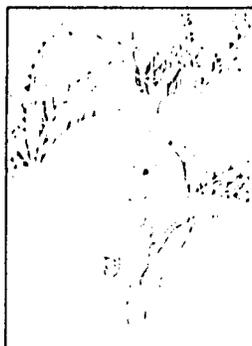


PN-ABF-598

# 4. VEGETABLES

*ABELMOSCHUS, ALLIUM,  
AMARANTHUS, BRASSICACEAE,  
CAPSICUM, CUCURBITACEAE,  
LYCOPERSICON, SOLANUM  
and OTHER VEGETABLES*

*E. Bettencourt  
J. Konopka*



## IBPGR DIRECTORIES OF GERmplasm COLLECTIONS

1. I Food Legumes: *Arachis, Cajanus, Cicer, Lens, Lupinus, Phaseolus, Pisum, Psophocarpus, Vicia* and *Vigna* (1989)<sup>1/</sup>
  1. II Soyabean<sup>1/</sup>
  2. Root and Tuber Crops: Aroids, Cassava, Potato, Sweet Potato, Yams and Others (2nd edition, 1986)
  3. Cereals: *Avena, Hordeum*, Millets, *Oryza, Secale, Sorghum, Triticum, Zea* and Pseudocereals (1990)
  4. Vegetables (*Abelmoschus, Allium, Amaranthus, Brassicaceae, Capsicum, Cucurbitaceae, Lycopersicon, Solanum* and other vegetables (1990)<sup>2/</sup>
  5. I Industrial Crops: Cacao, Coconut, *Piper*, Sugarcane and Tea (1981)
  5. II Industrial Crops: Beet, Coffee, Cotton, Oil Palm and Rubber (1989)
  6. I Tropical and Sub-Tropical Fruits and Tree Nuts (1984)
  6. II Temperate Fruits and Tree Nuts (1989)
  7. Forages (Grasses, Legumes, etc.) (1984)
- 
- 1/ The first, general, Food Legumes Directory was published in 1980 and is now out of print. It has been revised and divided into these two volumes
  - 2/ Replacing the volumes 3. I. Cereals: Wheat (1980); 3. II. Cereals: Maize (1980); 3. III. Cereals: Rice (1980); 3. IV. Cereals: Sorghum and Millets (1981); 3. V. Cereals: Barley (1982)
  - 3/ Replacing the 1980 publication

DIRECTORY OF GERMLASM COLLECTIONS

# 4. VEGETABLES

*ABELMOSCHUS, ALLIUM,  
AMARANTHUS, BRASSICACEAE,  
CAPSICUM, CUCURBITACEAE,  
LYCOPERSICON, SOLANUM  
and OTHER VEGETABLES*

*E. Bettencourt  
J. Konopka*

IBPGR  
ROME, 1990



The International Board for Plant Genetic Resources (IBPGR) is an autonomous international scientific organization under the aegis of the Consultative Group on International Agricultural Research (CGIAR). IBPGR was established by the CGIAR in 1974. The basic function of IBPGR is to promote and coordinate an international network of genetic resources centres to further the collecting, conservation, documentation, evaluation and use of plant germplasm and thereby contribute to raising the standard of living and welfare of people throughout the world. Financial support for the core programme is provided by the Governments of Australia, Austria, Belgium, Canada, China, Denmark, France, FRG, India, Italy, Japan, the Netherlands, Norway, Spain, Sweden, Switzerland, the UK and the USA as well as the United Nations Environment Programme and the World Bank

Citation:

IBPGR. (1990) Directory of Crop Germplasm Collections. 4. Vegetables: *Abelmoschus*, *Allium*, *Amaranthus*, Brassicaceae, *Capsicum*, Cucurbitaceae, *Lycopersicon*, *Solanum* and other vegetables. Bettencourt, E. and Konopka, J. International Board for Plant Genetic Resources, Rome

ISBN 92-9043-194-6

IBPGR Headquarters  
Via delle Sette Chiese 142  
00145 Rome  
Italy

## FOREWORD TO THE SECOND EDITION

This directory replaces the first edition published in 1982. The format differs from the first edition in several respects. Most obvious is the use of a standard set of headings for each entry, with each being included even where no information was available to IBPGR. It is hoped that there will be feedback to IBPGR from the users to fill in these gaps. Individual readers may also wish to treat their directory as a 'working copy' by filling in the information as it becomes available to them.

In those cases where it has not been possible to verify all the taxonomic names used, they have been included as cited by curators. In some cases where a name has been used that is generally regarded as no longer valid for that species, it has been retained as being the name still used by curators and, hence, to identify accessions in collections.

It is the hope of IBPGR that this directory will prove useful, and that it will act as a catalyst in stimulating interest in the conservation and use of the genetic resources of vegetables.

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*Abelmoschus*

**BELGIUM**

Laboratoire de Phytotechnie Tropicale  
 Faculté des Sciences Agronomiques  
 Université Catholique de Louvain  
 Place Croix du Sud, 3 - Sciences 15 D.  
 B-1348 Louvain-La-Neuve

Telephone: (010) 43 37 39/41  
 Telex: 59037 UCL B  
 Cable:

Curator/person in charge: B.-P. Louant  
 Details of collection: *Abelmoschus esculentus*, 3 cultivars from Japan  
 Maintenance of collection: Short-term seed storage at ambient temperatures. Seeds in plastic bags with silica gel  
 Duplication of collection: Not duplicated  
 Availability: Freely available  
 Quarantine: No known restrictions  
 Evaluation: On-going work  
 Documentation: No information

**BRAZIL**

Departamento de Fitotecnia  
 Universidade Federal de Viçosa  
 36570 Viçosa, M.G.

Telephone: (031) 899 26 11  
 Telex: 311587 FUFV BR  
 Cable:

Curator/person in charge: V.W.D. Casali  
 Details of collection: *Abelmoschus esculentus*, 192 landraces from Brazil  
 Maintenance of collection: Short-term seed storage at 5°C and controlled RH. Seeds in plastic containers of 4 kg capacity. Storage capacity 60 m<sup>3</sup>  
 Duplication of collection: CENARGEN/EMBRAPA  
 Availability: Freely available. Requests should be addressed to:  
 CENARGEN/EMBRAPA  
 C.P. 10-2372  
 CEP 70.849, Brasília - D.F., Brazil  
 Quarantine: No information  
 Evaluation: Partial  
 Documentation: Partial and computerized

**BURKINA FASO**

Station de Recherche Kamboinse  
 Institut Burkinabé de Recherche  
 Agronomique et Zootechnique (IBRAZ)  
 B.P. 7192  
 Ouagadougou

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: A. Duigma  
 Details of collection: *Abelmoschus esculentus*, 51 landraces from Burkina Faso  
 Maintenance of collection: Short-term seed storage at ambient temperatures

Duplication of collection: No information  
 Availability: Freely available  
 Quarantine: No information  
 Evaluation: No information  
 Documentation: Manual

## CHINA

Taiwan Agricultural Research Institute  
 189 Chung-Cheng Road  
 Wufeng, Taichung  
 Taiwan 41301

Telephone: (04) 333 23 01  
 Telex: 3338162  
 Cable:

Curator/person in charge: C.C. Tu  
 Details of collection: *Abelmoschus esculentus*, 16 cultivars from USA  
 Maintenance of collection: Medium-term seed storage at 5°C and 40-50% RH. Seeds in PVC containers of 60 cm<sup>3</sup> capacity  
 Duplication of collection: No information  
 Availability: Available in limited quantity (20-200 seeds)  
 Quarantine: Phytosanitary certificate required for export or import of material  
 Evaluation: On-going work for 10/20 characters  
 Documentation: Partial and computerized

## COTE D'IVOIRE

Laboratoire de Génétique  
 Institut International pour la Recherche Scientifique  
 et le Développement à Adiopodoumé (IIRSDA)  
 B.P. V-51  
 Abidjan

Telephone:  
 Telex:  
 Cable:

Curator/person in charge:  
 Details of collection: *Abelmoschus esculentus*, 1364 cultivated accessions from Afghanistan (8), Benin (213), Burkina Faso (144), Côte d'Ivoire (88), Cuba (3), Egypt (29), Ghana (24), Guatemala (2), Guinea (97), India (61), Iran (16), Mali (19), Mexico (1), Niger (31), Nigeria (49), Pakistan (7), Peru (2), Philippines (6), Saudi Arabia (1), Sudan (128), Syria (4), Taiwan (China) (4), Thailand (6), Togo (206), Turkey (116), Yugoslavia (13), Zaire (2), Zambia (24) and Zimbabwe (70)  
*A. caillei*, 684 accessions from Benin (64), Burkina Faso (30), Cameroon (23), Congo (1), Côte d'Ivoire (244), Ghana (23), Guinea (94), Liberia (5), Nigeria (24), Sudan (1) and Togo (165)  
*A. manihot*, 36 accessions from Thailand  
*A. moschatus*, 54 accessions from Benin (12), Côte d'Ivoire (1), Thailand (35) and Togo (6)  
*A. esculentus* x *A. caillei*, 17 accessions from Benin (6), Burkina Faso (2), Guinea (1) and Togo (8)  
 Maintenance of collection: Long-term seed storage at -18°C  
 Short-term seed storage at 6°C and at ambient temperatures under dry air conditions

**COTE D'IVOIRE (cont.)**

Duplication of collection:	ORSTOM, Montpellier, France and USDA, USA Core collection (180 samples) at: Regional Agricultural Research Station, Jamalpur, Bangladesh EMBRAPA, Brasilia, Brazil Plant Research Centre, Canada NIHORT, Nigeria Centre pour le Développement de l'Agriculture, Senegal
Availability:	Freely available. The "Core collection" can be dispatched on request
Quarantine:	No information
Evaluation:	All the cultivated species were evaluated in Cote d'Ivoire and the data published: "Organization génétique du genre <i>Abelmoschus</i> (gombo): Co-évolution de deux espèces cultivées en Afrique ( <i>A. esculentus</i> et <i>A. caillei</i> )", ORSTOM, Route d'Aulnay, Bondy, France. Data on the wild species will be published in 1989
Documentation:	Complete and computerized

*NB - The Abelmoschus collection was previously maintained at the ORSTOM Genetics Laboratory, Côte d'Ivoire. The ORSTOM Centre has changed its status to an international institute, "Institut International pour la Recherche Scientifique et le Développement à Adiopodoumé" (IIRSDA). Since the new Institute's crop mandate does not include vegetables, the collection will soon be transferred to another location*

**CUBA**

Instituto de Investigaciones Fundamentales  
en Agricultura Tropical "Alejandro Humboldt" (INIFAT)  
Calle 1 esq. 2, Santiago de las Vegas  
Ciudad Habana

Telephone:  
Telex:  
Cable:

Curator/person in charge:	Miguel A. Esquivel Perez
Details of collection:	<i>Abelmoschus esculentus</i> , 40 primitive cultivars from Cuba
Maintenance of collection:	Long-term seed storage at -18°C Medium-term seed storage at 0°-4°C. Seeds with 4-6% m.c. in sealed glass containers and/or in aluminium laminated foil packets
Duplication of collection:	ZIGuK, Gatersleben, DDR and VIR, Leningrad, USSR
Availability:	Available in limited quantity
Quarantine:	Imported material must possess phytosanitary certificate. Seeds to export should pass quarantine inspection and a phytosanitary certificate is given
Evaluation:	Almost complete using IBPGR descriptor list and/or descriptors selected according breeding programmes
Documentation:	Passport and characterization data complete. Manual and computerized

**ETHIOPIA**

Plant Genetic Resources Centre/Ethiopia (PGRC/E)  
P.O. Box 30726  
Addis Ababa

Telephone: 18 03 81  
Telex: 21460 GTZFP ET  
Cable: GENE BANK

- Curator/person in charge: Melaku Worede
- Details of collection: *Abelmoschus esculentus*, 11 landraces
- Maintenance of collection: Medium-term seed storage at 4°C and 35% RH
- Duplication of collection: No information
- Availability: Available, in consultation with Ethiopian breeders, scientists from the co-operating institutes and PGRC/E, whenever there is mutual advantage
- Quarantine: Import of seeds through the Institute of Agricultural Research, Quarantine Unit. Export seeds accompanied with phytosanitary certificate issued by the Ministry of Agriculture
- Evaluation: Not evaluated
- Documentation: On-going and computerized for passport data

**GHANA**

Plant Introduction and Exploration  
Crops Research Institute  
P.O. Box 7  
Bunso

Telephone:  
Telex:  
Cable:

- Curator/person in charge: H.L.O. Holloway
- Details of collection: *Abelmoschus esculentus*, 109 landraces from Benin (9), Ghana (18), Togo (44) and West Africa (38)
- Maintenance of collection: Short-term seed storage at ambient temperatures
- Duplication of collection: No information
- Availability: Available in limited quantity
- Quarantine: No information
- Evaluation: In progress
- Documentation: Manual. Passport data available

**INDIA**

Krishna Chandra Mishra Research Institute  
of Wild Vegetable Crops  
P.O. Bandanwar 814147  
Godda - Bihar

Telephone:  
Telex:  
Cable:

- Curator/person in charge: Kishore Chandra Mishra
- Details of collection: *Abelmoschus esculentus*, 1 elite line (YVM tolerant), donated by RAU, Sabour, India  
*A. moschatatus*, 1 landrace from Samastipur, Bihar, India
- Maintenance of collection: Short-term seed storage at ambient temperatures. Seeds in glass containers with silica gel

**INDIA (cont.)**

Duplication of collection:	Samukhia, Banka and Bhagalpur, Bihar, India
Availability:	Available on exchange basis
Quarantine:	No information
Evaluation:	Full for morphological and agronomical characters and disease resistance
Documentation:	Manual

**INDIA**

National Bureau of Plant Genetic Resources (NBPGR)  
 Indian Agricultural Research Institute (IARI)  
 Pusa Campus  
 New Delhi 110012

Telephone:  
 Telex:  
 Cable:

Curator/person in charge:	R.S. Rana
Details of collection:	<i>Abelmoschus angulosus</i> , 1 <i>A. esculentus</i> , 565 landraces from India <i>A. crinitus</i> , 1 <i>A. ficulneus</i> , 8 <i>A. manihot</i> , 12 <i>A. moschatus</i> , 2 <i>A. tuberculatus</i> , 43 <i>Abelmoschus</i> spp., 176 landraces from West Africa
Maintenance of collection:	Active collection
Duplication of collection:	Partially duplicated at Regional Stations at Akola and Vellanikhara, India
Availability:	Freely available
Quarantine:	No information
Evaluation:	Data are being published in crop specific catalogues
Documentation:	Manual

**IRAQ**

Plant Genetic Resources Unit  
 Agricultural Research Centre  
 Abu Ghraib - Baghdad

Telephone: (01) 511 22 01  
 Telex:  
 Cable: SBAAR - IRAQ

Curator/person in charge:	A.T. Sharif
Details of collection:	<i>Abelmoschus esculentus</i> , 24 landraces from Iraq
Maintenance of collection:	Short-term seed storage at 5°-10°C. Seeds in airtight cans. Storage capacity 40 m <sup>3</sup>
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	On-going work
Documentation:	Manual

**ITALY**

Istituto di Miglioramento Genetico  
e Produzione delle Sementi  
Università degli Studi  
Via Pietro Giuria, 15  
I-10126 Torino

Telephone: (011) 63 39 69 /411 52 50  
Telex:  
Cable:

- Curator/person in charge: P. Belletti
- Details of collection: *Abelmoschus esculentus*, 33 commercial cultivars from India, Pakistan, Turkey, USA and Zaire
- Maintenance of collection: Long-term seed storage at -20° and at -10°C. Storage capacity 1 m<sup>3</sup> and 0.5 m<sup>3</sup> respectively. Seeds with 8-10% m.c. in aluminium laminated foil packets
- Duplication of collection: Not duplicated
- Availability: Available in limited quantity and on exchange basis
- Quarantine: Phytosanitary certificate required for import and export of material
- Evaluation: On-going work for morphological and genetic features, agronomical aspects and disease resistance, according to IBPGR descriptor list
- Documentation: Computerized for characterization and evaluation data

**MALI**

Station de Recherches Agronomiques - SOTUBA  
B.P. 438  
Bamako

Telephone:  
Telex:  
Cable:

- Curator/person in charge: P. Sapin
- Details of collection: *Abelmoschus esculentus*, 21 landraces from Mali
- Maintenance of collection: Short-term seed storage at ambient temperatures
- Duplication of collection: CRSTOM, Côte d'Ivoire
- Availability: Available in limited quantity
- Quarantine: No information
- Evaluation: To be carried out at University of Mali
- Documentation: Manual

**NIGERIA**

National Centre for Genetic Resources  
and Biotechnology (NACGRAB)  
Moor Plantation  
PMB 5382  
Ibadan

Telephone: (022) 31 26 70 / 31 26 22  
Telex:  
Cable: GENE BANK

- Curator/person in charge: P.E. Onuorah
- Details of collection: *Abelmoschus* spp., 374 accessions
- Maintenance of collection: Long-term seed storage

**NIGERIA (cont.)**

Duplication of collection:	No information
Availability:	Available in limited quantity
Quarantine:	No information
Evaluation:	No information
Documentation:	Manual. Passport data available

**PAKISTAN**

Plant Genetic Resources Laboratory  
National Agricultural Research Centre  
Pakistan Agricultural Research Council (PARC)  
P.O. Box 1031  
Islamabad

Telephone: 82 00 53 33  
Telex: 5604 PARC PAK  
Cable: AGRESCOUNCIL

Curator/person in charge:	K. Anwar
Details of collection:	<i>Abelmoschus esculentus</i> , 15 primitive cultivars from Pakistan
Maintenance of collection:	Medium-term seed storage at 5°C +1°C. Seeds in cans
Duplication of collection:	At several International Research Centres
Availability:	Freely available provided there is sufficient seed
Quarantine:	Imported seeds must possess phytosanitary certificate and import permit. Export of seeds accompanied with phytosanitary certificate
Evaluation:	Partial
Documentation:	Manual

**PAPUA NEW GUINEA**

Laloki Research Station  
Department of Agriculture and Livestock  
P.O. Box 417  
Konedobu

Telephone: 28 10 68 / 28 10 40  
Telex: 22143  
Cable: AGRIC. KONEDOBUBU

Curator/person in charge:	R.N. Kambuou
Details of collection:	<i>Abelmoschus manihot</i> , 159 landraces from Papua New Guinea
Maintenance of collection:	Field Genebank
Duplication of collection:	Partially at Aiyura (5), Bubia (42) and Keravat (41), Papua New Guinea
Availability:	Freely available
Quarantine:	No information
Evaluation:	20 samples evaluated for morphological characters of leaf, fruit and seed; leaf yield; nutritive value and pest and disease resistance
Documentation:	Manual

*NB - Plans are underway to assemble all accessions at Laloki Research Station*

**PHILIPPINES**

National Plant Genetic Resources Laboratory (NPGRL)  
 Institute of Plant Breeding (IPB)  
 University of the Philippines at Los Baños  
 College, Laguna

Telephone: (63) 833 35 28  
 Telex: 3432 PTLBK PU  
 Cable: PLANTBREED PHILIPPINES

Curator/person in charge: N.C. Altoveros

Details of collection: *Abelmoschus esculentus*, 589 landraces from Afghanistan (10), Africa (3), Belize (1), Brazil (228), Bulgaria (1), PR China (2), Cuba (2), Egypt (4), Ghana (2), Guatemala (2), India (52), Iran (13), Japan (2), Mexico (3), Netherlands (4), Nigeria (2), Pakistan (5), Peru (2), Philippines (114), Puerto Rico (USA) (1), Sudan (1), Turkey (96), USA (12), USSR (1) and Yugoslavia (12)

Maintenance of collection: Long-term seed storage at -20°C  
 Medium-term seed storage at 5°C and 40% RH. Seeds with 6% m.c. in glass bottles or in tin cans or in aluminium laminated foil packets

Duplication of collection: Partially at Universidade Rural do Estado de Minas, Brazil; Departamento de Fitotecnia, Escola Superior de Agricultura, Brazil and USDA, USA

Availability: Available on exchange basis

Quarantine: Import permit required

Evaluation: Complete for morphological and horticultural characters

Documentation: Complete and computerized

**TURKEY**

Aegean Agricultural Research Institute (AARI)  
 P.O. Box 9  
 35661 Menemen - Izmir

Telephone: (51) 14 91 31  
 Telex:  
 Cable:

Curator/person in charge: The Directorate

Details of collection: *Abelmoschus esculentus*, 55 landraces

Maintenance of collection: Long-term seed storage at -20°C. Seeds in metal cans. Medium-term seed storage at 0°C.

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: Stripe and stem rust resistance

Documentation: No information

**UNITED STATES OF AMERICA**

Southern Regional Plant Introduction  
 Station (S-9)  
 US Department of Agriculture (USDA)  
 1109 Experiment Street  
 Griffin, Georgia 30223

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: G.R. Lovell

**UNITED STATES OF AMERICA (cont.)**

Details of collection: *Abelmoschus esculentus*, 407 landraces mostly donated by institutes in Brazil, India and Turkey

Maintenance of collection: Medium-term seed storage at 5°C and 40-50% RH

Duplication of collection: Partially at NSSL, Fort Collins, USA

Availability: Freely available. Requests through: G. White, Plant Introduction Officer, Beltsville Agricultural Research Centre, Beltsville, Maryland 20705, USA

Quarantine: No information

Evaluation: Complete for: maturity, plant height, stalk strength, stem type, plant colour, pod type, pod axis, pod length, spine density, resistance to *Fusarium* and root-knot nematodes

Documentation: Computerized. Catalogue of passport and evaluation data issued

**UNITED STATES OF AMERICA**

National Seed Storage Laboratory (NSSL)  
 US Department of Agriculture (USDA)  
 Agricultural Research Service (ARS)  
 Colorado State University Campus  
 Fort Collins, Colorado 80523

Telephone: (303) 484 04 02  
 Telex: 237401714 DNPA UC  
 Cable:  
 Telefax: (303) 221 14 27

Curator/person in charge: S.A. Eberhart

Details of collection: *Abelmoschus esculentus*, 230 landraces from various countries  
*A. manihot*, 10 landraces

Maintenance of collection: Long-term seed storage at -18°C. Seeds in aluminium laminated foil packets  
 The Institute has agreed to accept responsibility for maintaining a global collection of *Abelmoschus* for long-term conservation

Duplication of collection: As an active collection at Regional Plant Introduction Station, Griffin, Georgia, USA

Availability: Freely available only if not available from the active collection

Quarantine: No information

Evaluation: Responsibility of the Regional Plant Introduction Station holding the active collection

Documentation: All data are computerized in GRIN (Germplasm Resources Information Network). The GRIN system resides on a Prime Computer in Beltsville, MD, USA

**ZAMBIA**

Mount Makulu Research Station  
 Private Bag 7  
 Chilanga

Telephone: 27 86 55  
 Telex:  
 Cable: Research Chilanga

Curator/person in charge: C. Nkhoma

Details of collection: *Abelmoschus esculentus*, 92 landraces and primitive cultivars from Zambia

---

<b>Maintenance of collection:</b>	Short-term seed storage at 10°C and no controlled humidity. Seeds in aluminium laminated foil packets of 10 cm x 20 cm
<b>Duplication of collection:</b>	NSSL, Fort Collins, USA
<b>Availability:</b>	Available with the only condition of information feed-back
<b>Quarantine:</b>	Import and export seeds must be accompanied with phitosanitary certificate
<b>Evaluation:</b>	Partial for yield components
<b>Documentation:</b>	Partial and manual

*Allium*



**Previous Page Blank**

**AUSTRIA**

Institute for Agronomy  
and Plant Breeding  
University of Agriculture  
Gregor Mendelstrasse, 33  
A-1180 Vienna

Telephone: (0222) 34 25 00  
Telex:  
Cable:

- Curator/person in charge: L. Tanasch
- Details of collection: *Allium sativum*, 15 primitive cultivars from Lower Austria; 4 varieties from Czechoslovakia, donated by Research and Plant Breeding Institute of Vegetables, Olomouc; 4 from France, donated by INRA and 15 lines from Lower Austria
- Maintenance of collection: Short-term storage at ambient temperatures. Regeneration done yearly
- Duplication of collection: Plant Breeding Institute of Vegetables, Olomouc, Czechoslovakia and Federal Institute for Agronomy, Fuchsenbigl, Austria
- Availability: Available in limited quantity
- Quarantine: Phytosanitary certificate required
- Evaluation: Comparison trials, selection for different purposes and cytological evaluation
- Documentation: Manual. Computerization in progress

**AUSTRIA**

Research Station for Special Crops  
A-8551 Wies 88

Telephone: (03465) 24 23  
Telex:  
Cable:

- Curator/person in charge: H. Pelzmann
- Details of collection: *Allium ampeloprasum* var. *ampeloprasum*, 1 primitive cultivar from Greece  
*A. cepa* var. *viviparum*, 1 landrace from FRG  
*A. fistulosum*, 1 landrace from FRG  
*A. ramosum*, 1 landrace from Japan  
*A. sativum*, 2 landraces from Austria (1) and Yugoslavia (1)  
*A. ursinum*, 1 wild from Austria
- Maintenance of collection: In the field
- Duplication of collection: Not duplicated
- Availability: Available on exchange basis
- Quarantine: No known restrictions
- Evaluation: Not evaluated
- Documentation: Manual

**BRAZIL**

Centro Nacional de Pesquisa de Hortaliças (CNPQ)  
Empresa Brasileira de Pesquisa Agropecuária (EMBRAPA)  
C.P. 11.1316  
70000 Brasília D.F.

Telephone:  
Telex:  
Cable:

- Curator/person in charge: J.A. de Menezes Sobrinho

Details of collection:	<i>Allium sativum</i> , 86 clones of landraces from Argentina, Brazil and Peru
Maintenance of collection:	Short-term storage at ambient temperatures
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	Plant height, leaf characters, tillering root system, growth cycle and number of cloves per bulb
Documentation:	Partial and computerized

**BRAZIL**

Unidade de Execução de Pesquisa de Ambito  
Estadual, Cascata (UEPAE) Telephone:  
Empresa Brasileira de Pesquisa Agropecuária (EMBRAPA) Telex:  
C.P. 403 Cable:  
96.100 Pelotas R.S.

Curator/person in charge:	A. Garcia
Details of collection:	<i>Allium cepa</i> , 3 <i>A. sativum</i> , 25 All accessions are commercial cultivars from Brazil
Maintenance of collection:	Short-term seed storage at 17°C and 35% RH. Seeds in paper and cotton bags <i>A. sativum</i> , bulbs stored at ambient temperatures
Duplication of collection:	No information
Availability:	Available in limited quantity. Requests for material should be addressed to Dulce R. N. Warwick, Curator for Vegetable Crops, Centro Nacional de Recursos Genéticos (CENARGEN), Empresa Brasileira de Pesquisa Agropecuária (EMBRAPA), C.P. 11.1316, 70000 Brasília D.F.
Quarantine:	No information
Evaluation:	Growth cycle, disease resistance, yield and bulb shape, colour and storage ability
Documentation:	Manual

**BULGARIA**

Maritsa Institute for Vegetable Crops Telephone:  
ul. Brezovsko shosse 32 Telex:  
BG-4003 Plovdiv Cable:

Curator/person in charge:	E. Uzunova
Details of collection:	<i>Allium cepa</i> , 514 commercial cultivars and breeders' lines from Bulgaria, Denmark, Japan, Netherlands, USSR and Yugoslavia
Maintenance of collection:	Short-term seed storage at ambient temperatures
Duplication of collection:	No information

**BULGARIA (cont.)**

Availability:	Some restrictions
Quarantine:	No information
Evaluation:	Phenological observations, quality, yield, storage ability and dry matter content
Documentation:	Partial and manual

**BULGARIA**

Institute of Introduction and  
Plant Genetic Resources "K. Malkov"  
District of Plovdiv  
BG-4122 Sadovo

Telephone: (99) 22 21 / 22 51  
Telex: 44444 ZOS BG  
Cable:

Curator/person in charge:	B. Matsov / M. Zaharieva
Details of collection:	<i>Allium cepa</i> , 127 total accessions. Landraces (30), old cultivars (4), wild (40) and breeding material (53) from Czechoslovakia, DDR, Italy, Netherlands, USA and USSR <i>A. porrum</i> , 1 old cultivar and 16 breeding material from FRG, DDR, Italy, Rep. of South Africa and USSR <i>A. sativum</i> , 4 landraces from Bulgaria
Maintenance of collection:	Long-term seed storage at -18°C. Seeds with 5-7% m.c. in glass jars Medium-term seed storage at 5°C and 50% RH
Duplication of collection:	PR China, Czechoslovakia, DDR, FRG, Greece, Hungary, India, Italy, Japan, Korea, Netherlands, Rep. of South Africa, USA, USSR and Yugoslavia
Availability:	Available on exchange basis
Quarantine:	Phytosanitary certificate required. All import material must go through a year trial in the quarantine nursery of IIPGR, Sadovo
Evaluation:	Characterization and evaluation according to unified descriptor lists - COMECON (morphological traits, biological properties, resistance to diseases and pests, economical characters, chemical composition and technological evaluation). Genetic and ecological studies
Documentation:	Computerized for passport and evaluation data

**CHINA**

Taiwan Agricultural Research Institute  
189 Chung-Cheng Road  
Wufeng, Taichung  
Taiwan 41301

Telephone: (04) 330 23 01  
Telex: 3338162  
Cable:

Curator/person in charge:	C.C. Tu
Details of collection:	<i>Allium cepa</i> , 30 cultivars from USA <i>A. fistulosum</i> , 12 local cultivars <i>A. sativum</i> , 50 cultivars from PR China and Taiwan
Maintenance of collection:	As bulbs and tissue culture
Duplication of collection:	Feng-Shan Tropical Horticultural Experiment Station
Availability:	Available in limited quantity (20-200 seeds)

Quarantine:	Phytosanitary certificate required for export or import of material
Evaluation:	On-going work for 10/20 characters
Documentation:	Partial and computerized

**CUBA**

Instituto de Investigaciones Fundamentales  
en Agricultura Tropical "Alejandro Humboldt" (INIFAT)  
Calle 1 esq. 2, Santiago de las Vegas  
Ciudad Habana

Telephone:  
Telex:  
Cable:

Curator/person in charge:	Miguel A. Esquivel Perez
Details of collection:	<i>Allium cepa</i> , 22 primitive and advanced cultivars from Cuba and world-wide, donated by IHR, Wellesbourne, UK <i>A. sativum</i> , 78 primitive and advanced cultivars from Cuba, donated by IHR, Wellesbourne, UK
Maintenance of collection:	Long-term seed storage at -18°C Medium-term seed storage at 0°-4°C. Seeds with 4-6% m.c. in sealed glass containers and/or in aluminium laminated foil packets Tissue culture in progress. Clonally replicated plants
Duplication of collection:	ZIGuK, Gatersleben, DDR and VIR, Leningrad, USSR
Availability:	Available in limited quantity
Quarantine:	Imported material must possess phytosanitary certificate. Seeds to export should pass quarantine inspection and a phytosanitary certificate is given
Evaluation:	Almost complete using IBPGR descriptor list and/or descriptors selected according breeding programmes
Documentation:	Passport and characterization data complete. Manual and computerized

**CZECHOSLOVAKIA**

Breeding Station at Kvetoslavov  
Research and Breeding Institute for Vegetables  
and Special Plants, Hurbanovo  
930 41 Kvetoslavov

Telephone: (708) 24 43  
Telex:  
Cable: SS Kvetoslavov

Curator/person in charge:	K. Michalek
Details of collection:	<i>Allium cepa</i> , 74 cultivars <i>A. porrum</i> , 49 cultivars
Maintenance of collection:	Short-term seed storage at ambient temperatures
Duplication of collection:	No information
Availability:	Available on exchange basis
Quarantine:	No known restrictions
Evaluation:	On-going work
Documentation:	Manual

**CZECHOSLOVAKIA**

Research and Plant Breeding Institute for Vegetables  
ul. Slechtitelu  
772 36 Olomouc

Telephone: (85) 250 81  
Telex: 66282 VSUZO C  
Cable:

- Curator/person in charge: P. Kvasnicka
- Details of collection: *Allium ascalonicum*, 82 landraces, cultivars and wild, world-wide representation  
*A. cepa*, 120 cultivars, world-wide representation  
*A. fistulosum*, 12 cultivars and wild from Asia  
*A. sativum*, 268 landraces, cultivars and wild, world-wide representation  
*A. schoenoprasum*, 20 cultivars and wild from Europe  
*Allium* spp., 160 wild, world-wide representation
- Maintenance of collection: Long-term seed storage at -18°C and 5-10% RH  
Medium-term seed storage at 5°C  
Vegetatively propagated species of *Allium* maintained in a Field Genebank
- The Institute has agreed to accept responsibility for maintaining a collection of *Allium* (long-day species) for long-term conservation (in the field genebank)
- Duplication of collection: Not duplicated
- Availability: Available on exchange basis
- Quarantine: Phytosanitary certificate required
- Evaluation: Partial and complete, depending on the type of collection
- Documentation: Computerized for passport data and on-going for evaluation data. Data held at Czechoslovak Information System for Genetic Resources (EVIGEZ). For further information see: Rogalewicz, V. and Bares, I. (1987). Czechoslovak Information System for Genetic Resources. FAO/IBPGR Pl. Genet. Resources Newsletter, 72: 14-16

**ETHIOPIA**

Plant Genetic Resources Centre/Ethiopia (PGRC/E)  
P.O. Box 30726  
Addis Ababa

Telephone: 18 03 81  
Telex: 21460 GTZFP ET  
Cable: GENE BANK

- Curator/person in charge: Melaku Worede
- Details of collection: *Allium cepa*, 81 landraces  
*A. sativum*, 10 landraces
- Maintenance of collection: Accessions maintained in a Field Genebank
- Duplication of collection: No information
- Availability: Available, in consultation with Ethiopian breeders, scientists from the co-operating institutes and PGRC/E, whenever there is mutual advantage
- Quarantine: Import of seeds through the Institute of Agricultural Research, Quarantine Unit. Export seeds accompanied with phytosanitary certificate issued by the Ministry of Agriculture
- Evaluation: Partial
- Documentation: On-going and computerized for passport, characterization and evaluation data

**FEDERAL REPUBLIC OF GERMANY**

Institut für Pflanzenbau und  
Pflanzenzüchtung der FAL  
Bundesallee 50  
D-3300 Braunschweig

Telephone: (531) 59 66 00  
Telex:  
Cable: LANDFORSCHUNG, Völknerode  
Telefax: (531) 59 68 14

- Curator/person in charge: L. Seidewitz
- Details of collection: *Allium cepa*, 5 landraces from FRG (4) and Turkey (1); and 2 cultivars from Turkey  
*A. porrum*, 2 landraces and 2 cultivars from Turkey  
*A. schoenoprasum*, 1 wild from UK  
*A. tuberosum*, 2 landraces from FRG and 1 wild from Nepal
- Maintenance of collection: Long-term seed storage at -10°C. Seeds with 6% m.c. in airtight tins  
Medium-term seed storage at 3°C and 30% RH
- Duplication of collection: Not duplicated
- Availability: Freely available
- Quarantine: No known restrictions
- Evaluation: Complete for 35 descriptors
- Documentation: All available data computerized. Passport data are available for practically all accessions

**FEDERAL REPUBLIC OF GERMANY**

Lehrstuhl für Pflanzenbau und Züchtung  
Technische Universität München Freising  
Weißenstephan  
D-8050 Freising Weißenstephan

Telephone:  
Telex:  
Cable:

- Curator/person in charge: G. Fischbeck
- Details of collection: *Allium ampeloprasum* var. *ampeloprasum*, 6  
*A. cepa* (shallot), 15  
*A. cepa* (onion), 58  
*A. fistulosum*, 14  
*A. sativum*, 45  
*A. schoenoprasum*, 15  
*A. tuberosum*, 1  
Plus 151 accessions of 94 wild species
- Maintenance of collection: Active collection
- Duplication of collection: No information
- Availability: Freely available
- Quarantine: No information
- Evaluation: No information
- Documentation: Manual

**FRANCE**

Ecole Nationale Supérieure d'Horticulture  
Chaire de Productions Légumières et Granières  
4, rue Hardy  
R.P. 914  
F-78009 Versailles Cedex

Telephone: 39 50 60 87  
Telex:  
Cable:

Curator/person in charge: C. Foury

Details of collection: *Allium cepa*, 17 landraces, 3 wild and 44 cultivars from France, donated by Université Strasbourg, INRA and seed companies from France

Maintenance of collection: Short-term seed storage at ambient temperatures

Duplication of collection: IHR, Wellesbourne, UK

Availability: Some restrictions

Quarantine: No information

Evaluation: Partial, using IBPGR descriptor list

Documentation: Partial and manual for passport and evaluation data. Computerization in progress

**GREECE**

Vegetables Research Institute  
Gastouni, Ilias

Telephone: (0623) 230 58  
Telex:  
Cable:

Curator/person in charge: K. Bakalakos

Details of collection: *Allium cepa*, 2 landraces, 1 old cultivar and 1 wild

Maintenance of collection: Short-term seed storage at ambient temperatures

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: Selection of pure lines

Documentation: No information

**HUNGARY**

Vegetable Crops Research Institute  
Department of Budatétény, Budapest  
Experimental Station Ujmajor  
Pf. 95  
Park u. 2  
H-1223 Budapest

Telephone: 26 40 60  
Telex: 226088  
Cable:

Curator/person in charge: G. Botos

Details of collection: *Allium cepa*, 3 landraces, 4 old cultivars, 11 wild and 25 mutant/genetic stocks

Maintenance of collection: Seeds in hermetically sealed packets

Duplication of collection: No information

Availability:	No information
Quarantine:	No information
Evaluation:	Virus and bacterial resistance
Documentation:	No information

## HUNGARY

Research Centre for Agrobotany  
I.A.Q.  
H-2766 Tápiószéle

Telephone: Tápiószéle 41  
Telex: 226981 agbot H  
Cable:

Curator/person in charge: A.L. Kiss

Details of collection: *Allium ascalonicum*, 1  
*A. fistulosum*, 3  
*A. narcissiflorum*, 1  
*A. odorum*, 1  
*A. porrum*, 13  
*A. schoenoprasum*, 6  
*Allium* spp., 233 total accessions, including 139 landraces and 84 cultivars from Canada (1), Czechoslovakia (6), DDR (1), FRG (1), Hungary (202), Italy (1), Poland (4), Romania (12), USSR (3) and 2 of unknown origin

Maintenance of collection: Long-term seed storage at -20°C  
Medium-term seed storage at +0°C. Seeds with 5% m.c. in airtight containers

The Institute has agreed to accept responsibility for maintaining a South and East European collection of *Allium* for long-term conservation

Duplication of collection: Partially duplicated

Availability: Freely available provided there is sufficient seed. Index Seminum periodically issued

Quarantine: Phytosanitary certificate required

Evaluation: On-going work

Documentation: Complete for passport data. On-going for characterization data (28 characters)

## INDIA

National Bureau of Plant Genetic Resources (NBPGR)  
Indian Agricultural Research Institute (IARI)  
Pusa Campus  
New Delhi 110012

Telephone:  
Telex:  
Cable:

Curator/person in charge: R.S. Rana

Details of collection: *Allium cepa*, 1508  
*A. sativum*, 559  
All accessions are landraces from India and some introductions world-wide

Maintenance of collection: Active collection

Duplication of collection: Partially duplicated at Regional Station, Akola, India

**INDIA (cont.)**

Availability:	Freely available
Quarantine:	No information
Evaluation:	Data are being published in crop specific catalogues
Documentation:	Manual

**IRAN**

Seed and Plant Improvement Institute (SPII) Ministry of Agriculture & Rural Development Mard-Abad Ave. Karadj	Telephone: (02221) 28 58 Telex: Cable: SEEDPLANT, Karadj
Curator/person in charge:	M.A. Vahabian
Details of collection:	<i>Allium cepa</i> , 25 from Iran and 21 introductions
Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**IRELAND**

Plant Science Department University College of Cork Cork	Telephone: (021) 27 68 71 Telex: 26050 UNIC EI Cable:
Curator/person in charge:	J.P. Cullinane
Details of collection:	<i>Allium</i> spp., 70 wild
Maintenance of collection:	Medium-term seed storage at 4°C. Seeds in sealed plastic bags
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Disease and aphid resistance
Documentation:	No information

**ISRAEL**

Israel Gene Bank for Agricultural Crops Volcani Centre, ARO P.O. Box 6 50-250 Bet Dagan	Telephone: (03) 968 34 58 Telex: 381476 AROVC IL Cable: Telefax: 972-3-993998
Curator/person in charge:	M. Zur

<b>Details of collection:</b>	<i>Allium ampeloprasum</i> var. <i>ampeloprasum</i> , 50 cultivars from various countries, donated by USDA, USA <i>A. cepa</i> , 400 lines, cultivars and mutant genetic/stocks. World-wide representation, donated by Research Institute, Tápíószele, Hungary and USDA, USA <i>A. fistulosum</i> , 30 cultivars from various countries <i>A. schoenoprasum</i> , 80 cultivars from various countries
<b>Maintenance of collection:</b>	Long-term seed storage at -10°C. Seeds in aluminium boxes of 1 kg capacity. Storage area 50 m <sup>2</sup>
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	Available in limited quantity
<b>Quarantine:</b>	Special conditions and treatment according to Plant Protection Law
<b>Evaluation:</b>	Drought, salinity and disease resistance. High nutrition level
<b>Documentation:</b>	Complete and computerized

**ISRAEL**

Department of Field and Vegetable Crops  
The Faculty of Agriculture  
Hebrew University of Jerusalem  
P.O. Box 12  
76-100 Rehovot

Telephone: (08) 48 12 51  
Telex: 361931 HUAGR IL  
Cable:

<b>Curator/person in charge:</b>	D. Zamir
<b>Details of collection:</b>	<i>Allium cepa</i> , 150 mutant/genetic stocks
<b>Maintenance of collection:</b>	Short-term seed storage at ambient temperatures Field genebank  The Institute has agreed to accept responsibility for maintaining a collection of <i>Allium</i> (short-day species) for long-term conservation (in the field genebank)
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	No information
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	Disease and insect resistance, shelf life, linkage maps, yield and physiological genetics of stress conditions
<b>Documentation:</b>	No information

**ITALY**

Istituto del Germoplasma  
CNR  
Via G. Amendola, 165/A  
I-70126 Bari

Telephone: (080) 58 34 63  
Telex: 810565 CNR/BA I  
Cable:

<b>Curator/person in charge:</b>	P. Perrino
<b>Details of collection:</b>	<i>Allium</i> spp., 39 landraces

**ITALY (cont.)**

Maintenance of collection:	Long-term seed storage at -18°C. Seeds in airtight metal cans with silica gel Medium-term seed storage at 0°C and 40% RH. Seeds in vacuum sealed aluminium laminated foil packets
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**ITALY**

Istituto Sperimentale per l'Orticoltura  
Via Paullese, 60  
I-20075 Montanaso Lombardo - Milan

Telephone:  
Telex:  
Cable:

Curator/person in charge:	G.P. Soressi
Details of collection:	<i>Allium cepa</i> , 76 landraces, 11 commercial cultivars from Italy, 99 cultivars and 42 hybrids, donated by institutes and seed companies in various countries
Maintenance of collection:	Medium-term seed storage at 4°C
Duplication of collection:	No information
Availability:	Available in limited quantity
Quarantine:	No information
Evaluation:	Complete for size, shape and colour of bulbs; storage ability; flavour; yield and resistance to <i>Fusarium oxysporum</i>
Documentation:	Manual

**JAPAN**

National Institute of Agrobiological Resources (NIAR)  
Kannon-dai 2-1-2  
Tsukuba, Ibaraki 305

Telephone: 02975-6-7050  
Telex:  
Cable: NIARTSUKUBA YATABE  
Telefax: 02975-6-7408

Curator/person in charge:	Head, Germplasm Storage Center
Details of collection:	<i>Allium cepa</i> , 78 <i>A. fistulosum</i> , 82 <i>A. tuberosum</i> , 1 Old and commercial cultivars and elite lines from Japan
Maintenance of collection:	Long-term seed storage at -10°C Medium-term seed storage at -1°C and 30% RH Seeds with 6-7% m.c. in 1 to 3 PET containers of 430 ml  The Institute has agreed to accept responsibility for maintaining an Asian collection of <i>Allium</i> for long-term conservation
Duplication of collection:	No information
Availability:	Freely available for research purposes. A fee is applicable for private institutions

Quarantine:	No information
Evaluation:	Standard manual published by specialists' consent
Documentation:	Computerized for passport data

**JAPAN**

Vegitable and Ornamental Crops Research Station (VOCRS) Aino Mie 514-23	Telephone: Telex: Cable:
Curator/person in charge:	S. Nishi / M. Ashizawa
Details of collection:	<i>Allium chinense</i> , 3 <i>A. sativum</i> , 41 <i>A. wakegi</i> , 14 All accessions are landraces from Japan
Maintenance of collection:	Active collection
Duplication of collection:	No information
Availability:	Available in limited quantity
Quarantine:	No information
Evaluation:	Growth habit, plant height, leaf length, leaf colour, disease and insect resistance, bulb size, bulb weight, number of scales, scales size, scale weight and bulb and scale colour
Documentation:	Partial and computerized

**MEXICO**

Programa de Recursos Genéticos Centro de Investigaciones Forestales y Agropecuarias del Estado de Guanajuato Instituto Nacional de Investigaciones Forestales y Agropecuarias (INIFAP) km 6 carr. Celaya - S. Miguel Allende Apartado Postal 112 Celaya, Guanajuato	Telephone: 270 23 Telex: Cable:
Curator/person in charge:	S. Montes Hernandez
Details of collection:	<i>Allium cepa</i> , 54 landraces and commercial cultivars from Mexico <i>A. sativum</i> , 15 landraces and commercial cultivars from Egypt, Guatemala, Mexico (mainly), Nicaragua and Peru
Maintenance of collection:	Short-term seed storage at ambient temperatures. Seeds in glassine paper envelopes inside screw-top glass containers
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	<i>A. cepa</i> : morphological and agronomical characters and disease resistance <i>Allium sativum</i> : life cycle, colour and weight of bulb and number and weight of cloves
Documentation:	Partial. Computerization in progress

**NETHERLANDS**

Nunhems Zaden B.V.  
P.O. Box 4005  
NL-6080 AA Haalen

Telephone: (04759) 92 22  
Telex: 36907  
Cable:

Curator/person in charge: A. Oudenaarde  
Details of collection: *Allium porrum*  
Maintenance of collection: Short-term seed storage at 9°C and 30-60% RH. Seeds in plastic jars  
Duplication of collection: No information  
Availability: No information  
Quarantine: No information  
Evaluation: No information  
Documentation: No information

**NETHERLANDS**

Bejo Zaden B.V.  
P.O. Box 9  
NL-1722 ZG Noordscharwoude

Telephone: (02260) 140 41  
Telex: 57140 BEJO NL  
Cable:  
Telefax: (02260) 12772

Curator/person in charge: P.A. Beemsterboer  
Details of collection: *Allium cepa*, 20 old cultivars  
Maintenance of collection: Long-term seed storage at -26°C  
Short-term seed storage at 15°C and 55% RH  
Duplication of collection: CGN, Wageningen, Netherlands  
Availability: Available from: CGN, Wageningen, Netherlands  
Quarantine: No information  
Evaluation: Disease resistance and quality improvement  
Documentation: No information

**NETHERLANDS**

Centre for Genetic Resources  
the Netherlands (CGN)  
P.O. Box 224  
NL-6700 AE Wageningen

Telephone: (08370) 191 23  
Telex: 75044 DLOWA NL  
Cable:  
Telefax: (08370) 18094

Curator/person in charge: I.W. Boukema  
Details of collection: *Allium ampeloprasum* var. *ampeloprasum*, 13  
*Allium cepa*, common onion, 57  
    dry bulb onion, 175  
    silverskin onion, 7  
    bunching onion, 5  
*A. porrum*, 80  
*A. sativum*, 1  
*A. sphaerocephalon*, 2

Maintenance of collection:	Long-term seed storage at -20°C. Seeds in aluminium laminated foil packets Field genebank  The Institute has agreed to accept responsibility for maintaining a global collection of <i>Allium</i> for long-term conservation (in the field genebank)
Duplication of collection:	IHR, Wellesbourne, UK
Availability:	Available on exchange basis provided there is sufficient seed
Quarantine:	No known restrictions
Evaluation:	Disease resistance, stress tolerance and quality
Documentation:	Computerized for passport data

**NIGERIA**

National Centre for Genetic Resources  
and Biotechnology (NACGRAB)  
Moor Plantation  
PMB 5382  
Ibadan

Telephone: (022) 31 26 70 / 31 26 22  
Telex:  
Cable: GENE BANK

Curator/person in charge:	P.E. Onuorah
Details of collection:	<i>Allium</i> spp., 346 accessions
Maintenance of collection:	Long-term seed storage
Duplication of collection:	No information
Availability:	Available in limited quantity
Quarantine:	No information
Evaluation:	No information
Documentation:	Manual. Passport data available

**NORWAY**

Holt Agricultural Research Station  
P.O. Box 100  
N-9001 Tromsø

Telephone: (4783) 848 75  
Telex:  
Cable:  
Telefax: (4783) 801 73

Curator/person in charge:	H. Bakke
Details of collection:	<i>Allium cepa</i> var. <i>aggregatum</i> , 1 landrace
Maintenance of collection:	Yearly regeneration. During winter in paper bags at 5-15°C
Duplication of collection:	Among small gardeners in the District
Availability:	Available on request
Quarantine:	No known restrictions
Evaluation:	Fast growing under low temperatures
Documentation:	No information

**PAKISTAN**

Plant Genetic Resources Laboratory  
 National Agricultural Research Centre  
 Pakistan Agricultural Research Council (PARC)  
 P.O. Box 1031  
 Islamabad

Telephone: 82 00 53 33  
 Telex: 5604 PARC PAK  
 Cable: AGRESCOUNCIL

Curator/person in charge: R. Anwar  
 Details of collection: *Allium cepa*, 35 primitive cultivars from Pakistan  
 Maintenance of collection: Medium-term seed storage at 5°C ±1°C. Seeds in cans  
 Duplication of collection: At several International Research Centres  
 Availability: Freely available provided there is sufficient seed  
 Quarantine: Imported seeds must possess phytosanitary certificate and import permit. Export of seeds accompanied with phytosanitary certificate  
 Evaluation: Partial  
 Documentation: Manual

**PERU**

Programa de Investigación en Hortalizas  
 Universidad Nacional Agraria  
 Apartado 456  
 La Molina - Lima

Telephone: (14) 35 20 35 Ext. 354  
 Telex:  
 Cable:

Curator/person in charge: F. Delgado de la Flor B.  
 Details of collection: *Allium sativum*, 3 landraces from Peru  
 Maintenance of collection: Medium-term seed storage at 4°-8°C and 60% RH. Storage capacity 18 m<sup>3</sup>  
 Duplication of collection: IICA, Turrialba, Costa Rica and University of California, Davis, USA  
 Availability: Freely available for material already regenerated  
 Quarantine: Phytosanitary certificate required for import of seeds  
 Evaluation: 25% of the collection being characterized for 20 descriptors  
 Documentation: Partial

**POLAND**

Research Institute of Vegetable Crops  
 ul. 22 Lipca, 1/3  
 96-100 Skierniewice

Telephone: Skierniewice 22 11 / 5  
 Telex: 886649 IW PL  
 Cable:

Curator/person in charge: J. Skierkowski  
 Details of collection: *Allium cepa*, 9 landraces, 7 old cultivars and 110 wild  
*A. sativum*, 50 landraces and 1 wild  
 Maintenance of collection: Short-term seed storage at ambient temperatures

Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Evaluation for disease resistance: <i>Botrytis alli</i>
Documentation:	No information

## PORTUGAL

Secção de Horticultura  
 Instituto Superior de Agronomia (ISA)  
 Tapada da Ajuda  
 P-1399 Lisboa Codex

Telephone: (1) 63 81 61 / 2  
 Telex: 44700 ISATEL P  
 Cable:

Curator/person in charge:	A. Monteiro
Details of collection:	<i>Allium cepa</i> , 2 landraces from Portugal
Maintenance of collection:	Long-term seed storage at -18°C Short-term seed storage at 7°C Seeds with <10% m.c. in aluminium laminated foil packets
Duplication of collection:	No information
Availability:	Freely available in limited quantity
Quarantine:	No restrictions for export but imported material must possess phytosanitary certificate
Evaluation:	No information
Documentation:	Manual and complete for passport data

## PORTUGAL

Secção de Genética  
 Estação Agronómica Nacional (EAN)  
 Instituto Nacional de Investigação Agrária (INIA)  
 P-2780 Oeiras

Telephone: (1) 443 15 05 / 443 04 42  
 Telex: 63698 EAN P  
 Cable:

Curator/person in charge:	M. Mota
Details of collection:	<i>Allium cepa</i> , 7 landraces from Portugal
Maintenance of collection:	Long-term seed storage at -16°C in deep-freezers
Duplication of collection:	Not duplicated
Availability:	Available in limited quantity
Quarantine:	No restrictions for export but imported material must possess phytosanitary certificate
Evaluation:	None
Documentation:	Computerized for passport data

**SOUTH AFRICA, REPUBLIC OF**

Department of Agricultural Economics and Marketing  
 Directorate of Plant and Liquor Control  
 Private Bag X 179  
 0001 Pretoria

Telephone: (012) 206 24 06  
 Telex: 3-23264  
 Cable: SATIVA PRETORIA  
 Telefax: (012) 206 27 86

- Curator/person in charge: H. Chamberlain
- Details of collection: *Allium cepa*, 65 landraces and cultivars from Australia, Israel, Japan, Netherlands, Rep. of South Africa and USA
- Maintenance of collection: Long-term seed storage at -20°C. Seeds in vacuum sealed aluminium laminated foil packets (small part of the collection)  
 Short-term seed storage at 6°-7°C and 45% RH. Seeds in plastic containers
- Duplication of collection: At different Crop Research Institutes in the Rep. of South Africa
- Availability: Available in limited quantity (0.5 / 300 g) and on exchange basis. Index Seminum issued yearly  
 Requests to: The Plant Introduction Officer  
 (same address)
- Quarantine: Excluding ornamentals: Declaration on the phytosanitary certificate that the seed was treated with an appropriate fungicide, especially against *Urocystis cepulae*
- Evaluation: On-going work
- Documentation: Complete and computerized

**SPAIN**

Instituto Valenciano de Investigaciones  
 Agrarias (IVIA)  
 Apartado Oficial  
 Carretera de Moncada a Náquera, km 4,5  
 Moncada - Valencia

Telephone: (6) 139 10 00  
 Telex: 61440 IVIA E  
 Cable:

- Curator/person in charge: L. Navarro
- Details of collection: *Allium cepa*, 4 landraces and 1 old cultivar
- Maintenance of collection: No information
- Duplication of collection: No information
- Availability: No information
- Quarantine: No information
- Evaluation: No information
- Documentation: No information

**SPAIN**

Catedra de Genetica  
Escuela Técnica Superior de  
Ingenieros Agrónomos (ETSIA)  
Universidad Politécnica  
Camino de Vera, 14  
Apartado de Correos 22012  
46020 Valencia

Telephone: (96) 361 50 51 Ext. 182  
Telex: 62808 UPVA E  
Cable:

Curator/person in charge: F. Nuez

Details of collection: *Allium cepa*, 130  
*A. sativum*, 128  
All landraces from Spain

Maintenance of collection: Medium-term seed storage at -3°C and 25% RH. Seeds with silica gel in hermetically sealed glass containers of 6 cm x 7 cm

Duplication of collection: Research Institute for Vegetable Growing and Breeding, Olomouc, Czechoslovakia; Banco de Germoplasma, Alcala de Henares, Spain and IHR, Wellesbourne, UK

Availability: Available on exchange basis

Quarantine: No known restrictions

Evaluation: On-going work

Documentation: On-going work for passport data

**SPAIN**

Banco de Germoplasma  
Departamento de Horticultura  
Servicio de Investigación Agraria (DGA)  
P.O. Box 727  
Zaragoza

Telephone: (76) 57 63 11  
Telex: 58194 IDAE E  
Cable:  
Telefax: (76) 57 55 01

Curator/person in charge: M. Carravedo

Details of collection: *Allium cepa*, 89 landraces  
*Allium* spp., 4 landraces

Maintenance of collection: Medium-term seed storage at 0° to 4°C. Seeds in glass flasks with silica gel

Duplication of collection: Banco de Germoplasma, Alcala de Henares, Spain and IHR, Wellesbourne, UK

Availability: Available

Quarantine: No known restrictions

Evaluation: Complete for 34 accessions on: 100 seeds weight; bulb ripening earliness, colour of external tunics, weight, shape, length and width; flesh colour; soluble solids; storing quality and androsterility

Documentation: Passport data computerized

**SWITZERLAND**

Eidgenössische Forschungsanstalt  
für Obst-, Wein und Gartenbau  
CH-8820 Wädenswil

Telephone: (01) 780 13 33  
Telex:  
Cable:

Curator/person in charge: F. Kobel  
Details of collection: *Allium* spp., 4 accessions  
Maintenance of collection: No information  
Duplication of collection: No information  
Availability: No information  
Quarantine: No information  
Evaluation: Performance, disease resistance, edible properties and shelf-life  
Documentation: No information

**SYRIA**

Genetic Resources Unit  
Agriculture Research Directorate  
P.O. Box 113  
Douma - Damascus

Telephone: 75 04 01  
Telex: 411634 SYR  
Cable: MINAGRI DAMS

Curator/person in charge: K.S. Obari  
Details of collection: *Allium* spp., 26 cultivars and landraces from Syria  
Maintenance of collection: Medium-term seed storage at 4°C and 45% RH. Seeds in metal tins (10.5 cm x 10.5 cm) and aluminium laminated foil packets (20 cm x 10 cm)  
Duplication of collection: Istituto del Germoplasma, Bari, Italy; ICARDA, Syria and Royal Botanic Gardens, Kew, UK  
Availability: Available on exchange basis  
Quarantine: No known restrictions  
Evaluation: On-going work using IBPCR descriptor list  
Documentation: Manual. On-going work

**THAILAND**

Department of Horticulture  
Faculty of Agriculture  
Kasetsart University  
Bangken  
Bangkok 9

Telephone:  
Telex:  
Cable:

Curator/person in charge: B. Chareonpanich  
Details of collection: *Allium cepa*, 9 landraces from Thailand  
Maintenance of collection: Active collection  
Duplication of collection: No information  
Availability: Freely available

Quarantine:	No information
Evaluation:	No information
Documentation:	Manual

## TURKEY

Aegean Agricultural Research Institute (AARI)  
P.O. Box 9  
35661 Menemen - Izmir

Telephone: (51) 14 91 31  
Telex:  
Cable:

Curator/person in charge:	The Directorate
Details of collection:	<i>Allium</i> spp., 67 landraces and 2 wild
Maintenance of collection:	Long-term seed storage at -20°C. Seeds in metal cans. Medium-term seed storage at 0°C
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Stripe and stem rust resistance
Documentation:	No information

## UNION OF SOVIET SOCIALIST REPUBLICS

The N.I. Vavilov Institute of Plant Industry (VIR)  
44, Herzen str.  
Leningrad 190000

Telephone: (314) 48 48  
Telex:  
Cable:

Curator/person in charge:	V.I. Krivchenko
Details of collection:	<i>Allium cepa</i> , 2050 American and European breeding varieties, including 1900 accessions in the main catalogue and 150 in the temporary catalogue. World-wide representation <i>A. fistulosum</i> , 222 predominantly varieties from East countries, samples from European countries and local bred varieties, including 200 accessions in the main catalogue and 22 in the temporary catalogue <i>A. odorum</i> , 45 majority local populations and a few breeding varieties, including 40 accessions in the main catalogue and 5 in the temporary catalogue. Collection represents the genetic diversity from the main cultivation areas of the USSR (Altai and Novosibirsk regions) <i>A. schoenoprasum</i> , 15 local populations and a few breeding varieties from Australia, Canada, DDR, Sweden and USA, including 10 accessions in the main catalogue and 5 in the temporary catalogue
Maintenance of collection:	Long-term seed storage at -10°C Medium-term seed storage at 4°C. Seeds with 3-4% m.c. in sealed glass jars
Duplication of collection:	Partially at ZIGuK, Gatersleben, DDR; Istituto del Germoplasma, Bari, Italy and NSSL, Fort Collins, USA
Availability:	Available in accordance with the Exchange Catalogue regularly issued

**UNION OF SOVIET SOCIALIST REPUBLICS (cont.)**

Quarantine:	According to the International Convention on Phytosanitary Plant Protection
Evaluation:	Field and laboratory evaluation using the International COMECON descriptors list
Documentation:	Manual. Passport data available

*NB - Samples received at the Institute are given temporary catalogue numbers. Some may be included in the permanent collection after 2-3 years trials, elimination of duplicates and low-value breeding lines*

**UNITED KINGDOM**

School of Biological Sciences  
University of Birmingham  
P.O. Box 363  
Birmingham B15 2TT

Telephone: (021) 414 55 65  
Telex: 338938 SPAPHY G  
Cable:

Curator/person in charge:	B.V. Ford-Lloyd
Details of collection:	<i>Allium</i> spp., 100 accessions, including 20 wild species and undetermined number of interspecific hybrids Except for the interspecific hybrids, all material has been obtained via Botanic Garden seed exchange, or from Gatersleben, DDR or USDA, USA. Most interspecific hybrids have been donated by IHR, Wellesbourne, UK
Maintenance of collection:	Medium-term seed storage at 5°C. Seeds in polyethylene bags/envelopes. Mostly living plant collection
Duplication of collection:	Majority at donor institutes
Availability:	Available in limited quantity
Quarantine:	No information
Evaluation:	Cytological studies only
Documentation:	Limited passport information only

**UNITED KINGDOM**

Institute of Horticultural Research (IHR)  
Wellesbourne  
Warwick CV35 9EF

Telephone: (0789) 47 03 82  
Telex:  
Cable:  
Telefax: (0789) 47 05 52

Curator/person in charge:	D. Astley
Details of collection:	<i>Allium ampeloprasum</i> var. <i>ampeloprasum</i> , 99 <i>A. cepa</i> , 960 <i>A. fistulosum</i> , 61 <i>Allium</i> spp., 182 All accessions are cultivars
Maintenance of collection:	Long-term seed storage at -20°C. Seeds with 5-6% m.c. Storage capacity 108 m <sup>3</sup>  The Institute has agreed to accept responsibility for maintaining a global collection of <i>Allium</i> for long-term conservation
Duplication of collection:	Partially at CGN, Wageningen, Netherlands

Availability:	Freely available provided there is sufficient seed
Quarantine:	No restrictions for seed but there are restrictions for vegetative material
Evaluation:	No information
Documentation:	Complete and computerized

### UNITED STATES OF AMERICA

National Seed Storage Laboratory (NSSL)  
 US Department of Agriculture (USDA)  
 Agricultural Research Service (ARS)  
 Colorado State University Campus  
 Fort Collins, Colorado 80523

Telephone: (303) 484 04 02  
 Telex: 237401714 DNPA UC  
 Cable:  
 Telefax: (303) 221 14 27

Curator/person in charge:	S.A. Eberhart
Details of collection:	<i>Allium ampeloprasum</i> var. <i>ampeloprasum</i> , 41 accessions, mainly landraces from various countries <i>A. cepa</i> , 362 landraces and cultivars <i>A. fistulosum</i> , 8 accessions <i>A. sativum</i> , 2 accessions <i>A. schoenoprasum</i> , 16 accessions <i>Allium</i> spp., 54 accessions of 18 species mainly from Austria and USSR
Maintenance of collection:	Long-term seed storage at -18°C. Seeds in aluminium laminated foil packets  The Institute has agreed to accept responsibility for maintaining a global collection of <i>Allium</i> for long-term conservation
Duplication of collection:	As active collections at Regional Plant Introduction Stations. <i>A. cepa</i> and <i>A. fistulosum</i> at Geneva, New York, USA <i>Allium</i> spp., at Pullman, Washington, USA
Availability:	Freely available only if not available from the active collection
Quarantine:	No information
Evaluation:	Responsibility of the Regional Plant Introduction Stations holding the active collections
Documentation:	All data are computerized in GRIN (Germplasm Resources Information Network). The GRIN system resides on a Prime Computer in Beltsville, MD, USA

### UNITED STATES OF AMERICA

Northeast Regional Plant Introduction  
 Station (NE-9)  
 New York State Agricultural Experiment Station  
 US Department of Agriculture (USDA)  
 Geneva, New York 14456

Telephone:  
 Telex:  
 Cable:

Curator/person in charge:	D. Dolan
Details of collection:	<i>Allium cepa</i> , 506 <i>A. cepa</i> (shallot), 1 <i>A. fistulosum</i> , 11 <i>Allium thunbergii</i> , 1 Landraces, wild types, commercial cultivars and breeders' lines. World-wide representation

**UNITED STATES OF AMERICA (cont.)**

Maintenance of collection:	Medium-term seed storage at 4°C and 28% RH. Seeds in moisture proof aluminium laminated foil packets. Storage capacity 102m <sup>3</sup> Short-term seed storage at 10°C and 28% RH. Seeds in paper envelopes. Storage capacity 40.7 m <sup>3</sup>
Duplication of collection:	Partially duplicated as a base collection at NSSL, Fort Collins, USA
Availability:	Freely available. Requests through: G. White, Plant Introduction Officer, Beltsville Agricultural Research Centre, Beltsville, Maryland 20705, USA
Quarantine:	No information
Evaluation:	Uniformity; habit; vigour; height; number of leaves per plant; number of broken leaves; amount of leaf bloom; maturity; neck length and diameter; bulb shape, diameter and depth; bulb colour; number of loose scales per bulb; root size and storage properties
Documentation:	Computerized catalogue of available accessions with evaluation data issued

**UNITED STATES OF AMERICA**

Western Regional Plant Introduction Station (W-6)	Telephone: (509) 335 15 02
US Department of Agriculture (USDA)	Telex:
Washington State University	Cable:
Room 59, Johnson Hall	Telefax: (509) 335 66 49
Pullman, Washington 99163-6402	

Curator/person in charge: S. Dietz

Details of collection:	<i>Allium albidum</i> , 1
	<i>A. altaicum</i> , 7
	<i>A. ampeloprasum</i> var. <i>ampeloprasum</i> , 59
	<i>A. angulosum</i> , 4
	<i>A. cernuum</i> , 1
	<i>A. condensatum</i> , 1
	<i>A. dictyoprasum</i> , 2
	<i>A. drobovii</i> , 1
	<i>A. fuscoviolaceum</i> , 2
	<i>A. glaciale</i> , 1
	<i>A. karsianum</i> , 1
	<i>A. ledebourianum</i> , 2
	<i>A. lineare</i> , 7
	<i>A. longicuspis</i> , 4
	<i>A. obliquum</i> , 1
	<i>A. orcoprasum</i> , 1
	<i>A. oschaninii</i> , 2
	<i>A. prostratum</i> , 1
	<i>A. pseudoampeloprasum</i> , 1
	<i>A. pseudocepa</i> , 5
	<i>A. pskemense</i> , 5
	<i>A. pyrenicum</i> , 1
	<i>A. ramosum</i> , 4
	<i>A. sativum</i> , 54
	<i>A. schoenoprasum</i> , 18
	<i>A. scorodoprasum</i> , 1
	<i>A. scorodoprasum</i> subsp. <i>jajlae</i> , 1
	<i>A. scorodoprasum</i> subsp. <i>rotundum</i> , 1
	<i>A. senescens</i> , 2
	<i>A. sphaerocephalon</i> , 1

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Details of collection: (cont.)	<i>Allium tuberosum</i> , 4 <i>A. vavilovii</i> , 5 <i>Allium</i> spp., 8 Accessions from: Afghanistan (10), Austria (7), Brazil (8), Canada (2), PR China (3), Czechoslovakia (4), Denmark (7), Egypt (2), FRG (1), Hong Kong (1), Iran (6), Korea (1), Netherlands (2), Philippines (1), Poland (17), Spain (2), Switzerland (2), Syria (1), Turkey (7), USSR (65), USA (6) and Yugoslavia (50)
Maintenance of collection:	Medium-term seed storage at 4°C and 40% RH. Seeds 8.8% m.c. in envelopes which are kept in cabinet drawers <i>A. sativum</i> kept as bulbs at 10°C and 50% RH
Duplication of collection:	Partially, 41.5% (85 acc.) duplicated as base collection at NSSL, Fort Collins, USA
Availability:	167 accessions available
Quarantine:	No special regulations or restrictions. All non-USA orders go through quarantine in Beltsville, USA
Evaluation:	No information
Documentation:	All PI's assigned after 1979 have passport data computerized. All PI's assigned before 1979 have limited data computerized. Data available in hard copy

*Amaranthus*

**BELGIUM**

Laboratoire de Phytotechnie Tropicale  
 Faculté des Sciences Agronomiques  
 Université Catholique de Louvain  
 Place Croix du Sud, 3 - Sciences 15 D.  
 B-1348 Louvain-La-Neuve

Telephone: (010) 43 37 39/41  
 Telex: 59037 UCL B  
 Cable:

Curator/person in charge: B.-P. Louant

Details of collection: *Amaranthus caudatus*, 2 cultivars from Kenya  
*A. cruentus*, 1 cultivar from Kenya  
*A. hypochondriacus*, 2 cultivars from Kenya  
*A. tricolor*, 2 cultivars from Japan

Maintenance of collection: Short-term seed storage at ambient temperatures. Seeds in plastic bags with silica gel

Duplication of collection: Not duplicated

Availability: Freely available

Quarantine: No known restrictions

Evaluation: On-going work

Documentation: No information

**BOLIVIA**

Centro de Investigaciones Fitoecogenéticas  
 de Pairumani  
 Casilla 128  
 Cochabamba

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: M. Crespo

Details of collection: *Amaranthus* spp., 150 accessions

Maintenance of collection: No information

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: No information

Documentation: No information

**BOLIVIA**

Estación Experimental de Patacamaya  
 Instituto Boliviano de Tecnología  
 Agropecuaria (IBTA)  
 Patacamaya

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: N. Lizárraga

Details of collection: *Amaranthus caudatus*, 430 landraces from the Andean region

Maintenance of collection: Short-term seed storage at ambient temperatures

Duplication of collection: Estación Experimental de Camacaní, Puno, Peru

Availability:	Freely available
Quarantine:	No information
Evaluation:	No information
Documentation:	Manual

**CHILE**

Instituto de Producción y Sanidad Vegetal  
 Universidad Austral de Chile  
 Casilla 567  
 Valdivia

Telephone: 213911-232  
 Telex: 271035 UNAUS CL  
 Cable:  
 Telefax: 063212589

Curator/person in charge:	A. Contreras Mendez
Details of collection:	<i>Amaranthus</i> spp., 5 primitive cultivars from Chile
Maintenance of collection:	Long-term seed storage at -18°C. Seeds in aluminium containers
Duplication of collection:	Partially at FAL, Braunschweig, RFA; University of California, Davis; USA; Sturgeon Bay, USA and different institutions in Japan, Netherlands and UK
Availability:	Available on exchange basis
Quarantine:	International Quarantine Regulations applied. No restrictions for import via meristem culture
Evaluation:	No information
Documentation:	Computerization in progress

**CHINA**

Genetic Resources and Seed Unit (GRSU)  
 Asian Vegetable Research and Development  
 Center (AVRDC)  
 P.O. Box 42  
 Shanhua, Tainan 74199  
 Taiwan

Telephone: (06) 583 78 01  
 Telex: 73560 AVRDC  
 Cable: ASVEG SHANHUA  
 Telefax: (06) 583 00 09

Curator/person in charge:	D.C.S. Tay
Details of collection:	<i>Amaranthus atropurpureus</i> , 1 <i>A. caudatus</i> , 6 <i>A. cruentus</i> , 15 <i>A. edulis</i> , 2 <i>A. gangeticus</i> , 11 <i>A. leucocarpus</i> , 1 <i>A. lividus</i> , 4 <i>A. spinosus</i> , 6 <i>A. tricolor</i> , 5 <i>A. viridis</i> , 1 Unknown species, 33

*Celosia argentea* var. *argentea*, 1

Total of 86 landraces and cultivars from Afghanistan (1), PR China (1), Dahomey (2), Dominican Rep. (1), Ethiopia (1), France (1), Ghana (9), Guatemala (1), India (29), Indonesia (6), Korea (1), Malaysia (3), New Guinea (1), Nigeria (6), Pakistan (1), Puerto Rico (3), Suriname (1), Tanzania (2), Taiwan (3), Turkey (3), Thailand (4), Uganda (1), USA (5) and 2 of unknown origin

**CHINA (cont.)**

Maintenance of collection:	Medium-term seed storage at 5°-6°C and 45% RH. Seeds in plastic containers and aluminium laminated foil packets
Duplication of collection:	Tropical Horticultural Research Station, Fengshan, Taiwan (China) and OGFRC, Kutztown, USA
Availability:	Freely available
Quarantine:	No information
Evaluation:	No information
Documentation:	Partial and computerized

**CHINA**

Taiwan Agricultural Research Institute  
189 Chung-Cheng Road  
Wufeng, Taichung  
Taiwan 41301

Telephone: (04) 330 23 01  
Telex: 3338162  
Cable:

Curator/person in charge:	C.C. Tu
Details of collection:	<i>Amaranthus tricolor</i> , 55 local landraces and cultivars
Maintenance of collection:	Medium-term seed storage at 5°C and 40-50% RH. Seeds in PVC containers of 60 cm <sup>3</sup> capacity
Duplication of collection:	No information
Availability:	Available in limited quantity (20-200 seeds)
Quarantine:	Phytosanitary certificate required for export or import of material
Evaluation:	On-going work for 10/20 characters
Documentation:	Partial and computerized

**COSTA RICA**

Recursos Fitogenéticos :  
Programa de Mejoramiento de Cultivos Tropicales  
Centro Agronómico Tropical de  
Investigación y Enseñanza (CATIE)  
Turrialba

Telephone: 56 02 32 / 56 64 31  
Telex: 8005 CATIE CR  
Cable: CATIE, Turrialba

Curator/person in charge:	V. Villalobos / J. Arce
Details of collection:	<i>Amaranthus</i> spp., 240 landraces and wild from Central America and Ecuador, donated by INIA, Ecuador
Maintenance of collection:	Long-term seed storage at -17°C. Seeds with 5-7% m.c. in aluminium laminated foil packets Medium-term seed storage at 5°C and 30-40% RH. Seeds in paper or plastic bags
Duplication of collection:	INIA, Ecuador
Availability:	Freely available
Quarantine:	Phytosanitary certificate and import permit required
Evaluation:	No information
Documentation:	Computerized for passport and characterization data

**ECUADOR**

Unidad de Recursos Fitogenéticos  
 Instituto Nacional de Investigaciones  
 Agropecuarias (INIAP)  
 Casilla 340  
 Quito

Telephone: 629-691  
 Telex: 2532 INIAP ED  
 Cable:

- Curator/person in charge: R. Castillo Torres
- Details of collection: *Amaranthus* spp., 213 total accessions:  
 - 203 landraces, from Ecuador (125) and from Peru (78)  
 - 2 commercial cultivars from Peru  
 Accessions donated by INIAP and UNSAC (Universidad del Cuzco y Programa de Kiwicha)  
 - 8 landraces and elite lines from USA, donated by Rodale, Kutztown, USA
- Maintenance of collection: Long-term seed storage at -12°C. Seeds with 5-6% m.c. in aluminium laminated foil packets of 25 g each. Four packets each accession
- Duplication of collection: CATIE, Turrialba, Costa Rica. The original material from Peru at Programa Nacional de Kiwicha, Peru and Rodale, Kutztown, USA
- Availability: Available on exchange basis
- Quarantine: No restrictions for export but imported material must possess phytosanitary certificate
- Evaluation: 85% of the collection evaluated for 50 descriptors according to IBPGR descriptor list
- Documentation: Computerized. On-going work

**GUATEMALA**

Experimental Station  
 Instituto de Ciencia y Tecnología Agrícola  
 Chimaltenango

Telephone:  
 Telex:  
 Cable:

- Curator/person in charge: H. López
- Details of collection: *Amaranthus* spp., 95 accessions
- Maintenance of collection: Short-term seed storage at ambient temperatures. Storage capacity 40 m<sup>3</sup>
- Duplication of collection: No information
- Availability: No information
- Quarantine: No information
- Evaluation: On-going work
- Documentation: No information

**GUATEMALA**

Departamento de Genética  
 Facultad de Agronomía  
 Universidad de San Carlos de Guatemala  
 Ciudad Universitaria, Zona 12  
 Apartado Postal 1545  
 Guatemala

Telephone:  
 Telex:  
 Cable:

- Curator/person in charge: F. Rodríguez B.
- Details of collection: *Amaranthus caudatus*, 2  
*A. cruentus*, 4  
*A. dubius*, 5  
*A. hybridus*, 10  
*A. polygonoides*, 9  
*A. viridis*, 1  
*Amaranthus* spp., 54  
*A. caudatus* x *A. cruentus*, 1  
*A. dubius* x *A. hybridus*, 1  
*A. dubius* x *A. scariousus*, 1  
*A. hybridus* x *A. scariousus*, 3  
*A. scariousus* x *A. hybridus*, 1  
*A. viridis* x *A. hybridus*, 1
- Maintenance of collection: Long-term seed storage at -15°C. Seeds in vacuum sealed aluminium laminated foil packets  
 Short-term seed storage at ambient temperatures. Seeds in plastic containers
- Duplication of collection: CATIE, Costa Rica
- Availability: Available
- Quarantine: No known restrictions
- Evaluation: On-going work
- Documentation: Passport data computerized

**INDIA**

Faculty of Horticulture  
 Tamil Nadu Agricultural University  
 Coimbatore 641003

Telephone:  
 Telex:  
 Cable:

- Curator/person in charge: C.R. Muthukrishnan
- Details of collection: *Amaranthus caudatus*  
*A. dubius*  
*A. hypochondriacus*  
*A. lividus*  
*A. tricolor*  
 Total of 450 landraces mainly from India
- Maintenance of collection: Active collection
- Duplication of collection: No information
- Availability: Freely available
- Quarantine: No information
- Evaluation: In progress
- Documentation: Manual

**INDIA**

National Bureau of Plant Genetic Resources (NBPGR)  
 Indian Agricultural Research Institute (IARI)  
 Pusa Campus  
 New Delhi 110012

Telephone:  
 Telex:  
 Cable:

- Curator/person in charge: R.S. Rana
- Details of collection: *Amaranthus* spp., 824 accessions mainly landraces from India
- Maintenance of collection: Long-term seed storage  
 The Institute has agreed to accept responsibility for maintaining an Asian collection of *Amaranthus* for long-term conservation
- Duplication of collection: Partially duplicated at Regional Stations at Akola and Simla, India
- Availability: Freely available
- Quarantine: No information
- Evaluation: Data are being published in crop specific catalogues
- Documentation: Manual

**INDIA**

Regional Station  
 National Bureau of Plant Genetic Resources (NBPGR)  
 Phalgi  
 Simla 171004

Telephone: 24 53  
 Telex:  
 Cable: Germplasm

- Curator/person in charge: B.D. Joshi
- Details of collection: *Amaranthus caudatus*  
*A. cruentus*  
*A. hypochondriacus*  
*A. hybridus*  
*A. lividus*  
*A. spinosus*  
*A. tricolor*  
*A. viridis*  
 Total of 3015 accessions. 2808 landraces from Himachal Pradesh, Uttar Pradesh, Jammu and Kashmir, North eastern hill region Gujarat, Maharashtra, Western ghats and Tamilnadu, India and 207 exotic collections from Argentina (7), Bangladesh (1), FRG (3), Guatemala (6), Hungary (4), Indonesia (1), Kenya (45), Mexico (10), Nepal (15), Netherlands (22), Peru (2), Poland (8), Taiwan (China) (5), USA (77) and USSR (7)
- Maintenance of collection: Short-term seed storage at ambient temperatures. Regeneration done every three years  
 A medium-term seed storage facility at 5°-10°C and 35% RH with a capacity for 30000 seed samples is near completion at Shimla Station
- Duplication of collection: 2863 samples duplicated, as base collection, at NBPGR, New Delhi
- Availability: Freely available via:  
 R.S. Rana, NBPGR, New Delhi, 110012

**INDIA (cont.)**

Quarantine:	Phytosanitary certificate required for import
Evaluation:	Full for 800 accessions for 29 descriptors and in progress for 2215 new collections for 40 descriptors for two seasons for: plant height, stem, leaf, inflorescence, spikelet and seed morphological characters, maturity, yield and seed weight Catalogue of amaranth germplasm (8000 samples) available on request from NBPGR, New Delhi
Documentation:	Complete and manual

**INDONESIA**

National Biological Institute P.O. Box 110 Bogor	Telephone: Telex: Cable:
Curator/person in charge:	S. Sastrapradja
Details of collection:	<i>Amaranthus</i> spp., 75 landraces from Indonesia
Maintenance of collection:	Long-term seed storage at -18°C Medium-term seed storage at 3°C and 50% RH. Storage capacity 40 m <sup>3</sup> Seeds in plastic bags inside cans
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	On-going according to IBPGR descriptor list
Documentation:	Manual

**ISRAEL**

Israel Gene Bank for Agricultural Crops Volcani Centre ARO P.O. Box 6 50-250 Bet Dagan	Telephone: (03) 968 34 58 Telex: 381476 AROVC IL Cable: Telefax: 972-3-993998
Curator/person in charge:	M. Zur
Details of collection:	<i>Amaranthus</i> spp., 80 landraces from Asia, Nigeria and USA, donated by Nigeria and USDA, USA
Maintenance of collection:	Long-term seed storage at -10°C. Seeds in aluminium boxes of 1 kg capacity. Storage area 50 m <sup>2</sup>
Duplication of collection:	No information
Availability:	Available in limited quantity
Quarantine:	Special conditions and treatment according to Plant Protection Law
Evaluation:	Drought, salinity and disease resistance. High nutrition level
Documentation:	Complete and computerized

**JAPAN**

National Institute of Agrobiological Resources (NIAR)  
Kannon-dai 2-1-2  
Tsukuba, Ibaraki 305

Telephone: 02975-6-7050  
Telex:  
Cable: NIARTSUKUBA YATABE  
Telefax: 02975-6-7408

- Curator/person in charge: Head, Germplasm Storage Center
- Details of collection: *Amaranthus caudatus*, 7  
*A. dubius*, 9  
*A. cruentus*, 1  
*A. hypochondriacus*, 72  
*A. lividus*, 2  
*A. spinosus*, 5  
*A. tricolor*, 5  
Cultivars, lines and landraces from Southeast Asia  
  
*Celosia argentea* var. *argentea*, 3 landraces from Southeast Asia
- Maintenance of collection: Long-term seed storage at -10°C  
Medium-term seed storage at -1°C and 30% RH  
Seeds with 6-7% m.c. in 1 to 3 PET containers of 430 ml
- Duplication of collection: No information
- Availability: Freely available for research purposes. A fee is applicable for private institutions
- Quarantine: No information
- Evaluation: Standard manual published by specialists' consent
- Documentation: Computerized for passport data

**NIGERIA**

National Centre for Genetic Resources  
and Biotechnology (NACGRAB)  
Moor Plantation  
PMB 5382  
Ibadan

Telephone: (022) 31 26 70 / 31 26 22  
Telex:  
Cable: GENE BANK

- Curator/person in charge: P.E. Onuorah
- Details of collection: *Amaranthus* spp., 256 accessions  
*Celosia* spp., 9 accessions
- Maintenance of collection: Long-term seed storage
- Duplication of collection: No information
- Availability: Available in limited quantity
- Quarantine: No information
- Evaluation: No information
- Documentation: Manual. Passport data available

**PERU**

Centro de Investigación de Cultivos  
Andinos  
Universidad Nacional del Cuzco  
Apartado Postal 774  
Cuzco

Telephone: 231913  
Telex:  
Cable:

Curator/person in charge: L. Súmar Kalinowski

Details of collection: *Amaranthus caudatus*, total 708 accessions as follows:  
- 27 wild from Peru  
- 234 spontaneous from Bolivia (17) and Peru (207)  
- 421 primitive cultivars from Peru  
- 36 elite lines from Peru  
*A. cruentus*, 15 primitive cultivars from Guatemala and India  
*A. hypochondriacus*, 7 primitive cultivars from Mexico

Maintenance of collection: Short-term seed storage at ambient temperatures. The store is situated at 3500 m of altitude with a temperature of 10° +3°C and 70% +4% RH. Seeds in 1 litre glass containers. Storage capacity 70 m<sup>3</sup>

Duplication of collection: NSSL, Fort Collins, USA

Availability: Freely available

Quarantine: No known restrictions

Evaluation: Partial for *A. caudatus* according to IBPCR descriptor list with some modifications

Documentation: Partial and manual

**PERU**

Estación Experimental de Camacani  
Universidad Nacional Técnica del Altiplano  
Puno

Telephone:  
Telex:  
Cable:

Curator/person in charge: L. Lescano / L. Perez

Details of collection: *Amaranthus caudatus*, 440 landraces from the Andean region

Maintenance of collection: Active collection

Duplication of collection: IBTA, Patacamaya, Bolivia

Availability: Freely available

Quarantine: No information

Evaluation: No information

Documentation: Manual

**ROMANIA**

Gene Bank of Suceava  
Agricultural Research Station of Suceava  
Bulevardul 1 Mai, 15  
R-5800 Judetul Suceava

Telephone: (987) 158 47  
Telex: 23268  
Cable:

Curator/person in charge: M. Cristea

Details of collection: *Amaranthus retroflexus*, 5 wild from the Districts of Botosani, Constanta, Iasi, Sibiu and Suceava, Romania

Maintenance of collection:	Long-term seed storage at -20°C. Four rooms with the total storage capacity of 172.5 m <sup>3</sup> Medium-term seed storage at 4°C. Four rooms with the total storage capacity of 273.6 m <sup>3</sup> . Seeds with 8-10% m.c. in sealed glass containers of 50, 100, 150, 350, 400, 750, 800 and 1000 ml capacity
Duplication of collection:	Research Institute for Cereals and Technical Plants, Fundulea and Agricultural Research Station of Simnic, Romania
Availability:	Available on exchange basis
Quarantine:	In conformity with international quarantine regulations
Evaluation:	On-going work for field and laboratorial evaluation
Documentation:	Characterization data computerized

### SOUTH AFRICA, REPUBLIC OF

Department of Agricultural Economics and Marketing  
Directorate of Plant and Liquor Control  
Private Bag X 179  
0001 Pretoria

Telephone: (012) 206 24 06  
Telex: 3-23264  
Cable: SATIVA PRETORIA  
Telefax: (012) 206 27 86

Curator/person in charge: H. Chamberlain

Details of collection: *Amaranthus bouchonii*, 1  
*A. caudatus*, 1  
*A. hybridus*, 3  
*A. cruentus*, 1  
*A. hypochondriacus*, 1  
*A. retroflexus*, 2 landraces from Canada  
*A. thunbergii*, 1  
*A. tricolor*, 2  
*Amaranthus* spp., 1  
All other accessions are landraces from Rep. of South Africa  
  
*Celosia argentea* var. *argentea*, 1  
*C. odorata*, 1  
*C. trigyna*, 1  
All landraces from Rep. of South Africa

Maintenance of collection:	Long-term seed storage at -20°C. Seeds in vacuum sealed aluminium laminated foil packets (small part of the collection) Short-term seed storage at 6°-7°C and 45% RH. Seeds in plastic containers
Duplication of collection:	At different Crop Research Institutes in the Rep. of South Africa
Availability:	Available in limited quantity (0.5 / 300 g) and on exchange basis. Index Seminum issued yearly Requests to: The Plant Introduction Officer (same address)
Quarantine:	Rooted plants: Additional declaration on the phytosanitary certificate that: 1. The material is free from: a) Beet curly top virus b) Tomato black ring virus c) Tomato ringspot virus d) Tobacco ringspot virus e) Cucumber mosaic virus 2. The plants were rooted, grown and packed in a sterilized medium

**SOUTH AFRICA, REPUBLIC OF (cont.)**

Evaluation: On-going work  
 Documentation: Complete and computerized

**THAILAND**

Department of Agriculture  
 Fang Horticultural Experiment Station  
 Fang  
 Chiang Mai

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: T. Thonguthaisri  
 Details of collection: *Amaranthus* spp., 115 landraces from Thailand  
 Maintenance of collection: Active collection  
 Duplication of collection: NSSL, Fort Collins, USA  
 Availability: Freely available  
 Quarantine: No information  
 Evaluation: On-going according to IBPGR descriptor list  
 Documentation: Manual

**UNION OF SOVIET SOCIALIST REPUBLICS**

The N.I. Vavilov Institute of Plant Industry (VIR)  
 44, Herzen str.  
 Leningrad 190000

Telephone: (314) 48 48  
 Telex:  
 Cable:

Curator/person in charge: V.I. Krivchenko  
 Details of collection: *Amaranthus caudatus*, 3 primitive cultivars from USSR  
*A. cruentus*, 25 primitive cultivars from Africa, India, Peru and West Europe  
 Maintenance of collection: Long-term seed storage at -10°C  
 Medium-term seed storage at 4°C. Seeds with 6-7% m.c. in sealed glass containers  
 Duplication of collection: Partially at ZIGuK, Gatersleben, DDR; ICRISAT, India and NSSL, Fort Collins, USA  
 Availability: Available in accordance with the Exchange Catalogue regularly issued  
 Quarantine: According to the International Convention on Phytosanitary Plant Protection  
 Evaluation: Field and laboratory evaluation using the International COMECON descriptors list  
 Documentation: Manual. Passport data available

*NB - Samples received at the Institute are given temporary catalogue numbers. Some may be included in the permanent collection after 2-3 years trials, elimination of duplicates and low-value breeding lines*

## UNITED KINGDOM

Royal Botanic Gardens  
Kew and Wakehurst Place  
Wakehurst Place  
Ardingly:  
Haywards Heath  
West Sussex RH17 6 TN

Telephone: (0444) 89 27 01  
Telex: 296694 KEWGAR (Attn.  
SEEDBANK)  
Cable:

Curator/person in charge:	S. Linington
Details of collection:	<i>Amaranthus acutilobus</i> , 1 <i>A. adulterinus</i> , 1 from France <i>A. albus</i> , 5 from Canada, France, Germany and Portugal <i>A. bouchonii</i> , 2 from France <i>A. caudatus</i> , 2 <i>A. crispus</i> , 1 <i>A. deflexus</i> , 3 from Italy and Portugal <i>A. dubius</i> , 1 from Colombia <i>A. graecizans</i> , 2 from Italy and Portugal <i>A. hybridus</i> , 6 from Italy and Portugal <i>A. lividus</i> , 5 from France <i>A. patulus</i> , 1 from Germany <i>A. retroflexus</i> , 12 from Denmark, France, Germany, Italy and Portugal <i>A. spinosus</i> , 1
Maintenance of collection:	Long-term seed storage at -20°C. Seeds with 4-6% m.c. in aluminium cans, universal bottles or glass jars
Duplication of collection:	No information
Availability:	Freely available. Seed list issued
Quarantine:	No restrictions
Evaluation:	Germination of dormant seeds, verified identification
Documentation:	Complete and computerized

## UNITED STATES OF AMERICA

North Central Regional Plant Introduction Station  
Iowa State University  
USDA - ARS  
Ames, Iowa 50011

Telephone: (515) 294-32 55  
Telex:  
Cable:

Curator/person in charge:	R.L. Clark / J.W. Lehmann
Details of collection:	<i>Amaranthus</i> spp., 2230 landraces, breeding lines and populations from Africa, India, Mexico and various other countries
Maintenance of collection:	Medium term seed storage at 4°C and 35-40% RH. Seeds in screw-top glass jars
Duplication of collection:	NSSL, Fort Collins, USA
Availability:	Freely available
Quarantine:	No known restrictions
Evaluation:	No evaluation descriptor list established
Documentation:	Computerized and complete. Database for Germplasm Resources Information Network (GRIN), National Agricultural Library, Beltsville, USA

**UNITED STATES OF AMERICA**

National Seed Storage Laboratory (NSSL)  
 US Department of Agriculture (USDA)  
 Agricultural Research Service (ARS)  
 Colorado State University Campus  
 Fort Collins, Colorado 80523

Telephone: (303) 484 04 02  
 Telex: 237401714 DNPA UC  
 Cable:  
 Telefax: (303) 221 14 27

Curator/person in charge: S.A. Eberhart

Details of collection: *Amaranthus* spp., 139 accessions

Maintenance of collection: Long-term seed storage at -18°C. Seeds in aluminium laminated foil packets

The Institute has agreed to accept responsibility for maintaining a global collection of *Amaranthus* for long-term conservation

Duplication of collection: As an active collection at Regional Plant Introduction Station, Ames, Iowa, USA

Availability: Freely available only if not available from the active collection

Quarantine: No information

Evaluation: Responsibility of the Station holding the active collection

Documentation: All data are computerized in GRIN (Germplasm Resources Information Network). The GRIN system resides on a Prime Computer in Beltsville, MD, USA

**UNITED STATES OF AMERICA**

Rodale Research Center  
 P.O. Box 323, R.D.1  
 Kutztown, Pennsylvania 19530

Telephone: 215-683-6383  
 Telex: 84 73 38  
 Cable:

Curator/person in charge: C. Reider

Details of collection

*Amaranthus caudatus*, 297 most landraces, also a few cultivars and wild from Argentina (3), Bolivia (26), Ecuador (4), France (1), Nepal (20), Peru (218), USA (5) and 10 of unknown origin

*A. cruentus*, 184 most landraces, also a few cultivars and wild from Africa (2), Benin (5), Canada (1), Central African Republic (2), PR China (3), Ethiopia (1), Ghana (18), Guatemala (15), India (20), Malaysia (1), Mexico (97), Nepal (3), Niger (2), Nigeria (6), Peru (2), Portugal (1), Puerto Rico (1), Taiwan (4), Tanzania (2), USA (7), Zaire (1) and 9 of unknown origin

*A. dubius*, 23 landraces and cultivars from Ghana (2), India (6), Jamaica (2), Nepal (1), Niger (1), Puerto Rico (2), Seychelles (2), Surinam (1), Taiwan (2), Tanzania (1), US Virgin Islands (1), Zambia (1) and 1 of unknown origin

*A. hybridus*, 47 wild, landraces and cultivars from Argentina (1), Botswana (1), Ecuador (20), Greece (2), Guatemala (1), Mexico (1), Nepal (1), Nigeria (2), Pakistan (1), Peru (3), USA (4), Venezuela (2) and 8 of unknown origin

*A. hypochondriacus*, 349 landraces and cultivars from Afghanistan (3), Brazil (2), Dominican Republic (1), Ghana (1), India (50), Mexico (180), Nepal (85), USA (2), Uganda (1), West Indies (1), Zimbabwe (1) and 22 of unknown origin

*A. lividus*, 20 landraces from India (16), Hong Kong (2), Seychelles (1) and 1 of unknown origin

*A. palmari*, 6 wild from Mexico (1), Senegal (2) and USA (3)

<b>Details of collection:</b> (cont.)	<p><i>Amaranthus retroflexus</i>, 10 wild from Canada (1), India (1), Jamaica (?), Taiwan (1), Turkey (2), USA (3) and 1 of unknown origin</p> <p><i>A. spinosus</i>, 10 wild from Indonesia (4), Kenya (1), Taiwan (1), Thailand (1), Venezuela (2) and Zambia (1)</p> <p><i>A. tricolor</i>, 132 landraces and cultivars from Canada (1), P.R. China (6), Hong Kong (14), India (62), Indonesia (1), Madagascar (1), Malaysia (2), Nepal (2), Papua New Guinea (2), Taiwan (9), Thailand (2), USA (8), West Africa (2), Zaire (1) and 19 of unknown origin</p> <p><i>A. viridis</i>, 2 wild from Indonesia (1) and Philippines (1).</p> <p>- 1 landrace of unknown origin</p> <p><i>Amaranthus</i> spp., 127 total accessions:</p> <p>- 64 landraces and wild, world-wide, not identifiable</p> <p>- 63 landraces and wild which segregate into two or more species</p> <p><i>Celosia argentea</i> var. <i>argentea</i>, 6 landraces from Ghana (1), India (3), Nigeria (1) and 1 of unknown origin</p> <p><i>C. argentea</i> var. <i>cristata</i>, 6 landraces from Nepal (5) and USSR (1)</p>
<b>Maintenance of collection:</b>	Air-conditioned room with controlled humidity
<b>Duplication of collection:</b>	North Central Regional Plant Introduction Station, Ames, Iowa, USA
<b>Availability:</b>	Available in limited quantity
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	Complete for type (grain, leaf vegetable, weed, etc.); morphological characters of plant, leaf flower and seed; resistance to <i>Lygus</i> ; maturity period
	Catalogue (Rodale Amaranth Germplasm Collection, Rodale Press, Inc.) published and updated annually listing passport and characterization data for the germplasm collection
<b>Documentation:</b>	Complete and manual. Computerized for most passport and evaluation data

## ZAMBIA

Mount Makulu Research Station Private Bag 7 Chilanga	Telephone: 27 86 55 Telex: Cable: Research Chilanga
<b>Curator/person in charge:</b>	C. Nkhoma
<b>Details of collection:</b>	<i>Amaranthus hybridus</i> , 57 accessions, mostly spontaneous from Zambia
<b>Maintenance of collection:</b>	Short-term seed storage at 10°C and no controlled humidity. Seeds in aluminium laminated foil packets of 10 cm x 20 cm
<b>Duplication of collection:</b>	NSSL, Fort Collins, USA
<b>Availability:</b>	Available with the only condition of information feed-back
<b>Quarantine:</b>	Import and export seeds must be accompanied with phytosanitary certificate
<b>Evaluation:</b>	Partial for yield components
<b>Documentation:</b>	Partial and manual

**ZAMBIA**

Crop Science Department  
School of Agricultural Sciences  
University of Zambia  
P.O. Box 2379  
Lusaka

Telephone:  
Telex:  
Cable:

Curator/person in charge:

Details of collection: *Amaranthus caudatus*, 6  
*A. hybridus*, 1  
*A. hypochondriacus*, 12  
*A. tricolor*, 28  
*A. viridis*, 1  
*Amaranthus* spp., 3  
Landraces from India, Nigeria and USA donated by Tamil Nadu  
University, India

Maintenance of collection: Medium-term seed storage (domestic refrigerator)

Duplication of collection: No information

Availability: Available in limited quantity

Quarantine: No information

Evaluation: Adaptation to Zambian environment

Documentation: Partial and manual

## Brassicaceae

**AFGHANISTAN**

Plant Genetic Resources Unit  
 Crop Improvement Division  
 Plant Research and Soil Division  
 Ministry of Agriculture and Land Reform  
 Darulaman  
 Kabul

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: M.A. Rashid

Details of collection: *Brassica juncea*, 6  
*Eruca sativa*, 1 landrace from Afghanistan

Maintenance of collection: Medium-term seed storage at 2°C and 35-40% RH. Seeds in 1 litre capacity cans

Duplication of collection: No information

Availability: Freely available

Quarantine: No information

Evaluation: No information

Documentation: Manual

**AUSTRALIA**

Australian Temperate Field Crops Collection  
 Victorian Crops Research Institute  
 Australian Network of Plant Genetic Resources Centres  
 Horsham, Victoria

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: A.D. McIntyre

Details of collection: *Brassica* spp., 700 lines from Victoria and 1200 from Western Australia

Maintenance of collection: Long-term seed storage at -18°C. Seeds with 5% m.c. in sealed containers. Storage capacity 40 m<sup>3</sup>  
 Medium-term seed storage at 2°C. Seeds with 5% m.c. Storage capacity 128 m<sup>3</sup>

Duplication of collection: No information

Availability: Freely available

Quarantine: No information

Evaluation: No information

Documentation: Complete and computerized

**AUSTRALIA**

Australian Tropical Forages Genetic  
 Resources Centre  
 CSIRO  
 306 Carmody Road  
 Sta. Lucia, Queensland 4067

Telephone: (07) 377 02 09  
 Telex: 42159 AA  
 Cable:  
 Telefax: (07) 371 39 46

Curator/person in charge: R.J. Williams

<b>Details of collection:</b>	<i>Brassica alba</i> , 1 accession <i>B. campestris</i> , 1 accession <i>B. rapus</i> , 6 accessions <i>Brassica</i> spp., 3 accessions
<b>Maintenance of collection:</b>	Long-term seed storage at -20°C. Storage capacity 12 m <sup>3</sup> Short-term seed storage at 5° to 10°C and 25% RH. Storage capacity 60 m <sup>3</sup> Seeds in aluminium laminated foil packets and plastic bottles
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	Available provided there is sufficient seed
<b>Quarantine:</b>	Import seeds must have phytosanitary certificate. Seeds treated and quarantined on arrival. Despatch of seeds will include a phytosanitary certificate
<b>Evaluation:</b>	On-going work
<b>Documentation:</b>	Passport data complete and computerized

**AUSTRALIA**

Division of Plant Production  
Department of Agriculture  
Jarrah Road  
South Perth, Western Australia 6151

Telephone:  
Telex:  
Cable:

<b>Curator/person in charge:</b>	N.N. Roy
<b>Details of collection:</b>	<i>Brassica napus</i> , 85 cultivars, donated by breeders and institutions in Europe and Japan <i>B. juncea</i> , 100 landraces and cultivars, donated by institutions in India and USSR <i>B. rapa</i> , 30 cultivars, donated by breeders and institutions in Europe and India
<b>Maintenance of collection:</b>	Active collection. Seeds in aluminium laminated foil packets
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	Available in limited quantity
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	Adaptability and disease resistance
<b>Documentation:</b>	Partial and manual

**AUSTRIA**

Research Station for Special Crops  
A-8551 Wies 88

Telephone: (03465) 24 23  
Telex:  
Cable:

<b>Curator/person in charge:</b>	H. Pelzmar
<b>Details of collection:</b>	<i>Camelina sativa</i> , 1 landrace from Yugoslavia <i>Eruca vesicaria</i> subsp. <i>sativa</i> , 1 primitive cultivar from Italy <i>Raphanus sativus</i> var. <i>sativus</i> , 1 cultivar from FRG
<b>Maintenance of collection:</b>	Long-term seed storage at -18°C. Seeds with 5% m.c. in 500 cc plastic or tin containers

**AUSTRIA (cont.)**

Duplication of collection:	Not duplicated
Availability:	Available on exchange basis
Quarantine:	No known restrictions
Evaluation:	Not evaluated
Documentation:	Manual

**BELGIUM**

Rijksstation voor Plantenveredeling  
Rijkscentrum voor Landbouwkundig Onderzoek-Gent  
Burgemeesters van Gansberghelaan, 109  
B-9220 Merelbeke

Telephone: (091) 52 19 81  
Telex:  
Cable:

Curator/person in charge:	A. Andries
Details of collection:	<i>Brassica napus</i> var. <i>oleifera</i> , 2 landraces and 14 old cultivars <i>B. rapa</i> var. <i>rapifera</i> , 32 landraces and 8 old cultivars
Maintenance of collection:	Long-term seed storage at -20°C Medium-term seed storage at 5°C and 35% RH
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Yield, rust, mildew, <i>Xanthomonas</i> and <i>Plasmodiophora</i>
Documentation:	No information

**BULGARIA**

Maritsa Institute for Vegetable Crops  
ul. Brèzovsko shosse 32  
BG-4003 Plovdiv

Telephone:  
Telex:  
Cable:

Curator/person in charge:	E. Uzunova
Details of collection:	<i>Brassica oleracea</i> var. <i>capitata</i> , 750 commercial cultivars, breeders' lines and hybrids from Bulgaria, Czechoslovakia, DDR, Japan, Netherlands, Romania, USSR and Yugoslavia
Maintenance of collection:	Short-term seed storage at ambient temperatures The collection is held at: Horticultural Experimental Station 175 Negovan, Sofia
Duplication of collection:	No information
Availability:	Some restrictions
Quarantine:	No information
Evaluation:	Morphological characters, resistance to head cracking, resistance to bolting, duration of growing season, suitability for mechanized harvesting, yield, resistance to <i>Peronospora parasitica</i> , dry matter content, ascorbic acid content, protein content and composition, cellulose content, anthesis and incompatibility
Documentation:	Partial and manual

**BULGARIA**

Institute of Introduction and  
Plant Genetic Resources "K. Malkov"  
District of Plovdiv  
BG-4122 Sadovo

Telephone: (99) 22 21 / 22 51  
Telex: 44444 ZOS BG  
Cable:

- Curator/person in charge: B. Matsov / M. Zaharieva
- Details of collection: *Brassica oleracea*, 410 total accessions. 20 landraces, 6 old cultivars and 384 breeding material from DDR, Denmark, FRG, Hungary, Italy, Japan, Netherlands, UK and USSR  
*B. napus*, 296  
*B. rapa*, 194  
Accessions from Czechoslovakia, FRG and Poland  
*Sinapis* spp., 231 accessions from Poland and USSR
- Maintenance of collection: Long-term seed storage at -18°C. Seeds with 5-7% m.c. in glass jars  
Medium-term seed storage at 5°C and 50% RH
- Duplication of collection: PR China, Czechoslovakia, DDR, FRG, Greece, Hungary, India, Italy, Japan, Korea, Netherlands, Rep. of South Africa, USA, USSR and Yugoslavia
- Availability: Available on exchange basis
- Quarantine: Phytosanitary certificate required. All import material must go through a year trial in the quarantine nursery of IIPGR, Sadovo
- Evaluation: Characterization and evaluation according to unified descriptor lists - COMECON (morphological traits, biological properties, resistance to diseases and pests, economical characters, chemical composition and technological evaluation). Genetic and ecological studies
- Documentation: Computerized for passport and evaluation data

**CANADA**

Central Office for the Plant Gene Resources  
of Canada (PGRC)  
Plant Research Centre  
Central Experimental Farm  
Building 99  
Ottawa, Ontario K1A 0C6

Telephone: (613) 995 94 28  
Telex:  
Cable:

- Curator/person in charge: R.S. Pandeya
- Details of collection: *Brassica juncea*  
*B. napus*  
*B. rapa*  
*Sinapis alba*
- Maintenance of collection: Long-term seed storage at -20°C. Seeds in aluminium laminated foil packets. Storage capacity 145 m<sup>3</sup>  
Medium-term seed storage at 4°C and 20% RH. Seeds in paper envelopes. Storage capacity 54 m<sup>3</sup>  
The Institute has agreed to accept responsibility for maintaining a global collection of *B. juncea* and *B. rapa* (oilseeds and green manure) for long-term conservation
- Duplication of collection: No information

**CANADA (cont.)**

Availability:	Freely available
Quarantine:	No information
Evaluation:	Plant habit, size, appearance and inflorescence type
Documentation:	Partial and computerized for passport and characterization data

**CANADA**

Agriculture Canada Research Station  
107 Science Crescent  
Saskatoon, Saskatchewan S7N 0X2

Telephone:  
Telex:  
Cable:

Curator/person in charge: R.K. Downey

Details of collection: *Brassica carinata*, 69 landraces from Ethiopia and Europe (65) and India and Pakistan (4)  
*B. juncea*, 632 total accessions:  
 - 107 landraces and commercial cultivars from Europe  
 - 34 commercial cultivars from Canada (4), India and Pakistan (25) and Japan and East Asia (5)  
 - 491 diverse material from Australia (9), East Asia (12), Europe (222) and India and Pakistan (248)  
*B. napus*, 475 total accessions:  
 - 32 landraces and breeders' lines from Chile and South America (9) and Japan, PR China and Korea (23)  
 - 49 commercial cultivars from India and Pakistan (4), Japan and PR China (33) and North America (12)  
 - 384 breeders' lines from Australia and New Zealand (54), Canada (4), Europe (284) and India and Pakistan (42)  
 - 10 diverse material from Africa (7) and Middle East (3)  
*B. nigra*, 109 total accessions:  
 - 3 wild types from North America  
 - 5 commercial cultivars from Europe (4) and India (1)  
 - 101 diverse material from Africa (3), Europe (80) and India and Pakistan (18)  
*B. oleracea*, 189 total accessions:  
 - 24 commercial cultivars from Europe (13) and North America (11)  
 - 165 diverse material from Europe (158), Indian sub-continent (2), Japan (1) and Middle East (4)  
*B. rapa*, 1066 total accessions:  
 - 591 landraces from Mexico (494), Middle East (10) and Nepal, PR China and Korea (87)  
 - 200 landraces and breeders' lines from Europe  
 - 104 commercial cultivars from Europe (59), Indian sub-continent (19), Japan (13), North America (12) and South America (1)  
 - 171 breeders' lines from Australia (17), Indian sub-continent (140) and North America (14)  
*B. tournefortii*, 1 wild type from Australia and 5 other material from Ethiopia (3) and India (2)  
*Camelina sativa*, 17  
*Crambe* spp., 44  
*Eruca sativa*, 4  
*Raphanus sativus*, 6  
*Sinapis alba*, 170 total accessions:  
 - 53 commercial cultivars from Europe (50) and Indian sub-continent (3)  
 - 117 diverse material from Africa (2), PR China (1), Europe (107), Indian sub-continent (4) and Middle East (3)

Details of collection: (cont.)	<i>Sinapis arvensis</i> , 2 wild types from Canada and Chile and 10 other material from Africa (1) and Europe (9)
Maintenance of collection:	Long-term seed storage at -10°C and 66% RH. Seeds in glass vials and paper envelopes. Storage capacity 4 m <sup>3</sup>
Duplication of collection:	Canadian commercial cultivars at PGR, Ottawa, Canada and FAL, Braunschweig, FRG
Availability:	Available in limited quantity
Quarantine:	No information
Evaluation:	Oilseed <i>Brassica</i> collection for fatty acid composition and partly for glucosinolate content. About 2000 accessions for resistance to <i>Albugo candida</i> and about 200 lines for resistance to virulent strains of <i>Phoma lingam</i>
Documentation:	Partial and computerized

### CHINA, PEOPLE'S REPUBLIC OF

Rapeseed Resources Department  
Oil Crops Research Institute  
Chinese Academy of Agricultural Sciences (CAAS)  
Wuhan

Telephone: 87 84 31  
Telex:  
Cable:

Curator/person in charge:	Qian Xiuzheng
Details of collection:	<i>Brassica campestris</i> , 290 accessions from PR China <i>B. chinensis</i> , 120 accessions from PR China <i>B. juncea</i> , 150 accessions from PR China <i>B. napus</i> , 450 accessions from other countries
Maintenance of collection:	Seeds maintained in a cold store
Duplication of collection:	National Germplasm Center of Agricultural Crops, Beijing
Availability:	Available. Authorization from the Chinese authorities is requested
Quarantine:	Chinese quarantine regulations applied
Evaluation:	Agricultural characters; resistance to virus diseases; biochemical quality, oil and erucic acid content
Documentation:	Computerized

### CHINA

Genetic Resources and Seed Unit (GRSU)  
Asian Vegetable Research and Development  
Center (AVRDC)  
P.O. Box 42  
Shanhua, Tainan 74199  
Taiwan

Telephone: (06) 583 78 01  
Telex: 73560 AVRDC  
Cable: ASVEG SHANHUA  
Telefax: (06) 583 00 09

Curator/person in charge:	D.C.S. Tay
Details of collection:	<i>Brassica campestris</i> , 846 landraces and cultivars from Austria (14), Brazil (3), PR China (61), Guam (3), Hong Kong (3), India (10), Indonesia (3), Japan (368), Korea (206), Malaysia (5), Mauritius (5), Netherlands (2), Taiwan (139), Thailand (6) and USA (18)

**CHINA (cont.)**

Maintenance of collection:	Long-term seed storage at -18°C Medium-term seed storage at 2 <sup>o</sup> -5°C and 45% RH Short-term seed storage at 15°C and 45% RH Seeds with 5-6% m.c. in aluminium laminated foil packets (long-term storage) and in plastic containers (medium and short-term storage)
Duplication of collection:	NIAR, Tsukuba, Japan; National Plant Genetic Resources Laboratory, Univ. of Philippines, Los Baños, Philippines; IHR, Wellesbourne, UK and USDA, Beltsville, USA
Availability:	Available on exchange basis
Quarantine:	No information
Evaluation:	No information
Documentation:	Complete and computerized for passport and characterization data

**CHINA**

Taiwan Seed Service Provincial Department of Agriculture & Forestry Shinshieh Taichung Taiwan 426	Telephone: Telex: Cable:
Curator/person in charge:	Liao Cong Ich / Chan Chu Ming / Teng Shan Ho
Details of collection.	<i>Brassica juncea</i> , 10 landraces and commercial cultivars from PR China and Taiwan <i>B. oleracea</i> var. <i>botrytis</i> , 20 landraces, commercial cultivars and breeders' lines from PR China and Taiwan <i>B. oleracea</i> var. <i>capitata</i> , 4 breeders' lines from Taiwan <i>B. rapa</i> var. <i>chinensis</i> , 11 landraces from PR China and Taiwan <i>B. rapa</i> var. <i>pekinensis</i> , 6 landraces, commercial cultivars and breeders' lines from PR China and Taiwan <i>B. rapa</i> var. <i>silvestris</i> , 8 landraces from Taiwan
Maintenance of collection:	Medium-term seed storage at 5 <sup>o</sup> -8°C and 50% RH. Storage area 25 m <sup>2</sup>
Duplication of collection.	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	Complete for morphological characters, heat tolerance and disease and pest resistance
Documentation:	Complete and manual

**CHINA**

Taiwan Agricultural Research Institute 189 Chung-Cheng Road Wufeng, Taichung Taiwan 41301	Telephone: (04) 330 23 01 Telex: 3338162 Cable:
Curator/person in charge:	C.C. Tu
Details of collection.	<i>Brassica campestris</i> , 40 cultivars and elite lines from Taiwan <i>B. juncea</i> , 50 cultivars from PR China and Taiwan <i>B. oleracea</i> , 400 landraces and cultivars from PR China, Taiwan and USA

<b>Details of collection:</b> (cont.)	<i>Raphanus sativus</i> , 20 cultivars from Taiwan
<b>Maintenance of collection:</b>	Medium-term seed storage at 5°C and 40-50% RH. Seeds in PVC containers of 60 cm <sup>3</sup> capacity
<b>Duplication of collection:</b>	<i>Brassica</i> : Taiwan Seed Improvement and Propagation Station, Taiwan <i>Raphanus</i> : Feng-Shan Tropical Horticultural Experiment Station, Taiwan
<b>Availability:</b>	Available in limited quantity and on exchange basis (20-200 seeds)
<b>Quarantine:</b>	Phytosanitary certificate required for export or import of material
<b>Evaluation:</b>	On-going work for: Principal use; days to maturity; leaf status; n <sup>o</sup> of leaves/plants; leaf shape; root shoulder colour; root skin colour, shape, length, diameter and weight; floating root; pithless; cracked root; branching root and fibrous root
<b>Documentation:</b>	Partial and computerized

## CZECHOSLOVAKIA

Breeding Station at Kvetoslavov  
Research and Breeding Institute for Vegetables  
and Special Plants, Hurbanovo  
930 41 Kvetoslavov

Telephone: (708) 24 43  
Telex:  
Cable: SS Kvetoslavov

<b>Curator/person in charge:</b>	K. Michalek
<b>Details of collection:</b>	<i>Brassica oleracea</i> , 452 accessions
<b>Maintenance of collection:</b>	Short-term seed storage at ambient temperatures
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	Available on exchange basis
<b>Quarantine:</b>	No known restrictions
<b>Evaluation:</b>	On-going work
<b>Documentation:</b>	Manual

## CZECHOSLOVAKIA

Research and Plant Breeding Institute for Vegetables  
ul. Slechtitelu  
772 36 Olomouc

Telephone: (85) 250 81  
Telex: 66282 VSUZO C  
Cable:

<b>Curator/person in charge:</b>	P. Kvasnicka
<b>Details of collection:</b>	<i>Brassica oleracea</i> , 430 landraces and cultivars, world-wide representation <i>Raphanus sativus</i> , 510 landraces, cultivars and wild, world-wide representation
<b>Maintenance of collection:</b>	Long-term seed storage at -18°C and 5-10% RH Medium-term seed storage at 5°C
<b>Duplication of collection:</b>	Not duplicated

**CZECHOSLOVAKIA (cont.)**

Availability:	Available on exchange basis
Quarantine:	Phytosanitary certificate required
Evaluation:	Partial and complete, depending on the type of collection
Documentation:	Computerized for passport data and on-going for evaluation data. Data held at Czechoslovak Information System for Genetic Resources (EVIGEZ). For further information see: Rogalewicz, V. and Bares, I. (1987). Czechoslovak Information System for Genetic Resources. FAO/IBPGR Pl. Genet. Resources Newsletter, 72: 14-16

**CZECHOSLOVAKIA**

Research Station of Oil Seed Crops at Opava Research and Breeding Institute of Technical Crops and Legumes, Sumpérk Purkynova, 6 746 01 Opava	Telephone: 21 65 60 / 21 65 01 Telex: 52898 VSOPA C Cable:
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Curator/person in charge: J. Havel

## Details of collection:

*Brassica juncea*, 34 total accessions:  
 - 29 cultivars from Canada (2), PR China (3), FRG (2), UK (3), USSR (14) and 5 of unknown origin  
 - 5 breeder's lines from India (3) and 2 of unknown origin  
*B. napus* var. *napus*, 430 total accessions:  
 Winter:  
 - 248 cultivars from Australia (5), Canada (1), Czechoslovakia (6), DDR (15), Denmark (3), France (28), FRG (83), Hungary (4), Japan (8), Mongolia (1), Netherlands (8), Poland (17), Sweden (19), USSR (6), USSR (14) and 19 of unknown origin  
 - 95 breeder's lines from Czechoslovakia (7), DDR (15), FRG (11), France (6), Hungary (2), Poland (35), Sweden (10), USSR (1) and 8 of unknown origin  
 Spring:  
 - 1 landrace from Czechoslovakia  
 - 81 cultivars from Australia (1), Canada (7), FRG (21), Denmark (5), France (5), Italy (2), Japan (6), Poland (4), Sweden (17), UK (1), USSR (6) and 5 of unknown origin  
 - 5 breeder's lines from Sweden (3) and 2 of unknown origin  
*B. nigra*, 8 cultivars from Denmark (1), FRG (1), USSR (2) and 4 of unknown origin  
*B. rapa* f. *biennis*, 31 total accessions:  
 - 4 landraces from Czechoslovakia (2) and 2 of unknown origin  
 - 27 cultivars from Czechoslovakia (1), DDR (1), FRG (7), France (1), Poland (2), Sweden (3), USSR (2) and 10 of unknown origin  
 - 1 breeder's line of unknown origin  
*B. rapa* f. *praecox*, 18 total accessions:  
 - 15 cultivars from Australia (1), Canada (5), FRG (2), Sweden (2) and 5 of unknown origin  
 - 3 breeder's lines from Sweden  
*Camelina* spp., 13 cultivars from Poland (3), USSR (7) and 3 of unknown origin  
*Crambe* spp., 1 cultivar from Poland  
*Eruca* spp., 2 accessions from Canada (1) and USSR (1)  
*Raphanus sativus* var. *oleiformis*, 5 total accessions:  
 - 4 cultivars from FRG (3) and Netherlands (1)  
 - 1 breeder's line from Sweden

Details of collection: (cont.)	<i>Sinapis alba</i> , 38 total accessions: - 1 landrace from Czechoslovakia - 36 cultivars from Austria (1), Canada (2), Czechoslovakia (2), FRG (12), Denmark (1), France (3), Hungary (1), Netherlands (1), Poland (2), Romania (1), Sweden (2), UK (1), USSR (3) and 4 of unknown origin - 1 breeder's line from Denmark
Maintenance of collection:	Long-term seed storage at -18°C
Duplication of collection:	No information
Availability:	Available on exchange basis
Quarantine:	No known restrictions
Evaluation:	On-going work
Documentation:	Passport data computerized in Czechoslovak Information System for Genetic Resources EVIGEZ. For further information see Rogalewicz, V. and Bares, I., 1988. Czechoslovak Information System for Genetic Resources. FAO/IBPGR Pl. Genet. Resources Newsletter, 72: 14-16

## ETHIOPIA

Plant Genetic Resources Centre/Ethiopia (PGRC/E) P.O. Box 30726 Addis Ababa	Telephone: 18 03 81 Telex: 21460 GTZFP ET Cable: GENE BANK
Curator/person in charge:	Melaku Worede
Details of collection:	<i>Brassica</i> spp., 1069 primitive cultivars, including from PR China (8), India (31), Nepal (10) and Sweden (8)
Maintenance of collection:	Long-term seed storage at -10°C. Seeds with 5-7% m.c. in aluminium laminated foil packets Medium-term seed storage at 4°C and 35% RH. Seeds in aluminium laminated foil packets. Provisionally storage for samples awaiting multiplication and/or samples for long-term seed storage  The Institute has agreed to accept responsibility for maintaining a global collection of <i>B. carinata</i> for long-term conservation
Duplication of collection:	Partially (93 accessions) in Netherlands
Availability:	Available, in consultation with Ethiopian breeders, scientists from the co-operating institutes and PGRC/E, whenever there is mutual advantage
Quarantine:	Import of seeds through the Institute of Agricultural Research, Quarantine Unit. Export seeds accompanied with phytosanitary certificate issued by the Ministry of Agriculture
Evaluation:	Partial
Documentation:	On-going and computerized for passport, characterization and evaluation data

**FEDERAL REPUBLIC OF GERMANY**

Institut für Pflanzenbau und  
Pflanzenzüchtung der FAL  
Bundesallee, 50  
D-3300 Braunschweig

Telephone: (531) 59 66 00  
Telex:  
Cable: LANDFORSCHUNG, Völknerode  
Telefax: (531) 59 68 14

Curator/person in charge: L. Seidewitz

## Details of collection:

*Brassica carinata*, 113 total accessions:

- 107 ecotypes from Ethiopia
- 5 wild from Ethiopia (4) and Pakistan (1)
- 1 line of unknown origin
- B. hirta*, 11 wild from Puerto Rico (USA) (1), Poland (2), Spain (1), Sweden (4), Turkey (1) and Yugoslavia (2)

*B. juncea*, 107 total accessions:

- 40 cultivars from Canada (4), Czechoslovakia (1), FRG (3), Poland (1), USSR (15) and 16 of unknown origin
- 2 landraces from Ethiopia (1) and India (1)
- 43 lines from Afghanistan (2), Ethiopia (2), FRG (1), India (7), Nepal (7), Pakistan (3), Poland (1), Puerto Rico (USA) (1), Taiwan (China) (1), Thailand (2), Turkey (3), UK (1), USSR (1), and 11 of unknown origin
- 22 ecotypes from Balkans (1), Belgium (1), Canada (1), DDR (1), Denmark (1), FRG (1), Hungary (3), Morocco (1), Poland (2), Romania (2), UK (1), USSR (3) and 4 of unknown origin

*B. kaber*, 2 wild from Tunisia (1) and USSR (1)

*B. napus*, 232 total accessions:

- 174 cultivars from Australia (5), Austria (1), Canada (10), Czechoslovakia (5), Denmark (2), FRG (72), Finland (1), France (2), Italy (1), Netherlands (8), Poland (1), Sweden (7), UK (1) and 58 of unknown origin
- 3 landraces from Belgium (1), FRG (1) and Turkey (1)
- 40 lines from Brazil (1), Canada (1), FRG (8), France (1), Hungary (1), Indonesia (1), Japan (1), PR Mozambique (1), Nepal (1), Pakistan (2), Poland (3), Sweden (4), Taiwan (China) (1), Thailand (1), Turkey (4), UK (1), USSR (1), Yugoslavia (1) and 6 of unknown origin
- 7 ecotypes from DDR (1), France (1), Morocco (1), Romania (1) and 3 of unknown origin
- 7 wild from FRG
- 1 accession from Turkey

*B. oleracea*, 326 total accessions:

- 168 cultivars from Canada (2), Czechoslovakia (1), FRG (148), France (2), Japan (1), Netherlands (3), Turkey (1), USA (3), USSR (4) and 3 of unknown origin
- 28 landraces from FRG (21) and Turkey (7)
- 130 lines from Afghanistan (4), Australia (1), Belgium (1), Brazil (1), Bulgaria (3), Canada (1), Czechoslovakia (2), Denmark (3), Egypt (2), FRG (3), France (11), Hungary (2), India (5), Iran (4), Israel (1), Japan (4), Netherlands (11), Norway (1), Poland (2), Rep. of South Africa (1), Spain (4), Sweden (2), Syria (1), Taiwan (China) (1), Thailand (1), Turkey (39), UK (6), USA (1), USSR (3), Yugoslavia (1) and 8 of unknown origin

*B. pekinensis*, 3 landraces from Japan and 2 populations of unknown origin

*B. rapa*, 145 total accessions:

- 69 cultivars from Belgium (3), Canada (6), Czechoslovakia (1), FRG (24), Finland (1), Netherlands (12), Poland (2), Sweden (8) and 12 of unknown origin
- 4 landraces from FRG
- 57 lines from Afghanistan (4), Canada (2), DDR (2), Guatemala (2), India (20), Iran (2), Iraq (1), Pakistan (3), Poland (2), Puerto Rico (USA) (1), Taiwan (China) (5), Sweden (2), Turkey (7), USSR (1) and 3 of unknown origin
- 7 ecotypes from FRG (1) and 6 of unknown origin
- 8 wild from FRG (2) and 6 of unknown origin

Details of collection:  
(cont.)

*Brassica rapa* var. *marinosa*, 87 total accessions:

- 12 cultivars from FRG (1) and 11 of unknown origin
  - 34 lines from Afghanistan (2), Denmark (1), Ethiopia (2), FRG (1), Greece (1), India (5), Italy (2), Netherlands (2), Poland (1), Turkey (2), Yugoslavia (2) and 13 of unknown origin
  - 39 ecotypes from Argentina (1), Belgium (1), Bulgaria (1), Canada (1), Denmark (1), FRG (2), Greece (14), India (2), Italy (1), Romania (2), USSR (8) and 5 of unknown origin
  - 1 wild from FRG
  - 1 unidentified of unknown origin
- B. rapa* var. *chinensis*, 1 line and 2 populations  
*B. sinapistrum*, 1 wild from USSR

*Camelina alyssum*, 4 wild from Bulgaria (3) and FRG (1)

*C. microcurpa*, 1 wild from FRG

*C. pilosa*, 2 wild from FRG

*C. rumelica*, 1 wild from USSR

*C. sativa*, 142 total accessions:

- 29 cultivars from Poland (5), Sweden (1), USSR (12) and 11 of unknown origin
- 2 landraces from USSR
- 3 lines from USSR
- 19 ecotypes from Australia (1) and 18 of unknown origin
- 62 lines from FRG
- 27 wild from Belgium (2), Bulgaria (6), Czechoslovakia (1), Denmark (1), FRG (6), Italy (1), Netherlands (1), Poland (1), Romania (1), Spain (1), Sweden (2), UK (2) and USSR (2)

*Crambe abyssinica*, 25 total accessions:

- 4 cultivars of unknown origin
  - 6 lines from Nigeria (1), Sweden (1), USSR (3) and 1 of unknown origin
  - 13 ecotypes from FRG (1), Nigeria (1), Poland (2), Portugal (2), Sweden (1) and USSR (6)
  - 2 wild from Spain (1) and USSR (1)
- C. maritima*, 1 ecotype of unknown origin  
 3 wild from Belgium (1) and FRG (1)

*Eruca sativa*, 13 total accessions:

- 2 landraces from Turkey (1) and USSR (1)
- 1 ecotype of unknown origin
- 6 populations of unknown origin
- 4 wild from Belgium (1), FRG (2) and UK (1)

*E. vesicaria*, 92 total accessions:

- 89 ecotypes from Afghanistan (1), Egypt (1), Pakistan (77), Turkey (1) and 9 of unknown origin
- 1 line
- 2 wild from FRG (1) and Ireland (1)

*Lepidium sativum*, 12 total accessions:

- 1 cultivar from Turkey
- 6 landraces from FRG (3), Turkey (2) and Yemen (1)
- 5 wild from FRG

*Lepidium* spp., 1 wild from FRG

*Raphanus raphanistrum*, 1 wild from FRG

*R. sativus*, 186 total accessions:

- 150 cultivars from FRG (70), Netherlands (3), Poland (1), Turkey (2), UK (1), USSR (26) and 47 of unknown origin
- 18 landraces from FRG (5), Turkey (7) and 6 of unknown origin
- 14 populations from Canada (1) and 13 of unknown origin
- 4 wild from Belgium (1), FRG (2) and Spain (1)

*Sinapis alba*, 121 total accessions:

- 69 cultivars from Austria (1), Canada (2), Czechoslovakia (4), Denmark (1), FRG (9), France (1), Italy (1), Poland (2), Sweden (4), USSR (4) and 40 of unknown origin

**FEDERAL REPUBLIC OF GERMANY (cont.)**

- Details of collection:** - 44 landraces from Belgium (1), Canada (2), Denmark (1), FRG (3), France (1), Greece (3), Hungary (2), Israel (1), Romania (1), Turkey (1), USSR (3) and 25 of unknown origin  
- 2 lines from USSR (1) and 1 of unknown origin  
- 6 wild from Belgium (1), FRG (4) and Spain (1)  
*Sinapis arvensis*, 2 ecotypes from Israel (1) and 1 of unknown origin  
1 wild from FRG
- Maintenance of collection:** Long-term seed storage at -10°C. Seeds with 6% m.c. in airtight tins  
Medium-term seed storage at 3°C and 30% RH
- The Institute has agreed to accept responsibility for maintaining a global collection of *B. carinata* (vegetables); *B. napus* and *Sinapis alba* (oilseeds and green manure) and *B. napus* (vegetables and fodder) for long-term conservation
- Duplication of collection:** Not duplicated
- Availability:** Freely available
- Quarantine:** No known restrictions
- Evaluation:** No information
- Documentation:** All available data computerized. Passport data are available for practically all accessions

**FEDERAL REPUBLIC OF GERMANY**

Arbeitskreis Pflanzengenetik  
Botanisches Institut  
J. W. Goethe-Universität  
Postfach 111 932  
Siesmayerstr., 70  
D-6000 Frankfurt am Main 11

Telephone: (069) 798 47 34  
Telex: 413932 unif  
Cable:

- Curator/person in charge:** H. Becela
- Details of collection:** *Brassica* spp., 5 wild  
*Sinapis* spp., 2 wild
- Maintenance of collection:** Long-term seed storage and short-term seed storage at ambient temperatures, depending on the species. Seeds in paper and/or plastic bags
- Duplication of collection:** No information
- Availability:** No information
- Quarantine:** No information
- Evaluation:** Research work in radiation and cytogenetics (crop plant evolution)
- Documentation:** No information

**FEDERAL REPUBLIC OF GERMANY**

Institut für Pflanzenbau und  
Pflanzenzüchtung  
Georg-August-Universität Göttingen  
von-Sieboldstr., 0  
D-3400 Göttingen

Telephone: (0551) 39 43 61  
Telex: 96703 unigoe D  
Cable:

- Curator/person in charge: G. Röbbelen
- Details of collection: *Brassica napus*, 1400 breeding and genetic material  
*Brassica* spp., 60 old cultivars, 30 wild and 30 breeding material
- Maintenance of collection: Active collection
- Duplication of collection: Not duplicated
- Availability: Available on exchange basis
- Quarantine: No known restrictions
- Evaluation: Cytogenetic and biochemical analyses, local adaptation and field performance
- Documentation: Manual

**FEDERAL REPUBLIC OF GERMANY**

Saatzucht Steinach  
Dr. M. von Schmieder Nachf. GmbH  
Wittelsbacher Str., 15  
D-8441 Steinach über Straubing

Telephone: (09428) 715  
Telex: 65569  
Cable:

- Curator/person in charge: P. Berner
- Details of collection: *Sinapis alba*, 1 cultivar 'Signal', 1 wild from southern France and some breeding lines  
*Raphanus sativus*, 3 breeding lines
- Maintenance of collection: No information
- Duplication of collection: Not duplicated
- Availability: Only cultivar 'Sigma' available
- Quarantine: No information
- Evaluation: Evaluation for breeding purposes
- Documentation: Manual

**FINLAND**

Agricultural Research Centre  
Department of Plant Breeding  
SF-31600 Jokioinen

Telephone: (916) 881 11  
Telex: 6741 mttk sf  
Cable:  
Telefax: (916) 884 91

- Curator/person in charge: S. Pulli
- Details of collection: *Brassica napus*, 40  
*B. rapa*, 40  
All accessions are breeding lines

**FINLAND (cont.)**

Maintenance of collection:	Medium-term seed storage at -4°C. Seeds with 5-7% m.c. in glass jars
Duplication of collection:	Partially at NGB, Alnarp, Sweden
Availability:	Available on exchange basis
Quarantine:	No known restrictions
Evaluation:	Partial
Documentation:	No information

**FRANCE**

Station d'Amélioration des Plantes de Rennes  
 Institut National de la Recherche Agronomique (INRA)  
 B.P. 29  
 Domaine de la Motte-au-Vicomte  
 F-35650 Le Rheu

Telephone: (99) 28 51 00  
 Telex: 730866 INRARES F  
 Cable:

Curator/person in charge: Y. Hervé

Details of collection: *Brassica napus* var. *napobrassica*, 44 landraces  
*B. napus* var. *oleifera*, 39 total accessions. Landraces (33) and commercial cultivars (6)  
*B. oleracea* var. *acephala*, 386 total accessions. Landraces (370) and commercial varieties (16)  
*B. oleracea* var. *botrytis*, 147 total accessions. Landraces (60) and commercial cultivars (87)  
*B. oleracea* var. *capitata*, 105 total accessions. Landraces (61) and commercial varieties (44)  
*B. oleracea* var. *gemmifera*, 8 total accessions. Landraces (6) and commercial varieties (2)  
*B. rapa*, 35 total accessions. Landraces (32) and commercial cultivars (2)  
*Brassica* spp., 5 landraces  
*Lepidium sativum*, 2 landraces  
*Raphanus sativus*, 19 commercial cultivars

Maintenance of collection:	Long-term seed storage at -18°C. Seeds with 7% m.c.
Duplication of collection:	Not duplicated
Availability:	No information
Quarantine:	No information
Evaluation:	Not evaluated
Documentation:	No information

**HUNGARY**

UAS Keszthely  
 Faculty of Agricultural Sciences  
 Vár ut. 2  
 H-9200 Mosonmagyaróvár

Telephone: (98) 159 11  
 Telex: 24-211  
 Cable:

Curator/person in charge: J. Varga

Details of collection: *Brassica oleracea* var. *acephala*, 2 old cultivars

Maintenance of collection:	Short-term seed storage at ambient temperatures
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Specific disease resistance, yield and nutritional value improvement
Documentation:	No information

## HUNGARY

Research Centre for Agrobotany  
I.A.Q.  
H-2766 Tápiószéle

Telephone: Tápiószéle 41  
Telex: 226981 agbot H  
Cable:

Curator/person in charge: A.L. Kiss

Details of collection: *Brassica chinensis*, 2 accessions from Hungary  
*B. napus*, from Czechoslovakia (1) and from Hungary (18)  
*B. nigra*, 2 from Hungary  
*B. oleracea* var. *acephala*, 14 accessions from Hungary  
*B. oleracea* var. *botrytis*, from Hungary (2) and from Netherlands (2)  
*B. oleracea* var. *capitata*, 28 total accessions from Hungary (26), Netherlands (1) and Romania (1)  
*B. oleracea* var. *gemmifera*, 3 accessions from Hungary  
*B. oleracea* var. *sabauda*, 12 accessions from Hungary  
*B. rapa*, 2 from Hungary  
  
*Raphanus sativus*, 193 total accessions, including 56 landraces and 128 cultivars from Austria (2), Belgium (2), Bulgaria (1), China (11), Czechoslovakia (11), DDR (17), Denmark (9), Egypt (1), FRG (4), Hungary (110), Netherlands (1), Poland (2), Portugal (4), Romania (2), UK (9), USA (3), USSR (1) and 3 of unknown origin

Maintenance of collection:	Long-term seed storage at -20°C Medium-term seed storage at +0°C. Seeds with 5% m.c. in airtight containers
Duplication of collection:	<i>Brassica</i> : not duplicated <i>Raphanus</i> : partially duplicated
Availability:	Freely available provided there is sufficient seed. Index Seminum periodically issued
Quarantine:	Phytosanitary certificate required
Evaluation:	On-going work
Documentation:	Complete for passport data

## INDIA

National Bureau of Plant Genetic Resources (NBPGR)  
Indian Agricultural Research Institute (IARI)  
Pusa Campus  
New Delhi 110012

Telephone:  
Telex:  
Cable:

Curator/person in charge: R.S. Rana

**INDIA (cont.)**

Details of collection:	<i>Brassica juncea</i> , 1169 <i>B. nigra</i> <i>B. rapa</i> var. <i>silvestris</i> , 445 type toria, 188 type brown sarson and 404 type yellow sarson <i>B. lournefortii</i> Total of 18 accessions
	<i>Eruca sativa</i> , 100 landraces and breeders' lines from India
Maintenance of collection:	Active collection
Duplication of collection:	Partially duplicated at Regional Station, Simla, India
Availability:	Freely available
Quarantine:	No information
Evaluation:	Data are being published in crop specific catalogues
Documentation:	Manual

**INDIA**

Division of Genetics Indian Agricultural Research Institute (IARI) New Delhi 110012	Telephone: Telex: Cable:
Curator/person in charge:	I.J. Anand
Details of collection:	<i>Brassica juncea</i> , 1200 accessions mainly landraces from India
Maintenance of collection:	Active collection
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	In progress
Documentation:	Partial and manual

**INDIA**

All India Coordinated Project on Rape and Mustard Haryana Agricultural University Hissar 125004, Haryana	Telephone: Telex: Cable:
Curator/person in charge:	P.R. Kumar
Details of collection:	<i>Brassica juncea</i> , 5412 accessions mainly landraces from India <i>B. rapa</i> var. <i>silvestris</i> , 857 type toria, 519 type brown sarson and 321 type yellow sarson. All accessions are landraces from India <i>Brassica</i> spp., 205 accessions, mainly landraces from India
	<i>Eruca sativa</i> , 177 accessions, mainly landraces from India
Maintenance of collection:	Active collection
Duplication of collection:	No information
Availability:	Freely available

Quarantine:	No information
Evaluation:	In progress
Documentation:	No information

**IRAN**

Seed and Plant Improvement Institute (SPII)  
Ministry of Agriculture & Rural Development  
Mard-Abad Ave.  
Karadj

Telephone: (02221) 28 58  
Telex:  
Cable: SEEDPLANT, Karadj

Curator/person in charge: M.A. Vahabian

Details of collection: *Brassica oleracea* var. *botrytis*, 10 from Iran and 18 introductions  
*B. oleracea* var. *capitata*, 1  
*B. oleracea* var. *gongylodes*, 1  
*B. oleracea* var. *sabauda*, 11  
*B. rapa*, 3 from Iran  
  
*Raphanus sativus*, 10 from Iran and 15 introductions  
*R. sativus niger*, 1 from Iran

Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**IRAQ**

Plant Genetic Resources Unit  
Agricultural Research Centre  
Abu Ghraib - Baghdad

Telephone: (01) 511 22 01  
Telex:  
Cable: SBAAR - IRAQ

Curator/person in charge: A.T. Sharif

Details of collection: *Brassica* spp., 6  
*Lepidium* spp., 4  
*Raphanus* spp., 3  
All accessions are landraces from Iraq

Maintenance of collection:	Short-term seed storage at 5°-10°C. Seeds in airtight cans. Storage capacity 40 m <sup>3</sup>
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	No information
Documentation:	Manual

**ISRAEL**

Israel Gene Bank for Agricultural Crops  
 Volcani Centre, ARO  
 P.O. Box 6  
 50-250 Bet Dagan

Telephone: (03) 968 34 58  
 Telex: 381476 AROVC IL  
 Cable:  
 Telefax: 972-3-993998

Curator/person in charge: M. Zur

Details of collection: *Brassica juncea*, 90 landraces and wild from Europe, donated by CSIRO, Australia  
*B. napus*, 160 cultivars and breeders' lines from Australia, Canada, Europe, Japan and USA, donated by Agriculture Canada, Canada and FAL, Braunschweig, FRG  
*Brassica* spp., 150 landraces and wild from Europe and Israel  
 Brassicaceae, 100 landraces and wild from Europe and Israel

Maintenance of collection: Long-term seed storage at -10°C. Seeds in aluminium boxes of 1 kg capacity. Storage area 50 m<sup>2</sup>

Duplication of collection: No information

Availability: Available in limited quantity

Quarantine: Special conditions and treatment according to Plant Protection Law

Evaluation: Drought, salinity and disease resistance. High nutrition level

Documentation: Complete and computerized

**ITALY**

Istituto del Germoplasma  
 CNR  
 Via G. Amendola, 165/A  
 I-70126 Bari

Telephone: (080) 58 34 63  
 Telex: 810565 CNR/BA I  
 Cable:

Curator/person in charge: P. Perrino

Details of collection: *Brassica* spp., 129 old cultivars

*Eruca sativa*, 14 old cultivars

Maintenance of collection: Long-term seed storage at -18°C. Seeds in airtight metal cans with silica gel  
 Medium-term seed storage at 0°C and 40% RH. Seeds in vacuum sealed aluminium laminated foil packets

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: No information

Documentation: No information

**ITALY**

Research Institute for Vegetable Crops  
 Via Cavalleggeri, 25  
 I-84098 Pontecagnano (Salerno)

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: A. Ferraro

Details of collection:	<i>Brassica oleracea</i> var. <i>botrytis</i> , 30 old cultivars
Maintenance of collection:	Room with controlled temperature, light and humidity
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**JAPAN**

National Institute of Agrobiological Resources (NIAR) Kannon-dai 2-1-2 Tsukuba, Ibaraki 305	Telephone: 02975-6-7050 Telex: Cable: NIARTSUKUBA YATABE Telefax: 02975-6-7408
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Curator/person in charge:	Head, Germplasm Storage Center
Details of collection	<i>Brassica carinata</i> , 6 <i>B. chinensis</i> , 75 <i>B. japonica</i> , 28 <i>B. juncea</i> , 49 <i>B. napus</i> , 7 <i>B. oleracea</i> , 113 <i>B. parachinensis</i> , 16 <i>B. pekinensis</i> , 349 <i>B. rapa</i> , 250 Landraces, old and commercial cultivars and elite lines from East Asia, Europe and Japan  <i>Raphanus sativus</i> , 402 landraces, old and commercial cultivars and elite lines majority from Japan
Maintenance of collection:	Long-term seed storage at -10°C Medium-term seed storage at -1°C and 30% RH Seeds with 6-7% m.c. in 1 to 3 PET containers of 430 ml  The Institute has agreed to accept responsibility for maintaining an East Asian collection of all Brassicaceae crops for long-term conservation
Duplication of collection:	No information
Availability:	Freely available for research purposes. A fee is applicable for private institutions
Quarantine:	No information
Evaluation:	Standard manual published by specialists' consent
Documentation:	Computerized for passport data

**JAPAN**

Vegetable and Ornamental Crops Research Station (VOCRS) Ano, Mie 514-23	Telephone: Telex: Cable:
Curator/person in charge:	S. Nishi / M. Ashizawa

**JAPAN (cont.)**

Details of collection:	<i>Brassica juncea</i> , 31 from Japan <i>B. napus</i> var. <i>napus</i> , 3 from Japan <i>B. oleracea</i> var. <i>botrytis</i> , 12 from Japan <i>B. oleracea</i> var. <i>capitata</i> , 55 from Japan <i>B. oleracea</i> var. <i>italica</i> , 1 from Japan <i>B. rapa</i> var. <i>chinensis</i> , 22 from PR China and Japan <i>B. rapa</i> var. <i>narinosa</i> , 2 from Japan <i>B. rapa</i> var. <i>pekinensis</i> , 101 from PR China, Japan and Korea <i>B. rapa</i> var. <i>rapa</i> , 157 from PR China, Japan, Korea, USA and USSR  <i>Raphanus sativus</i> , 300 from PR China, Japan, Korea, USA and USSR All accessions are landraces
Maintenance of collection:	Short-term seed storage at 8°C
Duplication of collection:	NIAR, Tsukuba, Japan
Availability:	Available in limited quantity
Quarantine:	No information
Evaluation:	Disease resistance
Documentation:	Partial and manual

**JAPAN**

Faculty of Agriculture  
Tohoku University  
1-1 Amamiyamachi-Tsutsumidori  
Sendai 980

Telephone:  
Telex:  
Cable:

Curator/person in charge:	S. Tsunoda
Details of collection:	<i>Brassica carinata</i> , 12 landraces from Ethiopia <i>B. juncea</i> , 16 cultivars from Japan, donated by IARI, India <i>B. napus</i> var. <i>napus</i> , 22 wild types and cultivars from Algeria, Japan and New Zealand <i>B. nigra</i> , 14 wild types from Algeria and USA <i>B. oleracea</i> , 11 accessions from UK <i>B. oleracea</i> subsp. <i>robertiana</i> , 1 <i>B. oleracea</i> var. <i>alboglabra</i> , 2 accessions donated by Taiwan (China) <i>B. oleracea</i> var. <i>oxyrhina</i> , 3 <i>B. oleracea</i> var. <i>spinescens</i> , 1 Accessions from Algeria and Spain <i>B. rapa</i> var. <i>rapa</i> , 16 wild types from Algeria and 16 cultivars from Japan <i>B. rapa</i> var. <i>silvestris</i> , 19 cultivars donated by IARI, India <i>B. tournefortii</i> , 8 <i>Brassica</i> spp., 184 accessions from 23 genera and 49 species from Algeria, Egypt, Italy, Morocco, Portugal and Spain  <i>Raphanus sativus</i> , 7 landraces from Japan  <i>Sinapis alba</i> , 15 accessions from Morocco
Maintenance of collection:	Medium-term seed storage at 2°C. Seeds in glass vials with silica gel  The Institute has agreed to accept responsibility for maintaining a global collection of Brassicaceae (wild species) for long-term conservation

Duplication of collection: No information  
 Availability: Freely available  
 Quarantine: No information  
 Evaluation: No information  
 Documentation: Complete and manual

#### KOREA, REPUBLIC OF

Crop Experiment Station  
 Office of Rural Development  
 Yongdang  
 Mokpo 580

Telephone:  
 Telex:  
 Cable:

Curator/person in charge:

Details of collection: *Brassica napus* var. *oleifera*, 320 cultivars from Canada, Europe and Japan and 1860 breeders' lines  
*B. rapa* var. *silvestris*, 8

Maintenance of collection: Active collection

Duplication of collection: Suweon, Korea

Availability: Freely available

Quarantine: No information

Evaluation: On-going for cold tolerance, early maturity, low erucic acid and glucosinolate and male sterility

Documentation: Manual

#### KOREA, REPUBLIC OF

Horticultural Experiment Station  
 Office of Rural Development  
 Suweon 170

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: Soo-Seong Lee

Details of collection: *Brassica rapa* var. *pekinensis*, 78 accessions including inbred lines and 10 named S-alleles  
*Brassica* spp., 40

*Raphanus sativus*, 27 cultivars and breeders' lines from PR China, Japan, Korea, Taiwan (China) and USA

Maintenance of collection: Active collection

Duplication of collection: No information

Availability: Freely available

Quarantine: No information

Evaluation: On-going for yield, male sterility, TMV resistance and soft rot and heat tolerance

Documentation: Manual

**NETHERLANDS**

Nunhems Zaden B.V.  
P.O. Box 4005  
NL-6080 AA Haelen

Telephone: (04759) 92 22  
Telex: 36907  
Cable:

Curator/person in charge: A. Oudenaarde  
Details of collection: *Brassica oleracea*  
Maintenance of collection: Short-term seed storage at 9°C and 30-60% RH. Seeds in plastic jars  
Duplication of collection: No information  
Availability: No information  
Quarantine: No information  
Evaluation: No information  
Documentation: No information

**NETHERLANDS**

Bejo Zaden B.V.  
P.O. Box 9  
NL-1722 ZG Noordscharwoude

Telephone: (02260) 140 41  
Telex: 57140 BEJO NL  
Cable:  
Telefax: (02260) 12772

Curator/person in charge: P.A. Beemsterboer  
Details of collection: *Brassica* spp., 50 old cultivars  
Maintenance of collection: Long-term seed storage at -26°C  
Short-term seed storage at 15°C and 55% RH  
Duplication of collection: CGN, Wageningen, Netherlands  
Availability: Available at: CGN, Wageningen, Netherlands  
Quarantine: No information  
Evaluation: Disease resistance and quality improvement  
Documentation: No information

**NETHERLANDS**

Zelder B.V.  
Landgoed Zelder  
NL-6595 NW Ottersum

Telephone: (08851) 181 44  
Telex: 37311  
Cable:

Curator/person in charge: H. J. Weys  
Details of collection: *Brassica napus* var. *napus*, 3 old cultivars  
*B. rapa* var. *rapa*, 10 old cultivars  
Maintenance of collection: Medium-term seed storage at 5°C and 30% RH  
Duplication of collection: No information  
Availability: No information  
Quarantine: No information

Evaluation: Genotype testing

Documentation: No information

## NETHERLANDS

Centre for Genetic Resources  
the Netherlands (CGN)  
P.O. Box 224  
NL-6700 AE Wageningen

Telephone: (08370) 191 23  
Telex: 75044 DLOWA NL  
Cable:  
Telefax: (08370) 180 94

Curator/person in charge: I.W. Boukema / L.J.M. van Soest / H. Dijkstra

Details of collection: *Brassica oleracea* var. *alba*, 197  
*B. oleracea* var. *botrytis*, 213  
*B. oleracea* var. *conica*, 31  
*B. oleracea* var. *gemmifera*, 149  
*B. oleracea* var. *gongylodes*, 9  
*B. oleracea* var. *rubra*, 60  
*B. oleracea* var. *sabauda*, 67  
*B. oleracea* var. *selensia*, 58  
*B. rapa* var. *pekinensis*, 45  
*B. rapa* var. *rapifera*, 60

*Raphanus sativus*, 84

Maintenance of collection: Long-term seed storage at -20°C. Seeds in aluminium laminated foil packets

The Institute has agreed to accept responsibility for maintaining a global collection of *B. oleracea* for long-term conservation

Duplication of collection: To be duplicated in a near future at IHR, Wellesbourne, UK

Availability: Available in limited quantity

Quarantine: No known restrictions

Evaluation: Disease resistance, stress tolerance and quality. On-going characterization according to IBPGR descriptor list

Documentation: Computerized for some passport and characterization data

## NIGERIA

National Centre for Genetic Resources  
and Biotechnology (NACGRAB)  
Moor Plantation  
PMB 5382  
Ibadan

Telephone: (022) 31 26 70 / 31 26 22  
Telex:  
Cable: GENE BANK

Curator/person in charge: P.E. Onuorah

Details of collection: *Brassica* spp., 78 accessions

*Eruca* spp., 2 accessions

Maintenance of collection: Long-term seed storage

Duplication of collection: No information

Availability: Available in limited quantity

Quarantine: No information

**NIGERIA (cont.)**

Evaluation: No information  
 Documentation: Manual. Passport data available

**NORWAY**

Vaagones Agricultural Research Station  
 N-8000 Bodo  
 Telephone: (081) 255 86  
 Telex:  
 Cable:

Curator/person in charge: B. Volden  
 Details of collection: *Brassica rapa* var. *rapa*, 1 landrace  
 Maintenance of collection: Short-term seed storage at 0°-10°C. Seeds in plastic boxes and plastic bags  
 Duplication of collection: No information  
 Availability: No information  
 Quarantine: No information  
 Evaluation: No information  
 Documentation: No information

**NORWAY**

Holt Agricultural Research Station  
 P.O. Box 100  
 N-9001 Tromsø  
 Telephone: (4783) 848 75  
 Telex:  
 Cable:  
 Telefax: (4783) 801 73

Curator/person in charge: H. Bakke  
 Details of collection: *Brassica napus* var. *rapifera*, 8 accessions  
 - 5 crossings and selections (1970-1985)  
 - 3 landraces (Brandaug, Bredek and Stenhaug)  
*B. rapa* var. *rapifera*, 3 accessions, including 1 landraces  
 Maintenance of collection: Long-term seed storage at -18°C, in deep-freezers. Seeds in glass containers or sealed plastic/aluminium containers  
 Duplication of collection: Partially at NGB, Alnarp, Sweden  
 Availability: Available  
 Quarantine: No known restrictions  
 Evaluation: Early growing, bolting resistance and superior quality  
 Documentation: No information

**PAKISTAN**

Plant Genetic Resources Laboratory  
 National Agricultural Research Centre  
 Pakistan Agricultural Research Council (PARC)  
 P.O. Box 1031  
 Islamabad  
 Telephone: 82 00 53 33  
 Telex: 5604 PARC PAK  
 Cable: AGRESCOUNCIL

Curator/person in charge: R. Anwar

Details of collection:	<i>Raphanus sativus</i> , 15 primitive cultivars from Pakistan
Maintenance of collection:	Medium-term seed storage at 5°C ±1°C. Seeds in cans
Duplication of collection:	At several International Research Centres
Availability:	Freely available provided there is sufficient seed
Quarantine:	Imported seeds must possess phytosanitary certificate and import permit. Export of seeds accompanied with phytosanitary certificate
Evaluation:	Partial
Documentation:	Manual

## PHILIPPINES

National Plant Genetic Resources Laboratory (NPGRL)  
 Institute of Plant Breeding (IPB)  
 University of the Philippines at Los Baños  
 College, Laguna

Telephone: (63) 833 35 28  
 Telex: 3432 PTBLK PU  
 Cable: PLANTBREED PHILIPPINES

Curator/person in charge: N.C. Altoveros

Details of collection: *Brassica carinata*, 10 accessions from Ethiopia (3), France (6) and Sweden (1)  
*B. chinensis*, 66 accessions from PR China (21), Hong Kong (7), Japan (28), Malaysia (1), Taiwan (China) (7) and USA (2)  
*B. juncea*, 62 accessions from Canada (3), PR China (7), Czechoslovakia (5), France (10), Hong Kong (3), India (6), Israel (1), Turkey (1), UK (3) and USSR (24)  
*B. pekinensis*, 195 accessions from Guam (1), Hong Kong (1), Indonesia (1), Japan (53), Korea (29), Netherlands (1), Taiwan (China) (103), Thailand (3) and USA (3)  
*B. napus*, 2 from Taiwan (China)  
*B. oleracea* var. *acephala*, 6 accessions from France (2) and Netherlands (4)  
*B. oleracea* var. *botrytis*, 9 accessions from Japan (5) and Netherlands (4)  
*B. oleracea* var. *capitata*, 44 accessions from France (3), Japan (20), Netherlands (9) and USSR (12)  
 Plus 6 interspecific hybrids from France

Maintenance of collection: Long-term seed storage at -20°C  
 Medium-term seed storage at 5°C and 40% RH  
 Seeds with 6% m.c. in glass bottles or in tin cans or in aluminium laminated foil packets

Duplication of collection: Partially at AVRDC, Taiwan (China)

Availability: Available on exchange basis

Quarantine: Import permit required

Evaluation: Complete for morphological and horticulture characters

Documentation: Computerized and complete

**POLAND**

Experimental Station for Plant Breeding  
and Acclimatization  
Borowo  
62-055 Czempin

Telephone: Czempin 255  
Telex: 0412378  
Cable:

Curator/person in charge: J. Krzymanski  
 Details of collection: *Brassica napus*, 25 old cultivars and 95 mutant/genetic stocks  
 Maintenance of collection: Seeds in glass containers  
 Duplication of collection: No information  
 Availability: No information  
 Quarantine: No information  
 Evaluation: Chemical analyses (oil percentage, erucic acid and glucosinolates).  
Morphological characters and seed yield  
 Documentation: No information

**POLAND**

National Department of Plant Genetic Resources  
Plant Breeding and Acclimatization Institute  
Radzików n/ Warsaw  
05-870 Blonie

Telephone: (22) 55 26 11 / 4  
Telex: 812914 IHAR PL  
Cable:

Curator/person in charge: St. Goral / B. Grabiec / A. Włodarczyk  
 Details of collection: *Brassica napus* var. *biennis*, 12  
*B. napus* var. *napobrassica*, 3  
*B. oleracea* var. *acephala*, 4  
*B. oleracea* var. *botrytis*, 3  
 All accessions are cultivars from Poland  
*B. oleracea* var. *capitata*, 19 cultivars from Denmark, Netherlands and Poland  
*B. oleracea* var. *gongylodes*, 3 cultivars from Poland  
*B. rapa* subsp. *oleifera*, 4 cultivars from Poland  
*B. rapa* var. *rapa*, 5 cultivars from Poland  
*Crambe abyssinica*, 1 cultivar from Poland  
*Eruca sativa*, 1 accession  
*Raphanus sativus*, 12 cultivars from Poland  
 Maintenance of collection: Long-term seed storage at -15°C  
 Medium-term seed storage at 0°C  
 Seeds with 5-7% m.c. in glass containers under vacuum  
 Duplication of collection: No information  
 Availability: Available on exchange basis. Index Seminum issued  
 Quarantine: No known restrictions  
 Evaluation: On-going work  
 Documentation: Computerized for passport data

**POLAND**

Research Institute of Vegetable Crops  
ul. 22 Lipca, 1/3  
96-100 Skierniewice

Telephone: Skierniewice 22 11 / 5  
Telex: 886649 IW PL  
Cable:

Curator/person in charge: J. Skierkowski  
Details of collection: *Brassica oleracea* var. *botrytis*, 30 landraces and 15 old cultivars  
Maintenance of collection: Short-term seed storage at ambient temperatures  
Duplication of collection: No information  
Availability: No information  
Quarantine: No information  
Evaluation: No information  
Documentation: No information

**PORTUGAL**

Secção de Horticultura  
Instituto Superior de Agronomia (ISA)  
Tapada da Ajuda  
P-1399 Lisboa Codex

Telephone: (1) 63 81 61 / 2  
Telex: 44700 ISATEL P  
Cable:

Curator, person in charge: A. Monteiro  
Details of collection: *Brassica oleracea* var. *acephala*, 42  
*B. oleracea* var. *capitata*, 1  
*B. oleracea* var. *costata*, 125  
*B. napus* var. *napobrassica*, 14  
*B. rapa* var. *rapa*, 26  
All landraces from Portugal  
Maintenance of collection: Long-term seed storage at -18°C  
Short-term seed storage at 7°C  
Seeds with <10% m.c. in aluminium laminated foil packets  
Duplication of collection: Partially duplicated at Genetics, Oeiras and UTAD, Vila Real, Portugal  
Availability: Available in limited quantity  
Quarantine: No restrictions for export but imported material must possess phytosanitary certificate  
Evaluation: In progress according to IBPGR descriptor list  
Documentation: Manual and complete for passport data

**PORTUGAL**

Secção de Genética  
Estação Agronómica Nacional (EAN)  
Instituto Nacional de Investigação Agrária (INIA)  
P-2780 Oeiras

Telephone: (1) 443 15 05 / 443 04 42  
Telex: 63698 EAN P  
Cable:

Curator/person in charge: M. Mota  
Details of collection: *Brassica oleracea* var. *acephala*, 42  
*B. oleracea* var. *capitata*, 1  
*B. oleracea* var. *costata*, 125

**PORTUGAL (cont.)**

Details of collection: (cont.)	<i>Brassica napus</i> var. <i>napobrassica</i> , 14 <i>B. rapa</i> var. <i>rapa</i> , 26 <i>Brassica</i> spp., 45 All accessions are landraces and/or old cultivars from Portugal
Maintenance of collection:	Long-term seed storage at -16°C in deep-freezers
Duplication of collection:	Partially at Secção de Horticultura, ISA, Lisboa and Dep. de Fitotecnia, UTAD, Vila Real, Portugal
Availability:	Available in limited quantity
Quarantine:	No restrictions for export but imported material must possess phytosanitary certificate
Evaluation:	None
Documentation:	Manual and complete for passport data

**PORTUGAL**

Departamento de Fitotecnia  
Universidade de Trás-os-Montes  
e Alto Douro (UTAD)  
P-5000 Vila Real

Telephone: 236 89  
Telex: 24436 UTAD P  
Cable:

Curator/person in charge:	E. Rosa
Details of collection:	<i>Brassica oleracea</i> var. <i>acephala</i> , 42 <i>B. oleracea</i> var. <i>costata</i> , 125 All accessions are landraces and/or old cultivars from Portugal
Maintenance of collection:	Short-term seed storage at ambient temperatures
Duplication of collection:	Partially duplicated at Genetics, Oeiras and ISA, Lisboa, Portugal
Availability:	Available in limited quantity
Quarantine:	No restrictions for export but imported material must possess phytosanitary certificate
Evaluation:	On-going according to IBPGR descriptor list. Glucosinolates determination
Documentation:	Manual and complete for passport data

**SOUTH AFRICA, REPUBLIC OF**

Department of Agricultural Economics and Marketing  
Directorate of Plant and Liquor Control  
Private Bag X 179  
0001 Pretoria

Telephone: (012) 206 24 06  
Telex: 3-23264  
Cable: SATIVA PRETORIA  
Telefax: (012) 206 27 86

Curator/person in charge:	H. Chamberlain
Details of collection:	<i>Brassica oleracea</i> , 18 cultivars from Australia, Denmark, Netherlands, UK and USA <i>B. rapa</i> , 8 cultivars from Canada and USA
Maintenance of collection:	Long-term seed storage at -20°C. Seeds in vacuum sealed aluminium laminated foil packets (small part of the collection) Short-term seed storage at 6-7°C and 45% RH. Seeds in plastic containers

Duplication of collection:	At different Crop Research Institutes in the Rep. of South Africa
Availability:	Available in limited quantity (0.5 / 300 g) and on exchange basis. Index Seminum issued yearly Requests to: The Plant Introduction Officer (same address)
Quarantine:	Seed for planting - Additional declaration on the phytosanitary certificate that the parent plants were inspected during active growth and found to be free from: a) <i>Xanthomonas campestris</i> pv <i>campestris</i> b) <i>Leptosphaeria maculans</i> or that these organisms do not occur in the area of production
Evaluation:	On-going work
Documentation:	Complete and computerized

## SPAIN

Centro de Investigación y Desarrollo  
Agrario de Córdoba - DGIEA  
Junta de Andalucía  
P.O. Box 240  
Córdoba

Telephone: (57) 29 38 33  
Telex: 76686 INIA E  
Cable:

Curator/person in charge:	J.F. Martinez
Details of collection	<i>Brassica</i> spp., 36 accessions
Maintenance of collection:	No information
Duplication of collection	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation	No information

## SPAIN

Compañía Española de Cultivos  
Oleaginosos S.A. (CECOSA)  
C/ Genova, 9  
28004 Madrid

Telephone: (1) 419 12 31  
Telex: 41076 CECOS  
Cable:

Curator/person in charge:	E. Sobrino
Details of collection	<i>Brassica napus</i> var. <i>napus</i> , 50 landraces and 800 mutant/genetic stocks
Maintenance of collection	Short-term seed storage at ambient temperatures
Duplication of collection:	No information
Availability	No information
Quarantine	No information
Evaluation:	No information
Documentation:	No information

**SPAIN**

Departamento de Biología Vegetal  
 Escuela Técnica Superior  
 de Ingenieros Agrónomos (ETSIA)  
 Universidad Politécnica  
 Ciudad Universitaria  
 28040 Madrid

Telephone: (1) 244 48 07  
 Telex:  
 Cable:

- Curator/person in charge: C. Gómez-Campo
- Details of collection: Cruciferae, 1900 accessions, mainly wild members of the tribe Brassicaceae *Brassica*, *Sinapis* and *Raphanus*, ca. 500 accessions, including ca. 180 wild (n=9) of Mediterranean *Brassica* species, namely:  
*Brassica cretica*  
*B. hilarionis*  
*B. incana*  
*B. macrocarpa*  
*B. montana*  
*B. rupestris*  
*B. villosa*
- Maintenance of collection: Long-term seed storage at -10°C. Seeds in sealed glass capsules with CO<sub>2</sub> and silica gel  
 The Institute has agreed to accept responsibility for maintaining a global collection of Brassicaceae (wild species) for long-term conservation
- Duplication of collection: Thessaloniki, Greece; Istituto del Germoplasma, Bari, Italy and Sendai, Japan
- Availability: Available on exchange basis. Part of the collection of Mediterranean *Brassica* species is under multiplication
- Quarantine: No known restrictions
- Evaluation: Morphological and phytochemical (flavonoids and proteins) in progress
- Documentation: Complete and computerized for passport data. Data base for Mediterranean *Brassica* species

**SPAIN**

Misión Biológica de Galicia  
 Consejo Superior de Investigaciones Científicas (CSIC)  
 P.O. Box 28  
 36080 Pontevedra

Telephone: (986) 85 48 00  
 Telex:  
 Cable: El Palacio - Salcedo  
 Telefax: (986) 84 13 62

- Curator/person in charge: A. Ordas
- Details of collection: *Brassica campestris*, 56 landraces and 7 commercial varieties from Spain  
*B. oleracea*, 98 landraces and 16 commercial varieties from Spain  
*B. napus*, 29 landraces and 2 commercial varieties from Spain
- Maintenance of collection: Medium-term seed storage at 1°-3°C and 55% RH. Storage capacity 80 m<sup>3</sup>
- Duplication of collection: Not duplicated

Availability:	Available for research purposes provided there is sufficient seed
Quarantine:	No known restrictions
Evaluation:	On-going for agronomical characteristics
Documentation:	Passport data partial and computerized

**SPAIN**

Catedra de Genetica  
Escuela Técnica Superior de  
Ingenieros Agrónomos (ETSIA)  
Universidad Politécnica  
Camino de Vera, 14  
Apartado de Correos 22012  
46020 Valencia

Telephone: (96) 361 50 51 Ext. 182  
Telex: 62808 UPVA E  
Cable:

Curator/person in charge:	F. Nuez
Details of collection:	<i>Brassica</i> spp., 216 <i>Raphanus sativus</i> , 64 All accessions are landraces from Spain
Maintenance of collection:	Medium-term seed storage at -3°C and 25% RH. Seeds with silica gel in hermetically sealed glass containers of 6 cm x 7 cm
Duplication of collection:	Banco de Germoplasma, Alcalá de Henares, Spain and IHR, Wellesbourne, UK
Availability:	Available on exchange basis
Quarantine:	No known restrictions
Evaluation:	On-going work
Documentation:	On-going work for passport data

**SPAIN**

Banco de Germoplasma  
Departamento de Horticultura  
Servicio de Investigación Agraria (DGA)  
P.O. Box 727  
Zaragoza

Telephone: (76) 57 63 11  
Telex: 58194 IDAE E  
Cable:  
Telefax: (76) 575501

Curator, person in charge	M. Carravedo
Details of collection:	<i>Brassica</i> spp., 48 landraces <i>Raphanus sativus</i> , 3 landraces
Maintenance of collection:	Medium-term seed storage at 0°-4°C. Seeds in glass flasks with silica gel
Duplication of collection:	Not duplicated
Availability:	Not available
Quarantine:	No known restrictions
Evaluation:	Not evaluated
Documentation:	Partial

**SWITZERLAND**

Eidgenössische Forschungsanstalt  
für Obst-, Wein und Gartenbau  
CH-8820 Wädenswil

Telephone: (01) 780 13 33  
Telex:  
Cable:

Curator/person in charge: F. Kobel  
 Details of collection: *Brassica* spp., 7 accessions  
 Maintenance of collection: No information  
 Duplication of collector: No information  
 Availability: No information  
 Quarantine: No information  
 Evaluation: Performance, disease resistance, edible properties and shelf-life  
 Documentation: No information

**THAILAND**

Department of Horticulture  
Faculty of Agriculture  
Kasetsart University  
Bangken, Bangkok 9

Telephone:  
Telex:  
Cable:

Curator/person in charge: B. Chareonpanich  
 Details of collection: *Brassica oleracea* var. *botrytis*, 13  
*B. oleracea* var. *capitata*, 7  
Landraces from Thailand  
 Maintenance of collection: Active collection  
 Duplication of collection: No information  
 Availability: Freely available  
 Quarantine: No information  
 Evaluation: No information  
 Documentation: Manual

**TURKEY**

Aegean Agricultural Research Institute (AARI)  
P.O. Box 9  
35661 Menemen - Izmir

Telephone: (51) 14 91 31  
Telex:  
Cable:

Curator/person in charge: The Directorate  
 Details of collection: *Brassica* spp., 150 landraces and 1 wild  
*Raphanus sativus*, 81 landraces  
 Maintenance of collection: Long-term seed storage at -20°C. Seeds in metal cans. Medium-term seed storage at 0°C.

Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

### UNION OF SOVIET SOCIALIST REPUBLICS

The N.I. Vavilov Institute of Plant Industry (VIR)  
44, Herzen str.  
Leningrad 190000

Telephone: (314) 48 48  
Telex:  
Cable:

Curator/person in charge: V.I. Krivchenko

**Materials of collection:** *Brassica carinata*, 30 local populations  
*B. chinensis*, 60 accessions, including 30 accessions in the main catalogue and 30 in the temporary catalogue  
*B. oleracea*, 380 accessions, including 145 in the main catalogue and 233 in the temporary catalogue  
*B. oleracea* var. *botrytis*, 770 accessions, including 470 in the main catalogue and 300 in the temporary catalogue  
*B. oleracea* var. *capitata*, 1450 accessions, including 800 in the main catalogue and 650 in the temporary catalogue  
*B. oleracea* var. *gongylodes*, 150 accessions, including 100 in the main catalogue and 50 in the temporary catalogue  
*B. oleracea* var. *sabauda*, 160 accessions, including 100 in the main catalogue and 60 in the temporary catalogue  
*B. pekinensis*, 290 accessions, including 130 in the main catalogue and 160 in the temporary catalogue  
All accessions are breeding varieties, hybrids and a few local populations. Collection representing all cultivation areas

*Lepidium sativum*, 240 local populations, including 210 accessions in the main catalogue and 30 in the temporary catalogue

*Raphanus sativus*, 1200 breeding varieties and local populations, including 1000 accessions in the main catalogue and 200 in the temporary catalogue

**Maintenance of collection:** Long-term seed storage at -10°C  
Medium-term seed storage at 4°C. Seeds with 5-7% m.c. (*Brassica*), 2-5% m.c. (*Lepidium*) and 5% m.c. (*Raphanus*) in sealed glass containers

**Duplication of collection:** *Brassica*: Partially at ZIGuK, Gatersleben, DDR and NSSL, Fort Collins, USA  
*Lepidium*: Partially at ZIGuK, Gatersleben, DDR  
*Raphanus*: Partially at ZIGuK, Gatersleben, DDR; Istituto del Germoplasma, Bari, Italy and NSSL, Fort Collins, USA

**Availability:** Available in accordance with the Exchange Catalogue regularly issued

**Quarantine:** According to the International Convention on Phytosanitary Plant Protection

**Evaluation:** On-going work

**Documentation:** Manual

**NB -** Samples received at the Institute are given temporary catalogue numbers. Some may be included in the permanent collection after 2-3 years trials, elimination of duplicates and low-value breeding lines

**UNITED KINGDOM**

Scottish Crop Research Institute  
Invergowrie  
Dundee DD2 5DA

Telephone: (0382) 56 27 31  
Telex: 265451 MONREF G  
Cable:  
Telefax: (0382) 56 24 26

Curator/person in charge: G.R. Mackay / H. Dick

Details of collection: *Brassica napus* var. *oleifera*, 40 old/obsolete cultivars of forage and oilseed rape donated by private European seed companies  
*B. napus* var. *rapifera*, 160 old/obsolete cultivars of swede, mainly donated by private European seed companies  
*B. oleracea*, stocks containing marker genes including morphological and isoenzyme markers and a small collection self-incompatibility alleles  
*B. oleracea* var. *gemmifera*, 60 old/obsolete cultivars donated by European seed companies  
*B. rapa*, stocks containing marker genes including morphological and isoenzymes markers

Maintenance of collection: Long-term seed storage at -20°C. Seeds with 6% m.c. in aluminium laminated foil packets  
Short-term seed storage at 8°C. Seeds in aluminium laminated foil packets or in paper packets

Duplication of collection: Stocks held under long-term seed storage at Gene Bank, Wellesbourne, UK. It is intended that all stocks identified for long-term seed storage will be passed to Wellesbourne

Availability: Available provide there is sufficient seed

Quarantine: Subject to UK quarantine regulations

Evaluation: Partial. Passport data on all accessions but incomplete for some swede cultivars. Old cultivars of forage rape have been assessed for characters of importance in breeding research (e.g. yield, disease resistance, premature flowering and plant height). Genetic stocks for morphological characters. List available

Documentation: Manual. Computerization due to commence soon

**UNITED KINGDOM**

Agricultural Scientific Services  
Department of Agriculture and Fisheries  
for Scotland (DAFS)  
East Craigs  
Edinburgh EH 12 8NJ

Telephone: (031) 244 88 53  
Telex: 727348 DAFASS G  
Cable:  
Telefax: (031) 244 89 40

Curator/person in charge: F.N. Green

Details of collection: *Brassica napus* var. *napobrassica*, 130 accessions, including 100 old cultivar  
*B. rapa* var. *rapa*, 225 accessions, including 90 old cultivars

Maintenance of collection: Long-term seed storage at -18°C. Seeds in polyethylene packets in plastic boxes with silica gel

Duplication of collection: Most swede and some turnip at IHR, Wellesbourne, UK

Availability:	Available in limited quantity (0.5 g) only if not available from IHR
Quarantine:	No known restrictions
Evaluation:	Morphological and physiological description. 100 descriptors. On-going work
Documentation:	Data held on card index. On-going work

#### UNITED KINGDOM

Joseph Nickerson Research Centre  
Nickerson RPB Ltd.  
Rothwell  
Lincoln LN7 6DT

Telephone: (047289) 471  
Telex: 527072 AGSERV G  
Cable:

Curator/person in charge:	P.T. Gymer
Details of collection:	<i>Brassica napus</i> , 200 accessions
Maintenance of collection:	Medium-term seed storage at 5°C and 25% RH
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

#### UNITED KINGDOM

Scottish Crop Research Institute  
Pentlandsfield  
Roslin  
Midlothian EH25 9RF

Telephone:  
Telex:  
Cable:

Curator/person in charge:	B. MacFarlane Smith
Details of collection:	<i>Brassica napus</i> var. <i>napobrassica</i> , 60 <i>B. oleracea</i> var. <i>acephala</i> , 60 <i>B. rapa</i> var. <i>rapa</i> , 150  <i>Raphanus sativus</i> , 2 All accessions are majority landraces of unspecified origin
Maintenance of collection:	Active collection
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**UNITED KINGDOM**

Crops Department  
Colmans of Norwich  
Carrow, Norwich NR1 2DD

Telephone: (0603) 66 01 66  
Telex: 97438 Colmans Norwich  
Cable:

Curator/person in charge: R.A. Foss

Details of collection: *Brassica juncea*, 5 old cultivars and 186 mutant/genetic stocks  
*B. nigra*, 1 old cultivar  
*Sinapis alba*, 6 landraces, 8 old cultivars, 4 wild and 130 mutant/genetic stocks

Maintenance of collection: No information

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: Habit, yield and seed quality, disease and pest susceptibility

Documentation: No information

**UNITED KINGDOM**

Institute of Horticultural Research (IHR)  
Wellesbourne  
Warwick CV35 9EF

Telephone: (0789) 47 03 82  
Telex:  
Cable:  
Telefax: (0789) 47 05 52

Curator/person in charge: D. Astley

Details of collection: *Brassica juncea*, 67 accessions  
*B. oleracea* var. *acephala*, 187 accessions  
*B. oleracea* var. *botrytis*, 535 accessions  
*B. oleracea* var. *capitata*, 838 accessions  
*B. oleracea* var. *gemmifera*, 958 accessions  
*B. oleracea* var. *gongylodes*, 37 accessions  
*B. oleracea* var. *italica*, 194 accessions  
*B. napus*, 312 accessions  
*B. rapa*, 406 accessions  
*Raphanus* spp., 546 cultivated and 11 wild  
*Sinapis* spp., 12 accessions

Maintenance of collection: Long-term seed storage at -20°C. Seeds with 5-6% m.c. Storage capacity 108 m<sup>3</sup>  
The Institute has agreed to accept responsibility for maintaining a global collection (*B. oleracea* and *Raphanus*; *B. juncea*, *B. napus* and *B. rapa* - vegetables and fodder) for long-term conservation

Duplication of collection: Partially at CGN, Wageningen, Netherlands

Availability: Freely available provided there is sufficient seed

Quarantine: No restrictions for seed but there are restrictions for vegetative material

Evaluation: No information

Documentation: Complete and computerized

**UNITED STATES OF AMERICA**

North Central Regional Plant Introduction Station  
Iowa State University  
USDA - ARS  
Ames, Iowa 50011

Telephone: (515) 294-32 55  
Telex:  
Cable:

Curator/person in charge: R.L. Clark / B.C. Abel

Details of collection: *Brassica juncea*, 323  
*B. napus* var. *napus*, 540  
*B. rapa* var. *rapa*, 453  
All accessions are landraces and populations from various countries

Maintenance of collection: Medium-term seed storage at 4°C and 35-40% RH. Seeds in screw-top glass jars

Duplication of collection: NSSL, Fort Collins, USA

Availability: Freely available

Quarantine: No known restrictions

Evaluation: Evaluation data being obtained through cooperation of Crop Advisory Committee members

Documentation: Computerized and complete. Database for Germplasm Resources Information Network (GRIN), National Agricultural Library, Beltsville, USA

**UNITED STATES OF AMERICA**

National Seed Storage Laboratory (NSSL)  
US Department of Agriculture (USDA)  
Agricultural Research Service (ARS)  
Colorado State University Campus  
Fort Collins, Colorado 80523

Telephone: (303) 484 04 02  
Telex: 237401714 DNPA UC  
Cable:  
Telefax: (303) 221 14 27

Curator/person in charge: S.A. Eberhart

Details of collection: *Brassica carinata*, 36  
*B. juncea*, 242 landraces and cultivars. World-wide representation  
*B. napus*, 237 landraces and cultivars. World-wide representation  
*B. nigra*, 22 landrace and cultivars  
*B. oleracea* var. *acephala*, 28 accessions  
*B. oleracea* var. *botrytis*, 281 landraces and cultivars. World-wide representation  
*B. oleracea* var. *capitata*, 428 landraces and cultivars. World-wide representation  
*B. oleracea* var. *gemmifera*, 11 accessions  
*B. oleracea* var. *gongylodes*, 4 accessions  
*B. rapa*, 227 landraces and cultivars. World-wide representation  
*Raphanus sativus*, 376 landraces and cultivars. World-wide representation

Maintenance of collection: Long-term seed storage at -18°C. Seedy in aluminium laminated foil packets

Duplication of collection: As active collections at Regional Plant Introduction Stations:  
*B. oleracea*, at Geneva, New York, USA  
Other crucifers at Ames, Iowa, USA

**UNITED STATES OF AMERICA (cont.)**

Availability:	Freely available only if not available from the active collection
Quarantine:	No information
Evaluation:	Responsibility of the Regional Plant Introduction Stations holding the active collections
Documentation:	All data are computerized in GRIN (Germplasm Resources Information Network). The GRIN system resides on a Prime Computer in Beltsville, MD, USA

**UNITED STATES OF AMERICA**

Northeast Regional Plant Introduction Station (NE-9) New York State Agricultural Experiment Station US Department of Agriculture (USDA) Geneva, New York 14456	Telephone: Telex: Cable:
Curator/person in charge:	D. Dolan
Details of collection:	<i>Brassica oleracea</i> var. <i>botrytis</i> , 233 <i>B. oleracea</i> var. <i>gemmifera</i> , 68 <i>B. oleracea</i> var. <i>gongylodes</i> , 45 <i>B. oleracea</i> var. <i>oleracea</i> , 3 Landraces, wild types, old and commercial cultivars from many countries world-wide
Maintenance of collection:	Medium-term seed storage at 4°C and 28% RH. Seeds in moisture proof aluminium laminated foil packets. Storage capacity 102 m <sup>3</sup> Short-term seed storage at 10°C and 28% RH. Seeds in paper envelopes. Storage capacity 40.7 m <sup>3</sup>
Duplication of collection:	<i>B. oleracea</i> var. <i>botrytis</i> partially duplicated as a base collection at NSSL, Fort Collins, USA
Availability:	Freely available. Requests through G. White, Plant Introduction Officer, Beltsville Agricultural Research Centre, Beltsville, Maryland 20705, USA
Quarantine:	No information
Evaluation:	<i>B. oleracea</i> var. <i>botrytis</i> and <i>B. oleracea</i> var. <i>gemmifera</i> for: uniformity; plant size; leaf size; colour and bloom; head number, depth, width, compactedness, colour, bolting and quality; maturity and resistance to insects and diseases
Documentation:	Computerized catalogue of available accessions and with evaluation data issued for <i>B. oleracea</i> var. <i>botrytis</i> and <i>B. oleracea</i> var. <i>gemmifera</i> Other <i>Brassica</i> , partial and manual

**UNITED STATES OF AMERICA**

Crucifer Genetics Cooperative (CrGC) Department of Plant Pathology University of Wisconsin - Madison 1630 Linden Drive Madison, Wisconsin 53706	Telephone: (608) 262 86 38 Telex: Cable:
Curator/person in charge:	P.H. Williams
Details of collection:	Collection constitutes the genetic resource activity of the Crucifer Genetics Cooperative (CrGC)

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Details of collection: (cont.)	<p><i>Arabidopsis thaliana</i>, 4 North American ecotypes and selected European ecotypes, collected, derived and donated by various members of the CrGC</p> <p><i>Brassica carinata</i>, 9 <i>B. juncea</i>, 16 <i>B. napus</i>, 9 <i>B. nigra</i>, 2 <i>B. oleracea</i>, 46 <i>B. rapa</i>, 43</p> <p><i>Raphanus sativus</i>, 2</p> <p>Other species, 9 single collections of miscellaneous wild, weedy or cultivated cruciferae largely from North America maintained as a source of seed for each species, collected or procured and donated by various members of the CrGC</p>
Maintenance of collection:	Short-term seed storage at 18°C. Seeds in plastic containers under indicator silica gel
Duplication of collection:	NSSL, Fort Collins, USA
Availability:	Available in set quantities. Fee charged to cover handling of stocks. Free on exchange basis
Quarantine:	No known restrictions
Evaluation:	<p><i>Arabidopsis</i>: Specialized genetically characterized stocks in several common backgrounds adapted for laboratory studies, including morphological markers, isozymes, auxotrophs, developmental mutants, RFLP markers, cytogenetic stocks, chromosome and linkage group markers</p> <p><i>Brassica</i>: Specialized genetically characterized stocks in the common background of a rapid cycling base population (seed-to-seed in 35 days) including morphological markers, isozymes, pathogen interaction-phenotypes, cytoplasmic markers, cytogenetic stocks and alloplasmic substitution stocks. Partial and on-going for various characters using IBPGR descriptor list and CrGC Information Documents</p>
Documentation:	Partial, manual and computerized and on-going for passport, characterization and evaluation data

*Capsicum*

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**AUSTRALIA**

Horticultural Research Station  
 Queensland Department of Primary Industries  
 P.O. Box 538  
 Bowen, Queensland 4805

Telephone: (077) 85 22 55  
 Telex:  
 Cable:  
 Telefax: (077) 85 24 27

Curator/person in charge: R.M. Wright

Details of collection: *Capsicum annuum* var. *annuum*, 81 cultivars from Australia, Europe and USA  
*C. baccatum* var. *pendulum*, 3  
*C. chinense*, 7  
*C. chacoense*, 11  
*C. frutescens*, 5  
*C. pubescens*, 3

Maintenance of collection: Medium-term seed storage at 4°C and 55% RH. Seeds in 120 ml plastic containers. Storage area 15.6 m<sup>2</sup>

Duplication of collection: Partially at Redlands Horticultural Research Station, Australia

Availability: Freely available

Quarantine: No restrictions

Evaluation: Resistance to *Fusarium oxysporum* and PVY

Documentation: Computerized for passport data

**AUSTRALIA**

Australian Tropical Forages Genetic  
 Resources Centre  
 CSIRO  
 306 Carmody Road  
 Sta. Lucia, Queensland 4067

Telephone: (07) 377 02 09  
 Telex: 42159 AA  
 Cable:  
 Telefax: (07) 371 39 46

Curator/person in charge: R.J. Williams

Details of collection: *Capsicum annuum* var. *annuum*, 2  
*C. frutescens*, 1  
*Capsicum* spp., 3

Maintenance of collection: Long-term seed storage at -20°C. Storage capacity 12 m<sup>3</sup>  
 Short-term seed storage at 5° to 10°C and 25% RH. Storage capacity 60 m<sup>3</sup>  
 Seeds in aluminium laminated foil packets and plastic bottles.

Duplication of collection: No information

Availability: Available provided there is sufficient seed

Quarantine: Import seeds must have phytosanitary certificate. Seeds treated and quarantined on arrival. Despatch of seeds will include a phytosanitary certificate

Evaluation: On-going work

Documentation: Passport data complete and computerized

**AUSTRIA**

Institute for Agronomy  
and Plant Breeding  
University of Agriculture  
Gregor Mendelstrasse, 33  
A-1180 Vienna

Telephone: (0222) 34 25 00  
Telex:  
Cable:

Curator/person in charge: L. Tanasch

Details of collection: *Capsicum* spp., 10 primitive cultivars donated by FAL, Braunschweig, FRG

Maintenance of collection: Short-term seed storage at ambient temperatures

Duplication of collection: FAL, Braunschweig, FRG

Availability: Available in limited quantity

Quarantine: Phytosanitary certificate required

Evaluation: On-going. Personal research, demonstration and technical purposes

Documentation: Manual. Computerization in progress

**AUSTRIA**

Research Station for Special Crops  
A-8551 Wies 88

Telephone: (03465) 24 23  
Telex:  
Cable:

Curator/person in charge: H. Pelzmann

Details of collection: *Capsicum annuum* var. *annuum*, 5 cultivars from Austria (1), Hungary (2) and Yugoslavia (2)

Maintenance of collection: Long-term seed storage at -18°C. Seeds with 5% m.c. in 500 cc plastic or tin containers

Duplication of collection: Not duplicated

Availability: Available on exchange basis

Quarantine: No known restrictions

Evaluation: Not evaluated

Documentation: Manual

**AUSTRIA**

Institut für Pharmakognosie der Universität Wien  
Währingerstrasse, 25  
A-1090 Vienna

Telephone:  
Telex:  
Cable:

Curator/person in charge: J. Jurenitsch

Details of collection: *Capsicum annuum* var. *annuum*, 16  
*C. baccatum* var. *baccatum*, 4  
*C. chacoense*, 1  
*C. chinense*, 5  
*C. frutescens*, 1  
*C. pubescens*, 1  
Landraces and wild types donated by institutes in Europe and the University of California, Davis, USA

**AUSTRIA (cont.)**

Maintenance of collection:	Short-term seed storage at 18°-20°C
Duplication of collection:	No information
Availability:	Available in limited quantity
Quarantine:	No information
Evaluation:	Complete for capsaicin content and composition
Documentation:	Manual

**BELGIUM**

Laboratoire de Phytotechnie Tropicale  
 Faculté des Sciences Agronomiques  
 Université Catholique de Louvain  
 Place Croix du Sud, 3 - Sciences 15 D.  
 B-1348 Louvain-La-Neuve

Telephone: (010) 43 37 39/41  
 Telex: 59037 UCL B  
 Cable:

Curator/person in charge:	B.-P. Louant
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 7 cultivars from Indonesia (2), Morocco (1), Nigeria (2), Rwanda (1) and Zaire (1)
Maintenance of collection:	Short-term seed storage at ambient temperatures. Seeds in plastic bags with silica gel
Duplication of collection:	Not duplicated
Availability:	Freely available
Quarantine:	No known restrictions
Evaluation:	On-going work
Documentation:	No information

**BOLIVIA**

Centro de Investigaciones Fitoecogenéticas  
 de Pairumani  
 Casilla 128  
 Cochabamba

Telephone:  
 Telex:  
 Cable:

Curator/person in charge:	M. Crespo
Details of collection:	<i>Capsicum</i> spp., 400 accessions. Wild and cultivated
Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	About 40% of the collection characterized
Documentation:	No information

**BRAZIL**

Instituto de Genética  
Escola Superior de Agricultura "Luiz de Queiroz"  
Universidade de São Paulo  
Caixa Postal 83  
13400 Piracicaba - São Paulo

Telephone:  
Telex:  
Cable:

- Curator/person in charge: C.P. Costa
- Details of collection: *Capsicum* spp., 700 accessions. Mainly *C. baccatum* var. *baccatum* and *C. chinense*
- Maintenance of collection: No information
- Duplication of collection: No information
- Availability: No information
- Quarantine: No information
- Evaluation: No information
- Documentation: No information

**BRAZIL**

Departamento de Fitotecnia  
Universidade Federal de Viçosa  
36570 Viçosa, M.G.

Telephone: (031) 899 26 11  
Telex: 311587 FUFV BR  
Cable:

- Curator/person in charge: V.W.D. Casali
- Details of collection: *Capsicum annuum* var. *annuum*, 250 landraces from Brazil, Hungary and Mexico, donated by NIAVT, Hungary and INIA, Mexico  
*C. baccatum* var. *baccatum*  
*C. chinense*  
*C. frutescens*  
Total of 250 landraces from Brazil
- Maintenance of collection: Short-term seed storage at 5°C and controlled RH. Seeds in plastic containers of 4 kg. Storage capacity 60 m<sup>3</sup>
- Duplication of collection: CENARGEN/EMBRAPA
- Availability: Freely available. Requests should be addressed to:  
CENARGEN/EMBRAPA  
C.P. 10-2372  
CEP 70.849  
Brasilia - D.F., Brazil
- Quarantine: No information
- Evaluation: Partial
- Documentation: Partial and computerized

**BULGARIA**

Maritsa Institute for Vegetable Crops  
ul. Brezovsko shosse 32  
BG-4003 Plovdiv

Telephone:  
Telex:  
Cable:

- Curator/person in charge: E. Uzunova

**BULGARIA (cont.)**

Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 4089 commercial cultivars and breeders' lines from Bulgaria (includes landraces), Cuba, DDR, Denmark, France, Hungary, Iraq, Italy, Netherlands, Romania, Spain, USA and USSR
Maintenance of collection:	Short-term seed storage at ambient temperatures
Duplication of collection:	No information
Availability:	Some restrictions
Quarantine:	No information
Evaluation:	Phenological observations, quality and yield
Documentation:	Partial and manual

**BULGARIA**

Institute of Introduction and  
Plant Genetic Resources "K. Malkov"  
District of Plovdiv  
BG-4122 Sadovo

Telephone: (99) 22 21 / 22 51  
Telex: 44444 ZOS BG  
Cable:

Curator/person in charge:	B. Matsov / M. Zaharieva
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 368 total accessions. 200 landraces, 11 old cultivars, 155 breeding material and 2 breeding lines from Czechoslovakia, Denmark, Hungary, Korea and Turkey
Maintenance of collection:	Long-term seed storage at -18°C. Seeds with 5-7% m.c. in glass jars Medium-term seed storage at 5°C and 50% RH
Duplication of collection:	Austria, Bulgaria, Denmark, Czechoslovakia, France, Hungary, Korea, Poland, Sweden, Turkey, USA and USSR
Availability:	Available on exchange basis
Quarantine:	Phytosanitary certificate required. All import material must go through a year trial in the quarantine nursery of IIPGR, Sadovo
Evaluation:	Characterization and evaluation according to unified descriptor lists - COMECON (morphological traits, biological properties, resistance to diseases and pests, economical characters, chemical composition and technological evaluation). Genetic and ecological studies
Documentation:	Computerized for passport and evaluation data

**BULGARIA**

Institute of Genetics and Plant Breeding  
Bulgarian Academy of Sciences  
BG-1113 Sofia

Telephone:  
Telex:  
Cable:

Curator/person in charge:	M. Stoilov
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 16 landraces from Bulgaria <i>C. baccatum</i> var. <i>baccatum</i> , 3 <i>C. cardenasii</i> , 1 <i>C. chinense</i> , 4 <i>C. eximium</i> , 1 <i>C. frutescens</i> , 1 <i>C. galapagoense</i> , 1

<b>Details of collection:</b> (cont.)	<i>Capsicum praetermissum</i> , 1 <i>C. pubescens</i> , 3 All landraces and wild species donated by Research Institute of Plant Production, Prague, Czechoslovakia; ZIGuK, Gatersleben, DDR; University of Reading, UK and USDA Collection, Griffin, USA
<b>Maintenance of collection:</b>	Short-term seed storage at ambient temperatures
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	Freely available
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	<i>C. cardenasii</i> , drought tolerance <i>C. chinense</i> , TMV resistance
<b>Documentation:</b>	Manual

**CHILE**

Instituto de Producción y Sanidad Vegetal Universidad Austral de Chile Casilla 567 Valdivia	Telephone: 213911-232 Telex: 271035 UNAUS CL Cable: Telefax: 063212589
<b>Curator/person in charge:</b>	A. Contreras Mendez
<b>Details of collection:</b>	<i>Capsicum baccatum</i> var. <i>baccatum</i> , 3 accessions <i>C. pubescens</i> , 2 accessions All primitive cultivars from Chile
<b>Maintenance of collection:</b>	Long-term seed storage at -18°C. Seeds in aluminium containers
<b>Duplication of collection:</b>	Partially at FAL, Braunschweig, RFA; University of California, Davis; USA; Sturgeon Bay, USA and different institutions in Japan, Netherlands and UK
<b>Availability:</b>	Available on exchange basis
<b>Quarantine:</b>	International Quarantine Regulations applied. No restrictions for import via meristem culture
<b>Evaluation:</b>	No information
<b>Documentation:</b>	Computerization in progress

**CHINA**

Genetic Resources and Seed Unit (GRSU) Asian Vegetable Research and Development Center (AVRDC) P.O. Box 42 Shanhua, Tainan 74199 Taiwan	Telephone: (06) 583 78 01 Telex: 73560 AVRDC Cable: ASVEG SHANHUA Telefax: (06) 583 00 09
<b>Curator/person in charge:</b>	D.C.S. Tay
<b>Details of collection:</b>	<i>Capsicum annuum</i> var. <i>annuum</i> , 2593 <i>C. baccatum</i> var. <i>baccatum</i> , 334 <i>C. chacoense</i> , 25 <i>C. chinense</i> , 341 <i>C. eximium</i> , 3 <i>C. frutescens</i> , 269 <i>C. galapagoense</i> , 1

**CHINA (cont.)**

Details of collection: (cont.)	<i>Capsicum microcarpum</i> , 6 <i>C. praetermissum</i> , 4 <i>C. pubescens</i> , 27 <i>Capsicum</i> spp., 1574 Total of 5177 landraces, cultivars and wild from Afghanistan (19), Algeria (1), Angola (1), Argentina (50), Austria (22), Belgium (3), Belize (7), Bolivia (75), Brazil (208), British Indian Ocean Territory (1), Bulgaria (107), Canada (25), Chile (12), PR China (115), Colombia (89), Costa Rica (229), Cuba (15), Czechoslovakia (32), DDR (28), Denmark (5), Ecuador (55), Egypt (10), El Salvador (88), Ethiopia (66), FRG (23), Fiji Islands (3), France (43), French Guiana (91), Greece (5), Guatemala (143), Guyana (7), Honduras (87), Hungary (245), India (217), Indonesia (9), Iran (52), Israel (8), Italy (116), Jamaica (1), Japan (29), Kenya (4), Korea (147), Lebanon (3), Libya (10), Malaysia (186), Mariana Islands (1), Mexico (270), Nepal (8), Netherlands (104), Nicaragua (9), Nigeria (13), Pakistan (10), Panama (13), Paraguay (2), Peru (290), Philippines (72), Portugal (10), Puerto Rico (20), Romania (38), Singapore (1), Solomon Islands (1), Rep. of South Africa (1), Spain (58), Sri Lanka (1), Sudan (2), Surinam (10), Switzerland (9), Syria (7), Taiwan (33), Thailand (70), Trinidad (5), Tunisia (10), Turkey (395), UK (35), USA (316), USSR (56), Uruguay (4), Venezuela (27), Virgin Islands (UK) (2), Yugoslavia (493), Zaire (6) and 173 of unknown origin
Maintenance of collection:	Long-term seed storage at -18°C Medium-term seed storage at 2°-5°C and 45% RH Short-term seed storage at 15°C and 45% RH Seeds with 5-6% m.c. in aluminium laminated foil packets (long-term storage) and in plastic containers (medium and short-term storage)
Duplication of collection:	NIAR, Tsukuba, Japan; National Plant Genetic Resources Laboratory, Univ. of Philippines, Los Baños, Philippines; IHR, Wellesbourne, UK and USDA, Beltsville, USA
Availability:	Available on exchange basis
Quarantine:	No information
Evaluation:	No information
Documentation:	Complete and computerized for passport and characterization data

**CHINA**

Taiwan Agricultural Research Institute  
189 Chung-Cheng Road  
Wufeng, Taichung  
Taiwan 41301

Telephone: (04) 330 23 01  
Telex: 3338162  
Cable:

Curator/person in charge:	C.C. Tu
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 500 landraces, primitive cultivars and cultivars from Central and South America
Maintenance of collection:	Medium-term seed storage at 5°C and 40-50% RH. Seeds in PVC containers of 60 cm <sup>3</sup> capacity
Duplication of collection:	Taiwan Seed Improvement and Propagation Station and AVRDC, Taiwan
Availability:	Available in limited quantity (20-200 seeds)
Quarantine:	Phytosanitary certificate required for export or import of material
Evaluation:	On-going work for 10/20 characters
Documentation:	Partial and computerized

**COLOMBIA**

Centro Nacional de Investigación (CNI)  
 Instituto Colombiano Agropecuario (ICA)  
 Apartado Aéreo 233  
 Palmira-Valle

Telephone: (931) 281 64 Ext. 244  
 Telex:  
 Cable:

- Curator/person in charge: J. Jaramillo Vásquez
- Details of collection: *Capsicum annuum* var. *annuum*, 97 landraces and cultivars from Brazil (2), Colombia (11), Costa Rica (6), Denmark (1), Netherlands (5), Mexico (3) and USA (69)  
*C. baccatum* var. *baccatum*, 10 from Colombia  
*C. chinense*, 39 from Colombia  
*C. frutescens*, 31 accessions from Colombia (28), and USA (3)  
*C. pubescens*, 8 from Colombia  
*Capsicum* spp., 38 landraces, cultivars and wild from Colombia (4), Costa Rica (19), Guatemala (3), Mexico (6), Peru (1) and USA (5)
- Maintenance of collection: Medium-term seed storage at 4°-6°C and 60% RH. Seeds with 5-7% m.c. in aluminium laminated foil packets
- Duplication of collection: No information
- Availability: Available on exchange basis
- Quarantine: No known restrictions
- Evaluation: On-going work. More than 50% of the collection has been characterized
- Documentation: Computerized. On-going work

**COSTA RICA**

Recursos Fitogenéticos  
 Programa de Mejoramiento de Cultivos Tropicales  
 Centro Agronómico Tropical de  
 Investigación y Enseñanza (CATIE)  
 Apartado 15  
 Turrialba

Telephone: 56 01 69 / 56 64 31  
 Telex: 8005 CATIE CR  
 Cable: CATIE, Turrialba

- Curator/person in charge: V. Villalobos / J. Arce P.
- Details of collection: *Capsicum* spp., 1200 landraces, advanced cultivars and spontaneous from Central America and Mexico, donated by Facultad de Agronomía, Universidad de San Carlos, Guatemala
- Maintenance of collection: Long-term seed storage at -17°C. Seeds with 5-7% m.c. in aluminium laminated foil packets  
 Medium-term seed storage at 5°C and 30-40% RH. Seeds in paper or plastic bags  
 The Institute has agreed to accept responsibility for maintaining a global collection of *Capsicum* for long-term conservation
- Duplication of collection: Partially at AVRDC, Taiwan, China
- Availability: Freely available
- Quarantine: Phytosanitary certificate and import permit required
- Evaluation: On-going, 85% of the collection evaluated for 31 characters
- Documentation: Computerized for passport and characterization data

**CUBA**

Instituto de Investigaciones Fundamentales  
en Agricultura Tropical "Alejandro Humboldt" (INIFAT)  
Calle 1 esq. 2, Santiago de las Vegas  
Ciudad Habana

Telephone:  
Telex:  
Cable:

- Curator/person in charge: Miguel A. Esquivel Perez
- Details of collection: *Capsicum* spp., 266 primitive and advanced cultivars from Cuba, DDR and USSR, donated by VIR, Leningrad, USSR
- Maintenance of collection: Long-term seed storage at -18°C  
Medium-term seed storage at 0°-4°C. Seeds with 4-6% m.c. in sealed glass containers and/or in aluminium laminated foil packets
- Duplication of collection: ZIGuK, Gatersleben, DDR and VIR, Leningrad, USSR
- Availability: Available in limited quantity
- Quarantine: Imported material must possess phytosanitary certificate. Seeds to export should pass quarantine inspection and a phytosanitary certificate is given
- Evaluation: Almost complete using IBPCR descriptor list and/or descriptors selected according breeding programmes
- Documentation: Passport and characterization data complete. Manual and computerized

**CZECHOSLOVAKIA**

Research and Breeding Institute  
for Vegetables and Special Plants  
947 01 Hurbanovo

Telephone: (818) 23 35  
Telex: 98359 VUZSP C  
Cable:

- Curator/person in charge: L. Domcek
- Details of collection: *Capsicum annuum* var. *annuum*, 20 cultivars from Czechoslovakia, donated by Breeding Station, Cejc and Breeding Station, Kvetoslavov, Czechoslovakia
- Maintenance of collection: Short-term seed storage. Seeds in glass containers
- Duplication of collection: Research Institute of Plant Production, Praha-Ruzyne, Czechoslovakia
- Availability: Available on exchange basis
- Quarantine: No known restrictions
- Evaluation: Partial, using own descriptors
- Documentation: Partial and manual for passport data

**CZECHOSLOVAKIA**

Breeding Station at Kvetoslavov  
 Research and Breeding Institute for Vegetables  
 and Special Plants, Hurbanovo  
 930 41 Kvetoslavov

Telephone: (708) 24 43  
 Telex:  
 Cable: SS Kvetoslavov

Curator/person in charge: K. Michalek  
 Details of collection: *Capsicum annuum* var. *annuum*, 203 cultivars  
 Maintenance of collection: Short-term seed storage at ambient temperatures  
 Duplication of collection: No information  
 Availability: Available on exchange basis  
 Quarantine: No known restrictions  
 Evaluation: On-going work  
 Documentation: Manual

**CZECHOSLOVAKIA**

Research and Plant Breeding Institute for Vegetables  
 ul. Slechtitelu  
 772 36 Olomouc

Telephone: (85) 250 81  
 Telex: 66282 VSUZO C  
 Cable:

Curator/person in charge: P. Kvasnicka  
 Details of collection: *Capsicum* spp., 658 landraces, cultivars and wild, world-wide representation  
 Maintenance of collection: Long-term seed storage at -18°C and 5-10% RH  
 Medium-term seed storage at 5°C  
 Duplication of collection: Not duplicated  
 Availability: Available on exchange basis  
 Quarantine: Phytosanitary certificate required  
 Evaluation: Partial and complete, depending on the type of collection  
 Documentation: Computerized for passport data and on-going for evaluation data. Data held at Czechoslovak Information System for Genetic Resources (EVIGEZ). For further information see: Rogalewicz, V. and Bares, I. (1987). Czechoslovak Information System for Genetic Resources. FAO/IBPGR Pl. Genet. Resources Newsletter, 72: 14-16

**ECUADOR**

Unidad de Recursos Fitogenéticos  
 Instituto Nacional de Investigaciones  
 Agropecuarias (INIAP)  
 Casilla 340  
 Quito

Telephone: 629-691  
 Telex: 2532 INIAP ED  
 Cable:

Curator/person in charge: R. Castillo Torres  
 Details of collection: *Capsicum* spp., 46 landraces from Ecuador, donated by INIAP, Ecuador  
 Maintenance of collection: Long-term seed storage at -12°C. Seeds with 6% m.c. in aluminium laminated foil packets

**ECUADOR (cont.)**

Duplication of collection:	CATIE, Turrrialba, Costa Rica
Availability:	Not available at the moment. Regeneration/multiplication in progress
Quarantine:	No restrictions for export but imported material must possess phytosanitary certificate
Evaluation:	Not evaluated
Documentation:	Computerized. On-going work

**EL SALVADOR**

Centro Nacional de Tecnología  
Agropecuaria (CENTA)  
Carretera a Santa Ana km 33,5  
San Andrés, La Libertad

Telephone:  
Telex:  
Cable:

Curator/person in charge:	M.A. Valencia F.
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 92 landraces and 40 commercial cultivars and breeding lines from Central America, Colombia, Mexico, Peru, Philippines and USA
Maintenance of collection:	Short-term seed storage at 7°C, 12°C and 15°C Storage area 4 m <sup>2</sup> , 288 m <sup>2</sup> and 72 m <sup>2</sup> respectively No RH control in all stores. Seeds in paper bags and cardboard boxes
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	Morphological and agronomical characters
Documentation:	Manual

**ETHIOPIA**

Plant Genetic Resources Centre/Ethiopia (PGRC/E)  
P.O. Box 30726  
Addis Ababa

Telephone: 18 03 81  
Telex: 21460 GTZFP ET  
Cable: GENE BANK

Curator/person in charge:	Melaku Worede
Details of collection:	<i>Capsicum</i> spp., 158 landraces
Maintenance of collection:	Long-term seed storage at -10°C. Seeds with 5-7% m.c. in aluminium laminated foil packets Medium-term seed storage at 4°C and 35% RH. Seeds in aluminium laminated foil packets. Provisionally storage for samples awaiting multiplication and/or samples for long-term seed storage
Duplication of collection:	No information
Availability:	Available, in consultation with Ethiopian breeders, scientists from the co-operating institutes and PGRC/E, whenever there is mutual advantage

**ETHIOPIA (cont.)**

- Quarantine:** Import of seeds through the Institute of Agricultural Research, Quarantine Unit. Export seeds accompanied with phytosanitary certificate issued by the Ministry of Agriculture
- Evaluation:** Partial
- Documentation:** On-going and computerized for passport, characterization and evaluation data

**FEDERAL REPUBLIC OF GERMANY**

Institut für Pflanzenbau und  
Pflanzenzüchtung der FAL  
Bundesallee, 50  
D-3300 Braunschweig

Telephone: (531) 59 66 00  
Telex:  
Cable: LANDFORSCHUNG, Völkenrode  
Telefax: (531) 59 68 14

- Curator/person in charge:** L. Seidewitz
- Details of collection:** *Capsicum annuum* var. *annuum*, 33 total accessions:  
- 19 cultivars from Bulgaria (1), Hungary (1), Turkey (2), USA (1) and USSR (11)  
- 4 landraces from Turkey (3) and Yemen (1)  
- 10 lines from Yemen
- Maintenance of collection:** Long-term seed storage at -10°C. Seeds with 6% m.c. in airtight tins. Medium-term seed storage at 3°C and 30% RH
- Duplication of collection:** Not duplicated
- Availability:** Freely available
- Quarantine:** No known restrictions
- Evaluation:** Complete for 35 descriptors
- Documentation:** All available data computerized. Passport data are available for practically all accessions

**FRANCE**

Station d'Amélioration des Plantes Maraichères  
Institut National de la Recherche Agronomique (INRA)  
Domaine Saint-Maurice  
B.P. 94  
F-84140 Montfavet

Telephone: (90) 31 60 00  
Telex: 432870 INRAAVI F  
Cable:

- Curator/person in charge:** R. Dumas de Vaulx
- Details of collection:** *Capsicum annuum* var. *annuum*, 16 wild and 500 old cultivars  
*C. baccatum* var. *baccatum*, 17  
*C. chinense*, 13  
*C. frutescens*, 10
- Maintenance of collection:** Medium-term seed storage at 3°C and 30% RH. Seeds in sealed bags
- Duplication of collection:** No information
- Availability:** No information
- Quarantine:** No information
- Evaluation:** Disease resistance and low temperature tolerance
- Documentation:** No information

**GERMAN DEMOCRATIC REPUBLIC**

Zentralinstitut für Genetik  
und Kulturpflanzenforschung (ZIGuK)  
Corrensstrasse, 3  
DDR-4325 Gatersleben

Telephone: Gatersleben 50  
Telex: 48558 kupfga DDR  
Cable:

Curator/person in charge: Ch. Lehmann

Details of collection: *Capsicum annuum* var. *annuum*, 750 accessions  
*Capsicum* spp., 250

Maintenance of collection: Long-term seed storage at -15° to -18°C  
Medium-term seed storage at 0°C. Seeds in sealed glass jars

Duplication of collection: Partially at Istituto del Germoplasma, Bari, Italy

Availability: Freely available

Quarantine: No known restrictions

Evaluation: Disease resistance and cold tolerance

Documentation: Computerized for passport data

**GHANA**

Plant Introduction and Exploration Section  
Agricultural Research Station  
Crops Research Institute  
Bunso

Telephone:  
Telex:  
Cable:

Curator/person in charge: H.L.O. Holloway

Details of collection: *Capsicum annuum* var. *annuum*, 24 accessions

Maintenance of collection: Active collection

Duplication of collection: Agricultural Research Station, Okumaning, Ghana and IITA, Ibadan, Nigeria

Availability: Available in limited quantity

Quarantine: No information

Evaluation: No information

Documentation: Partial and manual

**GREECE**

Greek Gene Bank  
Cereals Institute  
North Greece Agricultural Research Centre  
Thessaloniki

Telephone:  
Telex:  
Cable:

Curator/person in charge: A. Zamanis

Details of collection: *Capsicum annuum* var. *annuum*, 16 landraces from Greece, 124 selections mainly of landraces from Greece and 41 commercial cultivars from Greece, Hungary, Netherlands, USA and Yugoslavia

Maintenance of collection:	Long term seed storage at -20°C and 55% RH. Seeds in aluminium laminated foil packets. Storage capacity 48 m <sup>3</sup> Medium-term seed storage at 0°-2°C and 30% RH. Storage capacity 48 m <sup>3</sup>
Duplication of collection:	IVT, Wageningen, Netherlands
Availability:	Freely available
Quarantine:	No information
Evaluation:	Partial
Documentation:	Partial and manual

## GUATEMALA

Experimental Station  
Instituto de Ciencia y Tecnología Agrícola  
Chimaltenango

Telephone:

Telex:

Cable:

Curator/person in charge:	H. López
Details of collection:	<i>Capsicum</i> spp., 276 accessions
Maintenance of collection:	Short-term seed storage at ambient temperatures. Storage capacity 40 m <sup>3</sup>
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	On-going work
Documentation:	No information

## GUATEMALA

Departamento de Genética  
Facultad de Agronomía  
Universidad de San Carlos de Guatemala  
Ciudad Universitaria, Zona 12  
Apartado Postal 1545  
Guatemala

Telephone:

Telex:

Cable:

Curator/person in charge:	F. Rodríguez B.
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 3 accessions <i>C. pubescens</i> , 19 accessions <i>Capsicum</i> spp., 193 accessions
Maintenance of collection:	Long-term seed storage at -15°C. Seeds in vacuum sealed aluminium laminated foil packets Short-term seed storage at ambient temperatures. Seeds in plastic containers
Duplication of collection:	CATIE, Costa Rica
Availability:	Available
Quarantine:	No known restrictions
Evaluation:	On-going work
Documentation:	Passport data computerized

**HUNGARY**

Vegetable Crops Research Institute  
 Department of Budatétény, Budapest  
 Experimental Station Ujmajor  
 Pf. 95  
 Park u. 2  
 H-1223 Budapest

Telephone: 26 40 60  
 Telex: 226088  
 Cable:

Curator/person in charge: G. Botos

Details of collection: *Capsicum* spp., 10 landraces, 10 old cultivars, 15 wild and 50 mutant/genetic stocks

Maintenance of collection: Seeds in hermetically sealed packets

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: Virus and bacterial resistance

Documentation: No information

**HUNGARY**

Irrigation Research Institute  
 Szabadság u. 2  
 H-5540 Szarvas

Telephone: Szarvas 214  
 Telex: 82471  
 Cable:

Curator/person in charge: G. Marjai

Details of collection: *Capsicum annuum* var. *annuum*, 3 mutant/genetic stocks

Maintenance of collection: Short-term seed storage at ambient temperatures

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: No information

Documentation: No information

**HUNGARY**

Research Centre for Agrobotany  
 I.A.Q.  
 H-2766 Tápíószöle

Telephone: Tápíószöle 41  
 Telex: 226981 agbot H  
 Cable:

Curator/person in charge: A.L. Kiss

Details of collection: *Capsicum annuum* var. *annuum*, 630 total accessions, including 173 landraces and 423 cultivars from Austria (4), Belgium (3), Brazil (5), Bulgaria (20), PR China (1), Czechoslovakia (44), DDR (35), FRG (12), Finland (6), France (4), Hungary (391), India (2), Italy (3), Japan (2), Netherlands (3), Poland (5), Portugal (2), Romania (9), Switzerland (1), UK (10), USA (22), USSR (20), Yugoslavia (6) and 21 of unknown origin  
*C. baccatum* var. *baccatum*, 1

Maintenance of collection:	Long-term seed storage at -20°C Medium-term seed storage at ±0°C. Seeds with 5% m.c. in airtight containers
Duplication of collection:	Partially duplicated
Availability:	Freely available provided there is sufficient seed. Index Seminum periodically issued
Quarantine:	Phytosanitary certificate required
Evaluation:	On-going work
Documentation:	Complete for passport data. Complete characterization data for 428 accessions (68 characters)

## INDIA

Regional Agricultural Research Station  
Andra Pradesh Agricultural University  
Lam  
Guntur 522034  
Andra Pradesh

Telephone:  
Telex:  
Cable:

Curator/person in charge:	N. Sriramachandra Murthy
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 123 landraces and commercial cultivars from India and introductions from Africa, Hungary, Japan, Mexico, Spain, Sri Lanka, USA and USSR <i>C. baccatum</i> var. <i>baccatum</i> , 1 commercial cultivar from USA <i>C. chinense</i> , 1 commercial cultivar and 1 mutant from USA <i>C. frutescens</i> , 1 commercial cultivar and 1 mutant from India
Maintenance of collection:	Active collection
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	Complete for 101 samples for 32 descriptors: Growth habit, fruit, leaf and seed morphological characters, disease and pest resistance (thrips, fungi and viruses)
Documentation:	Manual

## INDIA

National Bureau of Plant Genetic Resources (NBPGR)  
Indian Agricultural Research Institute (IARI)  
Pusa Campus  
New Delhi 110012

Telephone:  
Telex:  
Cable:

Curator/person in charge:	R.S. Rana
Details of collection:	<i>Capsicum</i> spp., 130 accessions, including 80 landraces from India
Maintenance of collection:	Active collection
Duplication of collection:	Partially duplicated at Regional Stations at Akola, Simla and Vellanikhara, India
Availability:	Freely available

**INDIA (cont.)**

Quarantine:	No information
Evaluation:	Data are being published in crop specific catalogues
Documentation:	Manual

**IRAN**

Seed and Plant Improvement Institute (SPII) Ministry of Agriculture & Rural Development Mard-Abad Ave. Karadj	Telephone: (02221) 28 58 Telex: Cable: SEEDPLANT, Karadj
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Curator/person in charge:	M.A. Vahabian
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 2 from Iran and 3 introductions
Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**ISRAEL**

Israel Gene Bank for Agricultural Crops Volcani Centre, ARO P.O. Box 6 50-250 Bet Dagan	Telephone: (03) 968 34 58 Telex: 381476 AROVC IL Cable: Telefax: 972-3-993998
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Curator/person in charge:	M. Zur
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 500 cultivars from Europe and USA, donated by European Institutes, commercial companies and USDA, USA
Maintenance of collection:	Long-term seed storage at -10°C. Seeds in aluminium boxes of 1 kg capacity. Storage area 50 m <sup>2</sup>
Duplication of collection:	No information
Availability:	Available in limited quantity
Quarantine:	Special conditions and treatment according to Plant Protection Law
Evaluation:	Drought, salinity and disease resistance. High nutrition level
Documentation:	Complete and computerized

**ITALY**

Istituto del Germoplasma CNR Via G. Amendola, 165/A I-70126 Bari	Telephone: (080) 58 34 63 Telex: 810565 CNR/BA I Cable:
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Curator/person in charge:	P. Perrino
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Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 93 old cultivars
Maintenance of collection:	Long-term seed storage at -18°C. Seeds in airtight metal cans with silica gel Medium-term seed storage at 0°C and 40% RH. Seeds in vacuum sealed aluminium laminated foil packets
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

## ITALY

Research Institute for Vegetables Crops  
Via Cavalleggeri, 25  
I-84098 Pontecagnano (Salerno)

Telephone:  
Telex:  
Cable:

Curator/person in charge:	A. Ferraro
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 40 old cultivars and 3 wild
Maintenance of collection:	Room with controlled temperature, light and humidity
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

## ITALY

Department of Agrobiotechnology  
National Agency for Atomic Energy (ENEA)  
P.O. Box 2400  
C.R.E. Casaccia  
I-00100 Rome A.D.

Telephone: (06) 69481  
Telex: 613296 ENEACA I  
Cable: CASACCIA ENEA

Curator/person in charge:	L. Rossi
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 100 accessions
Maintenance of collection:	Long-term seed storage at -20°C Medium-term seed storage at 0°C
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Disease resistance, short stature, quality, mechanical harvest and stress resistance
Documentation:	No information

**ITALY**

Istituto di Miglioramento Genetico  
e Produzione delle Sementi  
Università degli Studi  
Via Pietro Giuria, 15  
I-10126 Torino

Telephone: (011) 63 39 69 /411 52 50  
Telex:  
Cable:

Curator/person in charge: P. Belletti

Details of collection: *Capsicum annuum* var. *annuum*, 205 total accessions:  
- 76 landraces and old cultivars from Egypt (6), Italy (65), Morocco (4) and Tunisia (1)  
- 129 commercial cultivars from Brazil (6), donated by Sao Paulo State University, Piracicaba, Brazil; Hungary (27), donated by Research Institute for Vegetables Crops, Budapest, Hungary; Italy (51); Japan (6), donated by Kunisada Plant Breeding Station, Gunma-ken, Japan; Korea (24), donated by University of Malaysia, Kuala Lumpur, Malaysia; Netherlands (2); Thailand (9); UK (1) and USA (3), donated by University of Puerto Rico, Isabela, Puerto Rico  
*C. baccatum* var. *baccatum*, 4  
*C. chinense*, 4  
*C. frutescens*, 2  
All accessions are commercial cultivars from Brazil, donated by São Paulo State University, Piracicaba, Brazil

Maintenance of collection: Long-term seed storage at -20°C and at -10°C. Storage capacity 1 m<sup>3</sup> and 0.5 m<sup>3</sup> respectively. Seeds with 5-7% m.c. in aluminium laminated foil packets

Duplication of collection: Not duplicated

Availability: Available in limited quantity and on exchange basis

Quarantine: Phytosanitary certificate required for import and export of material

Evaluation: On-going work for morphological and genetic features, agronomical aspects and disease resistance, according to IBPGR descriptor list

Documentation: Computerized for characterization and evaluation data

**JAPAN**

National Institute of Agrobiological Resources (NIAR)  
Kannon-dai 2-1-2  
Tsukuba, Ibaraki 305

Telephone: 02975-6-7050  
Telex:  
Cable: NIARTSUKUBA YATABE  
Telefax: 02975-6-7408

Curator/person in charge: Head, Germplasm Storage Center

Details of collection: *Capsicum annuum* var. *annuum*, 42  
*C. baccatum* var. *baccatum*, 5  
Old and commercial cultivars from Central and South America and Japan

Maintenance of collection: Long-term seed storage at -10°C  
Medium term seed storage at -1°C and 30% RH  
Seeds with 6-7% m.c. in 1 to 3 PET containers of 430 ml

Duplication of collection: No information

Availability: Freely available for research purposes. A fee is applicable for private institutions

Quarantine: No information

**Evaluation:** Standard manual published by specialists' consent  
**Documentation:** Computerized for passport data

**JAPAN**

Plant Germplasm Institute  
 Faculty of Agriculture  
 Kyoto University  
 Nakafo 1, Mozume, Mukoshi  
 Kyoto 617

Telephone:  
 Telex:  
 Cable:

**Curator/person in charge:** M. Tanaka

**Details of collection:** *Capsicum annuum* var. *annuum*, 59 landraces from Argentina (3), Bolivia (4), Brazil (2), Chile (6), Colombia (5), Guatemala (6), Mexico (29) and Peru (4)  
*C. baccatum* var. *baccatum*, 371 landraces and wild types from Argentina (1), Bolivia (24), Brazil (3), Colombia (210), Ecuador (2), Peru (99) and Venezuela (32)  
*C. pubescens*, 77 landraces and wild types from Bolivia (47), Colombia (6) and Peru (24)  
*C. eximium*, 7  
*C. cardenasii*, 1  
 Wild species from Bolivia

**Maintenance of collection:** Medium-term seed storage at 4°-6°C and 50% RH. Seeds in sealed metal cans. Storage area 8.8 m<sup>2</sup>

**Duplication of collection:** No information

**Availability:** Freely available

**Quarantine:** No information

**Evaluation:** Complete for passport data

**Documentation:** Complete and manual

**MEXICO**

Programa de Recursos Genéticos  
 Centro de Investigaciones Forestales  
 y Agropecuarias del Estado de Guanajuato  
 Instituto Nacional de Investigaciones Forestales  
 y Agropecuarias (INIFAP)  
 km 6 carr. Celaya - S. Miguel Allende  
 Apartado Postal 112  
 Celaya, Guanajuato

Telephone: 270 23  
 Telex:  
 Cable:

**Curator/person in charge:** S. Montes Hernandez

**Details of collection:** *Capsicum annuum* var. *annuum*, 2787  
*C. annuum* var. *aviculare*, 219  
*C. baccatum* var. *baccatum*, 151  
*C. baccatum* var. *pendulum*, 16  
*C. chinense*, 220  
*C. frutescens*, 81  
*C. pubescens*, 50  
 All accessions are landraces, old and commercial cultivars and wild types.  
 World-wide representation  
*C. cardenasii*, 1  
*C. chacoense*, 15  
*C. eximium*, 2

**MEXICO (cont.)**

Details of collection: (cont.)	<i>Capsicum galapagoense</i> , 2 <i>C. praetermissum</i> , 5 <i>C. 'tovari'</i> , 1 Wild species from Central and South America <i>Capsicum</i> spp., 40
Maintenance of collection:	Short-term seed storage at ambient temperatures. Seeds in glassine paper envelopes inside screw-top glass containers
Duplication of collection:	This collection includes duplicates of most of the accessions from P.G. Smith's Collection, University of California, Davis, USA
Availability:	Freely available
Quarantine:	No information
Evaluation:	Various morphological characters according to standard descriptor list
Documentation:	Partial. Computerization in progress

**MEXICO**

Banco de Germoplasma  
Instituto Nacional de Investigaciones  
Forestales y Agropecuarias (INIFAP)  
Insurgentes Sur 694  
C.P. 03100  
México, D.F.

Telephone:  
Telex:  
Cable:

Curator/person in charge:	J.S. Muruaga Martinez
Details of collection:	<i>Capsicum</i> spp., 1500 accessions
Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**NETHERLANDS**

BRUINSMA Selectiebedrijven B.V.  
P.O. Box 24  
Middelbroekweg, 67  
NL-2670 AA Naaldwyk

Telephone: (01740) 282 44  
Telex: 33154  
Cable: TOMKO

Curator/person in charge:	L. van der Kruk
Details of collection:	<i>Capsicum</i> spp., 100 landraces, 100 old cultivars and 300 wild
Maintenance of collection:	Short-term seed storage at 18°C and 30% RH. Seeds in paper bags
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information

Evaluation: Disease resistance, yield and quality  
 Documentation: No information

### NETHERLANDS

Institute for Horticultural Plant Breeding (IVT)  
 P.O. Box 16  
 Mansholtlaan, 15  
 NL-6700 AA Wageningen

Telephone: (08370) 191 23  
 Telex: 75044 DLOWA NL  
 Cable:  
 Telefax: (08370) 180 94

Curator/person in charge: I.W. Boukema

Details of collection: *Capsicum annuum* var. *annuum*, ca. 880 landraces and commercial cultivars donated by institutes and seed companies in Europe and USA  
*C. baccatum* var. *baccatum*  
*C. baccatum* var. *pendulum*  
*C. barbatum*  
*C. canoides*  
*C. caratocarpum*  
*C. chacoense*  
*C. chinense*  
*C. eximium*  
*C. frutescens*  
*C. luteum*  
*C. microcarpum*  
*C. praetermissum*  
*C. pubescens*  
*C. testiculatum*  
 1124 total accessions mainly donated by CATIE, Costa Rica; University of Reading, UK and NPGS and University of California, Davis, USA

Maintenance of collection: Long-term seed storage at -20°C at Centre for Genetic Resources the Netherlands (CGN)  
 Short-term seed storage at 15° to 18°C and 15% RH at IVT  
 The Institute has agreed to accept responsibility for maintaining a global collection of *Capsicum* for long-term conservation

Duplication of collection: Mostly at the donor institutes

Availability: Available in limited quantity

Quarantine: No known restrictions

Evaluation: Disease resistance, stress tolerance and quality

Documentation: Computerized for passport and characterization data

### NICARAGUA

Programa de Recursos Genéticos Nicaragüenses (REGEN)  
 Instituto Superior de Ciencias Agropecuarias (ISCA)  
 Apartado 453  
 Carretera Norte km 12,5  
 Managua

Telephone: 319 68 / 316 19 Ext. 14  
 Telex:  
 Cable:

Curator/person in charge: C. Henry Loáisiga C.

Details of collection: *Capsicum* spp., 8 from Nicaragua

Maintenance of collection: Medium-term seed storage at 0°C and 55-60% RH. Seeds in aluminium laminated foil packets

**NICARAGUA (cont.)**

Duplication of collection:	No information
Availability:	Freely available
Quarantine:	Phytosanitary certificate required
Evaluation:	No information
Documentation:	Computerized for passport, characterization and evaluation data

**NIGERIA**

National Centre for Genetic Resources and Biotechnology (NACGRAB) Moor Plantation PMB 5382 Ibadan	Telephone: (022) 31 26 70 / 31 26 22 Telex: Cable: GENE BANK
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Curator/person in charge:	P.E. Onuorah
Details of collection:	<i>Capsicum</i> spp., 251
Maintenance of collection:	Long-term seed storage
Duplication of collection:	No information
Availability:	Available in limited quantity
Quarantine:	No information
Evaluation:	No information
Documentation:	Manual. Passport data available

**PAKISTAN**

Plant Genetic Resources Laboratory National Agricultural Research Centre Pakistan Agricultural Research Council (PARC) P.O. Box 1031 Islamabad	Telephone: 82 00 53 33 Telex: 5604 PARC PAK Cable: AGRSCOUNCIL
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Curator/person in charge:	R. Anwar
Details of collection:	<i>Capsicum</i> spp., 15 primitive cultivars from Pakistan
Maintenance of collection:	Medium-term seed storage at 5°C +1°C. Seeds in cans
Duplication of collection:	At several International Research Centres
Availability:	Freely available provided there is sufficient seed
Quarantine:	Imported seeds must possess phytosanitary certificate and import permit. Export of seeds accompanied with phytosanitary certificate
Evaluation:	Partial
Documentation:	Manual

## PERU

Programa de Investigación en Hortalizas  
 Universidad Nacional Agraria (UNA)  
 Apartado 456  
 La Molina - Lima

Telephone: (14) 35 20 35 Ext. 354  
 Telex:  
 Cable:

Curator/person in charge: F. Delgado de la Flor B.  
 Details of collection: *Capsicum* spp., 630 landraces from Peru  
 Maintenance of collection: Medium-term seed storage at 4°-8°C and 60% RH. Storage capacity 18 m<sup>3</sup>  
 Duplication of collection: IICA, Turrialba, Costa Rica and University of California, Davis, USA  
 Availability: Freely available for material already regenerated  
 Quarantine: Phytosanitary certificate required for import of seeds  
 Evaluation: 25% of the collection being characterized for 20 descriptors  
 Documentation: Partial

## PHILIPPINES

National Plant Genetic Resources Laboratory (NPGRL)  
 Institute of Plant Breeding (IPB)  
 University of the Philippines at Los Baños  
 College, Laguna

Telephone: (63) 833 35 28  
 Telex: 3432 PTLBK PU  
 Cable: PLANTBREED PHILIPPINES

Curator/person in charge: N.C. Altoveros  
 Details of collection: *Capsicum annuum* var. *annuum*, 102 landraces from Costa Rica (16), Japan (1), New Zealand (1), Philippines (68) and USA (26)  
*C. frutescens*, 166 landraces from PR China (3), Costa Rica (7), Fiji (1), Philippines (129) and USA (26)  
 Maintenance of collection: Long-term seed storage at -20°C  
 Medium-term seed storage at 5°C and 40% RH. Seeds with 6% m.c. in glass bottles or in tin cans or in aluminium laminated foil packets  
 Duplication of collection: Partially at CATIE, Costa Rica and USDA, USA  
 Availability: Available on exchange basis  
 Quarantine: Import permit required  
 Evaluation: Complete for morphological and horticultural characters  
 Documentation: Complete and computerized

## PORTUGAL

Secção de Genética  
 Estação Agronómica Nacional (EAN)  
 Instituto Nacional de Investigação Agrária (INIA)  
 P-2780 Oeiras

Telephone: (1) 443 15 05 / 443 04 42  
 Telex: 63698 EAN P  
 Cable:

Curator/person in charge: M. Mota  
 Details of collection: *Capsicum annuum* var. *annuum*, 1 landrace from Portugal  
*Capsicum* spp., 2 landraces from Spain  
 Maintenance of collection: Long-term seed storage at -16°C in deep-freezers

**PORTUGAL (cont.)**

- Duplication of collection: Material from Spain duplicated at Banco de Germoplasma, Alcalá de Henares, Spain
- Availability: Available in limited quantity
- Quarantine: No restrictions for export but imported material must possess phytosanitary certificate
- Evaluation: None
- Documentation: Computerized for passport data

**SOUTH AFRICA, REPUBLIC OF**

Department of Agricultural Economics and Marketing  
 Directorate of Plant and Liquor Control  
 Private Bag X 179  
 0001 Pretoria

Telephone: (012) 206 24 06  
 Telex: 3-23264  
 Cable: SATIVA PRETORIA  
 Telefax: (012) 206 27 86

- Curator/person in charge: H. Chamberlain
- Details of collection: *Capsicum annuum* var. *annuum*, 6 cultivars from USA  
*C. frutescens*, 18 cultivars from USA (1) and 17 of unknown origin
- Maintenance of collection: Long-term seed storage at -20°C. Seeds in vacuum sealed aluminium laminated foil packets (small part of the collection)  
 Short-term seed storage at 6°-7°C and 45% RH. Seeds in plastic containers
- Duplication of collection: At different Crop Research Institutes in the Rep. of South Africa
- Availability: Available in limited quantity (0.5 / 300 g) and on exchange basis. Index Seminum issued yearly  
 Requests to: The Plant Introduction Officer  
 (same address)
- Quarantine: Additional declaration on the phytosanitary certificate that the parent plants were inspected during active growth and found to be free from:  
 a) *Phytophthora capsici*  
 b) *Xanthomonas vesicatoria*  
 or that organisms do not occur in the area of production
- Evaluation: On-going work
- Documentation: Complete and computerized

**SPAIN**

Centro Regional de Investigaciones Agrarias  
 "La Alberca"  
 Apartado Oficial  
 Murcia

Telephone: (968) 84 01 50  
 Telex:  
 Cable:

- Curator/person in charge: J. Rodriguez Navarro
- Details of collection: *Capsicum* spp., 25 landraces and 4 old cultivars
- Maintenance of collection: Medium term seed storage at 4°C  
 Short-term seed storage at ambient temperatures
- Duplication of collection: No information

Availability:	No information
Quarantine:	No information
Evaluation:	Production, quality, colouration and disease resistance ( <i>Phytophthora capsici</i> , PUY and CMV)
Documentation:	No information

## SPAIN

Instituto Valenciano de Investigaciones  
Agrarias (IVIA)  
Apartado Oficial  
Carretera de Moncada a Náquera, km 4,5  
Moncada - Valencia

Telephone: (6) 139 10 00  
Telex: 61440 IVIA E  
Cable:

Curator/person in charge:	L. Navarro
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 9 landraces and 29 old cultivars
Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

## SPAIN

Catedra de Genética  
Escuela Técnica Superior de  
Ingenieros Agrónomos (ETSIA)  
Universidad Politécnica  
Camino de Vera, 14  
Apartado de Correos 22012  
46020 Valencia

Telephone: (96) 361 50 51 Ext. 182  
Telex: 62808 UPVA E  
Cable:

Curator/person in charge:	F. Nuez
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 453 landraces from Spain
Maintenance of collection:	Medium-term seed storage at -3°C and 25% RH. Seeds with silica gel in hermetically sealed glass containers of 6 cm x 7 cm
Duplication of collection:	IVT, Wageningen, Netherlands and Banco de Germoplasma, Alcalá de Henares, Spain
Availability:	Available on exchange basis
Quarantine:	No known restrictions
Evaluation:	On-going work
Documentation:	On-going work for passport data

**SPAIN**

Banco de Germoplasma  
 Departamento de Horticultura  
 Servicio de Investigación Agraria (DGA)  
 P.O. Box 727  
 Zaragoza

Telephone: (76) 57 63 11  
 Telex: 58194 IDAE E  
 Cable:  
 Telefax: (76) 57 55 01

Curator/person in charge: M. Carravedo / R. Gil

Details of collection: *Capsicum annuum* var. *annuum*, 413 total accessions. Primitive cultivars (234) from Spain and landraces, cultivars and elite lines (179) donated by different institutions from: Argentina, Brazil, Bulgaria, Canada, Czechoslovakia, DDR, France, Guatemala, Hungary, India, Israel, Italy, Korea, Mexico, Nicaragua, Peru, Philippines, Netherlands, Turkey, UK, USA, USSR and Yugoslavia  
*Capsicum baccatum* var. *baccatum*, 16  
*C. chacoense*, 7  
*C. chinense*, 15  
*C. eximium*, 3  
*C. frutescens*, 8  
*C. galapagoense*, 2  
*C. praetermissum*, 6 wild  
*C. pubescens*, 5  
*Capsicum* spp., 1  
 All other accessions are landraces, cultivars and elite lines, donated by the above listed institutions

Maintenance of collection: Medium-term seed storage at 2<sup>o</sup>-4<sup>o</sup>C. Seeds in glass and plastic containers with silica gel

Duplication of collection: Partially (119 primitive Spanish cultivars) at Banco de Germoplasma, Alcalá de Henares, Spain

Availability: Available in limited quantity

Quarantine: No known restrictions

Evaluation: Complete for 119 accessions on: fruit pungency; flowering date; fruit setting date; mature fruit colour (R.H.S. colour chart); plant height; long-sectional and cross-sectional fruit shape; mature fruit length and weight; flesh thickness and seed mean weight. On-going for the rest of the primitive Spanish varieties. Partial for the foreign cultivars mainly for disease resistance (*Phytophthora capsici*, *Verticillium dahliae*, PVY, CMV and TMV)

Documentation: Passport data computerized

**THAILAND**

Department of Horticulture  
 Faculty of Agriculture  
 Kasetsart University  
 Bangken  
 Bangkok 9

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: B. Chareonpanich

Details of collection: *Capsicum frutescens*, 12 landraces from Thailand

Maintenance of collection: Active collection

Duplication of collection: No information

Availability: Freely available

Quarantine:	No information
Evaluation:	No information
Documentation:	Manual

**TUNISIA**

Institut National de la Recherche  
Agronomique de Tunisie  
Avenue de l'Indépendance  
Ariana

Telephone:  
Telex:  
Cable:

Curator/person in charge:	N. Hamza
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 7 landraces from the Sahel and central regions of Tunisia
Maintenance of collection:	Short-term seed storage at 18°-20°C. Seeds in polyethylene bags
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**TURKEY**

Aegean Agricultural Research Institute (AARI)  
P.O. Box 9  
35661 Menemen - Izmir

Telephone: (51) 14 91 31  
Telex:  
Cable:

Curator/person in charge:	The Directorate
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 203 landraces
Maintenance of collection:	Long-term seed storage at -20°C. Seeds in metal cans Medium-term seed storage at 0°C
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Stripe and stem rust resistance
Documentation:	No information

**UNION OF SOVIET SOCIALIST REPUBLICS**

The N.I. Vavilov Institute of Plant Industry (VIR)  
44, Herzon str.  
Leningrad 190000

Telephone: (314) 48 48  
Telex:  
Cable:

Curator/person in charge:	V.I. Krivchenko
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**UNION OF SOVIET SOCIALIST REPUBLICS (cont.)**

Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> <i>C. baccatum</i> var. <i>baccatum</i> <i>C. conicum</i> 2300 local populations, breeding varieties and hybrids, including 1400 accessions in the main catalogue and 900 in the temporary catalogue. Collection representing all cultivation areas
Maintenance of collection:	Long-term seed storage at -10°C Medium-term seed storage at 4°C. Seeds with 2-4% m.c. in sealed glass jars
Duplication of collection:	Partially duplicated
Availability:	Available in accordance with the Exchange Catalogue regularly issued
Quarantine:	According to the International Convention on Phytosanitary Plant Protection
Evaluation:	Field and laboratory evaluation using the International COMECON descriptors list
Documentation:	Manual. Passport data available

*NB - Samples received at the Institute are given temporary catalogue numbers. Some may be included in the permanent collection after 2-3 years trials, elimination of duplicates and low-value breeding lines*

**UNITED KINGDOM**

School of Biological Sciences  
University of Birmingham  
P.O. Box 363  
Birmingham B15 2TT

Telephone: (021) 414 55 65  
Telex: 338938 SPAPHY G  
Cable:

Curator/person in charge:	B.V. Ford-Lloyd
Details of collection:	<i>Capsicum</i> spp., 57 accessions
Maintenance of collection:	Long-term seed storage at -20°C. Seeds in aluminium laminated foil packets Medium-term seed storage at 5°C. Seeds in polyethylene bags/envelopes
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Species relationships and patterns of variation
Documentation:	No information

**UNITED KINGDOM**

Department of Agricultural Botany  
University of Reading  
Whiteknights  
Reading RG6 2AS

Telephone:  
Telex:  
Cable:

Curator/person in charge: B. Pickersgill

<b>Details of collection:</b>	<i>Capsicum annuum</i> var. <i>annuum</i> <i>C. baccatum</i> var. <i>baccatum</i> <i>C. cardenasii</i> <i>C. chacoense</i> <i>C. chinense</i> <i>C. eximium</i> <i>C. frutescens</i> <i>C. galapagoense</i> <i>C. praetermissum</i> <i>C. pubescens</i> Variable number of landraces and wild types from Latin America
<b>Maintenance of collection:</b>	Short-term seed storage at ambient temperatures. Seeds in paper bags
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	Available in limited quantity
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	Morphological and some cytological characters
<b>Documentation:</b>	Partial and manual

#### UNITED STATES OF AMERICA

Southern Regional Plant Introduction  
Station (S-9)  
US Department of Agriculture (USDA)  
1109 Experiment Street  
Griffin, Georgia 30223

Telephone:  
Telex:  
Cable:

Curator/person in charge G.R. Lovell

<b>Details of collection:</b>	<i>Capsicum annuum</i> var. <i>annuum</i> , 1981 landraces, old and commercial cultivars world-wide <i>C. baccatum</i> var. <i>baccatum</i> , 287 <i>C. chacoense</i> , 12 <i>C. chinense</i> , 312 <i>C. frutescens</i> , 163 <i>C. praetermissum</i> , 6 <i>C. pubescens</i> , 10 <i>Capsicum</i> spp., 97 Landraces and wild types from Central and South America
<b>Maintenance of collection:</b>	Medium-term seed storage at 5°C and 40-50% RH
<b>Duplication of collection:</b>	Partially duplicated at NSSL, Fort Collins, USA
<b>Availability:</b>	Freely available. Requests through: G. White, Plant Introduction Officer, Beltsville Agricultural Research Centre, Beltsville, Maryland 20705, USA
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	Majority of collection for: plant height, width and maturity; fruit length, diameter, position, number per node, set, shape, colour and pungency <i>C. annuum</i> var. <i>annuum</i> , 25% of the accessions for: resistance to CTV, CMV, TEV, TMV, <i>Verticillium</i> wilt, <i>Phytophthora</i> , leaf blight and root knot nematodes
<b>Documentation:</b>	Computerized. Catalogue of passport and evaluation data issued

**UNITED STATES OF AMERICA**

National Seed Storage Laboratory (NSSL)  
 US Department of Agriculture (USDA)  
 Agricultural Research Service (ARS)  
 Colorado State University Campus  
 Fort Collins, Colorado 80523

Telephone: (303) 484 04 02  
 Telex: 237401714 DNPA UC  
 Cable:  
 Telefax: (303) 221 14 27

Curator/person in charge: S.A. Eberhart

Details of collection: *Capsicum annuum* var. *annuum*, 666 landraces, wild types and commercial cultivars. World-wide representation  
*C. baccatum* var. *baccatum*, 103 accessions  
*C. chinense*, 103 accessions  
*C. frutescens*, 33 accessions  
*Capsicum* spp., 23 accessions

Maintenance of collection: Long-term seed storage at -18°C. Seeds in aluminium laminated foil packets.

Duplication of collection: As an active collection at Regional Plant Introduction Station, Griffin, Georgia, USA

Availability: Freely available only if not available from the active collection

Quarantine: No information

Evaluation: Responsibility of the Regional Plant Introduction Station holding the active collection

Documentation: All data are computerized in GRIN (Germplasm Resources Information Network). The GRIN system resides on a Prime Computer in Beltsville, MD, USA

**UNITED STATES OF AMERICA**

Northeast Regional Plant Introduction  
 Station (NE-9)  
 New York State Agricultural Experiment Station  
 US Department of Agriculture (USDA)  
 Geneva, New York 14456

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: D. Dolan

Details of collection: *Capsicum annuum* var. *annuum*, 731  
*C. baccatum* var. *baccatum*, 106  
*C. cardenasii*, 1  
*C. chacoense*, 9  
*C. chinense*, 127  
*C. eximium*, 2  
*C. frutescens*, 70  
*C. praetermissum*, 4  
*C. pubescens*, 41  
*Capsicum* spp., 5  
 Landraces, wild species and commercial cultivars from many countries world-wide

Maintenance of collection: Medium-term seed storage at 4°C and 28% RH. Seeds in moisture proof aluminium laminated foil packets. Storage capacity 102m<sup>3</sup>  
 Short-term seed storage at 10°C and 28% RH. Seeds in paper envelopes. Storage capacity 40.7 m<sup>3</sup>

Duplication of collection: No information

Availability:	Freely available. Requests through: G. White, Plant Introduction Officer, Beltsville Agricultural Research Centre, Beltsville, Maryland 20705, USA
Quarantine:	No information
Evaluation:	Uniformity, habit, vigour, plant size, number of leaves and branches, colour of leaves, leaf size, maturity, flower colour, fruit set, fruit length and diameter, fruit posture, fruit colour and shape and resistance to mosaic virus
Documentation:	Partial and manual

## UNITED STATES OF AMERICA

Department of Botany  
Miami University  
Oxford, Ohio 45056

Telephone:  
Telex:  
Cable:

Curator/person in charge:	W.H. Eshbaugh
Details of collection:	<i>Capsicum annuum</i> var. <i>annuum</i> , 4 landraces <i>C. baccatum</i> var. <i>baccatum</i> , 9 wild <i>C. baccatum</i> var. <i>pendulum</i> , 49 landraces <i>C. cardenasii</i> , 54 wild <i>C. chacoense</i> , 30 wild <i>C. chinense</i> , 5 landraces <i>C. eximium</i> , 145 wild <i>C. pubescens</i> , 164 landraces <i>Capsicum</i> spp., 9 wild species All accessions from Bolivia
Maintenance of collection:	Active collection
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

## Cucurbitaceae

**ARGENTINA**

Estación Experimental Agropecuaria de Pergamino  
 Instituto Nacional de Tecnología  
 Agropecuaria (INTA)  
 C.C. 31  
 2700 Pergamino

Telephone:  
 Telex:  
 Cable:

Curator/person in charge:

Details of collection: *Cucurbita maxima* var. *maxima*  
*C. mixta*  
 Total of 82 landraces and wild types from Argentina

Maintenance of collection: Long-term seed storage at -18°C  
 Short-term seed storage at 7°C

Duplication of collection: Northeast Regional Plant Introduction Station, Geneva, NY, USA

Availability: Freely available

Quarantine: No information

Evaluation: No information

Documentation: Manual

**ARGENTINA**

Estacion Experimental Agropecuaria San Pedro  
 Instituto Nacional de Tecnología  
 Agropecuaria (INTA)  
 C.C. 43  
 2930 San Pedro - Buenos Aires

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: J.P. Rodriguez

Details of collection: *Cucurbita maxima* var. *maxima*, 10 population samples of commercial cultivars, 600 single plants of breeders' lines and 20 wild single plant samples  
*C. moschata*, 20 population samples of commercial cultivars  
*C. pepo*, 1 commercial cultivar  
 All accessions from Argentina

Maintenance of collection: Active collection

Duplication of collection: No information

Availability: Freely available

Quarantine: No information

Evaluation: Agronomical and marketing characters and disease resistance

Documentation: Partial and manual

**AUSTRALIA**

Australian Tropical Forages Genetic  
 Resources Centre  
 CSIRO  
 306 Carmody Road  
 Sta. Lucia, Queensland 4067

Telephone: (07) 377 02 09  
 Telex: 42159 AA  
 Cable:  
 Telefax: (07) 371 39 46

Curator/person in charge: R.J. Williams

<b>Details of collection:</b>	<i>Citrullus lanatus</i> var. <i>lanatus</i> , 1 accession <i>Cucumis melo</i> , 2 accessions <i>C. prophetarum</i> , 1 accession <i>C. sativus</i> , 4 accessions  <i>Cucurbita maxima</i> var. <i>maxima</i> , 2 accessions <i>C. pepo</i> , 1 accession <i>C. moschata</i> , 2 accessions  <i>Lagenaria siceraria</i> , 2 accessions
<b>Maintenance of collection:</b>	Long-term seed storage at -20°C. Storage capacity 12 m <sup>3</sup> Short-term seed storage at 5° to 10°C and 25% RH. Storage capacity 60 m <sup>3</sup> Seed - in aluminium laminated foil packets and plastic bottles
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	Available provided there is sufficient seed
<b>Quarantine:</b>	Import seeds must have phytosanitary certificate. Seeds treated and quarantined on arrival. Despatch of seeds will include a phytosanitary certificate
<b>Evaluation:</b>	On-going work
<b>Documentation:</b>	Passport data complete and computerized

**AUSTRIA**

Research Station for Special Crops  
A-8551 Wries 88

Telephone: (03465) 24 23  
Telex:  
Cable:

<b>Curator/person in charge</b>	H. Pelzmann
<b>Details of collection</b>	<i>Cucurbita pepo</i> var. <i>styrnaca</i> , 5 landraces from Austria (4) and Yugoslavia (1)
<b>Maintenance of collection</b>	Long-term seed storage at -18°C. Seeds with 5% m.c. in 500 cc plastic or tin containers
<b>Duplication of collection</b>	Not duplicated
<b>Availability</b>	Available on exchange basis
<b>Quarantine</b>	No known restrictions
<b>Evaluation</b>	Not evaluated
<b>Documentation</b>	Manual

**BOLIVIA**

Centro de Investigaciones Fitoecogenéticas  
de Parumani  
Casilla de Correos 128  
Cochabamba

Telephone:  
Telex:  
Cable:

<b>Curator/person in charge</b>	M. Crespo
<b>Details of collection</b>	Cucurbitaceae, 500 accessions. Native (wild and cultivated) plus few introductions
<b>Maintenance of collection</b>	No information

**BOLIVIA (cont.)**

Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Collection completed characterized
Documentation:	No information

**BRAZIL**

Centro Nacional de Pesquisa de Hortaliças (CNPH) Empresa Brasileira de Pesquisa Agropecuária (EMBRAPA) BR 060 km 09 C.P. 07-0218 70359 Brasília DF	Telephone: (061) 556 50 11 Telex: 061-2445 Cable:
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Curator/person in charge:	J.F. Lopes
Details of collection:	<i>Sechium edule</i> , 50 landraces from Brazil
Maintenance of collection:	Field genebank
Duplication of collection:	Not duplicated
Availability:	Freely available as seeds or cuttings
Quarantine:	No known restrictions
Evaluation:	None
Documentation:	None

**BRAZIL**

Departamento de Fitotecnia Universidade Federal de Viçosa 36570 Viçosa, M.G.	Telephone: (031) 899 26 11 Telex: 311587 FUFV BR Cable:
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Curator/person in charge:	V.W.D. Casali
Details of collection:	<i>Cucurbita maxima</i> var. <i>maxima</i> <i>C. moschata</i> Total of 432 landraces from Brazil
Maintenance of collection:	Short-term seed storage at 5°C and controlled RH. Seeds in plastic containers of 4 kg capacity. Storage capacity: 60 m <sup>3</sup>
Duplication of collection:	CENARGEN/EMBRAPA
Availability:	Freely available. Requests should be addressed to: CENARGEN/EMBRAPA C.P. 10-2372 CEP 70.849 Brasília - D.F. Brazil
Quarantine:	No information
Evaluation:	Partial
Documentation:	Partial and computerized

**BULGARIA**

Maritsa Institute for Vegetable Crops  
ul. Brezovsko shosse 32  
BG-4003 Plovdiv

Telephone:  
Telex:  
Cable:

- Curator/person in charge: E. Uzunova
- Details of collection: *Cucumis sativus*, 71 commercial cultivars and 450 inbred lines from Bulgaria, Czechoslovakia, DDR, Hungary, Netherlands and USSR
- Maintenance of collection: Short-term seed storage at ambient temperatures
- Duplication of collection: No information
- Availability: Some restrictions
- Quarantine: No information
- Evaluation: Phenological observations, morphological characters of the fruit, earliness, suitability for mechanized harvesting, resistance to diseases (*Pseudoperonospora cubensis*, *Sphaerotheca fuliginea* and CMV-1)
- Documentation: Partial and manual

**BULGARIA**

Institute of Introduction and  
Plant Genetic Resources "K. Malkov"  
District of Plovdiv  
BG-4122 Sadovo

Telephone: (99) 22 21 / 22 51  
Telex: 44444 ZOS BG  
Cable:

- Curator/person in charge: B. Matsov / M. Zaharieva
- Details of collection: *Citrullus lanatus* var. *lanatus*, 200 total accessions. Landraces (100), old cultivars (15) and breeding material (85) from Bulgaria, PR China, Czechoslovakia, France, Hungary, Spain and USSR
- Cucumis melo*, 250 total accessions. Landraces (100), old cultivars (18) and breeding material (132) from Denmark, France, Hungary, Italy, Netherlands, Romania, USA and USSR
- C. sativus*, 905 total accessions. Landraces (650), wild (7), old cultivars (10) and breeding material (238) from PR China, DDR, Greece, Hungary, India, Italy, Japan, Korea, Netherlands, USA, USSR and Yugoslavia
- Cucurbita moschata*  
*C. maxima* var. *maxima*  
*C. pepo*  
156 total accessions. Landraces (139), old cultivars (4) and breeding material (13) from Austria, Bulgaria, DDR and USA
- Maintenance of collection: Long-term seed storage at -18°C. Seeds with 5-7% m.c. in glass jars  
Medium-term seed storage at 5°C and 50% RH
- Duplication of collection: Austria, Bulgaria, Denmark, Czechoslovakia, France, Hungary, Korea, Poland, Sweden, Turkey, USA and USSR
- Availability: Available on exchange basis
- Quarantine: Phytosanitary certificate required. All import material must go through a year trial in the quarantine nursery of IIPGR, Sadovo

**BULGARIA (cont.)**

- Evaluation:** Characterization and evaluation according to unified descriptor lists - COMECON (morphological traits, biological properties, resistance to diseases and pests, economical characters, chemical composition and technological evaluation). Genetic and ecological studies
- Documentation:** Computerized for passport and evaluation data

**CHILE**

- Instituto de Producción y Sanidad Vegetal  
Universidad Austral de Chile  
Casilla 567  
Valdivia
- Telephone: 213911-232  
Telex: 271035 UNAUS CL  
Cable:  
Telefax: 063212589
- Curator/person in charge:** A. Contreras Mendez
- Details of collection:** *Cucurbita maxima* var. *maxima*, 1 accession  
*Cyclanthera pedata*, 1 accessions  
Accessions from Chile
- Maintenance of collection:** Long-term seed storage at -18°C. Seeds in aluminium containers
- Duplication of collection:** Partially at FAL, Braunschweig, RFA; University of California, Davis; USA; Sturgeon Bay, USA and different institutions in Japan, Netherlands and UK
- Availability:** Available on exchange basis
- Quarantine:** International Quarantine Regulations applied. No restrictions for import vi. meristem culture
- Evaluation:** No information
- Documentation:** Computerization in progress

**CHINA**

- Taiwan Agricultural Research Institute  
189 Chung-Cheng Road  
Wufeng, Taichung  
Taiwan 41301
- Telephone: (04) 330 23 01  
Telex: 3338162  
Cable:
- Curator/person in charge:** C.C. Tu
- Details of collection:** *Citrullus lanatus* var. *lanatus*, 18 cultivars  
*Cucumis melo*, 189 cultivars from PR China, India, Taiwan and USA  
*C. sativus*, 354 landraces and cultivars from Europe, India, Taiwan and USA  
*Cucurbita* spp., 60 cultivars from Japan and Taiwan  
*Luffa acutangula*, 63 cultivars from Africa and Taiwan  
*L. cylindrica*, 32 cultivars from India and Taiwan  
*Momordica charantia*, 25 cultivars from Taiwan  
*Lagenaria siceraria*, 20 cultivars from Central and South America, Europe, Taiwan and USA
- Maintenance of collection:** Medium-term seed storage at 5°C and 40-50% RH. Seeds in PVC containers of 60 cm<sup>3</sup> capacity

<b>Duplication of collection:</b>	<i>C. lanatus</i> var. <i>lanatus</i> : Taiwan Seed Improvement and Propagation Station, Taiwan <i>Cucurbita</i> spp.: Feng-Shan Tropical Horticultural Experiment Station, Taiwan
<b>Availability:</b>	Available in limited quantity and on exchange basis (20-200 seeds)
<b>Quarantine:</b>	Phytosanitary certificate required for export or import of material
<b>Evaluation:</b>	On-going work for 10/20 characters
<b>Documentation:</b>	Partial and computerized

## COLOMBIA

Centro Nacional de Investigación (CNI)  
Instituto Colombiano Agropecuario (ICA)  
Apartado Aéreo 233  
Palmira-Valle

Telephone: (931) 281 64 Ext. 244  
Telex:  
Cable:

<b>Curator/person in charge:</b>	J. Jaramillo Vásquez
<b>Details of collection:</b>	<p><i>Cucurbita ecuadorensis</i>, 1 wild from Brazil  <i>C. ficifolia</i>, wild from Colombia (7) and cultivar from USA (1)  <i>C. maxima</i> var. <i>maxima</i>, 2 wild from Brazil and wild and landraces from Colombia (16)  <i>C. mixta</i>, wild from Ecuador (1) and Peru (3); landrace from USA (1) and cultivars from USA (3)  <i>C. moschata</i>, 113 total accessions:  - 94 landraces and wild from Colombia  - 3 landraces from Costa Rica  - 16 cultivars from Ecuador (4), Guatemala (4), Mexico (3), Paraguay (1), Puerto Rico (USA) (4) and USA (2)  <i>C. pepo</i>, 3 landraces from Colombia (2) and Puerto Rico (USA) (1) and 3 cultivars from USA</p> <p><i>Cyclanthera</i> spp., 3 landraces from Colombia  <i>Lagenaria siceraria</i>, 3 landraces from Colombia  <i>Momordica charantia</i>, 1 landrace from PR China  <i>Sicana odorifera</i>, 1 landrace from Colombia</p>
<b>Maintenance of collection:</b>	Medium-term seed storage at 4°-6°C and 60% RH. Seeds with 5-7% m.c. in aluminium laminated foil packets
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	Available on exchange basis
<b>Quarantine:</b>	No known restrictions
<b>Evaluation:</b>	On-going work 50% of the collection has been evaluated
<b>Documentation:</b>	Computerized. On-going work

**COSTA RICA**

Recursos Fitogenéticos  
 Programa de Mejoramiento de Cultivos Tropicales  
 Centro Agronómico Tropical de  
 Investigación y Enseñanza (CATIE)  
 Turrialba

Telephone: 56 02 32 / 56 64 31  
 Telex: 8005 CATIE CR  
 Cable: CATIE, Turrialba

- Curator/person in charge: V. Villalobos / J. Arce
- Details of collection: *Cucurbita* spp., 1500 landraces and wild from Central America, donated by Facultad de Agronomía, Universidad de San Carlos, Guatemala
- Maintenance of collection: Long-term seed storage at -17°C. Seeds with 5-7% m.c. in aluminium laminated foil packets  
 Medium-term seed storage at 5°C and 30-40% RH. Seeds in paper or plastic bags
- Duplication of collection: Partially at Facultad de Agronomía, Universidad de San Carlos, Guatemala
- Availability: Freely available
- Quarantine: Phytosanitary certificate and import permit required
- Evaluation: On-going, 30% of the collection evaluated
- Documentation: Computerized for passport and characterization data

**CUBA**

Instituto de Investigaciones Fundamentales  
 en Agricultura Tropical "Alejandro Humboldt" (INIFAT)  
 Calle 1 esq. 2, Santiago de las Vegas  
 Ciudad Habana

Telephone:  
 Telex:  
 Cable:

- Curator/person in charge: Miguel A. Esquivel Perez
- Details of collection: *Citrullus lanatus* var. *lanatus*, 21 primitive cultivars from Cuba  
*Cucumis anguria*, 2 wild from Cuba  
*C. dipsaceus*, 2 wild from Cuba  
*C. melo*, 7 primitive and advanced cultivars from Cuba and Spain  
*C. sativus*, 40 primitive and advanced cultivars from Cuba and USSR, donated by VIR, Leningrad, USSR  
*Cucurbita moschata*, 82 primitive cultivars from Costa Rica and Cuba, donated by CATIE, Turrialba, Costa Rica  
*Lagenaria siceraria*, 3 primitive cultivars from Cuba  
*Luffa acutangula*, 1 primitive cultivars from Cuba  
*L. cylindrica*, 2 primitive cultivars from Cuba  
*Momordica charantia*, 4 primitive cultivars from Cuba
- Maintenance of collection: Long-term seed storage at -18°C  
 Medium-term seed storage at 0°-4°C. Seeds with 4-6% m.c. in sealed glass containers and/or in aluminium laminated foil packets
- Duplication of collection: ZIGuK, Gatersleben, DDR and VIR, Leningrad, USSR
- Availability: Available in limited quantity

Quarantine:	Imported material must possess phytosanitary certificate. Seeds to export should pass quarantine inspection and a phytosanitary certificate is given
Evaluation:	<i>C. moschata</i> : almost complete using IBPGR descriptor list and/or descriptors selected according breeding programmes. On-going for the rest
Documentation:	Passport and characterization data complete. Manual and computerized

**CZECHOSLOVAKIA**

Research and Breeding Institute  
for Vegetables and Special Plants  
947 01 Hurbanovo

Telephone: (818) 23 35  
Telex: 98359 VUZSP C  
Cable:

Curator/person in charge:	L. Domcek
Details of collection:	<i>Cucumis sativus</i> , 10 cultivars from Czechoslovakia, donated by Research Institute of Plant Production, Praha-Ruzyne and Breeding Station, Smrvice, Czechoslovakia
Maintenance of collection:	Short-term seed storage. Seeds in glass containers
Duplication of collection:	Research Institute of Plant Production, Praha-Ruzyne, Czechoslovakia
Availability:	Available on exchange basis
Quarantine:	No known restrictions
Evaluation:	Partial, using own descriptors
Documentation:	Partial and manual for passport data

**CZECHOSLOVAKIA**

Breeding Station at Kvetoslavov  
Research and Breeding Institute for Vegetables  
and Special Plants, Hurbanovo  
930 41 Kvetoslavov

Telephone: (708) 24 43  
Telex:  
Cable: SS Kvetoslavov

Curator/person in charge:	K. Michalek
Details of collection:	<i>Cucumis sativus</i> , 366 cultivars
Maintenance of collection:	Short-term seed storage at ambient temperatures
Duplication of collection:	No information
Availability:	Available on exchange basis
Quarantine:	No known restrictions
Evaluation:	On-going work
Documentation:	Manual

**CZECHOSLOVAKIA**

Research and Plant Breeding Institute for Vegetables  
ul. Slechtitelu  
772 36 Olomouc

Telephone: (85) 250 81  
Telex: 66282 VSUZO C  
Cable:

- Curator/person in charge: P. Kvasnicka
- Details of collection: *Citrullus lanatus* var. *lanatus*, 21 cultivars, world-wide representation  
*Cucumis* spp., 64 landraces, cultivars and wild, world-wide representation  
*Cucurbita* spp., 82 landraces and cultivars, world-wide representation
- Maintenance of collection: Long-term seed storage at -18°C and 5-10% RH  
Medium-term seed storage at 5°C
- Duplication of collection: Not duplicated
- Availability: Available on exchange basis
- Quarantine: Phytosanitary certificate required
- Evaluation: Partial and complete, depending on the type of collection
- Documentation: Computerized for passport data and on-going for evaluation data. Data held at Czechoslovak Information System for Genetic Resources (EVIGEZ). For further information see: Rogalewicz, V. and Bares, I. (1987). Czechoslovak Information System for Genetic Resources. FAO/IBPGR Pl. Genet. Resources Newsletter, 72: 14-16

**ECUADOR**

Unidad de Recursos Fitogenéticos  
Instituto Nacional de Investigaciones  
Agropecuarias (INIAP)  
Casilla de Correos 340  
Quito

Telephone: 629-691  
Telex: 2532 INIAP ED  
Cable:

- Curator/person in charge: R. Castillo Torres
- Details of collection: *Cucurbita* spp., 5 landraces from Ecuador, donated by INIAP, Ecuador
- Maintenance of collection: Long-term seed storage at -12°C. Seeds with 6% m.c. in aluminium laminated foil packets
- Duplication of collection: No information
- Availability: Not available at the moment. Regeneration/multiplication in progress
- Quarantine: No restrictions for export but imported material must possess phytosanitary certificate
- Evaluation: Not evaluated
- Documentation: Computerized. On-going work

**ETHIOPIA**

Plant Genetic Resources Centre/Ethiopia (PGRC/E)  
P.O. Box 30726  
Addis Ababa

Telephone: 18 03 81  
Telex: 21460 GTZFP ET  
Cable: GENE BANK

- Curator/person in charge: Melaku Worede
- Details of collection: *Coccinia abyssinica*, 37 landraces  
*Cucurbita* spp., 64 landraces, including 12 accessions donated by USDA, USA
- Maintenance of collection: Maintained as clonally replicated plants and as seeds
- Duplication of collection: No information
- Availability: Available, in consultation with Ethiopian breeders, scientists from the co-operating institutes and PGRC/E, whenever there is mutual advantage
- Quarantine: Import of seeds through the Institute of Agricultural Research, Quarantine Unit. Export seeds accompanied with phytosanitary certificate issued by the Ministry of Agriculture
- Evaluation: Partial
- Documentation: On-going and computerized for passport

**FEDERAL REPUBLIC OF GERMANY**

Institut für Pflanzenbau und  
Pflanzenzüchtung der FAL  
Bundesallee 50  
D-3300 Braunschweig

Telephone: (531) 59 66 00  
Telex:  
Cable: LANDFORSCHUNG, Völkensrode  
Telefax: (531) 59 68 14

- Curator/person in charge: L. Seidewitz
- Details of collection: *Citrullus lanatus* var. *lanatus*, 1 cultivar from the Rep. of South Africa  
*C. nandeanus*, 1 cultivar from the Rep. of South Africa  
*Citrullus* spp., 4 cultivars from the Rep. of South Africa  
*Cucumis africanus*, 1 wild from the Rep. of South Africa  
*C. anguria*, 2 wild from the Rep. of South Africa  
*C. heptadactylus*, 1 wild from the Rep. of South Africa  
*C. humifructus*, 1 wild from the Rep. of South Africa  
*C. leptodermis*, 1 from the Rep. of South Africa  
*C. mensei*, 1 from the Rep. of South Africa  
*C. melo*, 5 cultivars from FRG (2) and Turkey (3)  
*C. metuliferus*, 1 from the Rep. of South Africa  
*C. myriocarpus*, 1 from the Rep. of South Africa  
*C. sagittatus*, 1 from the Rep. of South Africa  
*C. sativus*, 109 total accessions:  
- 100 cultivars from PR China (2), India (1), Japan (64), Turkey (2), USA (4), USSR (26) and Yemen (1)  
- 1 hybrid from USSR  
- 6 landraces from Afghanistan (1), FRG (1), India (1), Turkey (2) and USSR (1)  
- 2 lines from Rep. of South Africa (1) and USA (1)  
*C. zeyheri*, 1 line from the Rep. of South Africa  
*Cucurbita ficifolia*, 1 cultivar from the Rep. of South Africa  
*C. maxima* var. *maxima*, 52 total accessions:  
- 15 cultivars from Austria (1), Canada (1), FRG (1), France (1), Hungary (2), Portugal (1), Spain (1), USA (1), USSR (1), Yugoslavia (1) and 4 of unknown origin

**FEDERAL REPUBLIC OF GERMANY (cont.)**

Details of collection: (cont.)	- 7 landraces from Taiwan (China) (1), USA (1), Yugoslavia (4) and 1 of unknown origin - 27 lines from Iran (7) and Turkey (20) - 3 accessions from the Rep. of South Africa <i>C. pepo</i> , 94 total accessions: - 66 cultivars from Austria (2), Bulgaria (1), Czechoslovakia (2), DDR (3), FRG (10), Hungary (4), Spain (1), Sweden (2), Tunisia (1), Turkey (3), UK (1), USA (2), USSR (10), Yugoslavia (1) and 23 of unknown origin - 26 landraces from Czechoslovakia (1), FRG (1), Hungary (6), Israel (1), Turkey (3), Yemen (1), Yugoslavia (3) and 10 of unknown origin - 2 wild from FRG <i>Cucurbita</i> spp., 20 cultivars and 47 landraces, including 1 landrace from Japan
Maintenance of collection:	Long-term seed storage at -10°C. Seeds with 6% m.c. in airtight tins Medium-term seed storage at 3°C and 30% RH
Duplication of collection:	Not duplicated
Availability:	Freely available
Quarantine:	No known restrictions
Evaluation:	No information
Documentation:	All available data computerized. Passport data are available for practically all accessions

**FRANCE**

Station d'Amélioration des Plantes Maraîchères  
Institut National de la Recherche Agronomique (INRA)  
B.P. 94  
Domaine Saint-Maurice  
F-84140 Montfavet-Avignon

Telephone: (90) 31 60 00  
Telex: 432870 INRAAVI F  
Cable:

Curator/person in charge:	G. Risser
Details of collection:	<i>Cucumis melo</i> , 240 inbred lines of commercial cultivars world-wide
Maintenance of collection:	Medium-term seed storage at 3°C and 30% RH. Seeds in sealed bags
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	Resistance to <i>Fusarium oxysporum</i> f. sp. <i>melonis</i>
Documentation:	Partial and manual

**GERMAN DEMOCRATIC REPUBLIC**

Zentralinstitut für Genetic  
und Kulturpflanzenforschung (ZIGuK)  
Corrensstrasse 3  
DDR-4325 Gatersleben

Telephone: Gatersleben 50  
Telex: 48558 kupfga DDR  
Cable:

- Curator/person in charge: Ch. Lehmann
- Details of collection: Cucurbitaceae, 1381 accessions  
*Citrullus lanatus* var. *lanatus*, 130  
*Cucumis melo*, 262  
*C. sativus*, 374  
*Cucurbita* spp., 477
- Maintenance of collection: Long-term seed storage at -15° to -18°C  
Medium-term seed storage at 0°C. Seeds in glass jars
- Duplication of collection: Partially at Istituto del Germoplasma, Bari, Italy and VIR, Leningrad, USSR
- Availability: Freely available
- Quarantine: No known restrictions
- Evaluation: Disease resistance and cold tolerance
- Documentation: Computerized for passport data. Index Seminum issued

**GHANA**

Plant Introduction and Exploration Section  
Agricultural Research Station  
Crops Research Institute  
Bunso

Telephone:  
Telex:  
Cable:

- Curator/person in charge: H.L.O. Holloway
- Details of collection: *Citrullus lanatus* var. *lanatus*, 16 accessions  
*Cucumis sativus*, 1 accession  
*Lagenaria siceraria*, 26 accessions
- Maintenance of collection: Active collection
- Duplication of collection: Agricultural Research Station, Okumaning, Ghana and IITA, Ibadan, Nigeria
- Availability: Available in limited quantity
- Quarantine: No information
- Evaluation: No information
- Documentation: Partial and manual

**GREECE**

Vegetables Research Institute  
Gastouni, Ilias

Telephone: (0623) 230 58

Telex:

Cable:

Curator/person in charge:	K. Bakalakos
Details of collection:	<i>Cucumis melo</i> , 2 landraces and 2 old cultivars
Maintenance of collection:	Short-term seed storage at ambient temperatures
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Selection of pure lines
Documentation:	No information

**GUATEMALA**

Experimental Station  
Instituto de Ciencia y Tecnología Agrícola  
Chimaltenango

Telephone:

Telex:

Cable:

Curator/person in charge:	H. López
Details of collection:	<i>Cucurbita</i> spp., 250 accessions
Maintenance of collection:	Short-term seed storage at ambient temperatures. Storage capacity 40 m <sup>3</sup>
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	On-going work
Documentation:	No information

**GUATEMALA**

Departamento de Genética  
Facultad de Agronomía  
Universidad de San Carlos de Guatemala  
Ciudad Universitaria, Zona 12  
Apartado Postal 1545  
Guatemala

Telephone:

Telex:

Cable:

Curator/person in charge:	F. Rodríguez B.
Details of collection:	<i>Cucurbita ficifolia</i> , 63 <i>C. lundelliana</i> , 8 <i>C. mixta</i> , 26 <i>C. moschata</i> , 5 <i>C. pepo</i> , 10 <i>Cucurbita</i> spp., 189 accessions <i>Lagenaria</i> spp., 22 accessions

Maintenance of collection:	Long-term seed storage at -15°C. Seeds in vacuum sealed aluminium laminated foil packets Short-term seed storage at ambient temperatures. Seeds in plastic containers
Duplication of collection:	CATIE, Costa Rica
Availability:	Available
Quarantine:	No known restrictions
Evaluation:	On-going work
Documentation:	Passport data computerized

**HUNGARY**

Vegetable Crops Research Institute  
Department of Budatétény, Budapest  
Experimental Station Ujmajor  
Pf. 95  
Park u. 2  
H-1223 Budapest

Telephone: 26 40 60  
Telex: 226088  
Cable:

Curator/person in charge:	G. Botos
Details of collection:	<i>Cucumis melo</i> , 4 landraces, 5 old cultivars, 3 wild and 20 mutant/genetic stocks
Maintenance of collection:	Seeds in hermetically sealed packets
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Virus and bacterial resistance
Documentation:	No information

**HUNGARY**

UAS Keszthely  
Faculty of Agricultural Sciences  
Mosonmagyaróvár  
Vár ut. 2  
H-9200 Mosonmagyaróvár

Telephone: (98) 159 11  
Telex: 24-211  
Cable:

Curator/person in charge:	J. Varga
Details of collection:	<i>Cucurbita pepo</i> var. <i>patissonna</i> , 1 landrace
Maintenance of collection:	Short-term seed storage at ambient temperatures
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Specific disease resistance, yield and nutritional value improvement
Documentation:	No information

**HUNGARY**

Irrigation Research Institute  
Szabadság u. 2  
H-5540 Szarvas

Telephone: Szarvas 214  
Telex: 82471  
Cable:

Curator/person in charge: G. Marjai  
Details of collection: *Cucurbita pepo* var. *oleifera*, 1 mutant/genetic stock  
Maintenance of collection: Short-term seed storage at ambient temperatures  
Duplication of collection: No information  
Availability: No information  
Quarantine: No information  
Evaluation: No information  
Documentation: No information

**HUNGARY**

Research Centre for Agrobotany  
I.A.Q.  
H-2766 Tápiószéle

Telephone: Tápiószéle 41  
Telex: 226981 agbot H  
Cable:

Curator/person in charge: L. Horváth  
Details of collection: *Citrullus colocynthis*, 1 accession  
*C. lanatus* var. *lanatus*, 203 accessions, including 110 landraces and 80 cultivars  
*Cucumis melo*, 180 accessions, including 48 landraces and 120 cultivars  
*C. sativus*, 184 accessions, including 73 landraces and 105 cultivars  
*Cucurbita ficifolia*, 6 accessions, including 3 landraces and 1 cultivar  
*C. maxima* var. *maxima*, 253 accessions, including 170 landraces and 64 cultivars  
*C. mixta*, 1 cultivar  
*C. moschata*, 10 accessions, including 7 cultivars  
*C. pepo*, 483 total accessions, including 208 landraces and 182 cultivars  
*Lagenaria siceraria*, 24 accessions, including 8 landraces and 4 cultivars  
*Trichosanthes anguina*, 1 accession  
1346 total accessions, including 620 landraces and 564 cultivars from Australia (12), Austria (1), Belgium (2), Brazil (1), Bulgaria (15), PR China (7), Czechoslovakia (76), DDR (71), Denmark (13), FRG (8), Finland (1), France (13), Hungary (856), Italy (14), Netherlands (3), Poland (11), Portugal (5), Romania (44), Turkey (4), UK (12), USSR (77), Yugoslavia (8) and 80 of unknown origin  
Maintenance of collection: Long-term seed storage at -20°C  
Medium-term seed storage at +0°C. Seeds with 5% m.c. in airtight containers  
Duplication of collection: Totally duplicated  
Availability: Freely available provide there is sufficient seed. Index Seminum periodically issued

Quarantine:	Phytosanitary certificate required
Evaluation:	No information
Documentation:	Passport data complete

**INDIA**

Krishna Chandra Mishra Research Institute  
of Wild Vegetable Crops  
P.O. Bandanwar 814147  
Godda - Bihar

Telephone:  
Telex:  
Cable:

Curator/person in charge: Kishore Chandra Mishra

Details of collection: *Benincasa hispida*, 1 landrace from Godda, Bihar

*Coccinia grandis*, 3 landraces from Godda, Bihar

*Cucumis melo*, 1 cultivar from Godda, Bihar

*Luffa acutangula*, 2 landraces from Godda, Bihar

*L. cylindrica*, 2 landraces from Godda, Bihar

*Momordica balsamina*, 1 wild from Rajasthan

*M. churantia*, 1 landrace from Godda, Bihar

*M. cochinchinensis*, 2 wild from Assam

*M. cymbalaria*, 2 wild from Karnatak

*M. dioica* (2n), 5 landraces from Godda, Bihar

*M. dioica* (4n), 2 landraces from W. Bengal and Assam

*M. subangulata*, 2 landraces from Karnatak

*Solenia amplexicaulis*, 2 wild from Godda, Bihar

*Trichosanthes dioica*, 4 cultivars from Bhagalpur and Samastipur, Bihar

*T. cucumerina*, 1 wild from Godda, Bihar

All accessions are from India

Maintenance of collection: Short-term seed storage at ambient temperatures. Seeds in glass containers with silica gel  
Perennials maintained in a Field Genebank

Duplication of collection: Samukhia (Banka, Bhagalpur, Bihar) and at P.G. Department of Botany, Bhagalpur University, 812007 Bhagalpur, Bihar, India

Availability: Available on exchange basis

Quarantine: No information

Evaluation: Complete for chromosome number, fruit size and colour, type of spines and flowering time. On-going for other characters

Documentation: Partial and manual. For more information see:  
Indian Horticulture (1983) 28 (4): 5-6  
(1986) 30 (4): 13  
Mendal (1985) 2 (3): 146-147

**INDIA**

Department of Olericulture  
 College of Horticulture  
 Kerala Agricultural University  
 P.O. Vellanikhara 680651  
 Trichur, Kerala

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: K.V. Peter / P.K. Gopalakrishnan

Details of collection: *Benincasa hispida*, 32 landraces from India  
*Cucumis sativus*, 69 breeders' lines donated by institutes in Canada, Denmark, India, Japan, Netherlands and USA  
*Cucurbita moschata*, 18 landraces from India  
*C. pepo*, 1 commercial cultivar from India  
*Momordica charantia*, 25 landraces from India  
*M. dioica*, 1 wild from India  
*M. tuberosa*, 1 wild from India  
*Trichosanthes cucumerina*, 25 landraces from India

Maintenance of collection: Short-term seed storage at ambient temperatures. Seeds in tin boxes

Duplication of collection: No information

Availability: Freely available via:  
 R.S. Rana, NBPGR, New Delhi 110012

Quarantine: No information

Evaluation: *Benincasa hispida*, complete for: plant habit; leaf number; fruit size, shape and number and thickness of flesh  
*Cucumis sativus*, 18 lines evaluated for: number of flowers and fruits per plant, flesh thickness and yield  
*Cucurbita moschata*, complete for: vigour; presence of leaf spots; fruit shape and colour and ribbing  
*Momordica charantia*, complete for: fruit colour, size and presence of spines and ridges  
*Trichosanthes cucumerina*, complete for: fruit colour, length and width

Documentation: Partial and manual

**INDIA**

Vivekananda Parvatiyakrishi Anusandhan Shala  
 Almora  
 Uttar Pradesh

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: J.P. Tandon

Details of collection: *Cucumis sativus*, 10  
*Cucurbita* spp., 5  
*Lagenaria siceraria*, 30  
*Luffa acutangula*, 9  
*Momordica charantia*, 23  
 All accessions are landraces from India

Maintenance of collection: Active collection

Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	In progress
Documentation:	Manual

**IRAN**

Seed and Plant Improvement Institute (SPII)  
Ministry of Agriculture & Rural Development  
Mard-Abad Ave.  
Karadj

Telephone: (02221) 28 58  
Telex:  
Cable: SEEDPLANT, Karadj

Curator/person in charge:	M.A. Vahabian
Details of collection:	<i>Citrullus lanatus</i> var. <i>lanatus</i> , 24 from Iran and 20 introductions  <i>Cucumis melo</i> , 42 accessions from Iran <i>C. sativus</i> , 7 from Iran and 19 introductions  <i>Cucurbita pepo</i> , 12 from Iran and 2 introductions
Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**IRAQ**

Plant Genetic Resources Unit  
Agricultural Research Centre  
Abu Ghraib - Baghdad

Telephone: (01) 511 22 01  
Telex:  
Cable: SBAAR - IRAQ

Curator/person in charge:	A.T. Sharif
Details of collection:	<i>Citrullus lanatus</i> var. <i>lanatus</i> , 6  <i>Cucumis</i> spp., 17  <i>Cucurbita</i> spp., 13 All accessions are landraces from Iraq
Maintenance of collection:	Short-term seed storage at 5°-10°C. Seeds in airtight cans. Storage capacity 40 m <sup>3</sup>
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	On-going work
Documentation:	Manual

**ISRAEL**

Department of Field and Vegetables Crops  
The Faculty of Agriculture  
Hebrew University of Jerusalem  
P.O. Box 12  
76-100 Rehovot

Telephone: (08) 48 12 51  
Telex: 361931 HUAGR IL  
Cable:

Curator/person in charge: D. Zamir

Details of collection: *Citrullus lanatus var. lanatus*, 433  
*C. colocynthis*, 58  
*C. ecirrhosus*, 3  
*C. rhemii*, 2

Maintenance of collection: Short-term seed storage at ambient temperatures

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: Disease and insect resistance, shelf life, linkage maps, yield and physiological genetics of stress conditions

Documentation: No information

**ITALY**

Istituto del Germoplasma  
CNR  
Via G. Amendola, 165/A  
I-70126 Bari

Telephone: (080) 58 34 63  
Telex: 810565 CNR/BA I  
Cable:

Curator/person in charge: P. Perrino

Details of collection: *Citrullus lanatus var. lanatus*, 11 accessions majority landraces from the Mediterranean region

*Cucumis melo*  
*C. sativus*  
*Cucumis* spp.  
Total of 69 accessions majority landraces from the Mediterranean region

*Cucurbita* spp., 62 accessions majority landraces from the Mediterranean region

Maintenance of collection: Long-term seed storage at -18°C. Seeds in airtight metal cans with silica gel. Medium-term seed storage at 0°C and 40% RH. Seeds in vacuum sealed aluminium laminated foil packets

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: No information

Documentation: Partial and computerized

**JAPAN**

National Institute of Agrobiological Resources (NIAR)  
Kannon-dai 2-1-2  
Tsukuba, Ibaraki 305

Telephone: 02975-6-7050  
Telex:  
Cable: NIARTSUKUBA YATABE  
Telefax: 02975-6-7408

- Curator/person in charge: Head, Germplasm Storage Center
- Details of collection: *Cucurbita ficifolia*, 3  
*C. foetidissima*, 12  
*C. maxima* var. *maxima*, 18  
*C. moschata*, 44  
*C. mixta*, 2  
*C. pepo*, 6  
*Cucurbita* spp., 2  
Old and commercial cultivars and elite lines from Central America, Europe and Japan
- Maintenance of collection: Long-term seed storage at -10°C  
Medium-term seed storage at -1°C and 30% RH  
Seeds with 6-7% m.c. in 1 to 3 PET containers of 430 ml
- Duplication of collection: No information
- Availability: Freely available for research purposes. A fee is applicable for private institutions
- Quarantine: No information
- Evaluation: Standard manual published by specialists' consent
- Documentation: Computerized for passport data

**MEXICO**

Programa de Recursos Genéticos  
Centro de Investigaciones Forestales  
y Agropecuarias del Estado de Guanajuato  
Instituto Nacional de Investigaciones Forestales  
y Agropecuarias (INIFAP)  
km 6 carr. Celaya - S. Miguel Aliende  
Apartado Postal 112  
Celaya, Guanajuato

Telephone: 270 23  
Telex:  
Cable:

- Curator/person in charge: S. Montes Hernandez
- Details of collection: *Cucurbita ficifolia*, 12  
*C. maxima* var. *maxima*, 2  
*C. mixta*, 186  
*C. moschata*, 169  
*C. pepo*, 156  
Landraces and some commercial cultivars from Mexico  
*C. foetidissima*, 14 wild types from Mexico  
*C. radicans*, 1 wild  
*C. sororia*, 39 wild  
*Cucurbita* spp., 20 landraces and wild types from Mexico  
*Lagenaria* spp., 6 wild  
*Luffa* spp., 2 wild  
*Sechium edule*, 45 landraces and commercial cultivars from Mexico
- Maintenance of collection: Short-term seed storage at ambient temperatures. Seeds in glassine paper envelopes inside screw-top glass containers

**MEXICO (cont.)**

Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	On-going work for various morphological characters using a standard descriptor list
Documentation:	Partial. Computerization in progress For further information see: Whitaker, T.W. and R.J. Knight. 1980. Collecting cultivated and wild cucurbits in Mexico. <i>Economic Botany</i> , 34 (4): 312-319

**NETHERLANDS**

BRUINSMA Selectiebedrijven B.V. P.O. Box 24 Middelbroekweg, 67 NL-2670 AA Naaldwyk	Telephone: (01740) 282 44 Telex: 33154 Cable: TOMKO
Curator/person in charge:	L. van der Kruk
Details of collection:	<i>Cucumis sativus</i> , 23 landraces, 85 old cultivars and 5 wild
Maintenance of collection:	Short-term seed storage at 18°C and 30% RH. Seeds in paper bags
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Disease resistance, yield and quality
Documentation:	No information

**NETHERLANDS**

Institute for Horticultural Plant Breeding (IVT) P.O. Box 16 Mansholtlaan, 15 NL-6700 AA Wageningen	Telephone: (08370) 191 23 Telex: 75044 DLOWA NL Cable: (08370) 18094
Curator/person in charge:	I.W. Boukema
Details of collection:	<i>Cucumis</i> spp., 2400 accessions, including mainly <i>C. sativus</i> , landraces, old and commercial cultivars (mainly Dutch), world-wide representation, <i>C. melo</i> and wild <i>Cucumis</i> species, the former donated by ZIGuK, Gatersleben, DDR and NPGS, USA
Maintenance of collection:	Short-term seed storage at 15°C and 15% RH
Duplication of collection:	Wild species at ZIGuK, Gatersleben, DDR and NPGS, USA
Availability:	Available in limited quantity
Quarantine:	No known restrictions
Evaluation:	Disease resistance, stress tolerance and quality
Documentation:	Partial and manual for a number of characterization and evaluation data

**NICARAGUA**

Programa de Recursos Genéticos Nicaragüenses (REGEN)  
 Instituto Superior de Ciencias Agropecuarias (ISCA)  
 Apartado 453  
 Carretera Norte km 12,5  
 Managua

Telephone: 319 68 / 316 19 Ext. 14  
 Telex:  
 Cable:

Curator/person in charge: C. Henry Loáisiga C.

Details of collection: *Cucurbita* spp., 43 from Nicaragua  
*Luffa cylindrica*, 3 from Nicaragua  
*Sechium edule*, 12

Maintenance of collection: Medium-term seed storage at 0°C and 55-60% RH. Seeds in aluminium laminated foil packets

Duplication of collection: *Sechium*: Centro Experimental Campos Azules, Nicaragua

Availability: Freely available

Quarantine: Phytosanitary certificate required

Evaluation: No information

Documentation: Computerized for passport, characterization and evaluation data

**NIGERIA**

National Centre for Genetic Resources  
 and Biotechnology (NACGRAB)  
 Moor Plantation  
 PMB 5382  
 Ibadan

Telephone: (022) 31 26 70 / 31 26 22  
 Telex:  
 Cable: GENE BANK

Curator/person in charge: P.E. Onuorah

Details of collection: *Citrullus* spp., 143 accessions  
*Cucumis* spp., 95 accessions  
*Cucurbita* spp., 14 accessions  
*Lagenaria* spp., 1 accession  
*Luffa* spp., 19 accessions  
*Momordica* spp., 4 accessions  
*Trichosanthes* spp., 33 accessions

Maintenance of collection: Long-term seed storage

Duplication of collection: No information

Availability: Available in limited quantity

Quarantine: No information

Evaluation: No information

Documentation: Manual. Passport data available

**PAKISTAN**

Plant Genetic Resources Laboratory  
National Agricultural Research Centre  
Pakistan Agricultural Research Council (PARC)  
P.O. Box 1031  
Islamabad

Telephone: 82 00 53 33  
Telex: 5604 PARC PAK  
Cable: AGRESCOUNCIL

Curator/person in charge: R. Anwar

Details of collection: *Citrullus* spp.  
*Cucumis* spp.  
*Cucurbita* spp.  
Total of 132 primitive cultivars from Pakistan

Maintenance of collection: Medium-term seed storage at 5°C ±1°C. Seeds in cans

Duplication of collection: At several International Research Centres

Availability: Freely available provided there is sufficient seed

Quarantine: Imported seeds must possess phytosanitary certificate and import permit.  
Export of seeds accompanied with phytosanitary certificate

Evaluation: Partial

Documentation: Manual

**PERU**

Programa de Investigación en Hortalizas  
Universidad Nacional Agraria  
Apartado 456  
La Molina - Lima

Telephone: (14) 35 20 35 Ext. 354  
Telex:  
Cable:

Curator/person in charge: F. Delgado de la Flor B.

Details of collection: Cucurbitaceae, 83  
*Cyclanthera pedata*, 26  
All accessions are landraces from Peru

Maintenance of collection: Medium-term seed storage at 4°-8°C and 60% RH. Storage capacity 18 m<sup>3</sup>

Duplication of collection: IICA, Turrialba, Costa Rica and University of California, Davis, USA

Availability: Freely available for material already regenerated

Quarantine: Phytosanitary certificate required for import of seeds

Evaluation: 25% of the collection being characterized for 20 descriptors

Documentation: Partial

**PHILIPPINES**

National Plant Genetic Resources Laboratory (NPGRL)  
Institute of Plant Breeding (IPB)  
University of the Philippines at Los Baños  
College, Laguna

Telephone: (63) 833 35 28  
Telex: 3432 PTLBK PU  
Cable: PLANTBREED PHILIPPINES

Curator/person in charge: N.C. Altoveros

<b>Details of collection:</b>	<p><i>Benincasa hispida</i>, 21 landraces from Belgium (1), Japan (1), Netherlands (1), Philippines (15) and Portugal (3)</p> <p><i>Citrullus lanatus</i> var. <i>lanatus</i>, 61 accessions from Bulgaria (3), DDR (15), Israel (11), Japan (14), Philippines (9), Turkey (5) and USSR (4)</p> <p><i>Cucumis melo</i>, 103 landraces from Bulgaria (13), DDR (48), Israel (12), Japan (3), Pakistan (1), Philippines (16), Turkey (5) and USSR (5)</p> <p><i>C. sativus</i>, 13 landraces from PR China (1), Philippines (11) and USA (1)</p> <p><i>Cucurbita ficifolia</i>, 28 landraces from Costa Rica (27) and Rep. of South Africa (1)</p> <p><i>C. lundelliana</i>, 1 wild from Mexico</p> <p><i>C. maxima</i> var. <i>maxima</i>, 20 landraces from Costa Rica (7), Hungary (11), Rep. of South Africa (1) and USSR (1)</p> <p><i>C. mixta</i>, 1 wild from Rep. of South Africa</p> <p><i>C. moschata</i>, 318 landraces from Bangladesh (1), Costa Rica (55), Cyprus (2), India (4), Mexico (2), New Zealand (1), Pakistan (1), Philippines (235), Rep. of South Africa (2) and USA (15)</p> <p><i>C. pepo</i>, 33 landraces from Costa Rica (19), Hungary (8), Pakistan (1), Rep. of South Africa (1) and USA (4)</p> <p><i>Lagenaria siceraria</i>, 104 landraces from Angola (1), Bangladesh (2), PR China (1), Italy (1), Japan (17), Lybia (1), Pakistan (1), Philippines (75), Rep. of South Africa (1), Taiwan (China) (1) and USSR (3)</p> <p><i>Luffa</i> spp., 178 landraces from Argentina (1), Bangladesh (1), Hungary (1), Japan (19), Maldives (22), Pakistan (1), Philippines (127), Taiwan (China) (1), UK (1), USSR (3) and Zimbabwe (1)</p> <p><i>Momordica charantia</i>, 170 landraces from Bhutan (1), PR China (1), DDR (1), India (4), Japan (1), Maldives (3), Pakistan (1), Philippines (155), Senegal (1), Taiwan (China) (1) and USSR (1)</p> <p><i>Trichosanthes anguina</i>, 5 landraces from Maldives</p> <p><i>T. cucumerina</i>, 4 landraces from Maldives</p>
<b>Maintenence of collection:</b>	<p>Long-term seed storage at -20°C</p> <p>Medium-term seed storage at 5°C and 40% RH. Seeds with 6% m.c. in glass bottles or in tin cans or aluminium laminated foil packets</p> <p>The Institute has agreed to accept responsibility for maintaining a global collection (<i>Benincasa</i>, <i>Luffa</i>, <i>Momordica</i> and <i>Trichosanthes</i>) and a Southeast Asian vegetables collection for long-term conservation</p>
<b>Duplication of collection:</b>	Partially at IIPCR, Bulgaria; CATIE, Costa Rica; Plant Protection and Plant Quarantine, DDR; IPTQ, Hungary; NIAR, Japan; USDA, USA and VIR, USSR
<b>Availability:</b>	Available on exchange basis
<b>Quarantine:</b>	Import permit required
<b>Evaluation:</b>	On-going work
<b>Documentation:</b>	Computerized for passport data. On-going for evaluation and characterization data

**POLAND**

National Department of Plant Genetic Resources  
 Plant Breeding and Acclimatization Institute  
 Radzików n/ Warsaw  
 05-870 Blonie

Telephone: (22) 55 26 11 / 4  
 Telex: 812914 IHAR PL  
 Cable:

- Curator/person in charge: St. Goral / T. Kotlinska
- Details of collection: *Cucumis sativus*, 11 cultivars from Poland  
*Cucurbita maxima* var. *maxima*, 2 cultivars from Poland
- Maintenance of collection: Long-term seed storage at -15°C  
 Medium-term seed storage at 0°C  
 Seeds with 5-7% m.c. in glass containers under vacuum
- Duplication of collection: No information
- Availability: Available on exchange basis. Index Seminum issued
- Quarantine: No known restrictions
- Evaluation: On-going work
- Documentation: Computerized for passport data

**POLAND**

Research Institute of Vegetable Crops  
 ul. 22 Lipca, 1/3  
 96-100 Skierniewice

Telephone: Skierniewice 22 11 / 5  
 Telex: 886649 IW PL  
 Cable:

- Curator/person in charge: J. Skierkowski
- Details of collection: *Cucumis sativus*, 2 landraces and 10 old cultivars
- Maintenance of collection: Short-term seed storage at ambient temperatures
- Duplication of collection: No information
- Availability: No information
- Quarantine: No information
- Evaluation: No information
- Documentation: No information

**POLAND**

Department of Plant Breeding and Seed Research  
 University of Agriculture  
 ul. Nowoursynowska, 166  
 02-766 Warsaw

Telephone: 43 90 41  
 Telex: 814790 SGGW PL  
 Cable:

- Curator/person in charge: J. Jakubiec
- Details of collection: *Cucumis sativus*  
*Cucurbita maxima* var. *maxima*  
*C. pepo*
- Maintenance of collection: No information

Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**PORTUGAL**

Secção de Horticultura  
 Instituto Superior de Agronomia (ISA)  
 Tapada da Ajuda  
 P-1399 Lisboa Codex

Telephone: (1) 63 81 61 / 2  
 Telex: 44700 ISATEL P  
 Cable:

Curator/person in charge:	A. Monteiro
Details of collection:	<i>Cucumis melo</i> , 3 landraces from northwest Portugal
Maintenance of collection:	Short-term seed storage at ambient temperatures
Duplication of collection:	Not duplicated
Availability:	Available in limited quantity
Quarantine:	No restrictions for export but imported material must possess phytosanitary certificate
Evaluation:	On-going work
Documentation:	Manual and complete for passport data

**PORTUGAL**

Secção de Genética  
 Estação Agronómica Nacional (EAN)  
 Instituto Nacional de Investigação Agrária (INIA)  
 P-2780 Oeiras

Telephone: (1) 443 15 05 / 443 04 42  
 Telex: 63698 EAN P  
 Cable:

Curator/person in charge:	M. Mota
Details of collection:	<i>Cucumis melo</i> , 3 <i>C. sativus</i> , 3  <i>Cucurbita maxima</i> var. <i>maxima</i> , 5 <i>C. pepo</i> , 4 <i>Cucurbita</i> spp., 9 All accessions are landraces from Portugal
Maintenance of collection:	Long-term seed storage at -16°C in deep-freezers
Duplication of collection:	Not duplicated
Availability:	Available in limited quantity
Quarantine:	No restrictions for export but imported material must possess phytosanitary certificate
Evaluation:	None
Documentation:	Computerized for passport data

**SOUTH AFRICA, REPUBLIC OF**

Department of Agricultural Economics and Marketing  
 Directorate of Plant and Liquor Control  
 Private Bag X 179  
 0001 Pretoria

Telephone: (012) 206 24 06  
 Telex: 3-23264  
 Cable: SATIVA PRETORIA  
 Telefax: (012) 206 27 86

Curator/person in charge: H. Chamberlain

Details of collection: *Citrullus lanatus* var. *lanatus*, 7 cultivars from Seychelles and USA  
*Cucumis melo*, 30 cultivars from France, Spain, Rep. of South Africa and USA  
*Cucurbita ecuadorensis*, 1 landrace from USA  
*C. ficifolia*, 2 landraces from Denmark  
*C. foetidissima*, 1 landrace from USA  
*C. okeechobeensis*, 1 landrace from USA  
*C. oleiferous*, 7 cultivars from Rep. of South Africa  
*C. maxima* var. *maxima*, 13 cultivars from Rep. of South Africa (7) and USA (6); and 1 landrace from USA  
*C. moschata*, 7 cultivars from Denmark and USA (4) and South Africa (3)  
*C. pepo*, 13 cultivars from Rep. of South Africa (2) and Turkey, UK and USA (11)  
*Cucurbita* spp., 8 cultivars from Rep. of South Africa

Maintenance of collection: Long-term seed storage at -20°C. Seeds in vacuum sealed aluminium laminated foil packets (small part of the collection)  
 Short-term seed storage at 6°-7°C and 45% RH. Seeds in plastic containers

Duplication of collection: At different Crop Research Institutes in the Rep. of South Africa

Availability: Available in limited quantity (0.5 / 300 g) and on exchange basis. Index  
 Seminum issued yearly  
 Requests to: The Plant Introduction Officer  
 (same address)

Quarantine: *Citrullus*, *Cucumis* and *Cucurbita*: Additional declaration on the  
 phytosanitary certificate that the parent plants were inspected during  
 active growth and found to be free from visual symptoms of mosaic virus  
 infection

Evaluation: On-going work

Documentation: Complete and computerized

**SPAIN**

Banco de Germoplasma  
 Finca "El Encin"  
 Instituto Nacional de Investigaciones Agrarias (INIA)  
 P.O. Box 127  
 Alcalá de Henares - Madrid

Telephone: (1) 889 69 69  
 Telex: 48989 INIA E  
 Cable:

Curator/person in charge: R. Ponce

Details of collection: *Cucumis anguria*, 10  
*C. melo*, 170  
*C. metuliferus*, 30  
*C. sativus*, 2  
*Cucumis* spp., 1  
 All accessions are landraces

<b>Maintenance of collection:</b>	Long-term seed storage at -18°C Medium-term seed storage at -2°C and 30% RH
	The Institute has agreed to accept responsibility for maintaining a global collection of <i>Citrullus</i> and <i>Cucumis</i> for long-term conservation
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	No information
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	No information
<b>Documentation:</b>	No information

**SPAIN**

Centro Regional de Investigaciones Agrarias "La Alberca" Apartado Oficial Murcia	Telephone: (968) 84 01 50 Telex: Cable:
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<b>Curator/person in charge:</b>	J. Rodríguez Navarro
<b>Details of collection:</b>	<i>Cucumis</i> spp., 15 landraces and 1 old cultivar
<b>Maintenance of collection:</b>	Medium-term seed storage at 4°C Short-term seed storage at ambient temperatures
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	No information
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	No information
<b>Documentation:</b>	No information

**SPAIN**

Instituto Valenciano de Investigaciones Agrarias (IVIA) Apartado Oficial Carretera de Moncada a Náquera, km 4,5 Moncada - Valencia	Telephone: (6) 139 10 00 Telex: 61440 IVIA E Cable:
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<b>Curator/person in charge:</b>	L. Navarro
<b>Details of collection:</b>	<i>Cucumis melo</i> , 18 landraces
<b>Maintenance of collection:</b>	No information
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	No information
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	No information
<b>Documentation:</b>	No information

**SPAIN**

Catedra de Genética  
Escuela Técnica Superior de  
Ingenieros Agrónomos (ETSIA)  
Universidad Politécnica  
Camino de Vera, 14  
Apartado de Correos 22012  
46020 Valencia

Telephone: (96) 361 50 51 Ext. 182  
Telex: 62808 UPVA E  
Cable:

- Curator/person in charge: F. Nuez
- Details of collection: *Citrullus lanatus* var. *lanatus*, 120  
*Cucumis melo*, 437  
*C. sativus*, 99  
*Cucurbita* spp., 536  
All accessions are landraces from Spain
- Maintenance of collection: Medium-term seed storage at -3°C and 25% RH. Seeds with silica gel in hermetically sealed glass containers of 6 cm x 7 cm
- Duplication of collection: Banco de Germoplasma, Alcalá de Henares, Spain and USDA, Beltsville, USA
- Availability: Available on exchange basis
- Quarantine: No known restrictions
- Evaluation: On-going work
- Documentation: On-going work for passport data

**SPAIN**

Banco de Germoplasma  
Departamento de Horticultura  
Servicio de Investigación Agraria (DGA)  
P.O. Box 727  
Zaragoza

Telephone: (76) 57 63 11  
Telex: 58194 IDAE E  
Cable:  
Telefax: (76) 57 55 01

- Curator/person in charge: M. Carravedo
- Details of collection: *Ecballium elaterium*, 1 wild  
*Citrullus lanatus* var. *lanatus*, 14 landraces  
*Cucumis melo*, 118 landraces  
*C. sativus*, 26 landraces  
*Cucurbita* spp., 20 landraces
- Maintenance of collection: Medium-term seed storage at 0°-4°C. Seeds in glass flasks with silica gel
- Duplication of collection: Partially at Banco de Germoplasma, Alcalá de Henares, Spain
- Availability: Available
- Quarantine: No known restrictions
- Evaluation: *C. melo*: complete for 69 accessions for: flowering and fruit earliness; skin and flesh colour; skin spots; netted; ribs; stem abscission; weight; length; width; shape; skin thickness; soluble solids; pH; seed weight and shape; and resistance to penetrometer
- Documentation: Passport data computerized

**THAILAND**

Department of Horticulture  
 Faculty of Agriculture  
 Kasetsart University  
 Bangken  
 Bangkok 9

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: M.L. Anothai Choomsai  
 Details of collection: *Momordica charantia*, 250 landraces from Thailand  
 Maintenance of collection: Short-term seed storage at 15°C  
 Duplication of collection: No information  
 Availability: Freely available  
 Quarantine: No information  
 Evaluation: Partial for plant characters and seed morphology  
 Documentation: Manual

**TURKEY**

Aegean Agricultural Research Institute (AARI)  
 P.O. Box 9  
 35661 Menemen - Izmir

Telephone: (51) 14 91 31  
 Telex:  
 Cable:

Curator/person in charge: The Directorate  
 Details of collection: *Citrullus* spp., 207  
                                   *Cucumis* spp., 345  
                                   *Cucurbita* spp., 223  
                                   All landraces  
 Maintenance of collection: Long-term seed storage at -20°C. Seeds in metal cans  
                                   Medium-term seed storage at 0°C  
 Duplication of collection: No information  
 Availability: No information  
 Quarantine: No information  
 Evaluation: No information  
 Documentation: No information

**UNION OF SOVIET SOCIALIST REPUBLICS**

The N.I. Vavilov Institute of Plant Industry (VIR)  
 44, Herzen str.  
 Leningrad 190000

Telephone: (314) 48 48  
 Telex:  
 Cable:

Curator/person in charge: V.I. Krivchenko  
 Details of collection: *Citrullus colocynthis*  
                                   *C. lanatus* var. *lanatus*  
                                   *C. mucosospermus*  
                                   2650 breeding varieties, local populations, semi-cultivated and wild forms  
                                   from 65 different countries, including 2270 accessions in the main  
                                   catalogue and 380 in the temporary catalogue

**UNION OF SOVIET SOCIALIST REPUBLICS (cont.)**

<b>Details of collection:</b>	<p><i>Cucumis melo</i>, 4550 breeding varieties, local populations and wild <i>Cucumis</i> species, including 3300 accessions in the main catalogue and 1250 in the temporary catalogue. Collection representing the main cultivation areas</p> <p><i>C. sativus</i>  <i>C. sativus</i> var. <i>hardwickii</i>  3380 commercial varieties, F<sub>1</sub> hybrids, local populations, breeding lines, mutant forms and wild, including 1812 accessions in the main catalogue and 1568 in the temporary catalogue. World-wide representation</p> <p><i>Cucurbita ficifolia</i>  <i>C. maxima</i> var. <i>maxima</i>  <i>C. moenchata</i>  <i>C. pepo</i>  2500 local populations and breeding varieties, including 1800 accessions in the main catalogue and 700 in the temporary catalogue. Collection representing the main cultivation areas</p> <p><i>Benincasa cerifera</i></p> <p><i>Ecballium elaterium</i></p> <p><i>Echinocystis lobata</i></p> <p><i>Lagenaria siceraria</i></p> <p><i>Luffa acutangula</i>  <i>L. cylindrica</i></p> <p><i>Momordica charantia</i></p> <p><i>Trichosanthes anguina</i>  690 total accessions, majority local populations, including 590 accessions in the main catalogue and 100 in the temporary catalogue. Collection representing species unavailable in the USSR or cultivated on a limited scale</p>
<b>Maintenance of collection:</b>	<p>Long-term seed storage at -10°C  Medium-term seed storage at 4°C. Seeds with 6-7% m.c. in sealed glass jars</p>
<b>Duplication of collection:</b>	<p>Partially at ZIGuK, Gatersleben, DDR; Istituto del Germoplasma, Bari, Italy and NSSL, Fort Collins, USA</p>
<b>Availability:</b>	<p>Available in accordance with the Exchange Catalogue regularly issued</p>
<b>Quarantine:</b>	<p>According to the International Convention on Phytosanitary Plant Protection</p>
<b>Evaluation:</b>	<p>Field and laboratory evaluation using the International COMECON descriptors list</p>
<b>Documentation:</b>	<p>Manual. Passport data available</p>

*NB - Samples received at the Institute are given temporary catalogue numbers. Some may be included in the permanent collection after 2-3 years trials, elimination of duplicates and low-value breeding lines*

## UNITED STATES OF AMERICA

North Central Regional Plant Introduction Station  
Iowa State University  
USDA - ARS  
Ames, Iowa 50011

Telephone: (515) 294-3255  
Telex:  
Cable:

- Curator/person in charge: R.L. Clark / K.R. Reitsma
- Details of collection: *Cucumis melo*, 2346  
*C. sativus*, 945  
*Cucumis* spp., 241  
Landraces, cultivars, populations and breeding populations from various countries
- Cucurbita pepo*, 862  
*C. texana*, 10  
Populations and cultivars from various countries
- Maintenance of collection: Medium-term seed storage at 4°C and 35-40% RH. Seeds in screw-top glass jars
- Duplication of collection: NSSL, Fort Collins, USA
- Availability: Freely available
- Quarantine: No known restrictions
- Evaluation: Evaluation data on 11 descriptors taken as accessions are multiplied
- Documentation: Computerized and complete. Database for Germplasm Resources Information Network (GRIN), National Agricultural Library, Beltsville, USA

## UNITED STATES OF AMERICA

Southern Regional Plant Introduction  
Station (S-9)  
US Department of Agriculture (USDA)  
1109 Experiment Street  
Griffin, Georgia 30223

Telephone:  
Telex:  
Cable:

- Curator/person in charge: G.R. Lovell
- Details of collection: *Benincasa hispida*, 15 landraces and cultivars from PR China and India
- Citrullus lanatus* var. *lanatus*, 983 landraces and cultivars majority from India, Turkey and Yugoslavia and also from 40 other countries
- Cucumis melo*, 2099 landraces and cultivars from Afghanistan, India and 35 other countries
- Cucurbita ecuadorensis*, 5 landraces and cultivars from Ecuador  
*C. ficifolia*, 25  
*C. hundelliana*, 5  
*C. martinezii*, 3  
*C. mixta*, 64  
Landraces and cultivars from Mexico  
*C. moschata*, 268 landraces and cultivars from 27 countries  
*C. pepo*, 2 cultivars from PR China  
*Cucurbita* spp., 25 landraces from Brazil and Mexico
- Lagenaria* spp., 87 landraces and cultivars from 17 countries
- Luffa* spp., 24 landraces and cultivars from India, Mexico and 8 other countries

**UNITED STATES OF AMERICA (cont.)**

Details of collection: (cont.)	<i>Momordica charantia</i> , 12 landraces and cultivars from PR China, India, Iraq and Mexico
Maintenance of collection:	Medium-term seed storage at 5°C and 40-50% RH
Duplication of collection:	<i>Citrullus lanatus</i> var. <i>lanatus</i> and <i>Cucurbita</i> spp., partially duplicated at NSSL, Fort Collins, USA
Availability:	Freely available. Requests through: G. White, Plant Introduction Officer, Beltsville Agricultural Research Centre, Beltsville, Maryland 20705, USA
Quarantine:	No information
Evaluation:	No information
Documentation:	Computerized

**UNITED STATES OF AMERICA**

National Seed Storage Laboratory (NSSL) US Department of Agriculture (USDA) Agricultural Research Service (ARS) Colorado State University Campus Fort Collins, Colorado 80523	Telephone: (303) 484 04 02 Telex: 237401714 DNPA UC Cable: Telefax: (303) 221 14 27
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Curator/person in charge:	S.A. Eberhart
Details of collection:	<i>Citrullus lanatus</i> var. <i>lanatus</i> , 925  <i>Cucumis melo</i> , 1027 <i>C. sativus</i> , 389 <i>Cucumis</i> spp., 25 accessions of 11 species  <i>Cucurbita maxima</i> var. <i>maxima</i> , 490 <i>C. moschata</i> , 165 <i>C. pepo</i> , 479 <i>Cucurbita</i> spp., 86 accessions of 7 species All accessions are landraces and cultivars. World-wide representation
Maintenance of collection:	Long-term seed storage at -18°C. Seeds in aluminium laminated foil packets  The Institute has agreed to accept responsibility for maintaining a global collection of <i>Citrullus</i> , <i>Cucumis</i> and <i>Cucurbita</i> for long-term conservation
Duplication of collection:	As active collections at Regional Plant Introduction Stations: <i>Citrullus</i> , at Griffin, Georgia, USA <i>Cucumis</i> , at Ames, Iowa, USA <i>Cucurbita moschata</i> , at Griffin, Georgia, USA <i>C. maxima</i> var. <i>maxima</i> , at Geneva, New York, USA <i>C. pepo</i> , at Ames, Iowa, USA
Availability:	Freely available only if not available from the active collections
Quarantine:	No information
Evaluation:	Responsibility of the Regional Plant Introduction Stations holding the active collections
Documentation:	All data are computerized in GRIN (Germplasm Resources Information Network). The GRIN system resides on a Prime Computer in Beltsville, MD, USA

## UNITED STATES OF AMERICA

Department of Horticultural Sciences  
 New York State Agricultural Experiment Station  
 Cornell University  
 Geneva Campus  
 Hendrick Hall  
 Geneva, New York 14456-0462

Telephone: (315) 787 22 37  
 Telex: 6717017  
 Cable:  
 Telefax: (315) 787 23 97

Curator/person in charge: R.W. Robinson

Details of collection: *Acanthosicyos horrida*, 3  
*A. naudiana*, 4  
  
*Alsomitra sarcophylla*, 1  
  
*Benincasa cerifera*, 1  
*B. hispida*, 11  
  
*Bryonia alba*, 1  
*B. dioica*, 6  
*B. monoica*, 6  
*B. verrucosa*, 1  
  
*Bryonopsis lucinosa*, 7  
  
*Cayaponia africana*, 1  
*C. racemosa*, 1  
  
*Cephalandra indica*, 1  
  
*Cionosicyos excisus*, 2  
*C. macranthus*, 2  
  
*Coccinia abyssinica*, 1  
*C. advensis*, 1  
*C. barteri*, 1  
*C. palmata*, 1  
*C. quinqueloba*, 1  
*C. rehmanii*, 1  
*C. sessifolia*, 1  
  
*Colocynthis striates*, 1  
  
*Corallocarpus boehmi*, 1  
  
*Cucumella cinerea*, 1  
  
*Cucumeropsis mannii*, 1  
  
*Cyclanthera brachystachera*, 1  
*C. exfoliens*, 8  
*C. pedata*, 9  
*C. subinermis*, 2  
*C. tonluzii*, 3  
  
*Dactyliandra welwitschii*, 1  
  
*Diplocyclos palmata*, 3  
  
*Ecballium elaterium*, 1  
  
*Echinocystis lobata*, 8  
*E. wrightii*, 1  
  
*Elaterium cilatum*, 1

## UNITED STATES OF AMERICA (cont.)

Details of collection: (cont.)	<i>Frantzia pittieri</i> , 1
	<i>Gurania makioyani</i> , 1
	<i>Halosicyos ragonospi</i> , 1
	<i>Hodgsonia capniocarpe</i> , 1
	<i>Kedostris africana</i> , 3
	<i>K. hirtella</i> , 1
	<i>Lagenaria breviflora</i> , 2
	<i>L. leuantha</i> , 3
	<i>L. siceraria</i> , 49
	<i>L. sphaerica</i> , 1
	<i>Luffa acutangula</i> , 6
	<i>L. aegyptica</i> , 2
	<i>L. cylindrica</i> , 4
	<i>L. purgans</i> , 1
	<i>Melothria japonica</i> , 4
	<i>M. maderaspatana</i> , 1
	<i>M. pendula</i> , 4
	<i>M. scabra</i> , 1
	<i>Momordica angustisepala</i> , 1
	<i>M. balsamina</i> , 1
	<i>M. caribiospermoida</i> , 1
	<i>M. charantia</i> , 10
	<i>M. cochinchinensis</i> , 2
	<i>M. dioica</i> , 1
	<i>M. foetida</i> , 7
	<i>M. involucrata</i> , 1
	<i>Mukia maderaspatana</i> , 3
	<i>M. scabella</i> , 1
	<i>Polyclathra</i> spp., 1
	<i>Posaloea sphaerocarpa</i> , 1
	<i>Sicana odorifera</i> , 9
	<i>Sicyos angulatus</i> , 9
	<i>Thladiantha dubia</i> , 3
	<i>Trichosanthes anguina</i> , 7
	<i>T. cordata</i> , 1
	<i>T. cucumeroides</i> , 4
	<i>T. dioica</i> , 1
	<i>T. kirilowii</i> , 2
	<i>T. palmata</i> , 3
	<i>Zelmeria marlotti</i> , 2
	<i>Z. pallidicarpa</i> , 1
Maintenance of collection:	Medium-term seed storage at 5°C and 17% RH. Seeds in aluminium laminated foil packets. Storage capacity 102m <sup>3</sup>

Duplication of collection:	Partially duplicated at the USDA Plant Introduction Stations at Athens, Georgia; Geneva, New York and Aines Iwoa and some botanical gardens
Availability:	Freely available
Quarantine:	No known restrictions
Evaluation:	Evaluated for correct botanical identification as for species, and traits useful in breeding
Documentation:	Manual

## UNITED STATES OF AMERICA

Horticulture Department  
 USDA/ARS  
 University of Wisconsin  
 Madison, Wisconsin 53706

Telephone: (608) 262 00 28  
 Telex: 265452 UOWISC-MDS  
 Cable:  
 Telefax: (608) 262 47 43

Curator/person in charge:

J. Staub

Details of collection:

*Cucumis africanus*, 4 accessions from Africa and USA  
*C. anguria*, 12 accessions from Brazil, Ethiopia, Hungary, India, UK; USA and Zimbabwe  
*C. anguria* var. *longipes*, 14 accessions from Botswana and Re. of South Africa  
*C. dipsaceus*, 16 accessions from Curaçao, Ecuador, Ethiopia, Kenya, Peru, Sudan and Tanzania  
*C. ficifolius*, 10 accessions from Ethiopia, Kenya and Rep. of South Africa  
*C. figurei*, 10 accessions from Burkina Faso, Kenya, Niger, Nigeria, Sudan and Tanzania  
*C. heptadactylus*, 1 accession from Rep. of South Africa  
*C. meusei*, 1 accession from USA  
*C. melo* var. *agrestis*, 29 accessions from Afghanistan, Australia, Botswana, DDR, India, Iran, Kenya, Nigeria, Senegal, Sri Lanka, Togo, USA and USSR  
*C. metuliferus*, 18 accessions from FRG, Kenya, Liberia, Netherlands, Rep. of South Africa, USA, USSR and Zimbabwe  
*C. myriocarpus*, 24 accessions from Angola, France, FRG, Hungary, Netherlands and Rep. of South Africa  
*C. prophetarum*, 2 accessions from Jordan  
*C. rigidus*, 1 accession from Rep. of South Africa  
*C. sagittatus*, 4 accessions from Rep. of South Africa and USA  
*C. sativus* var. *hardtwickii*, 7 accessions  
*C. zeyheri*, 26 accessions from PR Mozambique, Rep. of South Africa, Turkey and Zimbabwe

Maintenance of collection:	Short-term seed storage at ambient temperatures and 50% RH +10% in open boxes
Duplication of collection:	USDA/ARS, Beltsville, USA
Availability:	Available through the USDA/ARS Plant Quarantine Office
Quarantine:	No information
Evaluation:	Isozyme analysis
Documentation:	For further information see: Can. J. Bot. 1987. 65:792-798

## UNITED STATES OF AMERICA

U.S. Agricultural Research Station  
1636 East Alisal Street  
Salinas, California 93905

Telephone: (408) 755 28 64  
Telox:  
Cable:

Curator/person in charge: J.D. McCreight

## Details of collection:

*Cucurbita cordata*, 2 from Mexico  
*C. cylindrata*, 5 from Mexico  
*C. digitata*, 2 from Mexico  
*C. ecuadorensis*, 4 from Ecuador  
*C. ficifolia*, 17 accessions from Argentina (6), Ecuador (3), Mexico (5), Nepal (1), Peru (1) and UK (1)  
*C. foetidissima*, 5 from USA  
*C. lundelliana*, from Belize (1) and Guatemala (1)  
*C. martinezii*, 1 from Mexico  
*C. maxima* var. *maxima*, 24 accessions from Argentina (7), Bolivia (3), Brazil (1), Chile (1), Peru (2) and USA (10)  
*C. mixta*, from Mexico (12) and USA (2)  
*C. moschata*, 22 accessions from Bolivia (1), Guatemala (1), Brazil (1), India (1), Japan (1), Mexico (6), Virgin Islands (USA) (2), USA (7) and 2 of unknown origin  
*C. okeechobeensis*, 4 from USA  
*C. palmata*, from Mexico (7) and USA (8)  
*C. pepo*, 26 accessions from Argentina (5), Brazil (2), Ecuador (1), Guatemala (1), Mexico (12) and USA (5)  
*C. sororia*, 47 accessions from El Salvador (1), Nicaragua (1) and Mexico (45)  
*C. texana*, 2 from USA  
*C. digitata* x *C. palmata*, from Mexico (1) and USA (5)  
*C. palmata* x *C. digitata*, 1 from Mexico  
*C. sororia* x *C. mixta* (?), 14 from Mexico

Miscellaneous genera of Cucurbitaceae:  
*Apodanthera undulata*, 1 from USA

*Benincasa cerifera*, 1

*Bryonopsis* spp., 1 from USA

*Calycophysum brevipes*, 1 from Venezuela  
*C. spectabilis*, 1 from Venezuela

*Cionosicyos macranthus*, 1 from Mexico

*Citrullus colocynthis*, 5 accessions from Algeria (1), Saudi Arabia (1), USA (1) and 2 of unknown origin  
*C. lanatus* var. *lanatus*, from Afghanistan (1) and Mexico (?) (1)

*Cyclanthera exfoliata*, 1  
*C. pedata*, 3 from Argentina

*Echinocystis lobata*, 1 from USA

*Lagenaria siceraria*, 39 accessions from Argentina (1), Brazil (7), Ecuador (3), Ghana (2), Mexico (4), Niger (1), Nigeria (1), Peru (2), USA (13) and 5 of unknown origin  
*L. sphaerica*, from Kenya (2) and Rep. of South Africa (1)  
*L. brevifolia* x *L. siceraria*, 1  
*L. siceraria* x *L. sphaerica*, 1

*Luffa acutangula*, 2  
*L. cylindrica*, 1 from Mexico

*Marah macrocarpus*, 2 from USA

<b>Details of collection:</b> (cont.)	<i>Momordica balsamina</i> , 2 from USA <i>M. charantia</i> , 3 accessions from Costa Rica (1), USA (1) and Vietnam (1) <i>Posadaea sphaerocarpa</i> , 1 <i>Schizocarpum attenuatum</i> (?), 1 from Mexico <i>S. palmeri</i> , 1 from Mexico <i>Sicana odorifera</i> , 5 accessions from Guatemala (2), Mexico (1), Puerto Rico (1) and 1 of unknown origin <i>Trichosanthes anguina</i> , 1 from Malaysia
<b>Maintenance of collection:</b>	Short-term seed storage at 10°C and <40% RH
<b>Duplication of collection:</b>	Seeds held at Brawley, California, USA. After multiplication and documentation samples will be put into the U.S. National Plant Germplasm System (NPGS)
<b>Availability:</b>	Seeds will be available within a few years, after multiplication
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	<i>Cucumis</i> : seed parent, pollen parent, important phenotypic/genotypic characters frequently listed parents; disease and pest ratings documented elsewhere include powdery mildew ( <i>Sphaerotheca fuliginea</i> ), watermelon mosaic I and II and <i>Aphis gossypii</i>
<b>Documentation:</b>	Partial and manual. Computerized for <i>Cucumis</i>

#### UNITED STATES OF AMERICA

The Buffalo Gourd Development Project  
Department of Plant Science  
University of Arizona  
Tucson, Arizona 85721

Telephone:  
Telex:  
Cable:

<b>Curator/person in charge:</b>	W.P. Bemis
<b>Details of collection:</b>	<i>Cucurbita foetidisissima</i> , 145 accessions collected throughout the southwestern USA
<b>Maintenance of collection:</b>	Active collection
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	Freely available
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	On-going work
<b>Documentation:</b>	Information is provided in: Bemis, W.P.; Berry, J.W. and Weber, C.W. The Buffalo Gourd: A potential arid land crop. In: New Agricultural Crop, edited by G.A. Ritchie (1979) AAAS Selected Symposium 38, pp. 65-87 Westview Press, Boulder, Colorado 803301, USA

**ZAMBIA**

**Mount Makulu Research Station**  
**Private Bag 7**  
**Chilanga**

**Telephone: 27 86 55**  
**Telex:**  
**Cable: Research Chilanga**

**Curator/person in charge:** C. Nkhoma

**Details of collection:** Cucurbitaceae, 453 landraces, primitive cultivars and wild from Zambia

**Maintenance of collection:** Short-term seed storage at 10°C and no controlled humidity. Seeds in aluminium laminated foil packets of 10 cm x 20 cm

**Duplication of collection:** NSSL, Fort Collins, USA

**Availability:** Available with the only condition of information feed-back

**Quarantine:** Import and export seeds must be accompanied with phytosanitary certificate

**Evaluation:** Partial for yield components

**Documentation:** Partial and manual

171'

*Lycopersicon*

**ARGENTINA**

Estación Experimental Regional Agropecuaria  
 Alto Valle de Río Negro  
 Instituto Nacional de Tecnología Agropecuaria (INTA)  
 C.C. 782  
 8332 General Roca - Río Negro

Telephone: (0941) 250 17/27/37  
 Telex:  
 Cable:

Curator/person in charge: D.J. Calvar

Details of collection: *Lycopersicon lycopersicum*, 8 landraces and 27 commercial cultivars from Argentina and 538 introductions from Brazil, Canada, France, Germany, Italy, Netherlands, USA and USSR

Maintenance of collection: Short-term seed storage at ambient temperatures

Duplication of collection: No information

Availability: Freely available

Quarantine: No information

Evaluation: Flowering, fruiting and maturation time; growth habit; foliage density; number of fruits per raceme; fruit shape, colour, weight, number of locules, resistance to cracking and number of seeds

Documentation: Partial and manual

**AUSTRALIA**

Horticultural Research Station  
 Queensland Department of Primary Industries  
 P.O. Box 538  
 Bowen, Queensland 4805

Telephone: (077) 85 22 55  
 Telex:  
 Cable:  
 Telefax: (077) 85 24 27

Curator/person in charge: R.M. Wright

Details of collection: *Lycopersicon cheesmanii*, 3  
*L. chmielewskii*, 1  
*L. hirsutum*, 32  
*L. lycopersicum*, ca. 850 commercial cultivars from Australia, Europe and USA and 136 landraces from Iran, Morocco, Peru and USSR, donated by USDA, USA  
*L. parviflorum*, 1  
*L. pennellii*, 14  
*L. peruvianum* var. *peruvianum*, 39  
*L. pimpinellifolium*, 122

*S. juglandifolium*, 2  
*S. lycopersicoides*, 1  
*S. ochranthum*, 1  
*S. rickii*, 1

All accessions donated by USDA and University of California, USA

Maintenance of collection: Medium-term seed storage at 4°C and 55% RH. Seeds in 120 ml plastic containers. Storage area 15.6 m<sup>2</sup>

Duplication of collection: Partially at Redlands Horticultural Research Station, Australia

Availability: Freely available

Quarantine: No restrictions

Evaluation: Resistance to *Fusarium oxysporum* and PVY

Documentation: Computerized for passport data

**AUSTRIA**

Institute for Agronomy  
and Plant Breeding  
University of Agriculture  
Gregor Mendel strasse, 33  
A-1180 Vienna

Telephone: (0222) 34 25 00  
Telex:  
Cable:

- Curator/person in charge: L. Tanasch
- Details of collection: *Lycopersicon lycopersicum*, 10 primitive cultivars donated by FAL, Braunschweig, FRG
- Maintenance of collection: Short-term seed storage at ambient temperatures
- Duplication of collection: FAL, Braunschweig, FRG
- Availability: Available in limited quantity
- Quarantine: Phytosanitary certificate required
- Evaluation: On-going. Personal research, demonstration and technical purposes
- Documentation: Manual. Computerization in progress

**BRAZIL**

Unidade de Execução de Pesquisa  
de Ambito Estadual, Cascata (UEPAE)  
Empresa Brasileira de Pesquisa Agropecuária (EMBRAPA)  
C.P. 403  
96.100 Pelotas R.S.

Telephone:  
Telex:  
Cable:

- Curator/person in charge: A. da Silva Pereira
- Details of collection: *Lycopersicon lycopersicum*, 163 commercial cultivars, donated by Universidade Federal de Viçosa, Brazil; AVRDC, Taiwan (China) and University of California, Davis, USA
- Maintenance of collection: Short-term seed storage at 17°C and 35% RH. Seeds in paper bags. Storage area 16 m<sup>2</sup>
- Duplication of collection: No information
- Availability: Available in limited quantity. Requests for material should be addressed to Dulce R. N. Warwick, Curator for Vegetable Crops, Centro Nacional de Recursos Genéticos (CENARGEN), Empresa Brasileira de Pesquisa Agropecuária (EMBRAPA), C.P. 11.1316, 70000 Brasília D.F.
- Quarantine: No information
- Evaluation: Maturity; yield; fruit size, shape, firmness and colour and resistance to late blight
- Documentation: Manual

**BRAZIL**

Departamento de Fitotecnia  
Universidade Federal de Viçosa  
36570 Viçosa, M.G.

Telephone: (031) 899 26 11  
Telex: 311587 FUFV BR  
Cable:

- Curator/person in charge: V.W.D. Casali
- Details of collection: *Lycopersicon lycopersicum*, 600 landraces and primitive cultivars from Brazil and USA, donated by Purdue University, USA
- Maintenance of collection: Short-term seed storage at 5°C and controlled RH. Seeds in plastic containers of 4 kg. Storage capacity 60 m<sup>3</sup>
- Duplication of collection: CENARGEN/EMBRAPA
- Availability: Freely available. Requests should be addressed to:  
CENARGEN/EMBRAPA  
C.P. 10-2372  
CEP 70.849  
Brasília - D.F.  
Brazil
- Quarantine: No information
- Evaluation: Partial
- Documentation: Partial and computerized

**BULGARIA**

Maritsa Institute for Vegetable Crops  
ul. Brezovsko shosse 32  
BG-4003 Plovdiv

Telephone:  
Telex:  
Cable:

- Curator/person in charge: E. Uzunova
- Details of collection: *Lycopersicon lycopersicum*, 98 cultivars and breeders' lines from Bulgaria and USA, donated by Institute of Genetics and Plant Breeding, Bulgarian Academy of Sciences, Sofia, Bulgaria; and 16 wild species of unknown origin
- Maintenance of collection: Short-term seed storage at ambient temperatures
- Duplication of collection: No information
- Availability: Available in limited quantity
- Quarantine: No information
- Evaluation: Partially for resistance to TMV, *Verticillium albo-atrum*, *Cladosporium fulvum*, *Fusarium oxysporum* f. sp. *lycopersici*, corky root and *Corynebacterium michiganense*; breeding lines for dry matter content
- Documentation: Partial and manual

**BULGARIA**

Institute of Introduction and  
Plant Genetic Resources "K. Malkov"  
District of Plovdiv  
BG-4122 Sadovo

Telephone: (99) 22 21 / 22 51  
Telex: 44444 ZOS BG  
Cable:

- Curator/person in charge: B. Matsov / M. Zaharieva

<b>Details of collection:</b>	<i>Lycopersicon lycopersicum</i> , 700 total accessions. Landraces (60), wild (45), old cultivars (40) and breeding material (555) from Bulgaria, Canada, DDR, Denmark, France, Hungary, Italy, Netherlands, Spain, UK and USA
<b>Maintenance of collection:</b>	Long-term seed storage at -18°C. Seeds with 5-7% m.c. in glass jars Medium-term seed storage at 5°C and 50% RH
<b>Duplication of collection:</b>	Canada, Czechoslovakia, DDR, FRG, France, Greece, Hungary, Italy, Japan, Mexico, Poland, Spain, Sweden, USA and USSR
<b>Availability:</b>	Available on exchange basis
<b>Quarantine:</b>	Phytosanitary certificate required. All import material must go through a year trial in the quarantine nursery of IIPGR, Sadovo
<b>Evaluation:</b>	Characterization and evaluation according to unified descriptor lists - COMECON (morphological traits, biological properties, resistance to diseases and pests, economical characters, chemical composition and technological evaluation). Genetic and ecological studies
<b>Documentation:</b>	Computerized for passport and evaluation data

## CANADA

Central Office for the Plant Gene Resources  
of Canada (PGRC)  
Plant Research Centre  
Central Experimental Farm  
Building 99  
Ottawa, Ontario K1A 0C6

Telephone: (613) 995 94 28  
Telex:  
Cable:

<b>Curator/person in charge</b>	R.S. Pandeya
<b>Details of collection</b>	<i>Lycopersicon lycopersicum</i> , 800 landraces, commercial cultivars, breeders' lines and genetic stocks (single plant samples)
<b>Maintenance of collection</b>	Long-term seed storage at -20°C. Seeds in aluminium laminated foil packets. Storage capacity 145 m <sup>3</sup> Medium-term seed storage at 4°C and 20% RH. Seeds in paper envelopes. Storage capacity 54 m <sup>3</sup>
<b>Duplication of collection</b>	No information
<b>Availability:</b>	Freely available
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	Partial for passport and characterization data Plant and fruit characters, 24 descriptors - plant habit, size, appearance, inflorescence type, fruit set, shape, colour, locule number, core size, pedicel type, ripening, acidity, flesh colour and texture and fruit cracking Disease resistance, 19 descriptors - <i>Verticillium</i> , <i>Fusarium</i> , <i>Phytophthora</i> , <i>Alternaria</i> , <i>Cladosporium</i> , <i>Septoria</i> , <i>Colletotrichum</i> , <i>Corynebacterium</i> , <i>Xanthomonas</i> , <i>Pseudomonas</i> , TMV, CMV, DVS nematode, aphid, beetle, mite and fly
<b>Documentation:</b>	Partial and computerized

**CHILE**

Instituto de Producción y Sanidad Vegetal  
 Universidad Austral de Chile  
 Casilla 567  
 Valdivia

Telephone: 213911-232  
 Telex: 271035 UNAUS CL  
 Cable:  
 Telefax: 063212589

Curator/person in charge: A. Contreras Mendez

Details of collection: *Lycopersicon chilense*, 59 accessions  
*L. peruvianum* var. *peruvianum*, 5 accessions  
*Lycopersicon* spp., 30 accessions  
 All accessions are wild from Chile

Maintenance of collection: Long-term seed storage at -18°C. Seeds in aluminium containers

Duplication of collection: Partially at FAL, Braunschweig, FRG; University of California, Davis; USA; Sturgeon Bay, USA and different institutions in Japan, Netherlands and UK

Availability: Available on exchange basis

Quarantine: International Quarantine Regulations applied. No restrictions for import via meristem culture

Evaluation: No information

Documentation: Computerization in progress

**CHINA**

Genetic Resources and Seed Unit (GRSU)  
 Asian Vegetable Research and Development  
 Center (AVRDC)  
 P.O. Box 42  
 Shanhua, Tainan 74199  
 Taiwan

Telephone: (06) 583 78 01  
 Telex: 73560 AVRDC  
 Cable: ASVEG SHANHUA  
 Telefax: (06) 583 00 00

Curator/person in charge: D.C.S. Tay

Details of collection: *Lycopersicon cheesmanii*, 5  
*L. hirsutum*, 25  
*L. hirsutum* var. *glabratum*, 4  
*L. lycopersicum*, 5365  
*L. lycopersicum* var. *cerasiforme*, 31  
*L. pennellii*, 37  
*L. peruvianum* var. *humifusum*, 2  
*L. peruvianum* var. *peruvianum*, 91  
*L. pimpinellifolium*, 253  
*L. lycopersicum* x *L. hirsutum*, 2  
*L. lycopersicum* x *L. peruvianum*, 3  
*L. lycopersicum* x *L. pimpinellifolium*, 180  
 Unknown, 76

6074 total accessions, landraces, cultivars and wild from Afghanistan (12), Argentina (59), Australia (470), Bangladesh (8), Bolivia (77), Brazil 9112), Bulgaria (29), Canada (142), Chile (64), PR China (458), Colombia (127), Cook Islands (2), Costa Rica (46), Cuba (7), Czechoslovakia (68), Ecuador (163), Egypt (2), El Salvador (407), Ethiopia (17), Fiji Islands (1), FRG (19), France (34), French Guiana (13), Gambia (2), Ghana (8), Greece (5), Guadeloupe (14), Guam (3), Guatemala (227), Guyana (1), Honduras (97), Hong Kong (10), Hungary (145), India (114), Indonesia (22), Iran (63), Iraq (2), Israel (27), Italy (69), Japan (96), Jordan (2), Kenya (1), Korea (27), Lebanon (2), Liberia (1), Malaysia (28), Malawi (2), Mauritius (3), Mexico (225), Morocco (16), Nepal (2), Netherlands (95), New Caledonia (1),

<b>Details of collection:</b>	New Zealand (4), Nicaragua (31), Nigeria (17), Norway (91), Pakistan (6), Panama (61), Papua New Guinea (3), Peru (495), Philippines (126), Puerto Rico (19), Poland (44), Romania (5), Senegal (1), Rep. South Africa (21), Sri Lanka (16), Spain (49), Switzerland (1), Sweden (7), Syria (25), Taiwan (135), Thailand (45), Trinidad (92), Turkey (194), UK (44), Uruguay (1), USA (1212), USSR (90), Venezuela (28), Yugoslavia (118), Zaire (1) and 48 of unknown origin
<b>Maintenance of collection:</b>	Long-term seed storage at -18°C Medium-term seed storage at 2°-5°C and 45% RH Short-term seed storage at 15°C and 45% RH Seeds with 5-6% m.c. in aluminium laminated foil packets (long-term storage) and in plastic containers (medium and short-term storage)
<b>Duplication of collection:</b>	NIAR, Tsukuba, Japan; National Plant Genetic Resources Laboratory, Univ. of Philippines, Los Baños, Philippines; IHR, Wellesbourne, UK and USDA, Beltsville, USA
<b>Availability:</b>	Available on exchange basis
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	No information
<b>Documentation:</b>	Complete and computerized for passport and characterization data

## CHINA

Taiwan Agricultural Research Institute  
189 Chung-Cheng Road  
Wufeng, Taichung  
Taiwan 41301

Telephone: (04) 330 23 01  
Telex: 3338162  
Cable:

<b>Curator/person in charge:</b>	C.C. Tu
<b>Details of collection:</b>	<i>Lycopersicon lycopersicum</i> , 32 cultivars
<b>Maintenance of collection:</b>	Medium-term seed storage at 5°C and 40-50% RH. Seeds in PVC containers of 60 cm <sup>3</sup> capacity
<b>Duplication of collection:</b>	Taiwan Seed Improvement and Propagation Station and AVRDC, Taiwan
<b>Availability:</b>	Available in limited quantity and on exchange basis (20-200 seeds)
<b>Quarantine:</b>	Phytosanitary certificate required for export or import of material
<b>Evaluation:</b>	On-going work for 10/20 characters
<b>Documentation:</b>	Partial and computerized

## COLOMBIA

Centro Nacional de Investigación (CNI)  
Instituto Colombiano Agropecuario (ICA)  
Apartado Aéreo 233  
Palmira-Valle

Telephone: (931) 281 64 Ext. 244  
Telex:  
Cable:

**Curator/person in charge:** J. Jaramillo Vásquez

**COLOMBIA (cont.)**

Details of collection:	<p><i>Lycopersicon cheesmanii</i>, 2 from Peru  <i>L. chilense</i>, 1 from Peru  <i>L. hirsutum</i>, from Peru (18) and USA (1)  <i>L. hirsutum</i> var. <i>glabratum</i>, 3 from Colombia  <i>L. hirsutum</i> var. <i>typicum</i>, 1 from Colombia  <i>L. lycopersicum</i>, 1647 total accessions:  - 485 cultivars from Argentina (6), Australia (9), Bolivia (2), Brazil (41), Bulgaria (3), Canada (10), Chile (1), PR China (3), Costa Rica (2), Czechoslovakia (2), DDR (1), Denmark (32), France (32), Hungary (11), India (3), Israel (16), Italy (40), Japan (16), Mexico (4), Netherlands (115), Nigeria (2), Panama (20), Peru (13), Philippines (1), Poland (14), Puerto Rico (USA) (1), Syria (1), Taiwan (China) (54), UK (10), Uruguay (1), USSR (17) and Venezuela (2)  - 394 landraces and cultivars from Colombia  - 768 cultivars and breeding lines from USA  <i>L. lycopersicum</i> var. <i>cerasiforme</i>, from Colombia (11) and Peru (2)  <i>L. lycopersicum</i> var. <i>grandiflorum</i>, 1 from Peru  <i>L. lycopersicum</i> var. <i>pyriforme</i>, 1 from Peru  <i>L. minutum</i>, 4 from Peru  <i>L. pennellii</i>, 7 from Peru  <i>L. peruvianum</i> var. <i>peruvianum</i>, from Ecuador (1), Peru (26) and USA (4)  <i>L. pimpinellifolium</i>, from Colombia (15), Mexico (1), Peru (1), UK (1) and USA (9)  <i>L. lycopersicum</i> x <i>L. pimpinellifolium</i>, 16 accessions from Bolivia (1), Brazil (1), Bulgaria (1), Colombia (2), FRG (1), France (1), Honduras (1), India (3), Iran (1), Peru (1), Turkey (1), USA (1) and Venezuela (1)</p>
Maintenance of collection:	Medium-term seed storage at 4°-6°C and 60% RH. Seeds with 5-7% m.c. in aluminium laminated foil packets
Duplication of collection:	CRI, La Selva and ICA, Rio Negro, Colombia
Availability:	Available on exchange basis
Quarantine:	No known restrictions
Evaluation:	On-going work
Documentation:	Computerized. On-going work

**COSTA RICA**

Recursos Fitogenéticos  
Programa de Mejoramiento de Cultivos Tropicales  
Centro Agronómico Tropical de  
Investigación y Enseñanza (CATIE)  
Turrialba

Telephone: 56 02 32 / 56 64 31  
Telex: 8005 CATIE CR  
Cable: CATIE, Turrialba

Curator/person in charge:	V. Villalobos / J. Arce
Details of collection:	<i>Lycopersicon</i> spp., 250 landraces and spontaneous from Central America
Maintenance of collection:	<p>Long-term seed storage at -17°C. Seeds with 5-7% m.c. in aluminium laminated foil packets  Medium-term seed storage at 5°C and 30-40% RH. Seeds in paper or plastic bags</p> <p>The Institute has agreed to accept responsibility for maintaining a global collection of <i>Lycopersicon</i> for long-term conservation</p>
Duplication of collection:	Estación Experimental Fabio Baudrit, Costa Rica

Availability:	Freely available
Quarantine:	Phytosanitary certificate and import permit required
Evaluation:	On-going, 90% of the collection evaluated
Documentation:	Computerized for passport and characterization data

## CUBA

Instituto de Investigaciones Fundamentales  
en Agricultura Tropical "Alejandro Humboldt" (INIFAT)  
Calle 1 esq. 2, Santiago de las Vegas  
Ciudad Habana

Telephone:  
Telex:  
Cable:

Curator/person in charge:	Miguel A. Esquivel Perez
Details of collection:	<i>Lycopersicon lycopersicum</i> , 1070 primitive and advanced cultivars and breeding lines from Costa Rica, Cuba, DDR, Spain and USSR, donated by CAT, Turrialba, Costa Rica; ZIGuK, Gatersleben, DDR; INIA, Spain and VIR, Leningrad, USSR
Maintenance of collection:	Long-term seed storage at -18°C Medium-term seed storage at 0°-4°C. Seeds with 4-6% m.c. in sealed glass containers and/or in aluminum laminated foil packets
Duplication of collection:	ZIGuK, Gatersleben, DDR and VIR, Leningrad, USSR
Availability:	Available in limited quantity
Quarantine:	Imported material must possess phytosanitary certificate. Seeds to export should pass quarantine inspection and a phytosanitary certificate is given
Evaluation:	Almost complete using IBPGR descriptor list and/or descriptors selected according breeding programmes
Documentation:	Passport and characterization data complete. Manual and computerized

## CZECHOSLOVAKIA

Research and Breeding Institute  
for Vegetables and Special Plants  
947 01 Hurbanovo

Telephone: (818) 23 35  
Telex: 98359 VUZSP C  
Cable:

Curator/person in charge:	L. Domcek
Details of collection:	<i>Lycopersicon lycopersicum</i> , 10 cultivars from Czechoslovakia, donated by Breeding Station, Kvetoslavov, and Breeding Station, Smrvice, Czechoslovakia
Maintenance of collection:	Short-term seed storage. Seeds in glass containers
Duplication of collection:	Research Institute of Plant Production, Praha-Ruzyně, Czechoslovakia
Availability:	Available on exchange basis
Quarantine:	No known restrictions
Evaluation:	Partial, using own descriptors
Documentation:	Partial and manual for passport data

**CZECHOSLOVAKIA**

Breeding Station at Kvetoslavov  
 Research and Breeding Institute for Vegetables  
 and Special Plants, Hurbanovo  
 930 41 Kvetoslavov

Telephone: (708) 24 43  
 Telex:  
 Cable: SS Kvetoslavov

Curator/person in charge: K. Michalek  
 Details of collection: *Lycopersicon lycopersicum*, 487 cultivars  
 Maintenance of collection: Short-term seed storage at ambient temperatures  
 Duplication of collection: No information  
 Availability: Available on exchange basis  
 Quarantine: No known restrictions  
 Evaluation: On-going work  
 Documentation: Manual

**CZECHOSLOVAKIA**

Research and Plant Breeding Institute for Vegetables  
 ul. Slechtitelu  
 772 36 Olomouc

Telephone: (85) 250 81  
 Telex: 66282 VSUZO C  
 Cable:

Curator/person in charge: P. Kvasnicka  
 Details of collection: *Lycopersicon* spp., 1429 landraces and cultivars, world-wide representation  
 Maintenance of collection: Long-term seed storage at -18°C and 5-10% RH  
 Medium-term seed storage at 5°C  
 Duplication of collection: Not duplicated  
 Availability: Available on exchange basis  
 Quarantine: Phytosanitary certificate required  
 Evaluation: Partial and complete, depending on the type of collection  
 Documentation: Computerized for passport data and on-going for evaluation data. Data held at Czechoslovak Information System for Genetic Resources (EVIGEZ). For further information see: Rogalewicz, V. and Bares, I. (1987). Czechoslovak Information System for Genetic Resources. FAO/IBPGR Pl. Genet. Resources Newsletter, 72: 14-16

**ECUADOR**

Instituto de Ciencias Naturales  
 Universidad Central de Quito  
 Casilla 633  
 Quito

Telephone:  
 Telex:  
 Cable:

Curator/person in charge:  
 Details of collection: *Lycopersicon hirsutum*, 20  
*L. lycopersicum*, 13 landraces from Ecuador  
*L. lycopersicum* var. *cerasiforme*, 9  
*L. parviflorum*, 2  
*L. pimpinellifolium*, 6

<b>Details of collection:</b> (cont.)	<i>Solanum juglandifolium</i> , 2 <i>S. ochranthum</i> , 2 All wild species from Ecuador
<b>Maintenance of collection:</b>	Active collection
<b>Duplication of collection:</b>	University of California, Davis, USA
<b>Availability:</b>	Freely available
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	No information
<b>Documentation:</b>	Manual

## ECUADOR

Unidad de Recursos Fitogenéticos  
Instituto Nacional de Investigaciones  
Agropecuarias (INIAP)  
Casilla 340  
Quito

Telephone: 629-691  
Telex: 2532 INIAP ED  
Cable:

<b>Curator/person in charge:</b>	R. Castillo Torres
<b>Details of collection:</b>	<i>Lycopersicon</i> spp., 22 wild from Ecuador, donated by INIAP, Ecuador
<b>Maintenance of collection:</b>	Long-term seed storage at -12°C. Seeds with 6% m.c. in aluminium laminated foil packets
<b>Duplication of collection:</b>	University of California, Davis, USA
<b>Availability:</b>	Not available at the moment. Regeneration/multiplication in progress
<b>Quarantine:</b>	No restrictions for export but imported material must possess phytosanitary certificate
<b>Evaluation:</b>	Not evaluated
<b>Documentation:</b>	Computerized. On-going work

## EL SALVADOR

Centro Nacional de Tecnología  
Agropecuaria (CENTA)  
km 33, 5 - Carretera a Santa Ana  
San Andrés, La Libertad

Telephone:  
Telex:  
Cable:

<b>Curator/person in charge:</b>	M.A. Valencia F.
<b>Details of collection:</b>	<i>Lycopersicon lycopersicum</i> , 100 landraces, 75 commercial cultivars and 50 breeding lines <i>L. lycopersicum</i> var. <i>cerasiforme</i> , 25 wild types from Central America, Colombia, Mexico, Peru, Philippines and USA
<b>Maintenance of collection:</b>	Medium-term seed storage at 7°C. Seeds in paper bags and cardboard boxes. Storage area 4 m <sup>2</sup> Short-term seed storage at 12°C and 15°C. Storage area 288 m <sup>2</sup> and 72 m <sup>2</sup> respectively No RH control in all stores
<b>Duplication of collection:</b>	No information

**EL SALVADOR (cont.)**

Availability:	Freely available
Quarantine:	No information
Evaluation:	Morphological and agronomical characters
Documentation:	Manual

**FEDERAL REPUBLIC OF GERMANY**

Institut für Pflanzenbau und  
Pflanzenzüchtung der FAL  
Bundesallee 50  
D-3300 Braunschweig

Telephone: (531) 59 66 00  
Telex:  
Cable: LANDFORSCHUNG, Völkeroode  
Telefax: (531) 59 68 14

Curator/person in charge: L. Seidewitz

Details of collection: *Lycopersicon lycopersicum*, 221 total accessions:  
- 164 cultivars from Argentina (1), Belgium (4), Bulgaria (1), Canada (2), Colombia (1), Czechoslovakia (4), DDR (19), FRG (3), France (1), Guatemala (1), Hungary (1), Italy (1), Mexico (1), Netherlands (2), Peru (1), Romania (1), Rep. of South Africa (2), Sweden (1), Switzerland (2), Turkey (1), UK (2), USA (12), USSR (39) and 61 of unknown origin  
- 6 landraces from FRG (4) and Turkey (2)  
- 49 ecotypes of unknown origin  
- 2 accessions from Poland (1) and Turkey (1)

Maintenance of collection: Long-term seed storage at -10°C. Seeds with 6% m.c. in airtight tins  
Medium-term seed storage at 3°C and 30% RH

Duplication of collection: Not duplicated

Availability: Freely available

Quarantine: No known restrictions

Evaluation: Complete for 35 descriptors

Documentation: All available data computerized. Passport data are available for practically all accessions

**FEDERAL REPUBLIC OF GERMANY**

Arbeitskreis Pflanzengenetik  
Botanisches Institut  
J. W. Goethe-Universität  
Postfach 111 932  
Siemeyerstrasse 70  
D-6000 Frankfurt am Main 11

Telephone: (069) 798 47 34  
Telex: 413932 unif  
Cable:

Curator/person in charge: H. Becela

Details of collection: *Lycopersicon* spp., 6 old cultivars and 5 wild

Maintenance of collection: Long-term seed storage and short-term seed storage at ambient temperatures, depending on the species. Seeds in paper and/or plastic bags

Duplication of collection: No information

Availability: No information

Quarantine: No information

**Evaluation:** Research work in radiation and cytogenetics (crop plant evolution)  
**Documentation:** No information

**FRANCE**

Graines d'Elite Clause  
 F-91221 Brétigny-sur-Orge Cedex

Telephone: (06) 84 95 84  
 Telex: 692159 CLAUSE F  
 Cable:

**Curator/person in charge:** Y. Bartement

**Details of collection:** *Lycopersicon lycopersicum*

**Maintenance of collection:** Medium-term seed storage at 4°C  
 Short-term seed storage at ambient temperatures

**Duplication of collection:** No information

**Availability:** No information

**Quarantine:** No information

**Evaluation:** No information

**Documentation:** No information

**FRANCE**

Station d'Amélioration des Plantes Maraichères  
 Institut National de la Recherche Agronomique (INRA)  
 B.P. 94  
 Domaine Saint-Maurice  
 F-84140 Montfavet

Telephone: (90) 31 60 00  
 Telex: 432870 INRAAVI F  
 Cable:

**Curator/person in charge:** R. Dumas de Vaulx

**Details of collection:** *Lycopersicon lycopersicum*, 1200 accessions, including 600 breeding material

**Maintenance of collection:** Medium-term seed storage at 3°C and 30% RH. Seeds in sealed bags

**Duplication of collection:** No information

**Availability:** No information

**Quarantine:** No information

**Evaluation:** Disease resistance and low temperature tolerance

**Documentation:** No information

**GERMAN DEMOCRATIC REPUBLIC**

Zentralinstitut für Genetik  
 und Kulturpflanzenforschung (ZIGuK)  
 Corrensstrasse 3  
 DDR-4325 Gatersleben

Telephone: Gatersleben 50  
 Telex: 48558 kuptga DDR  
 Cable:

**Curator/person in charge:** Ch. Lehmann

**Details of collection:** *Lycopersicon lycopersicum*, 2600 accessions, including 402 mutants

**GERMAN DEMOCRATIC REPUBLIC (cont.)**

- Maintenance of collection:** Long-term seed storage at -15° to -18°C  
 Medium-term seed storage at 0°C. Seeds in sealed glass jars  
 The Institute has agreed to accept responsibility for maintaining a global collection of *Lycopersicon* for long-term conservation
- Duplication of collection:** Partially at Istituto del Germoplasma, Bari, Italy and VIR, Leningrad, USSR
- Availability:** Freely available
- Quarantine:** No known restrictions
- Evaluation:** Disease resistance and cold tolerance
- Documentation:** Passport data computerized. Index Seminum issued

**GHANA**

- Plant Introduction and Exploration Section  
 Agricultural Research Station  
 Crops Research Institute  
 Bunso
- Telephone:  
 Telex:  
 Cable:
- Curator/person in charge:** H.L.O. Holloway
- Details of collection:** *Lycopersicon lycopersicum*, 11 accessions
- Maintenance of collection:** Active collection
- Duplication of collection:** Agricultural Research Station, Okumaning, Ghana and IITA, Ibadan, Nigeria
- Availability:** Available in limited quantity
- Quarantine:** No information
- Evaluation:** No information
- Documentation:** Partial and manual

**GHANA**

- Horticultural Section  
 Crops Research Institute  
 P.O. Box 3785  
 Kwadaso, Kumasi
- Telephone:  
 Telex:  
 Cable:
- Curator/person in charge:** F. Agble
- Details of collection:** *Lycopersicon lycopersicum*, 4 landraces from Ghana, 23 commercial cultivars, 74 breeders' lines and 3 mutant lines, donated by institutes in Taiwan (China), Italy, Japan, Netherlands, Nigeria and USA
- Maintenance of collection:** Short-term seed storage at 10°C. Seeds in aluminium laminated foil packets, tins and paper envelopes
- Duplication of collection:** No information
- Availability:** Restricted to 5 samples per request

Quarantine:	No information
Evaluation:	No information
Documentation:	Manual

**GREECE**

Vegetables Research Institute  
Gastouni, Ilias

Telephone: (0623) 230 58  
Telex:  
Cable:

Curator/person in charge:	K. Bakalakos
Details of collection:	<i>Lycopersicon lycopersicum</i> , 2 landraces and 2 old cultivars
Maintenance of collection:	Short-term seed storage at ambient temperatures
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Selection of pure lines
Documentation:	No information

**GUATEMALA**

Experimental Station  
Instituto de Ciencia y Tecnología Agrícola  
Chimaltenango

Telephone:  
Telex:  
Cable:

Curator/person in charge:	H. Lopez
Details of collection:	<i>Lycopersicon</i> spp., 40 accessions
Maintenance of collection:	Short-term seed storage at ambient temperatures. Storage capacity 40 m <sup>3</sup>
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	On-going work
Documentation:	No information

**GUATEMALA**

Departamento de Genética  
Facultad de Agronomía  
Universidad de San Carlos de Guatemala  
Ciudad Universitaria, Zona 12  
Apartado Postal 1545  
Guatemala

Telephone:  
Telex:  
Cable:

Curator/person in charge:	F. Rodríguez B.
Details of collection:	<i>Lycopersicon</i> spp., 51 accessions

**GUATEMALA (cont.)**

- Maintenance of collection: Long-term seed storage at -15°C. Seeds in vacuum sealed aluminium laminated foil packets  
Short-term seed storage at ambient temperatures. Seeds in plastic containers
- Duplication of collection: CATIE, Costa Rica
- Availability: Available
- Quarantine: No known restrictions
- Evaluation: On-going work
- Documentation: Passport data computerized

**HUNGARY**

Research Centre for Agrobotany  
I.A.Q.  
H-2766 Tápiószéle

Telephone: Tápiószéle 41  
Telex: 226981 agbot H  
Cable:

Curator/person in charge: A.L. Kiss

Details of collection: *Lycopersicon cerastifera*, 1  
*L. hirsutum*, 5  
*L. humboldtii*, 3  
*L. lycopersicum*, 1292 total accessions, including 122 landraces and 1091 cultivars from Australia (19), Austria (3), Brazil (71), Bulgaria (49), Canada (25), PR China (8), Czechoslovakia (112), DDR (200), Denmark (3), FRG (7), France (20), Hungary (398), India (4), Italy (18), Netherlands (30), Norway (1), Poland (51), Portugal (8), Romania (13), Rep. of South Africa (6), Sweden (1), Switzerland (1), UK (14), USA (63), USSR (93) and 75 of unknown origin  
*L. megacarpum*, 1  
*L. peruvianum* var. *peruvianum*, 7  
*L. pimpinellifolium*, 15  
*L. lycopersicum* var. *pyriforme*, 7  
*L. racemiflorum*, 1  
*L. racemigerum*, 4

- Maintenance of collection: Long-term seed storage at -20°C  
Medium-term seed storage at +0°C. Seeds with 5% m.c. in airtight containers
- Duplication of collection: Partially duplicated
- Availability: Freely available provided there is sufficient seed. Index Seminum periodically issued
- Quarantine: Phytosanitary certificate required
- Evaluation: On-going work
- Documentation: Passport data complete. On-going work for characterization. Data complete for 605 accessions (49 characters)

**INDIA**

National Bureau of Plant Genetic Resources (NBPGR)  
 Indian Agricultural Research Institute (IARI)  
 Pusa Campus  
 New Delhi 110012

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: R.S. Rana

Details of collection: *Lycopersicon lycopersicum*, 950 landraces from India and introduction world-wide

Maintenance of collection: Active collection

Duplication of collection: No information

Availability: Freely available

Quarantine: No information

Evaluation: Data are being published in crop specific catalogues

Documentation: Manual

**IRAN**

Seed and Plant improvement Institute (SPII)  
 Ministry of Agriculture & Rural Development  
 Mard-Abad Ave.  
 Karadj

Telephone: (02221) 28 58  
 Telex:  
 Cable: SEEDPLANT, Karadj

Curator/person in charge: M.A. Vahabian

Details of collection: *Lycopersicon lycopersicum*, 67 from Iran and 65 introductions

Maintenance of collection: No information

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: No information

Documentation: No information

**IRAQ**

Plant Genetic Resources Unit  
 Agricultural Research Centre  
 Abu Ghraib - Baghdad

Telephone: (01) 511 22 01  
 Telex:  
 Cable: SE'AAR - IRAQ

Curator/person in charge: A.T. Sharif

Details of collection: *Lycopersicon lycopersicum*, 12 landraces from Iraq

Maintenance of collection: Short-term seed storage at 5°-10°C. Seeds in airtight cans. Storage capacity 40 m<sup>3</sup>

Duplication of collection: No information

Availability: Freely available

Quarantine: No information

**IRAQ (cont.)**

Evaluation: On-going work  
 Documentation: Manual

**ISRAEL**

Department of Field and Vegetable Crops  
 The Faculty of Agriculture  
 Hebrew University of Jerusalem  
 P.O. Box 12  
 76-100 Rehovot

Telephone: (08) 48 12 51  
 Telex: 361931 HUAGR IL  
 Cable:

Curator/person in charge: D. Zamir  
 Details of collection: *Lycopersicon lycopersicum*, 200 old cultivars  
 Maintenance of collection: Short-term seed storage at ambient temperatures  
 Duplication of collection: No information  
 Availability: No information  
 Quarantine: No information  
 Evaluation: Disease and insect resistance, shelf life, linkage maps, yield and physiological genetics of stress conditions  
 Documentation: No information

**ITALY**

Istituto del Germoplasma  
 CNR  
 Via G. Amendola, 165/A  
 I-70126 Bari

Telephone: (080) 58 34 63  
 Telex: 810565 CNR/BA I  
 Cable:

Curator/person in charge: P. Perrino  
 Details of collection: *Lycopersicon lycopersicum*, 105 old cultivars  
 Maintenance of collection: Long-term seed storage at -18°C. Seeds in airtight metal cans with silica gel  
 Medium-term seed storage at 0°C and 40% RH. Seeds in vacuum sealed aluminium laminated foil packets  
 Duplication of collection: No information  
 Availability: No information  
 Quarantine: No information  
 Evaluation: No information  
 Documentation: No information

**ITALY**

Institute of Agronomy and Field Crops  
 Via Valdisavoia, 5  
 I-95123 Catania

Telephone: (95) 35 14 20  
 Telex:  
 Cable:

Curator/person in charge: S. Foti  
 Details of collection: *Lycopersicon lycopersicum*, 10 mutant/genetic stocks

Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

## ITALY

Research Institute for Vegetable Crops  
Via Cavalleggeri, 25  
I-84098 Pontecagnano (Salerno)

Telephone:  
Telex:  
Cable:

Curator/person in charge:	A. Ferraro
Details of collection:	<i>Lycopersicon lycopersicum</i> , 120 old cultivars and 7 wild
Maintenance of collection:	Room with controlled temperature, light and humidity
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

## ITALY

Genetics  
Faculty of Agriculture  
University of Naples  
Via Università, 100  
I-80055 Portici (NA)

Telephone: (081) 775 20 56  
Telex:  
Cable:

Curator/person in charge:	L.M. Monti
Details of collection:	<i>Lycopersicon lycopersicum</i> , 4 landraces, 10 old cultivars, 4 wild and 482 mutant/genetic stocks
Maintenance of collection:	Medium-term seed storage at 4°C and 30% RH
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Quality, nematode and disease resistance
Documentation:	No information

**ITALY**

Department of Agrobiotechnology  
National Agency for Atomic Energy (ENEA)  
P.O. Box 2400  
C.R.E. Casaccia  
I-00100 Rome A.D.

Telephone: (06) 694 81  
Telex: 613296 ENEACA I  
Cable: CASACCIA ENEA

Curator/person in charge: L. Rossi

Details of collection: *Lycopersicon lycopersicum*, 200 accessions

Maintenance of collection: Long-term seed storage at -20°C  
Medium-term seed storage at 0°C

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: Disease resistance, short stature quality, mechanical harvest and stress resistance

Documentation: No information

**JAPAN**

National Institute of Agrobiological Resources (NIAR)  
Kannon-dai 2-1-2  
Tsukuba, Ibaraki 305

Telephone: 02975-6-7050  
Telex:  
Cable: NIARTSUKUBA YATABE  
Telefax: 02975-6-7408

Curator/person in charge: Hez., Germplasm Storage Center

Details of collection: *Lycopersicon chilense*, 2  
*L. hirsutum*, 5  
*L. lycopersicum*, 298  
*L. peruvianum* var. *peruvianum*, 43  
*L. pimpinellifolium*, 20  
*L. pissisii*, 1  
*Lycopersicon* spp., 83  
Old and commercial cultivars, landraces, wild and related species from America, Central Asia, Europe and Japan

Maintenance of collection: Long-term seed storage at -10°C  
Medium-term seed storage at -1°C and 30% RH  
Seeds with 6-7% m.c. in 1 to 3 PET containers of 430 ml

Duplication of collection: No information

Availability: Freely available for research purposes. A fee is applicable for private institutions

Quarantine: No information

Evaluation: Standard manual published by specialists' consent

Documentation: Computerized for passport data

**KENYA**

Plant Quarantine Station  
Kenya Agricultural Research Institute (KARI)  
P.O. Box 30148  
Nairobi

Telephone:  
Telex:  
Cable:

Curator/person in charge: D.M. Okioga  
Details of collection: *Lycopersicon* spp., 220 accessions  
Maintenance of collection: No information  
Duplication of collection: No information  
Availability: No information  
Quarantine: No information  
Evaluation: No information  
Documentation: No information

**NETHERLANDS**

BRUINSMA Selectiebedrijven b.v.  
P.O. Box 24  
Middelbroekweg, 67  
NL-2670 AA Naaldwyk

Telephone: (01740) 282 44  
Telex: 33154  
Cable: TOMKO

Curator/person in charge: L. van der Kruk  
Details of collection: *Lycopersicon* spp., 100 landraces, 100 old cultivars and 100 wild  
Maintenance of collection: Short-term seed storage at 18°C and 30% RH. Seeds in paper bags  
Duplication of collection: No information  
Availability: No information  
Quarantine: No information  
Evaluation: Disease resistance, yield and quality  
Documentation: No information

**NETHERLANDS**

Institute for Horticultural Plant Breeding (IVT)  
P.O. Box 16  
Maneplaan, 15  
NL-6700 AA Wageningen

Telephone: (08370) 191 23  
Telex: 75044 DLOWA NL  
Cable:  
Telefax: (08370) 180 94

Curator/person in charge: I.W. Botikema  
Details of collection: *Lycopersicon chesmanni*  
*L. chilense*  
*L. chmielewsku*  
*L. hirsutum*  
*L. lycopersicum*  
*L. parviflorum*  
*L. pennellii*  
*L. peruvianum* var. *peruvianum*  
Total 2000 accessions: 80% - *L. lycopersicum* (landraces, old and commercial cultivars, world-wide representation but many Dutch cultivars); and 20% - wild species

**NETHERLANDS (cont.)**

Maintenance of collection:	Short-term seed storage at 15°C and 15% RH
Duplication of collection:	Not duplicated
Availability:	Available in limited quantity
Quarantine:	Import seed must be free of PSTV
Evaluation:	Disease resistance, stress tolerance and quality
Documentation:	Computerized for passport and characterization data

**NIGERIA**

National Centre for Genetic Resources  
and Biotechnology (NACGRAB)  
Moor Plantation  
PMB 5382  
Ibadan

Telephone: (022) 31 26 70 / 31 26 22  
Telex:  
Cable: GENE BANK

Curator/person in charge:	P.E. Onuorah
Details of collection:	<i>Lycopersicon</i> spp., 451 accessions
Maintenance of collection:	Long-term seed storage
Duplication of collection:	No information
Availability:	Available in limited quantity
Quarantine:	No information
Evaluation:	No information
Documentation:	Manual. Passport data available

**PERU**

Programa de Investigación en Hortalizas  
Universidad Nacional Agraria  
Apartado 456  
La Molina - Lima

Telephone: (14) 35 20 35 Ext. 354  
Telex:  
Cable:

Curator/person in charge:	F. Delgado de la Flor B.
Details of collection:	<i>Lycopersicon</i> spp., 80 landraces and 506 wild from Peru
Maintenance of collection:	Medium-term seed storage at 4°-8°C and 60% RH. Storage capacity 18 m <sup>3</sup>
Duplication of collection:	IICA, Turrialba, Costa Rica and University of California, Davis, USA
Availability:	Freely available for material already regenerated
Quarantine:	Phytosanitary certificate required for import of seeds
Evaluation:	25% of the collection being characterized for 20 descriptors
Documentation:	Partial

**PHILIPPINES**

National Plant Genetic Resources Laboratory (NPGRL)  
 Institute of Plant Breeding (IPB)  
 University of the Philippines at Los Baños  
 College, Laguna

Telephone: (63) 833 35 28  
 Telex: 3432 PTLBK PU  
 Cable: PLANTBREED PHILIPPINES

Curator/person in charge: N.C. Altoveros

Details of collection: *Lycopersicon cheesmanii*, 2 wild from Ecuador and Galapagos  
*L. hirsutum*, 9 accessions from Ecuador (5) and Peru (4)  
*L. lycopersicum*, 4306 accessions from Argentina (54), Bolivia (76), Brazil (97), Canada (125), PR China (85), Colombia (81), Costa Rica (55), Czechoslovakia (67), Ecuador (91), El Salvador (399), Guatemala (201), Honduras (82), Hungary (163), India (99), Iran (60), Italy (57), Mexico (80), Peru (180), Philippines (220), Taiwan (China) (99), Turkey (191), USA (839), USSR (75), Yugoslavia (113) and 717 from 53 other countries  
*L. lycopersicum* var. *cerasiforme*, 28 accessions from 10 countries  
*L. peruvianum* var. *peruvianum*, 67 accessions from Chile (17), Ecuador (3), Peru (44), Poland (1), USA (1) and 1 of unknown origin  
*L. pimpinellifolium*, 182 accessions from Ecuador (27), Mexico (22), Peru (111), USA (16) and 6 from 6 other countries  
*Lycopersicon* spp., 12 accessions from USA (9) and 3 of unknown origin  
*L. hirsutum* x *L. glabrosium*, 4 accessions from Ecuador and Peru  
*L. lycopersicum* x *L. hirsutum*, 2 accessions from the Netherlands  
*L. lycopersicum* x *L. peruvianum*, 3 accessions from USA  
*L. lycopersicum* x *L. pimpinellifolium*, 176 accessions from 31 countries  
*L. peruvianum* x *L. hirsutum*, 2 accessions from Peru

Maintenance of collection: Long-term seed storage at -20°C  
 Medium-term seed storage at 5°C and 40% RH  
 Seeds with 6% m.c. in glass bottles, tin cans or in aluminium laminated foil packets

The Institute has agreed to accept responsibility for maintaining an Asian collection of *Lycopersicon* and a Southeast Asian vegetables collection for long-term conservation

Duplication of collection: Partially at AVRDC, Taiwan (China) and USDA, USA

Availability: Available on exchange basis

Quarantine: Import permit required

Evaluation: On-going. Around 500 accessions are evaluated every year

Documentation: Complete and computerized for passport data. On-going computerization for evaluation and characterization data

**POLAND**

National Department of Plant Genetic Resources  
 Plant Breeding and Acclimatization Institute  
 Radzików pl. Warsaw  
 05-870 Blonie

Telephone: (22) 55 26 11 / 4  
 Telex: 812914 IHAR PL  
 Cable:

Curator/person in charge: St. Goral / A. Włodarczyk / J. Paszkowska

Details of collection: *Lycopersicon lycopersicum*, 67 cultivars from Canada, Czechoslovakia, DDR, Hungary, Poland (mainly), USA and USSR

**POLAND (cont.)**

Maintenance of collection:	Long-term seed storage at -15°C Medium-term seed storage at 0°C Seeds with 5-7% m.c. in vacuum sealed glass containers
Duplication of collection:	No information
Availability:	Available on exchange basis. Index Seminum issued
Quarantine:	No known restrictions
Evaluation:	On-going work
Documentation:	Computerized for passport data

**POLAND**

Research Institute of Vegetable Crops ul. 22 Lipca, 1/3 96-100 Skierniewice	Telephone: Skierniewice 22 11 / 5 Telex: 886649 IW PL Cable:
Curator/person in charge	J. Skierkowski
Details of collection:	<i>Lycopersicon lycopersicum</i> , 30 landraces, 10 old cultivars and 3 wild
Maintenance of collection:	Short-term seed storage at ambient temperatures
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**SOUTH AFRICA, REPUBLIC OF**

Department of Agricultural Economics and Marketing Directorate of Plant and Liquor Control Private Bag X 179 0001 Pretoria	Telephone: (012) 206 24 06 Telex: 3-23264 Cable: SATIVA PRETORIA Telefax: (012) 206 27 86
Curator/person in charge	H. Chamberlain
Details of collection:	<i>Lycopersicon lycopersicum</i> , 194 cultivars from Australia, Denmark, France, Hawaii (USA), Hungary, Italy, Japan, Malaysia, Netherlands, Portugal, Rep. of South Africa (48) and UK
Maintenance of collection:	Long-term seed storage at -20°C. Seeds in vacuum sealed aluminium laminated foil packets (small part of the collection) Short-term seed storage at 6°-7°C and 45% RH. Seeds in plastic containers
Duplication of collection:	At different Crop Research Institutes in the Rep. of South Africa
Availability:	Available in limited quantity (0.5/300 g) and on exchange basis. Index Seminum issued yearly Requests to: The Plant Introduction Officer (same address)

Quarantine:	Additional declaration on the phytosanitary certificate that parent plants were inspected during active growth and found to be free from: a) <i>Corynebacterium michiganense</i> pv. <i>michiganense</i> b) <i>Fusarium oxysporum</i> f.sp. <i>lycopersici</i> race III c) Tomato ringspot virus d) Tomato black ring virus e) Potato spindle tuber viroid or that these organisms do not occur in the area of production
Evaluation:	On-going work
Documentation:	Complete and computerized

## SPAIN

Centro Regional de Investigaciones Agrarias  
"La Alberca"  
Apartado Oficial  
Murcia

Telephone: (968) 84 01 50  
Telex:  
Cable:

Curator/person in charge:	J. Rodriguez Navarro
Details of collection:	<i>Lycopersicon</i> spp., 20 landraces and 1 old cultivar
Maintenance of collection:	Medium-term seed storage at 4°C Short-term seed storage at ambient temperatures
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

## SPAIN

Instituto Valenciano de Investigaciones  
Agrarias (IVIA)  
Apartado Oficial  
Carretera de Moncada a Náquera, km 4,5  
Moncada - Valencia

Telephone: (6) 139 10 00  
Telex: 61440 IVIA E  
Cable:

Curator/person in charge:	L. Navarro
Details of collection:	<i>Lycopersicon lycopersicum</i> , 5 landraces, 49 old cultivars and 9 wild
Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**SPAIN**

Catedra de Genética  
Escuela Técnica Superior de  
Ingenieros Agrónomos (ETSIA)  
Universidad Politécnica  
Camino de Vera, 14  
Apartado de Correos 22012  
46020 Valencia

Telephone: (96) 361 50 51 Ext. 182  
Telex: 62808 UPVA E  
Cable:

Curator/person in charge: F. Nuez  
Details of collection: *Lycopersicon lycopersicum*, 602 landraces from Spain  
Maintenance of collection: Medium-term seed storage at -3°C and 25% RH. Seeds with silica gel in hermetically sealed glass containers of 6 cm x 7 cm  
Duplication of collection: Banco de Germoplasma, Alcalá de Henares, Spain and USDA, Beltsville, USA  
Availability: Available on exchange basis  
Quarantine: No known restrictions  
Evaluation: On-going work  
Documentation: On-going work for passport data

**SPAIN**

Banco de Germoplasma  
Departamento de Horticultura  
Servicio de Investigación Agraria (DGA)  
P.O. Box 727  
Zaragoza

Telephone: (76) 57 63 11  
Telex: 58194 IDAE E  
Cable:  
Telefax: (76) 57 55 01

Curator/person in charge: M. Carravedo  
Details of collection: *Lycopersicon lycopersicum*, 178 landraces  
Maintenance of collection: Medium-term seed storage at 0°-4°C. Seeds in glass flasks with silica gel  
Duplication of collection: Partially at Banco de Germoplasma, Alcalá de Henares, Spain  
Availability: Available  
Quarantine: No known restrictions  
Evaluation: Complete for 146 accessions for: 100 seeds weight; anthocyanic colouration of hypocotyl; growing type; flowering earliness; inflorescence type; ripening earliness; flesh colour of the ripe fruit; plant shape; fruit mean weight; fruit length and width; long-sectional and cross-sectional fruit shape and number of loculi  
Documentation: Passport data computerized

**SWITZERLAND**

Eidgenössische Forschungsanstalt  
für Obst-, Wein und Gartenbau  
CH-8820 Wädenswil

Telephone: (01) 780 13 33  
Telex:  
Cable:

Curator/person in charge: F. Kobel

Details of collection:	<i>Lycopersicon lycopersicum</i> , 1 accession
Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Performance, disease resistance, edible properties and shelf-life
Documentation:	No information

## SYRIA

Genetic Resources Unit  
Agriculture Research Directorate  
P.O. Box 113  
Dcuma - Damascus

Telephone: 75 04 01  
Telex: 411634 SYR  
Cable: MINAGRI DAMS

Curator/person in charge:	K.S. Obari
Details of collection:	<i>Lycopersicon lycopersicum</i> , 33 cultivars and landraces from Syria
Maintenance of collection:	Medium-term seed storage at 4°C and 45% RH. Seeds in metal tins (10.5 cm x 10.5 cm) and aluminium laminated foil packets (20 cm x 10 cm)
Duplication of collection:	Istituto del Germoplasma, Bari, Italy; ICARDA, Syria and Royal Botanic Gardens, Kew, UK
Availability:	Available on exchange basis
Quarantine:	No known restrictions
Evaluation:	On-going work using IBPGR descriptor list
Documentation:	Manual. On-going work

## THAILAND

Department of Horticulture  
Faculty of Agriculture  
Kasetsart University  
Bangken  
Bangkok 9

Telephone:  
Telex:  
Cable:

Curator/person in charge:	B. Chareonpanich
Details of collection:	<i>Lycopersicon lycopersicum</i> , 64 landraces from Thailand
Maintenance of collection:	Active collection
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	No information
Documentation:	Manual

**TURKEY**

Aegean Agricultural Research Institute (AARI)  
P.O. Box 9  
35661 Menemen - Izmir

Telephone: (51) 14 91 31  
Telex:  
Cable:

Curator/person in charge: The Directorate  
 Details of collection: *Lycopersicon lycopersicum*, 101 landraces  
 Maintenance of collection: Long-term seed storage at -20°C. Seeds in metal cans. Medium-term seed storage at 0°C  
 Duplication of collection: No information  
 Availability: No information  
 Quarantine: No information  
 Evaluation: Stripe and stem rust resistance  
 Documentation: No information

**UNION OF SOVIET SOCIALIST REPUBLICS**

The N.I. Vavilov Institute of Plant Industry (VIR)  
44, Herzen str.  
Leningrad 190000

Telephone: (314) 48 48  
Telex:  
Cable:

Curator/person in charge: V.I. Krivchenko  
 Details of collection: *Lycopersicon lycopersicum*, 5500 commercial varieties and F<sub>1</sub> hybrids, domestic and breeding lines, mutant forms and wild species, including 3000 accessions in the main catalogue and 2500 in the temporary catalogue. World-wide collection  
 Maintenance of collection: Long-term seed storage at -10°C  
 Medium-term seed storage at 4°C. Seeds with 3-4% m.c. in sealed glass containers  
 Duplication of collection: Partially at ZIGuK, Gatersleben, DDR  
 Availability: Available in accordance with the Exchange Catalogue regularly issued  
 Quarantine: According to the International Convention on Phytosanitary Plant Protection  
 Evaluation: Field and laboratory evaluation using the International COMECON descriptors list  
 Documentation: Manual. Passport data available

*NB - Samples received at the Institute are given temporary catalogue numbers. Some may be included in the permanent collection after 2-3 years trials, elimination of duplicates and low-value breeding lines*

**UNITED STATES OF AMERICA**

Campbell Institute for Agricultural Research  
Campbell Soup Company  
Campbell Place  
Camden, New Jersey 08101

Telephone:  
Telex:  
Cable:

Curator/person in charge: C. M. Cunningham

Details of collection: *Lycopersicon lycopersicum*, 22 landraces and wild forms, 550 commercial cultivars and 4000 breeders' lines, partly donated by the University of California, Davis and the USDA collection, Ames, Iowa, USA and institutes world-wide and partly from the Andean region

Maintenance of collection: Short-term seed storage at 20°C and 60% RH. Seeds in paper envelopes

Duplication of collection: No information

Availability: Available but restricted to a maximum of 10 samples per request

Quarantine: No information

Evaluation: Agronomical characters of fruit and plant; genetics; disease resistance (*Fusarium*, *Verticillium*, *Septoria*, *Stemphylium*, collar rot, early blight, smog, virus, late blight, blossom-end-rot, nematodes, bacterial spot, *Anthraco*se, *Rhizoctonia*) and fruit quality (colour, ascorbic acid content, betacarotene content, acidity, % of solids, etc.)

Documentation: Computerized

**UNITED STATES OF AMERICA**

Tomato Genetics Stock Centre (TGSC)  
Department of Vegetable Crops  
University of California  
Davis, California 95616

Telephone: (916) 752 17 37  
Telex:  
Cable:

Curator/person in charge: C.M. Rick

Details of collection: *Lycopersicon cheesmanii*, 67  
*L. chilense*, 57  
*L. chmielewskii*, 16  
*L. hirsutum*, 126  
*L. lycopersicum*, 1588 total accessions:  
- 172 landraces from Latin America  
- 80 commercial cultivars from various countries  
- 720 monogenic stocks  
- 616 compound marker stocks, allozyme variants, reciprocal translocations, trisomics and autotetraploids  
*L. lycopersicum* var. *cerasiforme*, 257  
*L. parviflorum*, 30  
*L. pennellii*, 41  
*L. peruvianum* var. *peruvianum*, 137  
*L. pimpinellifolium*, 211

*Solanum juglandifolium*, 3  
*S. rickii*, 2

All other accessions are wild from Chile, Colombia, Ecuador and Peru

Maintenance of collection: Short-term seed storage at 8°C and 30% RH

Duplication of collection: NSSL, Fort Collins and NPGS, USA  
Duplicate samples of all wild collections sent to various agencies in the country of collection

**UNITED STATES OF AMERICA (cont.)**

Availability:	Freely available
Quarantine:	No information
Evaluation:	Complete for gene analysis: various determinations in wild species. For more details see: Tomato Genetics Cooperative (TGC) reports
Documentation:	Complete. Stock lists published (TGSC Reports N <sup>o</sup> 36 - 38)

**UNITED STATES OF AMERICA**

National Seed Storage Laboratory (NSSL)  
US Department of Agriculture (USDA)  
Agricultural Research Service (ARS)  
Colorado State University Campus  
Fort Collins, Colorado 80523

Telephone: (303) 484 04 02  
Telex: 237401714 DNPA UC  
Cable:  
Telefax: (303) 221 14 27

Curator/person in charge:	S.A. Eberhart
Details of collection:	<i>Lycopersicon lycopersicum</i> , 6439 landraces, commercial cultivars, wild types and breeders' lines. World-wide representation
Maintenance of collection:	Long-term seed storage at -18°C. Seeds in aluminium laminated foil packets  The Institute has agreed to accept responsibility for maintaining a global collection of <i>Lycopersicon</i> for long-term conservation
Duplication of collection:	As an active collection at Regional Plant Introduction Station, Geneva, New York, USA
Availability:	Freely available only if not available from the active collection
Quarantine:	No information
Evaluation:	Responsibility of the Regional Plant Introduction Station holding the active collections
Documentation:	All data are computerized in GRIN (Germplasm Resources Information Network). The GRIN system resides on a Prime Computer in Beltsville, MD, USA

**UNITED STATES OF AMERICA**

Department of Horticultural Sciences  
New York State Agricultural Experiment Station  
Cornell University  
Geneva Campus  
Herdrick Hall  
Geneva, New York 14456-0462

Telephone: (315) 787 22 37  
Telex: 6717017  
Cable:  
Telefax: (315) 787 23 97

Curator/person in charge:	R.W. Robinson
Details of collection:	<i>Lycopersicon lycopersicum</i> , 4800 total accessions. Landraces and old cultivars (50), commercial cultivars (250), breeding lines (4000) and genetic stocks (500) from countries and donor institutes world-wide <i>L. pimpinellifolium</i> <i>Lycopersicon</i> spp. 50 accessions from Chile, Mexico (mainly) and Peru
Duplication of collection:	Partially at Regional Plant Introduction Station at Geneva, New York; NSSL, Fort Collins, Colorado and TGSC, University of California, Davis, USA

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<b>Availability:</b>	<b>Freely available</b>
<b>Quarantine:</b>	<b>No information</b>
<b>Evaluation:</b>	<b>Cold tolerance and disease resistance</b>
<b>Documentation:</b>	<b>Manual</b>

303-

*Solanum*

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**BRAZIL**

Departamento de Fitotecnia  
Universidade Federal de Viçosa  
36570 Viçosa, M.G.

Telephone: (031) 899 26 11  
Telex: 311587 FUFV BR  
Cable:

- Curator/person in charge: V.W.D. Casali
- Details of collection: *Solanum gilo*  
*S. melongena*  
Total of 132 landraces from Brazil
- Maintenance of collection: Short-term seed storage at 5°C and controlled RH. Seeds in plastic containers of 4 kg. Storage capacity 60 m<sup>3</sup>
- Duplication of collection: CENARGEN/EMBRAPA
- Availability: Freely available. Requests should be addressed to:  
CENARGEN/EMBRAPA  
C.P. 10-2372  
CEP 70.849  
Brasília - D.F.  
Brazil
- Quarantine: No information
- Evaluation: Partial
- Documentation: Partial and computerized

**BULGARIA**

Institute of Introduction and  
Plant Genetic Resources "K. Malkov"  
District of Plovdiv  
BG-4122 Sadovo

Telephone: (99) 22 21 / 22 51  
Telex: 44444 ZOS BG  
Cable:

- Curator/person in charge: B. Matsov / M. Zaharieva
- Details of collection: *Solanum melongena*, 5 old cultivars and 49 breeding material from Argentina, Bulgaria, Canada, France, Israel, Italy, Netherlands and USSR
- Maintenance of collection: Long-term seed storage at -18°C. Seeds with 5-7% m.c. in glass jars  
Medium-term seed storage at 5°C and 50% RH
- Duplication of collection: Brazil, Canada, Cuba, DDR, Denmark, France, Hungary, Italy, Netherlands, Spain, Sweden, Turkey, UK and USA
- Availability: Available on exchange basis
- Quarantine: Phytosanitary certificate required. All import material must go through a year trial in the quarantine nursery of IIPGR, Sadovo
- Evaluation: Characterization and evaluation according to unified descriptor lists - COMECON (morphological traits, biological properties, resistance to diseases and pests, economical characters, chemical composition and technological evaluation). Genetic and ecological studies
- Documentation: Computerized for passport and evaluation data

**CHILE**

Instituto de Producción y Sanidad Vegetal  
 Universidad Austral de Chile  
 Casilla 567  
 Valdivia

Telephone: 213911-232  
 Telex: 271035 UNAUS CL  
 Cable:  
 Telefax: 063212589

Curator/person in charge: A. Contreras Mendez

Details of collection: *Solanum rickii*, 4 accessions  
*Solanum* spp., 5 accessions  
 All accessions wild from Chile

Maintenance of collection: Long-term seed storage at -18°C. Seeds in aluminium containers

Duplication of collection: Partially at FAL, Braunschweig, FRG; University of California, Davis; USA; Sturgeon Bay, USA and different institutions in Japan, Netherlands and UK

Availability: Available on exchange basis

Quarantine: International Quarantine Regulations applied. No restrictions for import via meristem culture

Evaluation: No information

Documentation: Computerization in progress

**CHINA**

Taiwan Agricultural Research Institute  
 189 Chung-Cheng Road  
 Wufeng, Taichung  
 Taiwan 41301

Telephone: (04) 330 23 01  
 Telex: 3338162  
 Cable:

Curator/person in charge: C.C. Tu

Details of collection: *Solanum melongena*, 16 cultivars

Maintenance of collection: Medium-term seed storage at 5°C and 40-50% RH. Seeds in PVC containers of 60 cm<sup>3</sup> capacity

Duplication of collection: Kahosiung District Agricultural Improvement Station, Taiwan

Availability: Available in limited quantity and on exchange basis (20-200 seeds)

Quarantine: Phytosanitary certificate required for export or import of material

Evaluation: On-going work for 10/20 characters

Documentation: Partial and computerized

**COSTA RICA**

Unidad de Recursos Genéticos  
 Centro Agronomico Tropical de Investigación  
 y Enseñanza (CATIE)  
 Apartado 74  
 Turrialba

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: H. Heinze

**COSTA RICA (cont.)**

Details of collection:	<i>Solanum mammosum</i> , 3 <i>S. quitoense</i> , 5 <i>S. topiro</i> , 5 Landraces and wild types from Central America
Maintenance of collection:	Long-term seed storage at -20°C. Seeds in hermetically sealed aluminium laminated foil packets. Storage capacity 110 m <sup>3</sup> Medium-term seed storage at 5°C and 30-35% RH. Storage capacity 55 m <sup>3</sup>
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	No information
Documentation:	Data held on punched cards. Computerization planned

**COTE D'IVOIRE**

Centre Neerlandais Office de la Recherche Scientifique et Technique d'Outre Mer (ORSTOM) Centre d'Adiopodoume B.P. V-51 Abidjan	Telephone: Telex: Cable:
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Curator/person in charge:	H.P.O. Bleijendaal
Details of collection:	<i>Solanum aethiopicum</i> <i>S. gilo</i> <i>S. macrocarpon</i> <i>S. melongena</i> <i>S. nigrum</i> All landraces from Côte d'Ivoire
Maintenance of collection:	Medium-term seed storage. Seeds in polyethylene bags in closed cans
Duplication of collection:	No information
Availability:	Available in limited quantity
Quarantine:	No information
Evaluation:	On-going work
Documentation:	Manual

**CUBA**

Instituto de Investigaciones Fundamentales en Agricultura Tropical "Alejandro Humboldt" (INIFAT) Calle 1 esq. 2, Santiago de las Vegas Ciudad Habana	Telephone: Telex: Cable:
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Curator/person in charge:	Miguel A. Esquivel Perez
Details of collection:	<i>Solanum ciliatum</i> , 1 <i>S. jamaicense</i> , 1 <i>S. mammosum</i> , 2 <i>S. melongena</i> , 11 primitive and advanced cultivars from Cuba and USSR, donated by VIR, Leningrad, USSR

<b>Details of collection:</b> (cont.)	<i>Solanum nigrum</i> , 2 All other accessions are wild from Cuba
<b>Maintenance of collection:</b>	Long-term seed storage at -18°C Medium-term seed storage at 0°-4°C. Seeds with 4-6% m.c. in sealed glass containers and/or in aluminium laminated foil packets
<b>Duplication of collection:</b>	ZIGuK, Gaterleben, DDR and VIR, Leningrad, USSR
<b>Availability:</b>	Available in limited quantity
<b>Quarantine:</b>	Imported material must possess phytosanitary certificate. Seeds to export should pass quarantine inspection and a phytosanitary certificate is given
<b>Evaluation:</b>	On-going work using IBPGR descriptor list and/or descriptors selected according breeding programmes
<b>Documentation:</b>	Passport and characterization data complete. Manual and computerized

### CZECHOSLOVAKIA

Research Institute of Vegetable Growing and Breeding 772 36 Olomouc	Telephone: (85) 250 81 Telex: 66282 VSUZO C Cable:
<b>Curator/person in charge:</b>	P. Kvasnicka
<b>Details of collection:</b>	<i>Solanum melongena</i> , 36 cultivars, world-wide representation
<b>Maintenance of collection:</b>	Long-term seed storage at -18°C and 5-10% RH Short-term seed storage at 5°C
<b>Duplication of collection:</b>	Not duplicated
<b>Availability:</b>	Available on exchange basis
<b>Quarantine:</b>	Phytosanitary certificate required
<b>Evaluation:</b>	Partial and complete, depending on the species
<b>Documentation:</b>	Computerized for passport data and on-going for evaluation data. Data held at Czechoslovak Information System for Genetic Resources (EVIGEZ). For further information see: Rogalewicz, V. and Bares, I. (1987). Czechoslovak Information System for Genetic Resources. FAO/IBPGR Pl. Genet. Resources Newsletter, 72: 14-16

### ECUADOR

Unidad de Recursos Fitogenéticos Instituto Nacional de Investigaciones Agropecuarias (INIAP) Casilla 340 Quito	Telephone: 629-691 Telex: 2532 INIAP ED Cable:
<b>Curator/person in charge:</b>	R. Castillo Torres
<b>Details of collection:</b>	<i>Solanum quitoense</i> , 10 landraces from Ecuador, donated by INIAP, Ecuador
<b>Maintenance of collection:</b>	Long-term seed storage at -12°C. Seeds with 6% m.c. in aluminium laminated foil packets

**EQUADOR (cont.)**

Duplication of collection:	No information
Availability:	Not available at the moment. Regeneration/multiplication in progress
Quarantine:	No restrictions for export but imported material must possess phytosanitary certificate
Evaluation:	Not evaluated
Documentation:	Computerized. On-going work

**EL SALVADOR**

Centro Nacional de Tecnología  
Agropecuaria (CENTA)  
km 33, 5 - Carretera a Santa Ana  
San Andrés, La Libertad

Telephone:  
Telex:  
Cable:

Curator/person in charge:	M.A. Valencia F.
Details of collection:	<i>Solanum melongena</i> , 35 landraces and commercial cultivars from Central America, Colombia, Mexico, Peru, Philippines and USA
Maintenance of collection:	Medium-term seed storage at 7°C. Seeds in paper bags and cardboard boxes. Storage area 4 m <sup>2</sup> Short-term seed storage at 12°C and 15°C. Storage area 288 m <sup>2</sup> and 72 m <sup>2</sup> respectively No RH control in all stores
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	Morphological and agronomical characters
Documentation	Manual

**ETHIOPIA**

Plant Genetic Resources Centre/Ethiopia (PGRC/E)  
P.O. Box 30726  
Addis Ababa

Telephone: 18 03 81  
Telex: 21460 GTZFP ET  
Cable: GENE BANK

Curator/person in charge:	Melaku Worede
Details of collection:	<i>Solanum</i> spp., 13 wild
Maintenance of collection:	Medium-term seed storage at 4°C and 35% RH
Duplication of collection:	No information
Availability:	Available, in consultation with Ethiopian breeders, scientists from the co-operating institutes and PGRC/E, whenever there is mutual advantage
Quarantine:	Import of seeds through the Institute of Agricultural Research, Quarantine Unit. Export seeds accompanied with phytosanitary certificate issued by the Ministry of Agriculture
Evaluation:	Not evaluated
Documentation:	On-going and computerized for passport data

## FRANCE

Station d'Amélioration des Plantes Maraichères  
 Centre de Recherches Agronomiques d'Avignon  
 Institut National de la Recherche Agronomique (INRA)  
 B.P. 94  
 Domaine Saint-Maurice  
 F-84140 Montfavet

Telephone: (90) 31 60 00  
 Telex: 432870 INRAAVI F  
 Cable:

Curator/person in charge: M.C. Daunay

Details of collection: *Solanum aculeastrum*, 1 single plant  
*S. anomalum*, 15 landraces from West Africa  
*S. indicum*, 2 wild from Ethiopia  
*S. integrifolium*, 2 from Japan and Uganda  
*S. macrocarpon*, 2 landraces from West Africa  
*S. melongena*, 130 F<sub>1</sub> hybrids and cultivars world-wide  
*S. sisymbriifolium*, 1  
*S. sodomaeum*, 2 wild from Tunisia  
*S. torvum*, 2 wild from Côte d'Ivoire and Guadeloupe, France  
*S. xanthocarpum*, 2 wild from Nepal

Maintenance of collection: Medium-term seed storage at 3°C and 30% RH. Seeds in sealed bags

Duplication of collection: No information

Availability: Freely available

Quarantine: No information

Evaluation: Wild material evaluated for resistance to: *Verticillium dahliae*,  
*Thielaviopsis basicola* and nematodes

Documentation: Partial and manual

## GHANA

Plant Introduction and Exploration  
 Crops Research Institute  
 P.O. Box 7  
 D'Anso

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: H.L.O. Holloway

Details of collection: *Solanum gilo* (including *S. aethiopicum*, *S. anguivi* and *S. integrifolium*),  
 76 accessions from Benin (14), Côte d'Ivoire (7) and Togo (47)  
*S. macrocarpon* (including *S. dasyphyllum*), 66 accessions from Benin (17),  
 Côte d'Ivoire (2) and Togo (47)  
*S. melongena* (including *S. manum*), 6 accessions from Benin (2) and  
 Togo (4)  
*S. scabrum* (including *S. americanum* and *S. nigrum*), 7 accessions from  
 Benin (1) and Togo (6)  
*Solanum* spp. (including *S. cranthium* and *S. torvum*), 3 accessions from  
 Benin (1) and Togo (2)

Maintenance of collection: Short-term seed storage at ambient temperatures

Duplication of collection: University of Birmingham, UK

Availability: Available in limited quantity

Quarantine: No information

Evaluation: On-going work

Documentation: Manual. Passport data available

**GUATEMALA**

Departamento de Genética  
 Facultad de Agronomía  
 Universidad de San Carlos de Guatemala  
 Ciudad Universitaria, Zona 12  
 Apartado Postal 1545  
 Guatemala

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: F. Rodríguez B.

Details of collection: *Solanum melongena*, 3 accessions  
*S. wendlandii*, 1 accessions  
*Solanum* spp., 62 accessions

Maintenance of collection: Long-term seed storage at -15°C. Seeds in vacuum sealed aluminium laminated foil packets. Short-term seed storage at ambient temperatures. Seeds in plastic containers

Duplication of collection: CATIE, Costa Rica

Availability: Available

Quarantine: No known restrictions

Evaluation: On-going work

Documentation: Passport data computerized

**INDIA**

Krishna Chandra Mishra Research Institute  
 of Wild Vegetable Crops  
 P.O. Bandanwar 814147  
 Godda - Bihar

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: Kishore Chandra Mishra

Details of collection: *Solanum indicum*, 1 landrace from Meghalaya  
*S. melongena*, 1 landrace from Karnataka  
*S. nigrum*, 1 wild from Godda, Bihar  
*S. torvum*, 1 wild from Samastipur:  
 All accessions from India

Maintenance of collection: Short-term seed storage at ambient temperatures. Seeds in glass containers with silica gel

Duplication of collection: Samukhia, Banka and Bhagalpur, Bihar, India

Availability: Available on exchange basis

Quarantine: No information

Evaluation: Partial for morphological and agronomical characters

Documentation: Manual and partial

**INDIA**

National Bureau of Plant Genetic Resources (NBPGR)  
 Indian Agricultural Research Institute (IARI)  
 Pusa Campus  
 New Delhi 110012

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: R.S. Rana

<b>Details of collection:</b>	<i>Solanum melongena</i> , 84 landraces from India <i>Solanum</i> spp., 16
<b>Maintenance of collection:</b>	Active collection
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	Freely available
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	Data are being published in crop specific catalogues
<b>Documentation:</b>	Manual

**INDIA**

Division of Vegetable Crops and Floriculture  
Indian Agricultural Research Institute (IARI)  
New Delhi 110012

Telephone:  
Telex:  
Cable:

<b>Curator/person in charge:</b>	B. Choudhury
<b>Details of collection:</b>	<i>Solanum melongena</i> , 420 landraces and 30 cultivars All accessions from India
<b>Maintenance of collection:</b>	Active collection
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	Freely available
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	In progress
<b>Documentation:</b>	No information

**IRAN**

Seed and Plant Improvement Institute (SPII)  
Ministry of Agriculture & Rural Development  
Mard-Abad Ave.  
Karadj

Telephone: (02221) 28 58  
Telex:  
Cable: SEEL PLANT, Karadj

<b>Curator/person in charge:</b>	M.A. Vahabian
<b>Details of collection:</b>	<i>Solanum melongena</i> , 2 from Iran and 2 introductions
<b>Maintenance of collection:</b>	No information
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	No information
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	No information
<b>Documentation:</b>	No information

**IRAQ**

Plant Genetic Resources Unit  
Agricultural Research Centre  
Abu Ghraib - Baghdad

Telephone: (01) 511 22 01  
Telex:  
Cable: SBAAR - IRAQ

Curator/person in charge: A.T. Sharif

Details of collection: *Solanum melongena*, 9 landraces from Iraq

Maintenance of collection: Short-term seed storage at 5°-10°C. Seeds in airtight cans. Storage capacity 40 m<sup>3</sup>

Duplication of collection: No information

Availability: Freely available

Quarantine: No information

Evaluation: On-going work

Documentation: Manual

**ITALY**

Istituto del Germoplasma  
CNR  
Via G. Amendola, 165/A  
I-70126 Bari

Telephone: (080) 58 34 63  
Telex: 810565 CNR/BA I  
Cable:

Curator/person in charge: P. Perrino

Details of collection: *Solanum melongena*, 98 accessions majority landraces from the Mediterranean region

Maintenance of collection: Long-term seed storage at -18°C. Seeds in airtight metal cans with silica gel  
Medium-term seed storage at 0°C and 40% RH. Seeds in vacuum sealed aluminium laminated foil packets

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: No information

Documentation: Partial and computerized

**ITALY**

Research Institute for Vegetable Crops  
Via Cavallegeri, 25  
I-84098 Pontecagnano (Salerno)

Telephone:  
Telex:  
Cable:

Curator/person in charge: A. Ferraro

Details of collection: *Solanum melongena*, 30 old cultivars and 7 wild

Maintenance of collection: Room with controlled temperature, light and humidity

Duplication of collection: No information

Availability: No information

Quarantine:	No information
Evaluation:	No information
Documentation:	No information

## ITALY

Istituto di Miglioramento Genetico  
e Produzione delle Sementi  
Università degli Studi  
Via Pietro Giuria, 15  
I-10126 Torino

Telephone: (011) 63 39 69 /411 52 50  
Telex:  
Cable:

Curator/person in charge:	P. Belletti
Details of collection:	<i>Solanum melongena</i> , 23 commercial cultivars from Italy (22) and Pakistan (1)
Maintenance of collection:	Long-term seed storage at -20° and at -10°C. Storage capacity 1 m <sup>3</sup> and 0.5 m <sup>3</sup> respectively. Seeds with 5-6% m.c. in aluminium laminated foil packets
Duplication of collection:	Not duplicated
Availability:	Available in limited quantity and on exchange basis
Quarantine:	Phytosanitary certificate required for import and export of material
Evaluation:	On-going work for morphological and genetic features, agronomical aspects and disease resistance, according to IBPGR descriptor list
Documentation:	Computerized for characterization and evaluation data

## JAPAN

National Institute of Agrobiological Resources (NIAR)  
Kannon-dai 2-1-2  
Tsukuba, Ibaraki 305

Telephone: 02975-6-7050  
Telex:  
Cable: NIARTSUKUBA YATABE  
Telefax: 02975-6-7408

Curator/person in charge:	Head, Germplasm Storage Center
Details of collection:	<i>Solanum melongena</i> , 303 landraces, old and commercial cultivars and elite lines from East and Southeast Asia and Japan
Maintenance of collection:	Long-term seed storage at -10°C Medium-term seed storage at -1°C and 30% RH Seeds with 6-7% m.c. in 1 to 3 PET containers of 430 ml
Duplication of collection:	No information
Availability:	Freely available for research purposes. A fee is applicable for private institutions
Quarantine:	No information
Evaluation:	Standard manual published by specialists' consent
Documentation:	Computerized for passport data

**NETHERLANDS**

Institute for Horticultural Plant Breeding (IVT)  
 P.O. Box 16  
 Mansholtlaan, 15  
 NL-6700 AA Wageningen

Telephone: (08370) 191 23  
 Telex: 75044 DLOWA NL  
 Cable:  
 Telefax: (08370) 180 94

Curator/person in charge: I.W. Boukema

Details of collection: *Solanum aethiopicum*  
*S. anomalum*  
*S. ciliatum*  
*S. gilo*  
*S. incanum*  
*S. indicum*  
*S. integrifolium*  
*S. khasianum*  
*S. macrocarpon*  
*S. melongena*, 131 accessions from Bhutan (1), Italy (Sicily) (2), Maldives (31), Spain (71) and Syria (26)  
*S. muricatum*  
*S. nigrum*  
*S. quitoense*  
*S. sisymbriifolium*  
*S. sodomaeum*  
*S. torvum*  
*Solanum* spp., 48 from Zambia  
 Total 523 landraces, old and commercial cultivars

Maintenance of collection: Long-term seed storage at -20°C at Centre for Genetic Resources the Netherlands (CGN). Short-term seed storage at 15°C and 15% RH at IVT

The Institute has agreed to accept responsibility for maintaining a global collection of *Solanum melongena* for long-term conservation

Duplication of collection: Mostly at the donor institutes

Availability: Available in limited quantity

Quarantine: No known restrictions

Evaluation: Disease resistance, stress tolerance and quality

Documentation: Computerized for passport and characterization data

**NIGERIA**

National Centre for Genetic Resources  
 and Biotechnology (NACGRAB)  
 Moor Plantation  
 PMB 5382  
 Ibadan

Telephone: (022) 31 26 70 / 31 26 22  
 Telex:  
 Cable: GENE BANK

Curator/person in charge: P.E. Onuorah

Details of collection: *Solanum* spp., 209

Maintenance of collection: Long-term seed storage

Duplication of collection: No information

Availability: Available in limited quantity

Quarantine: No information

**Evaluation:** No information  
**Documentation:** Manual. Passport data available

## PHILIPPINES

National Plant Genetic Resources Laboratory (NPGRL)  
 Institute of Plant Breeding (IPB)  
 University of the Philippines at Los Baños  
 College, Laguna  
 Telephone: (63) 833 35 28  
 Telex: 3432 PTLBK PU  
 Cable: PLANTBREED PHILIPPINES

**Curator/person in charge:** N.C. Altoveros

**Details of collection:** *Solanum melongena*, 211 landraces from Afghanistan (2), Bangladesh (1), PR China (5), Ethiopia (1), Fiji (2), India (43), Iran (14), Japan (3), Nepal (1), Pakistan (1), Philippines (60), Rep. of South Africa (3), Syria (3), Taiwan (China) (2), Thailand (2), Turkey (57), USA (5) and Yugoslavia (5)

**Maintenance of collection:** Long-term seed storage at -20°C  
 Medium-term seed storage at 5°C  
 Seeds with 6% m.c. in glass bottles or in tin cans or in aluminium laminated foil packets

**Duplication of collection:** Partially at Iowa State University and USDA, USA

**Availability:** Available on exchange basis

**Quarantine:** Import permit required

**Evaluation:** Complete for morphological and horticultural characters

**Documentation:** Complete and computerized

## PERU

Programa de Investigación en Hortalizas  
 Universidad Nacional Agraria  
 Apartado 456  
 La Molina - Lima  
 Telephone: (14) 35 20 35 Ext. 354  
 Telex:  
 Cable:

**Curator/person in charge:** F. Delgado de la Flor B.

**Details of collection:** *Solanum muricatum*, 8 landraces from Peru

**Maintenance of collection:** Medium-term seed storage at 4°-8°C and 60% RH. Storage capacity 18 m<sup>3</sup>

**Duplication of collection:** IICA, Turrialba, Costa Rica and University of California, Davis, USA

**Availability:** Freely available for material already regenerated

**Quarantine:** Phytosanitary certificate required for import of seeds

**Evaluation:** 25% of the collection being characterized for 20 descriptors

**Documentation:** Partial

**POLAND**

National Department of Plant Genetic Resources  
 Plant Breeding and Acclimatization Institute  
 Radzików n/ Warsaw  
 05-870 Błonie

Telephone: (22) 55 26 11 / 4  
 Telex: 812914 IHAR PL  
 Cable:

Curator/person in charge: St. Goral

Details of collection: *Solanum* spp., 1300 cultivars, wild and genetic stocks

Maintenance of collection: 112 accessions are stored as tissue culture in clonal repository (Potato Institute, Bonin n/ Koszalin, Poland)

Duplication of collection: No information

Availability: Available on exchange basis

Quarantine: No known restrictions

Evaluation: On-going work

Documentation: On-going computerization for passport data

**SOUTH AFRICA, REPUBLIC OF**

Department of Agricultural Economics and Marketing  
 Directorate of Plant and Liquor Control  
 Private Bag X 179  
 0001 Pretoria

Telephone: (012) 206 24 06  
 Telex: 3-23264  
 Cable: SATIVA PRETORIA  
 Telefax: (012) 206 27 86

Curator/person in charge: H. Chamberlain

Details of collection: *Solanum aviculare*, 1 landrace from New Zealand  
*S. laciniatum*, 1 landrace from New Zealand  
*S. melongena*, 10 landraces from USA  
*S. wrightii*, 1 landrace of unknown origin  
*Solanum* spp., 1 landrace from USA

Maintenance of collection: Long-term seed storage at -20°C. Seeds in vacuum sealed aluminium laminated foil packets (small part of the collection)  
 Short-term seed storage at 6°-7°C and 45% RH. Seeds in plastic containers

Duplication of collection: At different Crop Research Institutes in the Rep. of South Africa

Availability: Available in limited quantity (0.5 / 300 g) and on exchange basis. Index Seminum issued yearly  
 Requests to: The Plant Introduction Officer  
 (same address)

Quarantine: *S. melongena*, seeds for planting  
 Additional declaration on the phytosanitary certificate that  
 1. The seed is free from *Phomopsis vexans*  
 2. The seed has been treated with hot water at 30°C for 50 minutes

Evaluation: On-going work

Documentation: Complete and computerized

**SPAIN**

Catedra de Genética  
 Escuela Técnica Superior de  
 Ingenieros Agrónomos (ETSCIA)  
 Universidad Politécnica  
 Camino de Vera, 14  
 Apartado de Correos 22012  
 46020 Valencia

Telephone: (96) 361 50 51 Ext. 182  
 Telex: 62808 UPVA E  
 Cable:

Curator/person in charge: F. Nuez  
 Details of collection: *Solanum melongena*, 77 landraces from Spain  
 Maintenance of collection: Medium-term seed storage at -3°C and 25% RH. Seeds with silica gel in hermetically sealed glass containers of 6 cm x 7 cm  
 Duplication of collection: IVT, Wageningen, Netherlands and Banco de Germoplasma, Alcalá de Henares, Spain  
 Availability: Available on exchange basis  
 Quarantine: No known restrictions  
 Evaluation: On-going work  
 Documentation: On-going work for passport data

**SPAIN**

Banco de Germoplasma  
 Departamento de Horticultura  
 Servicio de Investigación Agraria (DGA)  
 P.O. Box 727  
 Zaragoza

Telephone: (76) 57 63 11  
 Telex: 58194 IDAE E  
 Cable:  
 Telefax: (76) 57 55 01

Curator/person in charge: M. Carravedo  
 Details of collection: *Solanum melongena*, 4 landraces  
 Maintenance of collection: Medium-term seed storage at 0°-4°C. Seeds in glass flasks with silica gel  
 Duplication of collection: Not duplicated  
 Availability: Not available  
 Quarantine: No known restrictions  
 Evaluation: Not evaluated  
 Documentation: Partial

**TURKEY**

Aegean Agricultural Research Institute (AARI)  
 P.O. Box 9  
 35661 Menemen - Izmir

Telephone: (51) 14 91 31  
 Telex:  
 Cable:

Curator/person in charge: The Directorate  
 Details of collection: *Solanum melongena*, 47 landraces  
 Maintenance of collection: Long-term seed storage at -20°C. Seeds in metal cans. Medium-term seed storage at 0°C

**TURKEY (cont.)**

Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	Stripe and stem rust resistance
Documentation:	No information

**UNION OF SOVIET SOCIALIST REPUBLICS**

The N.I. Vavilov Institute of Plant Industry (VIR)  
44, Herzen str.  
Leningrad 190000

Telephone: (314) 48 48  
Telex:  
Cable:

Curator/person in charge:	V.I. Krivchenko
Details of collection:	<i>Solanum integrifolium</i> <i>S. melongena</i> 950 local populations, breeding varieties and hybrids, including 500 accessions in the main catalogue and 450 in the temporary catalogue. Collection representing all cultivation areas
Maintenance of collection:	Long-term seed storage at -10°C Medium-term seed storage at 4°C. Seeds with 2-4% m.c. in sealed glass jars
Duplication of collection:	Partially duplicated
Availability:	Available in accordance with the Exchange Catalogue regularly issued
Quarantine:	According to the International Convention on Phytosanitary Plant Protection
Evaluation:	Field and laboratory evaluation using the International COMECON descriptors list
Documentation:	Manual. Passport data available

*NB - Samples received at the Institute are given temporary catalogue numbers. Some may be included in the permanent collection after 2-3 years trials, elimination of duplicates and low-value breeding lines*

**UNITED KINGDOM**

School of Biological Sciences  
University of Birmingham  
P.O. Box 363  
Birmingham B15 2TT

Telephone: (021) 414 55 65  
Telex: 338938 SPAPHY G  
Cable:

Curator/person in charge:	R.N. Lester
Details of collection:	<i>Solanum aethiopicum</i> , 20 <i>S. macrocarpon</i> , 10 <i>S. melongena</i> , 40 <i>Solanum</i> spp., 50 Single plant samples mainly of wild material from Africa, America, Asia and Australia <i>S. gilo</i> (including <i>S. aethiopicum</i> , <i>S. anguini</i> and <i>S. integrifolium</i> ), 76 accessions from Benin (14), Burkina Faso (8), Côte d'Ivoire (7) and Togo (47)

<b>Details of collection:</b> (cont.)	<i>Solanum macrocarpon</i> (including <i>S. dasyphyllum</i> ), 66 accessions from Benin (17), Côte d'Ivoire (2) and Togo (47) <i>S. gilo</i> and <i>S. macrocarpon</i> , 33 from Ghana <i>S. melongena</i> (including <i>S. incanum</i> ), 6 accessions from Benin (2) and Togo (4) <i>S. scabrum</i> (including <i>S. americanum</i> and <i>S. nigrum</i> ), 7 accessions from Benin (1) and Togo (6) <i>Solanum</i> spp. (including <i>S. erianthum</i> and <i>S. torvum</i> ), 3 accessions from Benin (1) and Togo (2) All accessions are landraces and wild types
<b>Maintenance of collection:</b>	Long-term seed storage at -20°C. Seeds in aluminium laminated foil packets Medium-term seed storage at 5°C. Seeds in polyethylene bags with silica gel
<b>Duplication of collection:</b>	Partially at Crops Research Institute, Bunso, Ghana
<b>Availability:</b>	Available in limited quantity (20-50 seeds)
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	Taxonomically identified and research analysis of crossability, morphometrics, seed proteins and leaf flavonoids
<b>Documentation:</b>	Computerized for passport data

#### UNITED STATES OF AMERICA

Southern Regional Plant Introduction Station (S-9) US Department of Agriculture (USDA) 1109 Experiment Street Griffin, Georgia 30223	Telephone: Telex: Cable:
<b>Curator/person in charge:</b>	G.R. Lovell
<b>Details of collection</b>	<i>Solanum gilo</i> , 83 <i>S. melongena</i> , 418 landraces and cultivars majority from India and Turkey and from 21 other countries <i>Solanum</i> spp., 52 accessions of 24 related species. World-wide representation
<b>Maintenance of collection:</b>	Medium-term seed storage at 5°C and 40-50% RH
<b>Duplication of collection:</b>	Partially at NSSL, Fort Collins, USA
<b>Availability:</b>	Freely available. Requests through: G. White, Plant Introduction Officer, Beltsville Agricultural Research Centre, Beltsville, Maryland 20705, USA
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	<i>S. melongena</i> : maturity; fruit shape; fruit surface texture; colour of mature and immature fruit; leaf type; spine density; flower habit; flower colour and resistance to <i>Verticillium</i> wilt and <i>Lygus lineolaris</i>
<b>Documentation:</b>	Computerized

**UNITED STATES OF AMERICA**

National Seed Storage Laboratory (NSSL)  
 US Department of Agriculture (USDA)  
 Agricultural Research Service (ARS)  
 Colorado State University Campus  
 Fort Collins, Colorado 80523

Telephone: (303) 484 04 02  
 Telex: 237401714 DNPA UC  
 Cable:  
 Telefax: (303) 221 14 27

- Curator/person in charge: S.A. Eberhart
- Details of collection: *Solanum melongena*, 427 landraces and cultivars. World-wide representation
- Maintenance of collection: Long-term seed storage at -18°C. Seeds in aluminium laminated foil packets  
 The Institute has agreed to accept responsibility for maintaining a global collection of *Solanum melongena* for long-term conservation
- Duplication of collection: As an active collection at Regional Plant Introduction Station, Griffin, Georgia, USA
- Availability: Freely available only if not available from the active collection
- Quarantine: No information
- Evaluation: Responsibility of the Regional Plant Introduction Station holding the active collection
- Documentation: All data are computerized in GRIN (Germplasm Resources Information Network). The GRIN system resides on a Prime Computer in Beltsville, MD, USA

**UNITED STATES OF AMERICA**

Northeast Regional Plant Introduction  
 Station (NE-9)  
 New York State Agricultural Experiment Station  
 US Department of Agriculture (USDA)  
 Geneva, New York 14456

Telephone:  
 Telex:  
 Cable:

- Curator/person in charge: D. Dolan
- Details of collection: *Solanum melongena*, 320 landraces, wild types, commercial cultivars and breeders' lines world-wide  
*Solanum* spp., 11
- Maintenance of collection: Medium-term seed storage at 4°C and 28% RH. Seeds in moisture proof aluminium laminated foil packets. Storage capacity 102m<sup>3</sup>  
 Short-term seed storage at 10°C and 28% RH. Seeds in paper envelopes. Storage capacity 40.7 m<sup>3</sup>
- Duplication of collection: No information
- Availability: Freely available. Requests through: G. White, Plant Introduction Officer, Beltsville Agricultural Research Centre, Beltsville, Maryland 20705, USA
- Quarantine: No information
- Evaluation: Complete for: uniformity, habit, vigour, height, number of branches, leafiness, average number of fruits per plant, length and width of fruit, fruit colour and shape and resistance to *Verticillium*
- Documentation: Complete and manual

## Other vegetables

**AUSTRALIA**

Australian Tropical Forages Genetic  
Resources Centre  
CSIRO  
306 Carmody Road  
Sta. Lucia, Queensland 4037

Telephone: (07) 377 02 09  
Telex: 42159 AA  
Cable:  
Telefax: (07) 371 39 46

Curator/person in charge: R.J. Williams

Details of collection: *Basella alba*, 1 accession  
*Foeniculum vulgare*, 1 accession  
*Hibiscus acetosella*, 1 accession  
*H. asper*, 4 accession  
*H. cannabinus*, 379 accessions  
*H. diversifolius*, 2 accessions  
*H. mechowii*, 1 accession  
*H. meeusei*, 4 accessions  
*H. sabdariffa*, 92 accessions  
*Hibiscus* spp., 4 accessions

Maintenance of collection: Long-term seed storage at -20°C. Storage capacity 12 m<sup>3</sup>  
Short-term seed storage at 5° to 10°C and 25% RH. Storage capacity 60 m<sup>3</sup>  
Seeds in aluminium laminated foil packets and plastic bottles

Duplication of collection: No information

Availability: Available provided there is sufficient seed

Quarantine: Import seeds must have phytosanitary certificate. Seeds treated and quarantined on arrival. Despatch of seeds will include a phytosanitary certificate

Evaluation: On-going work

Documentation: Passport data complete and computerized

**AUSTRIA**

Research Station for Special Crops  
A-8551 Wies 88

Telephone: (03465) 24 23  
Telex:  
Cable:

Curator/person in charge: H. Pelzmann

Details of collection: *Lactuca sativa* var. *capitata*, 4 cultivars from Austria

Maintenance of collection: Long-term seed storage at -18°C. Seeds with 5% m.c. in 500 cc plastic or tin containers

Duplication of collection: Not duplicated

Availability: Available on exchange basis

Quarantine: No known restrictions

Evaluation: Not evaluated

Documentation: Manual

**BELGIUM**

Station des Cultures Fruitières et Maraîchères  
Centre de Recherches Agronomiques de l'Etat  
Chaussée de Charleroi, 234  
B-5800 Gembloux

Telephone: (081) 61 29 35  
Telex: 59165 Centragro Gembloux  
Cable:

Curator/person in charge: A. Monin

Details of collection: *Cichorium intybus*, 6 landraces and 10 cultivars from Leuven county and seed shops, Belgium

Maintenance of collection: Short-term seed storage at 14°C and 60% RH. Seeds in paper bags

Duplication of collection: No known duplication

Availability: Available in limited quantity

Quarantine: No known restrictions

Evaluation: On-going work

Documentation: Manual. On-going work

**BELGIUM**

Rijksstation voor Plantenveredeling  
Rijkscentrum voor Landbouwkundig Onderzoek-Gent  
Burgemeesters van Gansberghelaan, 109  
B-9220 Mellebeke

Telephone: (091) 52 19 81  
Telex:  
Cable:

Curator/person in charge: A. Andries

Details of collection: *Cichorium intybus*, 4 landraces and 6 old cultivars  
*Scorzonera hispanica*, 3 landraces and 4 old cultivars

Maintenance of collection: Long-term seed storage at -20°C  
Medium-term seed storage at 5°C and 35% RH

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: Yield, rust, mildew, *Xanthomonas* and *Plasmidiophora*

Documentation: No information

**BULGARIA**

Institute of Introduction and  
Plant Genetic Resources "K. Malkov"  
District of Plovdiv  
BG-4122 Sadovo

Telephone: (99) 22 21 / 22 51  
Telex: 44444 ZOS BG  
Cable:

Curator/person in charge: B. Matsov / M. Zaharieva

Details of collection: *Lactuca sativa*, 412 total accessions. Landraces (4), old cultivars (2), wild (1) and breeding material (405) from Czechoslovakia, DDR, Greece, Hungary, Italy, PDR Korea, Netherlands, UK and USSR  
*Spinacia oleracea*, 1 landrace and 59 breeding material from Czechoslovakia, Hungary, Italy and Netherlands

**BULGARIA (cont.)**

- Maintenance of collection: Long-term seed storage at -18°C. Seeds with 5-7% m.c. in glass jars  
Medium-term seed storage at 5°C and 50% RH
- Duplication of collection: PR China, Czechoslovakia, DDR, FRG, Greece, Hungary, India, Italy, Japan, Korea, Netherlands, Rep. of South Africa, USA, USSR and Yugoslavia
- Availability: Available on exchange basis
- Quarantine: Phytosanitary certificate required. All import material must go through a year trial in the quarantine nursery of IIPGR, Sadovo
- Evaluation: Characterization and evaluation according to unified descriptor lists - COMECON (morphological traits, biological properties, resistance to diseases and pests, economical characters, chemical composition and technological evaluation). Genetic and ecological studies
- Documentation: Computerized for passport and evaluation data

**CHILE**

Instituto de Producción y Sanidad Vegetal  
Universidad Austral de Chile  
Casilla 567  
Valdivia

Telephone: 213911-232  
Telex: 271035 UN AUS CL  
Cable:  
Telefax: 063212589

- Curator/person in charge: A. Contreras Mendez
- Details of collection: *Physalis* spp., 2 primitive cultivars from Chile
- Maintenance of collection: Long-term seed storage at -18°C. Seeds in aluminium containers
- Duplication of collection: Partially at FAL, Braunschweig, FRG; University of California, Davis, USA; Sturgeon Bay, USA and different institutions in Japan, Netherlands and UK
- Availability: Available on exchange basis
- Quarantine: International Quarantine Regulations applied. No restrictions for import via meristem culture
- Evaluation: No information
- Documentation: Computerization in progress

**COSTA RICA**

Unidad de Recursos Genéticos  
Centro Agronómico Tropical de Investigación  
y Enseñanza (CATIE)  
Apartado 74  
Turrialba

Telephone:  
Telex:  
Cable:

- Curator/person in charge: H. Heinze
- Details of collection: *Physalis ixocarpa*, 8 landraces from Central America  
*Physalis* spp., 57 accessions from Central America

Maintenance of collection:	Long-term seed storage at -20°C. Seeds in hermetically sealed aluminium laminated foil packets. Storage capacity 110 m <sup>3</sup> Medium-term seed storage at 5°C and 30-35% RH. Storage capacity 55 m <sup>3</sup>
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	No information
Documentation:	Data held on punched cards. Computerization planned

## CZECHOSLOVAKIA

Research and Plant Breeding Institute for Vegetables  
ul. Slechtitelu  
772 36 Olomouc

Telephone: (85) 250 81  
Telex: 66282 VSUZO C  
Cable:

Curator/person in charge: P. Kvasnicka

Details of collection: *Apium graveolens*, 87 landraces and cultivars from Europe  
*Cichorium* spp., 53 landraces and cultivars from Europe  
*Daucus carota*, 623 landraces and cultivars, world-wide representation  
*Foeniculum vulgare*, 6 cultivars from Europe  
*Lactuca* spp., 842 landraces and cultivars, world-wide representation  
*Pastinaca sativa*, 23 landraces and cultivars from Asia and Europe  
*Petroselinum* spp., 69 landraces and cultivars from Europe  
*Scorzonera hispanica*, 20 landraces and cultivars from Europe  
*Spinacia oleracea*, 102 cultivars, world-wide representation  
*Tragopogon porrifolius*, 6 landraces and cultivars from Europe

Maintenance of collection:	Long-term seed storage at -18°C and 5-10% RH Medium-term seed storage at 5°C
Duplication of collection:	Not duplicated
Availability:	Available on exchange basis
Quarantine:	Phytosanitary certificate required
Evaluation:	Partial and complete, depending on the type of collection
Documentation:	Computerized for passport data and on-going for evaluation data. Data held at Czechoslovak Information System for Genetic Resources (EVIGEZ). For further information see: Rogalewicz, V. and Bares, I. (1987). Czechoslovak Information System for Genetic Resources. FAO/IBPGR Pl. Genet. Resources Newsletter, 72: 14-16

**FEDERAL REPUBLIC OF GERMANY**

Institut für Pflanzenbau und  
Pflanzenzüchtung der FAL  
Bundesallee, 50  
D-3300 Braunschweig

Telephone: (531) 59 66 00  
Telex:  
Cable: LANDFORSCHUNG, Völkrode  
Telefax: (531) 59 68 14

Curator/person in charge: L. Seidewitz

- Details of collection:
- Anethum graveolens*, 7 cultivars from Denmark (1), FRG (3), Sweden (1) and USSR (2), 10 landraces from PR China (1), FRG (1), Turkey (2) and USSR (6) and 20 wild from FRG (19) and 1 of unknown origin
- Apium graveolens*, 2 cultivars from USSR, 8 landraces from Belgium (1), FRG (4), Turkey (1) and USSR (2) and 4 wild from FRG (3) and 1 of unknown origin
- Asparagus officinalis*, 1 cultivar
- Cichorium endivia*, 58 total accessions:  
- 55 cultivars from PR China (1), FRG (1), France (13), Greece (1), Italy (5), Netherlands (7), Thailand (1) and 26 of unknown origin  
- 1 landrace from Turkey  
- 2 wild from Cyprus (1) and Ethiopia (1)
- C. intybus*, 201 total accessions:  
- 84 cultivars from Austria (1), Belgium (4), Czechoslovakia (2), FRG (2), France (4), Greece (1), Hungary (1), Italy (3), Netherlands (54), Yugoslavia (3) and 9 of unknown origin  
- 19 ecotypes from FRG (1) and 18 of unknown origin  
- 98 wild from Afghanistan (1), Austria (1), Belgium (2), Cyprus (1), FRG (83), France (2), India (1), Italy (1), Netherlands (1), Pakistan (3), Turkey (1), Uruguay (1) and 1 of unknown origin
- Daucus carota*, 97 total accessions  
- 14 cultivars from Rep. of South Africa (2), Turkey (1) and USSR (11)  
- 4 landraces from Turkey  
- 79 wild from Belgium (1), FRG (74), France (1), Italy (1), Poland (1) and Portugal (1)
- Foeniculum vulgare*, 71 total accessions:  
- 4 cultivars from Afghanistan (1), Hungary (1), Yugoslavia (1) and 1 of unknown origin  
- 63 wild from Afghanistan (1), Belgium (1), DDR (3), Egypt (1), Ethiopia (3), FRG (25), France (2), Hungary (7), India (1), Poland (1), Portugal (1), Romania (1), Spain (1), Switzerland (1), Turkey (3), UK (4), USA (2) and 5 of unknown origin  
- 4 accessions from Belgium (1), Honduras (1), Italy (1) and UK (1)
- Hibiscus sabdariffa*, 1 wild from Egypt
- Lactuca perennis*, 10 wild from FRG
- L. sativa*, 12 cultivars from Canada (2), PR China (2), Finland (1), Turkey (1) and USSR (6) and 9 landraces from FRG (8) and Turkey (1)
- L. serriola*, 29 wild from FRG (28) and UK (1)
- Pastinaca sativa*, 1 cultivar from Hungary and 35 wild from DDR (1), FRG (33) and France (1)
- Petroselinum crispum*, 17 total accessions.  
- 4 cultivars from Turkey (1) and USSR (3)  
- 4 landraces from FRG (1) and Turkey (3)  
- 9 wild from FRG

<b>Details of collection:</b> (cont.)	<i>Spinacia oleracea</i> , 9 cultivars from PR China (1), FRG (3), Netherlands (2), Turkey (1) and USSR (2) and 7 landraces from FRG (1) and Turkey (6) <i>Spinacia</i> spp., 1 landrace from Turkey
<b>Maintenance of collection:</b>	Long-term seed storage at -10°C. Seeds with 6% m.c. in airtight tins Medium-term seed storage at 3°C and 30% RH
<b>Duplication of collection:</b>	Not duplicated
<b>Availability:</b>	Freely available
<b>Quarantine:</b>	No known restrictions
<b>Evaluation:</b>	No information
<b>Documentation:</b>	All available data computerized. Passport data are available for practically all accessions

## GUATEMALA

Departamento de Genética  
Facultad de Agronomía  
Universidad de San Carlos de Guatemala  
Ciudad Universitaria, Zona 12  
Apartado Postal 1545  
Guatemala

Telephone:  
Telex:  
Cable:

<b>Curator/person in charge:</b>	F. Rodríguez B.
<b>Details of collection:</b>	<i>Physalis</i> spp., 41 accessions
<b>Maintenance of collection:</b>	Long-term seed storage at -15°C. Seeds in vacuum sealed aluminium laminated foil packets Short-term seed storage at ambient temperatures. Seeds in plastic containers
<b>Duplication of collection:</b>	CATIE, Costa Rica
<b>Availability:</b>	Available
<b>Quarantine:</b>	No known restrictions
<b>Evaluation:</b>	On-going work
<b>Documentation:</b>	Passport data computerized

## HUNGARY

Research Centre for Agrobotany  
I.A.Q.  
H-2766 Tápiószőlő

Telephone: Tápiószőlő 41  
Telex: 226981 aghot H  
Cable:

<b>Curator/person in charge:</b>	A.L. Kiss
<b>Details of collection:</b>	<i>Daucus carota</i> , 60 landraces and 30 cultivars from Czechoslovakia (7), Denmark (1), FRG (1), Hungary (74), Poland (4), Romania (1), Switzerland (1) and 1 of unknown origin  <i>Lactuca sativa</i> , 348 accessions, including 180 landraces and 154 cultivars from Belgium (2), PR China (2), Czechoslovakia (18), DDR (57), Denmark (2), FRG (1), Hungary (217), Italy (3), Netherlands (2), Poland (13), Portugal (1), Romania (6), USA (8), USSR (11), Uk (2) and 3 of unknown origin

**HUNGARY (cont.)**

Details of collection: (cont.)	<i>Pastinaca sativa</i> , 24 landraces and 1 cultivar from Hungary (21) and Romania (4)  <i>Petroselinum crispum</i> , 74 landraces and 11 cultivars from Czechoslovakia (4), DDR (1), Denmark (1), Hungary (75), Poland (2) and Romania (2)
Maintenance of collection:	Long-term seed storage at -20°C Medium-term seed storage at +0°C. Seeds with 5% m.c. in air tight containers
Duplication of collection:	Not duplicated
Availability:	Freely available provided there is sufficient seed. Index Seminum periodically issued
Quarantine:	Phytosanitary certificate required
Evaluation:	On-going work
Documentation:	Complete for passport data

**INDIA**

Krishna Chandra Mishra Research Institute of Wild Vegetable Crops P.O. Bandanwar 814147 Godda - Bihar	Telephone: Telex: Cable:
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Curator/person in charge:	Kishore Chandra Mishra
Details of collection:	<i>Basella alba</i> , 2 <i>B. rubra</i> , 1  <i>Ipomoea muricata</i> , 1 All accessions are landraces from Bihar, India
Maintenance of collection:	Short-term seed storage at ambient temperatures. Seeds in glass containers with silica gel
Duplication of collection:	Samukhia, Banka and Bhagalpur, Bihar, India
Availability:	Available on exchange basis
Quarantine:	No information
Evaluation:	On-going work
Documentation:	Manual and partial

**INDIA**

National Bureau of Plant Genetic Resources (NBPGR) Indian Agricultural Research Institute (IARI) Pusa Campus New Delhi 110012	Telephone: Telex: Cable:
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Curator/person in charge:	R.S. Rana
Details of collection:	<i>Apium graveolens</i> , 100 landraces from India
Maintenance of collection:	Active collection
Duplication of collection:	No information

Availability:	Freely available
Quarantine:	No information
Evaluation:	Data are being published in crop specific catalogues
Documentation:	Manual

**INDIA**

Jute Agricultural Research Institute  
Barrackpore  
West Bengal

Telephone:  
Telex:  
Cable:

Curator/person in charge:	S.M. Chatterji
Details of collection:	<i>Corchorus capsularis</i> , 121 landraces from India, 57 hybrids, 35 introductions, and 57 genetic lines <i>C. olitorius</i> , 147 landraces from India, 14 introductions, 38 hybrids and 97 genetic lines <i>Corchorus</i> spp., 7 wild from India  <i>Hibiscus cannabinus</i> , 33 landraces from India, 56 introductions and 14 hybrids <i>H. sabdariffa</i> , 28 landraces from India, 27 introductions and 20 hybrids
Maintenance of collection:	Short-term seed storage at ambient temperatures
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No information
Evaluation:	Complete for: 18 morphological characters of leaf, stem, root, flower and pod; days to flowering; photoperiod sensitivity; leaf area index; net assimilation area; number and shape of fibre bundles; colour, lustre, strength and yield of fibres and disease ( <i>Fusarium</i> and <i>Anthraxnose</i> ) and pest resistance
Documentation:	Complete and manual

**IRAN**

Seed and Plant Improvement Institute (SPII)  
Ministry of Agriculture & Rural Development  
Mard-Abad Ave.  
Karadj

Telephone: (02221) 28 58  
Telex:  
Cable: SEEDPLANT, Karadj

Curator/person in charge:	M.A. Vahabian
Details of collection:	<i>Daucus carota</i> , 2 from Iran and 5 introductions <i>Lactuca sativa</i> var. <i>orientalis</i> , 8 from Iran and 29 introductions <i>Spinacia oleracea</i> , 4 from Iran and 1 introduction
Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information

**IRAN (cont.)**

Quarantine:	No information
Evaluation:	No information
Documentation:	No information

**IRAQ**

Plant Genetic Resources Unit  
Agricultural Research Centre  
Abu Ghraib - Baghdad

Telephone: (01) 511 22 01  
Telex:  
Cable: SBAAR - IRAQ

Curator/person in charge: A.T. Sharif

Details of collection: *Daucus carota*, 5

*Spinacia oleracea*, 2

All accessions are landraces from Iraq

Maintenance of collection: Short-term seed storage at 5°-10°C. Seeds in airtight cans. Storage capacity 40 m<sup>3</sup>

Duplication of collection: No information

Availability: Freely available

Quarantine: No information

Evaluation: On-going work

Documentation: Manual

**ISRAEL**

Israel Gene Bank for Agricultural Crops  
Volcani Centre  
ARO  
P.O. Box 6  
50-250 Bet Dagan

Telephone: (03) 968 34 58  
Telex: 381476 AROVC IL  
Cable:  
Telefax: 972-3-993998

Curator/person in charge: M. Zur

Details of collection: *Asparagus* spp., 20 landraces and cultivars from Europe and Israel

Maintenance of collection: Long-term seed storage at -10°C. Seeds in aluminium boxes of 1 kg capacity. Storage area 50 m<sup>2</sup>

Duplication of collection: No information

Availability: Available in limited quantity

Quarantine: Special conditions and treatment according to Plant Protection Law

Evaluation: Drought, salinity and disease resistance. High nutrition level

Documentation: Complete and computerized

## ITALY

Institute of Agronomy and Field Crops  
Via Valdisavoia, 5  
I-95123 Catania

Telephone: (95) 35 14 20  
Telex:  
Cable:

Curator/person in charge:	S. Foti
Details of collection:	<i>Cynara cardunculus</i> , 5 landraces, 10 old cultivars and 1 wild
Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

## ITALY

Research Institute for Vegetable Crops  
Via Cavalleggeri, 25  
I-84098 Pontecagnano (Salerno)

Telephone:  
Telex:  
Cable:

Curator/person in charge	A. Ferraro
Details of collection	<i>Lactuca sativa</i> , 50 old cultivars and 5 wild
Maintenance of collection	Room with controlled temperature, light and humidity
Duplication of collection	No information
Availability	No information
Quarantine	No information
Evaluation	No information
Documentation	No information

## ITALY

Department of Agrobiotechnology  
National Agency for Atomic Energy (ENEA)  
P.O. Box 2400  
C.R.E. Casaccia  
I-00100 Rome A.D.

Telephone: (06) 69481  
Telex: 613296 ENEACA I  
Cable: CASACCIA ENEA

Curator/person in charge	L. Rossi
Details of collection	<i>Cynara scolymus</i> , 20 accessions
Maintenance of collection	Long-term seed storage at -20°C Medium-term seed storage at 0°C
Duplication of collection	No information
Availability	No information
Quarantine	No information

**ITALY (cont.)**

**Evaluation:** Disease resistance, short stature, quality, mechanical harvest and stress resistance

**Documentation:** No information

**JAPAN**

National Institute of Agrobiological Resources (NIAR) Telephone: 02975-6-7050  
 Kannon-dai 2-1-2 Telex:  
 Tsukuba, Ibaraki 305 Cable: NIARTSUKUBA YATABE  
 Telefax: 02975-6-7408

**Curator/person in charge:** Head, Germplasm Storage Center

**Details of collection:** *Daucus carota*, 40 old and commercial cultivars from Japan  
*Lactuca sativa*, 8 old and commercial cultivars from Japan

**Maintenance of collection:** Long-term seed storage at -10°C  
 Medium-term seed storage at -1°C and 30% RH  
 Seeds with 6-7% m.c. in 1 to 3 PET containers of 430 ml

**Duplication of collection:** No information

**Availability:** Freely available for research purposes. A fee is applicable for private institutions

**Quarantine:** No information

**Evaluation:** Standard manual published by specialists' consent

**Documentation:** Computerized for passport data

**MEXICO**

Programa de Recursos Genéticos Telephone: 270 23  
 Centro de Investigaciones Forestales y Agropecuarias del Estado de Guanajuato Telex:  
 Instituto Nacional de Investigaciones Forestales y Agropecuarias (INIFAP) Cable:  
 km 6 carr. Celaya - S. Miguel Allende  
 Apartado Postal 112  
 Celaya, Guanajuato

**Curator/person in charge:** S. Montes Hernandez

**Details of collection:** *Physalis* spp., 220 landraces, wild species and cultivars from Mexico

**Maintenance of collection:** Short-term seed storage at ambient temperatures. Seeds in glassine paper envelopes inside screw-top glass containers

**Duplication of collection:** No information

**Availability:** Freely available

**Quarantine:** No information

**Evaluation:** On-going work

**Documentation:** Partial. Computerization in progress

## NETHERLANDS

BRUINSMA Selectiebedrijven B.V.  
P.O. Box 24  
Middelbroekweg, 67  
NL-2870 AA Naaldwyk

Telephone: (01740) 282 44  
Telex: 33154  
Cable: TOMKO

Curator/person in charge: L. van der Kruk  
Details of collection: *Lactuca* spp., 10 landraces, 35 old cultivars and 20 wild  
Maintenance of collection: Short-term seed storage at 18°C and 30% RH. Seeds in paper bags  
Duplication of collection: No information  
Availability: No information  
Quarantine: No information  
Evaluation: Disease resistance, yield and quality  
Documentation: No information

## NETHERLANDS

Bejo Zaden B.V.  
P.O. Box 9  
NL-1722 ZG Noordscharwoude

Telephone: (02260) 140 41  
Telex: 57140 BEJO NL  
Cable:  
Telefax: (02260) 12772

Curator/person in charge: P.A. Beemsterboer  
Details of collection: *Daucus carota*, 30 old cultivars  
Maintenance of collection: Long-term seed storage at -26°C  
Short-term seed storage at 15°C and 55% RH  
Duplication of collection: CGN, Wageningen, Netherlands  
Availability: Available at: CGN, Wageningen, Netherlands  
Quarantine: No information  
Evaluation: Disease resistance and quality improvement  
Documentation: No information

## NETHERLANDS

Centre for Genetic Resources  
the Netherlands (CGN)  
P.O. Box 224  
NL-6700 AE Wageningen

Telephone: (08370) 191 23  
Telex: 75044 DLOWA NL  
Cable:  
Telefax: (08370) 180 94

Curator/person in charge: I.W. Boukema  
Details of collection: *Lactuca aculeata*, 1  
*L. altaica*, 1  
*L. dregeana*, 2  
*L. saligna*, 48

**NETHERLANDS (cont.)**

- Details of collection:** *Lactuca sativa* (unknown cultivar group), 113  
 (cont.) group butterhead lettuce, 523  
 group cos lettuce, 121  
 group crisp lettuce, 134  
 group cutting lettuce, 96  
 group latin lettuce, 39  
 group stalk lettuce, 29  
*L. serriola* or *L. sativa*, group oil seed lettuce, 8  
*L. serriola*, 389  
*L. virosa*, 42  
*L. sativa* x *L. serriola*, 3  
*Lactuca* spp., 49 wild and 6 other accessions  
 Species or genera related to *Lactuca*, 18  
 Total 1622 accessions, being 1055 cultivars and 567 wild, world-wide representation  
 Cultivated material donated by ZIGuK, Gatersleben, DDR; IVT, Netherlands; AARI, Turkey; NPCGS, USA and VIR, Leningrad, USSR  
 Wild material, IVT expedition in Israel and donated by Volcani Centre, Israel; many Botanical Gardens and NPCGS, USA
- Spinacia oleracea*, 344 accessions including cultivars from Europe (mainly Netherlands); landraces, mostly from Turkey and some from PR China and India; and 2 wild from Iran. All accessions donated by IVT, Netherlands, AARI, Turkey and NPCGS, USA  
*S. tetandra*, 2 wild donated by IVT, Netherlands  
*S. turkestanica*, 10 landraces and wild from USSR, donated by IVT, Netherlands
- Maintenance of collection:** Long-term seed storage at -20°C. Seeds in aluminium laminated foil packets  
 Short-term seed storage at 15°C and 15% RH
- Duplication of collection:** *Lactuca*: to be duplicated in a near future at IHR, Wellesbourne, UK  
*Spinacia*: not yet duplicated
- Availability:** Available on exchange basis
- Quarantine:** No known restrictions
- Evaluation:** *Lactuca*: disease resistance, stress tolerance and quality  
 On-going characterization for: seed colour; seedling and leaf anthocyanin content, distribution and pattern; leaf colour, division, blistering, margin undulation and venation; heart formation; head leaves overlap; head shape; plant diameter; bolting time; head height; homogeneity; seedling cotyledon shape and colour; leaf thickness; tipburn sensitivity and side shoot formation tend  
*Spinacia*: on-going for nitrate content, disease resistance, etc.
- Documentation:** Computerized for passport and some characterization data

**NIGERIA**

National Centre for Genetic Resources  
 and Biotechnology (NACGRAB)  
 Moor Plantation  
 PMB 5382  
 Ibadan

Telephone: (022) 31 26 70 / 31 26 22  
 Telex:  
 Cable: GENE BANK

Curator/person in charge: P.E. Onuorah

**Details of collection:** *Basella* spp., 29 accessions  
*Cichorium* spp., 1 accession

<b>Details of collection:</b> (cont.)	<i>Corchorus</i> spp., 28 accessions
	<i>Lactuca</i> spp., 11 accessions
	<i>Petroselinum</i> spp., 2 accessions
	<i>Physalis</i> spp., 2 accessions
	<i>Spinacia</i> spp., 6 accessions
	<i>Talinum</i> spp., 8 accessions
<b>Maintenance of collection:</b>	Long-term seed storage
<b>Duplication of collection:</b>	No information
<b>Availability:</b>	Available in limited quantity
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	No information
<b>Documentation:</b>	Manual. Passport data available

## PAKISTAN

Plant Genetic Resources Laboratory  
National Agricultural Research Centre  
Pakistan Agricultural Research Council (PARC)  
P O. Box 1031  
Islamabad

Telephone: 82 00 53 33  
Telex: 5604 PARC PAK  
Cable: AGRESCOUNCIL

<b>Curator/person in charge:</b>	R. Anwar
<b>Details of collection:</b>	<i>Daucus carota</i> , 5 <i>Spinacia oleracea</i> , 12 All accessions are primitive cultivars from Pakistan
<b>Maintenance of collection:</b>	Medium-term seed storage at 5°C +1°C. Seeds in cans
<b>Duplication of collection:</b>	At several International Research Centres
<b>Availability:</b>	Freely available provided there is sufficient seed
<b>Quarantine:</b>	Imported seeds must possess phytosanitary certificate and import permit. Export of seeds accompanied with phytosanitary certificate
<b>Evaluation:</b>	Partial
<b>Documentation:</b>	Manual

## PHILIPPINES

National Plant Genetic Resources Laboratory (NPGRL)  
Institute of Plant Breeding (IPB)  
University of the Philippines at Los Baños  
College, Laguna

Telephone: (63) 833 35 28  
Telex: 3432 PTLBK PU  
Cable: PLANTBREED PHILIPPINES

<b>Curator/person in charge:</b>	N.C. Altoveros
<b>Details of collection:</b>	<i>Basella rubra</i> , 14

**PHILIPPINES (cont.)**

- Details of collection: *Moringa oleifera*, 35  
(cont.) *Talinum triangulare*, 3  
All accessions are landraces from the Philippines
- Maintenance of collection: Long-term seed storage at -20°C  
Medium-term seed storage at 5°C and 40% RH. Seeds with 6% m.c. in glass bottles  
The Institute has accepted responsibility for maintaining a Southeast Asia vegetables regional collection for long-term conservation
- Duplication of collection: Not duplicated
- Availability: Available on exchange basis
- Quarantine: Import permit required
- Evaluation: Complete
- Documentation: Computerized and complete

**POLAND**

- National Department of Plant Genetic Resources  
Plant Breeding and Acclimatization Institute  
Radzików n/ Warsaw  
05-870 Blonie
- Telephone: (22) 55 26 11 / 4  
Telex: 812914 IHAR PL  
Cable:
- Curator/person in charge: St. Goral / T. Kotlinska
- Details of collection: *Anethum graveolens*, 1  
*Apium graveolens*, 4 cultivars from Poland  
*Cichorium intybus* var. *foliosum*, 1 cultivar  
*C. intybus* var. *sativum*, 4 cultivars from Poland  
*Daucus carota*, 12 cultivars from Poland  
*Lactuca sativa*, 12 cultivars from DDR and Poland  
*Petroselinum crispum*, 3 cultivars from Poland  
*Rheum palmatum*, 1  
*Spinacia oleracea*, 4 cultivars from the Netherlands and Poland
- Maintenance of collection: Long-term seed storage at -15°C  
Medium-term seed storage at 0°C  
Seeds with 5-7% m.c. in glass containers sealed under vacuum
- Duplication of collection: No information
- Availability: Available on exchange basis. Index Seminum issued
- Quarantine: No known restrictions
- Evaluation: On-going work
- Documentation: Computerized for passport data

**SOUTH AFRICA, REPUBLIC OF**

Department of Agricultural Economics and Marketing  
 Directorate of Plant and Liquor Control  
 Private Bag X 179  
 0001 Pretoria

Telephone: (012) 206 24 06  
 Telex: 3-23264  
 Cable: SATIVA PRETORIA  
 Telefax: (012) 206 27 86

Curator/person in charge: H. Chamberlain

Details of collection: *Cichorium endivia*, 3 cultivars from Italy, Netherlands and USA

*Daucus carota*, 3 cultivars from Rep. of South Africa

*Lactuca sativa*, 6 landraces and cultivars from UK and USA

Maintenance of collection: Long-term seed storage at -20°C. Seeds in vacuum sealed aluminium laminated foil packets (small part of the collection)  
 Short-term seed storage at 6°-7°C and 45% RH. Seeds in plastic containers

Duplication of collection: At different Crop Research Institutes in the Rep. of South Africa

Availability: Available in limited quantity (0.5/300 g) and on exchange basis. Index  
 Seminum issued yearly  
 Requests to: The Plant Introduction Officer (same address)

Quarantine: *Cichorium*: Declaration on the phytosanitary certificate that the seed has been treated with an appropriate fungicide especially against *Alternaria cichorii*

*Daucus*: No known restrictions

*Lactuca*: Additional declaration on the phytosanitary certificate that the level of infection with *Lactuca* mosaic virus in the seed did not exceed 0.1% by indexing; or parent plants were inspected during active growth and visible infection in the field did not exceed 2%

Evaluation: On-going work

Documentation: Complete and computerized

**SPAIN**

Banco de Germoplasma  
 Departamento de Horticultura  
 Servicio de Investigación Agraria (DGA)  
 P.O. Box 727  
 Zaragoza

Telephone: (76) 57 63 11  
 Telex: 58194 IDAE E  
 Cable:  
 Telefax: (76) 575501

Curator/person in charge: M. Carravedo

Details of collection: *Apium graveolens*, 3 landraces

*Asparagus acutifolius*, 1 wild

*Cichorium endivia*, 6

*Cynara cardunculus*, 8 landraces

*Daucus carota*, 2 landraces

*Foeniculum vulgare*, 1 wild

*Lactuca sativa*, 75 landraces and 74 old cultivars

*Petroselinum crispum*, 10 landraces

*Spinacia oleracea*, 8 landraces

**SPAIN (cont.)**

- Maintenance of collection:** Medium-term seed storage at 0°-4°C. Seeds in glass flasks with silica gel
- Duplication of collection:** *L. sativa*: partially at Banco de Germoplasma, Alcalá de Henares, Spain
- Availability:** Available with some restrictions
- Quarantine:** No known restrictions
- Evaluation:** *L. sativa*: complete for 36 accessions for: seed weight; sowing and transplanting date; seed colour; anthocyanic pigmentation of hypocotils and cotyledons; cotyledons colour; lettuce type; plant size; length/width ratio; upper and lower dentate of leaf; leaf colour; presence of anthocyanin in leaf; headed lettuce; leaf veins; and number of days to flowering
- Documentation:** Passport data computerized

**SWITZERLAND**

- Eidgenössische Forschungsanstalt  
für Obst-, Wein und Gartenbau  
CH-8820 Wädenswil
- Telephone: (01) 780 13 33  
Telex:  
Cable:
- Curator/person in charge:** F. Kobel
- Details of collection:** *Daucus carota*, 1  
*Foeniculum* spp., 2
- Maintenance of collection:** No information
- Duplication of collection:** No information
- Availability:** No information
- Quarantine:** No information
- Evaluation:** Performance, disease resistance, edible properties and shelf-life
- Documentation:** No information

**THAILAND**

- Department of Horticulture  
Faculty of Agriculture  
Kasetsart University  
Bangken  
Bangkok 9
- Telephone:  
Telex:  
Cable:
- Curator/person in charge:** M.L. Anothai Choomsai
- Details of collection:** *Ipomoea aquatica*, 50 landraces from Thailand
- Maintenance of collection:** Active collection
- Duplication of collection:** No information
- Availability:** Freely available
- Quarantine:** No information
- Evaluation:** No information
- Documentation:** Manual

**TURKEY**

Aegean Agricultural Research Institute (AARI)  
P.O. Box 9  
35661 Menemen - Izmir

Telephone: (51) 14 91 31  
Telex:  
Cable:

Curator/person in charge: The Directorate

Details of collection: *Daucus carota*, 35 landraces  
*Lactuca* spp., 71 landraces and 69 wild  
*Spinacia oleracea*, 103 landraces

Maintenance of collection: Long-term seed storage at -20°C. Seeds in metal cans  
Medium-term seed storage at 0°C

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: Stripe and stem rust resistance

Documentation: No information

**UNION OF SOVIET SOCIALIST REPUBLICS**

The N.I. Vavilov Institute of Plant Industry (VIR)  
44, Herzen str.  
Leningrad 190000

Telephone: (314) 48 48  
Telex:  
Cable:

Curator/person in charge: V.I. Krivchenko

Details of collection: *Anethum graveolens*, 335 local populations collected in Asia, Eastern Europe, Northern Africa, few breeding varieties from Canada, Denmark, Sweden and USA, including 215 accessions in the main catalogue. World-wide representation

*Apium graveolens*, 250 breeding varieties and local populations, including 150 accessions in the main catalogue and 100 in the temporary catalogue. World-wide representation

*Coriandrum sativum*, 490 local populations and a few breeding varieties, including 290 accessions in the main catalogue and 200 in the temporary catalogue. Collection representing the main cultivation areas

*Daucus carota*, 1700 breeding varieties and local populations, including 1000 accessions in the main catalogue and 700 in the temporary catalogue. World-wide representation

*Foeniculum vulgare*, 170 local populations and a few breeding varieties, including 100 accessions in the main catalogue and 70 in the temporary catalogue. Collection representing the main cultivation areas

*Lactuca sativa*, 980 landraces and American and European breeding varieties, including 580 accessions in the main catalogue and 400 in the temporary catalogue. World-wide representation

*Pastinaca sativa*, 50 breeding varieties and local populations, including 30 accessions in the main catalogue and 20 in the temporary catalogue. World-wide representation

**UNION OF SOVIET SOCIALIST REPUBLICS (cont.)**

- Details of collection:** *Petroselinum crispum*, 100 breeding varieties and local populations, including 30 accessions in the main catalogue and 70 in the temporary catalogue. World-wide representation
- Physalis ixocarpa*  
*P. pubescens*  
50 local populations, breeding varieties and hybrids. Collection representing all cultivation areas
- Spinacia oleracea*, 365 local forms from Asia and varieties and F<sub>1</sub> hybrids from Europe. World-wide representation
- Maintenance of collection:** Long-term seed storage at -10°C. Medium-term seed storage at 4°C. Seeds with 5-7% m.c. (*Apium graveolens*), 4-5% m.c. (*Anethum graveolens*), 3-4% m.c. (*D. carota*), 2-5% m.c. (*F. vulgare*), 2-5% m.c. (*L. sativa*), 5-6% m.c. (*P. sativa*), 6-7% m.c. (*P. crispum*) and 8% m.c. (*S. oleracea*) in sealed glass containers
- Duplication of collection:** Partially at PGR, Ottawa, Canada; ZIGuK, Gatersleben, DDR; Istituto del Germoplasma, Bari, Italy and NSSL, USA
- Availability:** Available in accordance with the Exchange Catalogue regularly issued
- Quarantine:** According to the International Convention on Phytosanitary Plant Protection
- Evaluation:** Field and laboratory evaluation: Botanical, biological, biochemical, immunological and economically valuable characters
- Documentation:** Passport data almost completely computerized. Manual for the rest
- NB - Samples received at the Institute are given temporary catalogue numbers. Some may be included in the permanent collection after 2-3 years trials, elimination of duplicates and low-value breeding lines*

**UNITED KINGDOM**

- Institute of Horticultural Research (IHR)  
Wellesbourne  
Warwick CV35 9EF
- Telephone: (0789) 47 03 82  
Telex:  
Cable:  
Telefax: (0789) 47 05 52
- Curator/person in charge:** D. Astley
- Details of collection:** *Apium graveolens* var. *dulce*, 62 accessions
- Daucus carota*, 502 cultivated and 43 wild
- Lactuca saligna*, 15  
*L. sativa*, 1218  
*L. serriola*, 86  
*L. virosa*, 39  
All accessions are cultivars
- Maintenance of collection:** Long-term seed storage at -20°C. Seeds with 5-6% m.c. Storage capacity 108 m<sup>3</sup>
- Duplication of collection:** Partially at CGN, Wageningen, Netherlands
- Availability:** Freely available provided there is sufficient seed
- Quarantine:** No restrictions for seed but there are restrictions for vegetative material
- Evaluation:** 50% of the *Lactuca* collection has been screened and is lettuce virus free
- Documentation:** Complete and computerized

**UNITED KINGDOM**

Royal Botanic Gardens  
Kew and Wakehurst Place  
Wakehurst Place  
Ardingly  
Haywards Heath  
West Sussex RH17 6 TN

Telephone: (0444) 89 27 01  
Telex: 296694 KEWGAR (Attn.  
SEEDBANK)  
Cable:

Curator/person in charge: S. Linington

Details of collection: *Daucus carota*, 7 wild from Poland, Portugal, Spain and UK  
*D. gracilis*, 1 from Morocco

*Lactuca serriola*, 2 wild from Romania and UK  
*L. virosa*, 2 wild from Italy

Maintenance of collection: Long-term seed storage at -20°C. Seeds with 4-6% m.c. in aluminium cans, universal bottles or glass jars

Duplication of collection: No information

Availability: Freely available. Seed list issued

Quarantine: No restrictions

Evaluation: Germination of dormant seeds, verified identification

Documentation: Complete and computerized

**UNITED STATES OF AMERICA**

North Central Regional Plant Introduction Station  
Iowa State University  
USDA - ARS  
Ames, Iowa 50011

Telephone: (515) 294-32 55  
Telex:  
Cable:

Curator/person in charge: R.L. Clark / K.R. Reitsma

Details of collection: *Daucus carota*, 560  
*Daucus* spp., 40  
All accessions are populations, cultivars and breeding lines from various countries

Maintenance of collection: Medium-term seed storage at 4°C and 35-40% RH. Seeds in screw-top glass jars

Duplication of collection: NSSL, Fort Collins, USA

Availability: Freely available

Quarantine: No known restrictions

Evaluation: Data on 18 plant descriptors collected when accessions are multiplied

Documentation: Computerized and complete. Database for Germplasm Resources Information Network (GRIN), National Agricultural Library, Beltsville, USA

**UNITED STATES OF AMERICA**

National Seed Storage Laboratory (NSSL)  
 US Department of Agriculture (USDA)  
 Agricultural Research Service (ARS)  
 Colorado State University Campus  
 Fort Collins, Colorado 80523

Telephone: (303) 484 04 02  
 Telex: 237401714 DNPA UC  
 Cable:  
 Telefax: (303) 221 14 27

Curator/person in charge: S.A. Eberhart

Details of collection: *Apium graveolens*, 146  
*Daucus carota*, 320  
*Daucus* spp., 6 accessions of 4 species

*Lactuca sativa*, 869  
*Lactuca* spp., 29 accessions of 7 species

*Spinacia oleracea*, 251  
 All accessions are landraces and cultivars. World-wide representation

Maintenance of collection: Long-term seed storage at -18°C. Seeds in aluminium laminated foil packets

Duplication of collection: As active collections at Regional Plant Introduction Stations:  
*Apium*, at Geneva, New York, USA  
*Daucus* and *Spinacia*, at Ames, Iowa, USA  
*Lactuca*, at Pullman, Washington, USA

Availability: Freely available only if not available from the active collections

Quarantine: No information

Evaluation: Responsibility of the Station holding the active collection

Documentation: All data are computerized in GRIN (Germplasm Resources Information Network). The GRIN system resides on a Prime Computer in Beltsville, MD, USA

**UNITED STATES OF AMERICA**

Northeast Regional Plant Introduction  
 Station (NE-9)  
 New York State Agricultural Experiment Station  
 US Department of Agriculture (USDA)  
 Geneva, New York 14456

Telephone:  
 Telex:  
 Cable:

Curator/person in charge: D. Dolan

Details of collection: *Apium graveolens* var. *rapaceum*, 84

*Asparagus* spp., 41

*Daucus* spp., 221

*Lactuca* spp., 234

*Spinacia* spp., 187

All accessions are landraces, wild species and cultivars. World-wide representation

<b>Maintenance of collection:</b>	Medium-term seed storage at 4°C and 28% RH. Seeds in moisture proof aluminium laminated foil packets. Storage capacity 102 m <sup>3</sup> Short-term seed storage at 10°C and 28% RH. Seeds in paper envelopes. Storage capacity 40.7 m <sup>3</sup>
<b>Duplication of collection:</b>	<i>Apium</i> : As a base collection at NSSL, Fort Collins, USA <i>Asparagus</i> , <i>Daucus</i> and <i>Spinacia</i> : At Regional Introduction Station, Ames, Iowa, USA <i>Lactuca</i> : At Regional Plant Introduction Station, Pullman, Washington, USA
<b>Availability:</b>	Freely available. Requests through: G. White, Plant Introduction Officer, Beltsville Agricultural Research Centre, Beltsville, Maryland 20705, USA
<b>Quarantine:</b>	No information
<b>Evaluation:</b>	<i>Apium</i> complete for: Uniformity, habit, vigour, plant height and width, crown width, petiole length and diameter, number of petioles, number of split petioles, colour of petioles, type of petioles (hollow or solid), leafiness, leaf colour and storage quality <i>Asparagus</i> , <i>Daucus</i> , <i>Lactuca</i> and <i>Spinacia</i> complete. Full details at Regional Plant Introduction Stations with major responsibility for these genera
<b>Documentation:</b>	Complete and computerized for <i>Apium</i> . Complete and manual for other genera

#### UNITED STATES OF AMERICA

Western Regional Plant Introduction Station (W-6) US Department of Agriculture (USDA) Washington State University Room 59, Johnson Hall Pullman, Washington 99163-6402	Telephone: (509) 335 15 02 Telex: Cable: Telefax: (509) 335 66 49
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Curator/person in charge: S. Dietz

Details of collection:	<i>Lactuca altaica</i> , 1 <i>L. dreyerana</i> , 1 <i>L. indica</i> , 1 <i>L. livida</i> , 1 <i>L. perennis</i> , 5 <i>L. saligna</i> , 16 <i>L. sativa</i> , 696 <i>L. sativa</i> var. <i>capitata</i> , 5 <i>L. serriola</i> , 145 <i>L. serriola</i> f. <i>integrifolia</i> , 1 <i>L. virosa</i> , 8 <i>Lactuca</i> spp., 3 Accessions from: Afghanistan (10), Argentina (2), Belgium (8), PR China (4), Czechoslovakia (9), Denmark (2), DDR (42), Egypt (6), Ethiopia (1), France (5), FRG (3), Greece (49), Hungary (56), India (6), Iran (29), Iraq (2), Israel (6), Italy (5), Japan (2), Kenya (2), Korea (5), Malta (1), Netherlands (138), Pakistan (6), Poland (13), Portugal (3), Romania (3), Rep. of South Africa (1), Spain (10), Sweden (2), Syria (5), Taiwan (2), Thailand (1), Turkey (347), UK (4), USSR (16) and Yugoslavia (76)
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<b>Maintenance of collection:</b>	Medium-term seed storage at 4°C and 40% RH. Seeds 6.1% m.c. in envelopes which are kept in cabinet drawers
<b>Duplication of collection:</b>	Partially, 69.3% (611 acc.) duplicated as base collection at NSSL, Fort Collins, USA

**UNITED STATES OF AMERICA (cont.)**

- Availability:** 740 accessions available
- Quarantine:** No special regulations or restrictions. All non-USA orders go through quarantine in Beltsville, USA
- Evaluation:** On-going work for 19 descriptors. Contains characteristic data on *Lactuca* accessions as proposed by the Leafy Vegetables crop Advisory Committee (CAC). For additional information on evaluation, contact R. Hannon at the Western RPIS in Pullman, WA, USA. Telephone: (509) 335 15 02
- Documentation:** All PIs assigned after 1979 have passport data computerized. All PIs assigned before 1979 have limited data computerized. Data available in hard copy

**UNITED STATES OF AMERICA**

Vegetable Production Research Unit  
Agricultural Research Station Telex:  
US Department of Agriculture (USDA)  
P.O. Box 5098  
Salinas, California 93915

Telephone:

Cable:

**Curator/person in charge:** E.J. Ryder / N.E. De Vos / J.D. McCreight

- Details of collection:** *Cichorium endivia*, 75  
*C. intybus*, 50  
Commercial cultivars donated by seed companies in Europe and North America
- Cynara scolymus*, 30 breeders' lines and 15 single plant samples of commercial clones from France, Italy and Spain  
*C. syriaca*, 3 wild types from Italy and Spain
- Lactuca sativa*, 400 commercial cultivars and breeding lines world-wide (single plant samples) and 200 PI accessions majority single plant samples of landraces, wild types and commercial cultivars world-wide  
*L. saligna*  
*L. serriola*  
*L. virosa*  
*Lactuca* spp.  
Total of 60 landraces and wild types world-wide
- Maintenance of collection:** *Cichorium* and *Lactuca*: Long-term seed storage at -18°C and 50% RH. Storage capacity 2.3 m<sup>3</sup>  
*Cynara*: Short-term seed storage at ambient temperatures. Clonal material in a Field Genebank
- Duplication of collection:** Western Regional Plant Introduction Station, Pullman, Washington, USA
- Availability:** Mostly available at Western Regional Plant Introduction Station, Pullman, Washington, USA
- Quarantine:** No information
- Evaluation:** *Cichorium*: type; disease resistance and other characteristics  
*Cynara*: artichoke plume moth (*Platyptilia carduidactyla*) resistance; frost resistance and a number of production characteristics  
*Lactuca*: type; resistance to lettuce mosaic virus, big vein and *Sclerotinia* diseases and other characteristics
- Documentation:** Partial and manual

## Index

This index comprises only the species appearing in the 'Details of collection' sections of the directory, and, within any genus, the entries are in alphabetical order, with the exceptions that any entry for 'spp.' occurs last in the simple species list, followed by hybrid forms.

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