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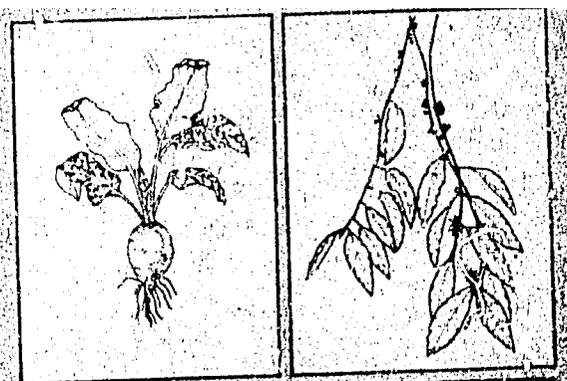
DIRECTORY OF GERmplasm COLLECTIONS



5.11 INDUSTRIAL CROPS

BEEt, COFFEE, OIL PALM,
COTTON AND RUBBER

Battersaunt
J. Konopka



INTERNATIONAL
BOARD FOR
PLANT
GENETIC
RESOURCES

IBPGR DIRECTORIES OF GERmplasm COLLECTIONS

1. I Food Legumes (except Soyabean)^{1/}
1. II Soyabean^{1/}
2. Root and Tuber Crops (Aroids, Cassava, Potato, Sweet Potato, Yams and Others). 2nd edition, 1986.
3. I Cereals: Wheat (1980)^{2/}
3. II Cereals: Maize (1980)^{2/}
3. III Cereals: Rice (1980)^{2/}
3. IV Cereals: Sorghum and Millets (1981)^{2/}
3. V Cereals: Barley (1982)^{2/}
4. Vegetables (1982)
5. I Industrial Crops (Cacao, Coconut, Piper, Sugarcane and Tea) (1981)
5. II Industrial Crops (Beet, Coffee, Oil Palm, Coffee and Rubber) (1988)
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. It has been revised and split into two parts.

^{2/} Revised version to be published in 1989.

Other IBPGR publications of relevance to the crops covered in this Directory are:

- Descriptors for Beet (1980)
- Descriptors for Cotton (1985)
- Genetic Resources of Coffee (1980) (including descriptors)
- Genetic Resources of Hevea (1984)
- Report of IBPGR Working Group on Oil Palm Genetic Resources
Rome, 19-21 September 1984 (AGPG:IBPGR/84/135)

IBPGR publications covering aspects of in vitro work relevant to genebanks include:

IBPGR Advisory Committee on In Vitro Storage. 1988. Conservation and Movement of Vegetatively Propagated Germplasm: In Vitro Culture and Disease Aspects. International Board for Plant Genetic Resources, Rome.

Simpson M.J.A. and Withers, L.A. 1986. Characterization of Plant Genetic Resources Using Isozyme Electrophoresis: A Guide to the Literature. International Board for Plant Genetic Resources, Rome.

Scowcroft, W.R. 1984. Genetic Variability in Tissue Culture: Impact on Conservation and Utilization. International Board for Plant Genetic Resources, Rome.

Withers, L.A. 1980. Tissue Culture Storage for Genetic Conservation. International Board for Plant Genetic Resources, Rome.

Withers, L.A. 1982. Institutes Working on Tissue Culture for Genetic Conservation. International Board for Plant Genetic Resources, Rome.

For information on coverage of and access to the IBPGR In Vitro Database consult:

Whehlans, K. and Withers, L.A. 1984. The IBPGR International Database on In Vitro Conservation. FAO/IBPGR Plant Genetic Resources Newsletter, 6(1): 33-38.

DIRECTORY OF GERMPLASM COLLECTIONS

5. II. INDUSTRIAL CROPS

*BEET, COFFEE, OIL PALM
COTTON AND RUBBER*

*E. Bettencourt
J. Konopka*

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 collection, 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 World Bank

The designations employed, and the presentation of material in this Directory, do not imply the expression of any opinion whatsoever on the part of the International Board for Plant Genetic Resources or the Food and Agriculture Organization of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries

Citation:

IBPGR. 1988. Directory of Germplasm Collections. 5. II. Industrial Crops: Beet, Coffee, Oil Palm, Cotton and Rubber. Bettencourt, E. and Konopka, J. International Board for Plant Genetic Resources, Rome

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IBPGR Headquarters
c/o FAO
Via delle Terme di Caracalla
00100 Rome
Italy

Foreword

The present directory is the second part of the one published in 1981 which included cacao, coconut, pepper, sugarcane and tea.

Beet is included here, for the purpose of the IBPGR directories, although strictly speaking it could belong in the root and tubers and in vegetables directories.

The format differs from the first part 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 those 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, used to identify accessions in collections.

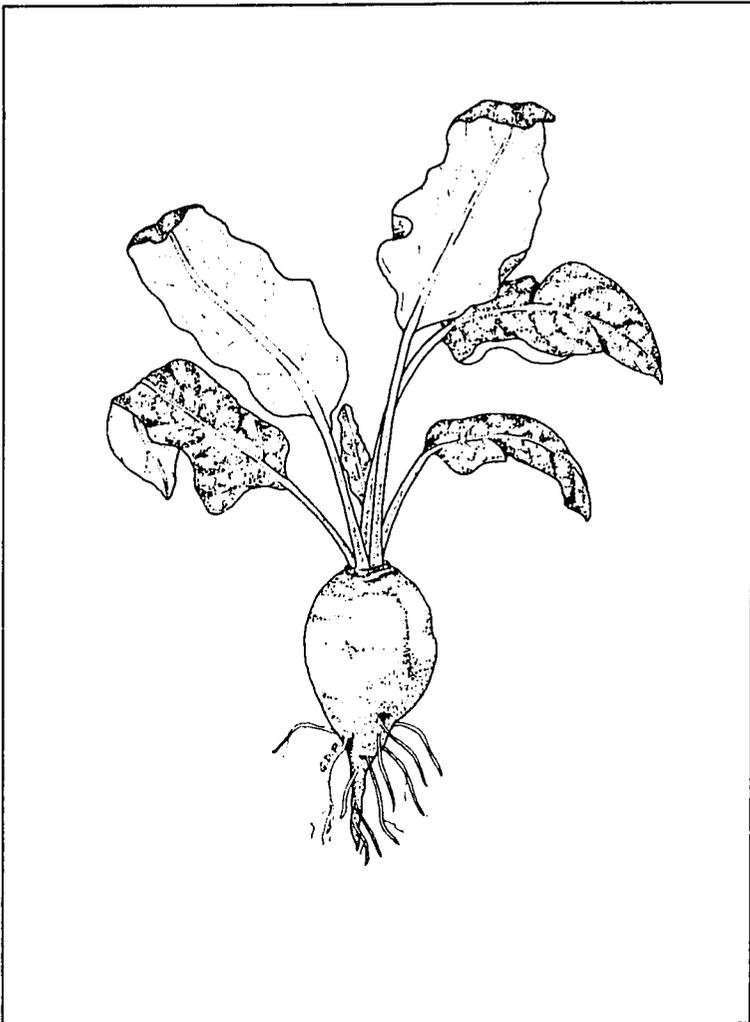
It is the hope of IBPGR that this directory will prove useful, and that it will act as a catalyst in stimulating interest in the conservation and use of the genetic resources of industrial crops

J.T. Williams
Director
IBPGR

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Beta



BELGIUM

BETA

Government Plant Breeding Station
Government Agricultural Research Centre-Ghent
Burgemeesters van Gansberghelaan, 109
B-9220 Merelbeke

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

Curator/person in charge: E. van Bockstaele
Details of collection: Beta vulgaris subsp. vulgaris (fodder), 12 landraces and 10 old cultivars
Maintenance of collection: Long-term seed storage at -20°C and medium-term seed storage at 5°C and 35% RH
Duplication of collection: No information
Availability: No information
Quarantine: No information
Evaluation: Yield and disease resistance
Documentation: No information

CZECHOSLOVAKIA

Research and Breeding Institute of Beets
294 46 Semčice

Telephone: (Mladá Boleslav) 98 81 81
Telex: 123643 VSUR C
Cable:

Curator/person in charge: D. Cejková
Details of collection: Beta vulgaris subsp. vulgaris, 234 commercial cultivars from 22 countries
Beta spp., 60 commercial cultivars
Maintenance of collection: As seeds. Short-term seed storage at ambient temperatures
Duplication of collection: No information
Availability: Freely available
Quarantine: No information
Evaluation: Complex evaluation and utilization
Documentation: Published in research reports

FEDERAL REPUBLIC OF GERMANY

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

Telephone: (0531) 59 66 00
Telex:
Cable: Landforschung, Völknerode

Curator/person in charge: M. Dambroth
Details of collection: Beta atriplicifolia, 1 wild
B. intermedia, 206 wild accessions from Netherlands (1), Turkey (201) and unknown origin (4)
B. lomatogona, 85 wild accessions from Morocco (1), Turkey (83) and unknown origin (1); 3 ecotypes of unknown origin
B. macrorhiza, 29 wild accessions from Turkey (27), USSR (1) and unknown origin (1)

BETA

Details of collection: (cont.)	<p><u>Beta patellaris</u>, 17 wild accessions from Morocco (2), Portugal (1), Spain (11), Turkey (2) and unknown (1)</p> <p><u>B. procumbens</u>, 2 wild accessions from Spain (1) and unknown (1)</p> <p><u>B. trigyna</u>, 93 wild accessions from Morocco (2), Turkey (83), USA (1), USSR (1) and unknown (6). 3 ecotypes of unknown origin</p> <p><u>B. vulgaris</u> subsp. <u>adanensis</u>, 3 wild accessions from Turkey</p> <p><u>B. vulgaris</u> subsp. <u>macrocarpa</u>, 4 wild accessions from Algeria (1), Tunisia (2) and Turkey (1)</p> <p><u>B. vulgaris</u> subsp. <u>maritima</u>, 39 wild accessions from France (1), Greece (36), Spain (1) and Sweden (1)</p> <p><u>B. vulgaris</u> subsp. <u>patula</u>, 1 wild accession from Portugal</p> <p><u>B. vulgaris</u> subsp. <u>trojana</u>, 5 wild accessions from Turkey</p> <p><u>B. vulgaris</u> subsp. <u>vulgaris</u>, 74 accessions from Afghanistan (2), Ethiopia (1), FRG (1), India (30), Iran (1), Lebanon (3), Pakistan (6), Sweden (1), Syria (4), Turkey (22), USSR (3). 13 cultivars from Greece (5). India (3), USSR (1) and Yugoslavia (4); 380 wild accessions from Algeria (1), Greece (103), Italy (175), Spain (1), Tunisia (1), Turkey (86), unknown (3); 51 populations from Afghanistan (1), Greece (11), India (2), Iran (3), Pakistan (1), Poland (2), Syria (1), Turkey (25), unknown (5); 83 primitive cultivars from Greece</p> <p><u>B. vulgaris</u> subsp. <u>vulgaris</u> var. <u>alba</u>, 97 accessions from Afghanistan (4), Canada (1), China (1), Egypt (1), FRG (1), Iran (9), Syria (2), Turkey (64) and unknown (14), 33 cultivars from Canada (2), China (1), GDR (1), Italy (1), Netherlands (1), Poland (1), Sweden (1), UK (1), USSR (1), Yugoslavia (1) and unknown (22). 4 landraces and 1 hybrid from FRG</p> <p><u>B. vulgaris</u> subsp. <u>vulgaris</u> var. <u>altissima</u>, 70 accessions from Afghanistan (4), Ethiopia (1), India (1), Iran (3), Iraq (1), Pakistan (1), Poland (19), Turkey (32), USSR (2), Yugoslavia (2) and unknown (4); 14 cultivars from FRG (4), USSR (8), Yugoslavia (1) and unknown (1); 2 ecotypes, 5 hybrids, 1 landrace, 42 breeding lines and 8 populations from Turkey.</p> <p><u>B. vulgaris</u> subsp. <u>vulgaris</u> var. <u>conditiva</u>, 43 accessions from Burma (1), India (10), Iran (5), Iraq (1), Lebanon (1), Poland (3), Sweden (4), Syria (1), Turkey (13), USSR (1) and unknown (3); 43 cultivars from: Afghanistan (1), Netherlands (4), China (2), FRG (2), USA (1), Yugoslavia (8) and unknown (25); 18 populations from Greece (3), FRG (5) and Turkey (10); 2 landraces from FRG</p> <p><u>B. vulgaris</u> subsp. <u>vulgaris</u> var. <u>vulgaris</u>, 4 populations from Turkey</p> <p><u>B. vulgaris</u> var. <u>altissima</u>, 9 accessions</p> <p><u>B. webbiana</u>, 3 wild accessions from Spain (1) and unknown (2)</p>
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Maintenance of collection:	As seeds: long-term seed storage at -10°C, seeds with 4% to 8% moisture content, in airtight tins. This is an IBPGR base collection
Duplication of collection:	No information
Availability:	Freely available provided sufficient seeds in store
Quarantine:	No known restrictions
Evaluation:	Partial evaluation has been done
Documentation:	Computerized. Passport and some evaluation data available from L. Seidewitz who is in charge of documentation and information

FEDERAL REPUBLIC OF GERMANY

KWS Kleinwanzlebener Saat-zucht AG
 Vorn. Rabbethge und Giesecke
 Postfach 146, D-3352 Einbeck

Telephone: (05561) 31 11
 Telex: 0965612 D
 Cable:

Curator/person in charge: G. Diener

FEDERAL REPUBLIC OF GERMANY (cont.)

BETA

Details of collection: Beta lomatogora
B. macrorrhiza
B. trigyna
B. vulgaris subsp. maritima
B. vulgaris subsp. vulgaris
Beta spp., 300 accessions

Maintenance of collection: As seeds, in coldstore

Duplication of collection: Greek Gene Bank, Thessaloniki and NSSL, Fort Collins, USA

Availability: Freely available

Quarantine: No known restrictions

Evaluation: Most of the material has been evaluated

Documentation: Complete. Partially computerized

FRANCE

Institut de Recherche Mennesson
P.O. Box 19
Pinon
F-02320 Anizy-le-Chateau

Telephone: 23 80 12 17
Telex: 140901 F
Cable:

Curator/person in charge: C. Dumont

Details of collection: Beta vulgaris subsp. vulgaris, 1200 accessions

Maintenance of collection: As seeds, in temperature and humidity controlled room

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: Yield, quality and beet diseases

Documentation: No information

FRANCE

Station d'Amélioration des Plantes
INRA
P.O. Box 1540
F-21034 Dijon Cedex

Telephone: (80) 39 72 21
Telex:
Cable:

Curator/person in charge: C. Brian

Details of collection: Beta vulgaris subsp. vulgaris, 50 accessions
Beta spp., 45 accessions

Maintenance of collection: As seeds. Long-term seed storage at -20°C and medium-term seed storage at -6°C and 40% RH

Duplication of collection: No information

Availability: No information

BETA

Quarantine: No information

Evaluation: No information

Documentation: No information

FRANCE

Station d'Amelioration des Plantes de Rennes
INRA
P.O. Box 29
Domaine de la Motte-au-Vicomte
F-35650 Le Rheu

Telephone: (99) 60 71 92
Telex: 740060 INRALR F
Cable:

Curator/person in charge: F. le Cohec

Details of collection: Beta spp. (fodder), 50 landraces, 100 old cultivars and 200 mutant/genetic stocks

Maintenance of collection: As seeds. Medium-term seed storage at 2° to 4°C

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: No information

Documentation: No information

FRANCE

Station Expérimentale du Magneraud
INRA
P.O. Box 52
F-17700 Surgères

Telephone: (46) 27 90 57
Telex:
Cable:

Curator/person in charge: X. Ballot

Details of collection: Beta vulgaris subsp. vulgaris, mutant/genetic stocks, 55 fodder and 153 sugar

Maintenance of collection: As seeds. Medium-term seed storage at 5° ± 1°C and 35% ± 5% RH

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: Collection of cultivars registered in main countries of Organization for Economic Cooperation and Development (OECD) for the studies of distinctness of new cultivars

Documentation: No information

GERMAN DEMOCRATIC REPUBLICBETA

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

Telephone: Gatersleben 50
Telex: 42558 KUPFGA DDR
Cable:

Curator/person in charge: Chr. Lehmann

Details of collection: Beta vulgaris subsp. maritima, 32 accessions
B. vulgaris subsp. vulgaris, 174 accessions
B. vulgaris subsp. vulgaris convar. crassa var. altissima, 1 accession
B. vulgaris subsp. vulgaris var. conditiva, 33 accessions
B. vulgaris subsp. vulgaris var. crassa f. crassa, 7 accessions
B. vulgaris subsp. vulgaris f. longorubra, 8 accessions
B. vulgaris subsp. vulgaris f. xanthina, 21 accessions
B. vulgaris subsp. vulgaris var. lutea, 1 accession
B. vulgaris subsp. vulgaris convar. vulgaris var. flavescens f. leucopleura, 4 accessions
B. vulgaris subsp. vulgaris f. rhodopleura, 1 accession
B. vulgaris subsp. vulgaris var. vulgaris, 3 accessions
All accessions are primitive or commercial cultivars

Maintenance of collection: As seeds. Long-term seed storage at -10°C, in sealed glass jars and tin cans and medium-term seed storage at 0°C and 30% RH

Duplication of collection: VIR, Leningrad, USSR

Availability: Available

Quarantine: No information

Evaluation: No information

Documentation: Computerization in progress. Index Seminum issued

GREECE

The Greek Gene Bank
North Greek Agricultural Research Centre
P.O. Box 105 14
54110 Thessaloniki

Telephone: (031) 47 11 44
Telex:
Cable:

Curator/person in charge: A. Zamanis

Details of collection: Beta spp., 335 wild, 220 landraces and 112 old cultivars

Maintenance of collection: As seeds. Long-term seed storage at -20°C, in tin cans of 1000ml and medium-term seed storage at 2°C and 30% RH, in laminated foil packets of 500ml

Duplication of collection: Institut für Pflanzenbau und Pflanzenzüchtung at Braunschweig-Volkenrode, FRG

Availability: Freely available on exchange basis

Quarantine: A phytosanitary certificate is necessary for export and import

Evaluation: Evaluation is being carried out using the IBPGR Descriptor List

Documentation: Complete, computerized on Apple II micro-computer. For further information see Cortesi, H.A. et al. (1981) Beet collecting in Greece. *FAO/IBPGR Pl. Genet. Resources Newsl.* 46: 40-41. Cortesi, H.A. and Guarino, L. (1985) 1984 IBPGR mission to Tunisia. *FAO/IBPGR Pl. Genet. Resources Newsl.* 62: 20-24

HUNGARYBETA

Research Centre for Agrobotany (RCA)
Institute for Plant Production
and Qualification (IPPQ)
Genebank Department
H-2766 Taposzele

Telephone:
Telex: 226981 AGBOT H
Cable:

Curator/person in charge: L. Bangai

Details of collection: Beta vulgaris subsp. vulgaris, 34 obsolete cultivars, mainly Hungarian

Maintenance of collection: As seeds. Medium-term seed storage at 0°C, with relative humidity control, in airtight glass jars

Duplication of collection: Research Institute for Sugar Industry, Hungary

Availability: Freely available provided that there is sufficient seed

Quarantine: Phytosanitary certificate required

Evaluation: Partial but in progress

Documentation: Partial and manual

INDIA

All India Coordinated Research Project
on Sugar Beet (AICRP-SB)
Indian Institute of Sugarcane Research
P.O. Dilkusha
Lucknow 226002

Telephone: 516 73
Telex: 535 - 309
Cable: Gannaanusandhan, Lucknow

Curator/person in charge: H. M. Srivastava

Details of collection: Beta vulgaris subsp. vulgaris, 5 multigerm diploid open-pollinated varieties from Czechoslovakia, Poland, USA and USSR; 10 multigerm self sterile lines and 4 monogerm self fertile lines from USA; 2 indigenous bred, diploid multigerm open-pollinated varieties, and 40 indigenous developed, diploid multigerm inbred lines

Maintenance of collection: As seeds

Duplication of collection: No information

Availability: Available after obtaining permission from the Indian Council of Agricultural Research (ICAR), New Delhi 110 001

Quarantine: Normal quarantine procedures apply

Evaluation: Evaluation is done for root yield and sugar content at Lucknow and some other locations under All India Coordinated Research Project on Sugar Beet (AICRP-SB)

Documentation: Manual. Evaluation data are published in Annual Reports of AICRP-SB

IRELAND

BETA

An Foras Taluntais
Plant Breeding Department
Oak Park Research Centre
The Agricultural Institute
Oak Park, Carlow

Telephone: (0503) 314 25
Telex: 60610 AFTO EI
Cable:

Curator/person in charge: P. J. O'Hare

Details of collection: Beta vulgaris subsp. vulgaris, 10 landraces, 20 old cultivars and 20 mutant/genetic stocks

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

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: No information

Documentation: No information

IRELAND

An Foras Taluntais
Sugar Beet Research Unit
Sugar Beet Breeding Department
The Agricultural Institute
Thurles, Co. Tipperary

Telephone: (0504) 212 22
Telex: 26755 ISTS EI
Cable: SIJUCRE THURLES

Curator/person in charge: L. J. O'Connor

Details of collection: Beta vulgaris subsp. vulgaris, 10 landraces, 20 cultivars and 20 breeding lines

Maintenance of collection: As seeds. Short-term seed storage at ambient temperatures, in sealed containers. Seeds with 11% to 12% moisture content

Duplication of collection: No information

Availability: Freely available to institutes in other countries on exchange basis

Quarantine: Usual quarantine procedures apply

Evaluation: Most of the accessions have been evaluated

Documentation: Manual

JAPAN

Hokkaido National Agricultural
Experiment Station
Hitsujigaoka, Toyohira-ku
Sapporo 061-01

Telephone:
Telex:
Cable:

Curator/person in charge: H. Tanabe

Details of collection: Beta vulgaris subsp. vulgaris, 1135 cultivars and breeding lines from China, FRG, Poland, USA and USSR, donated by USDA

BETA

Details of collection: (cont.)	Wild, of unknown origin: <u>Beta atriplicifolia</u> , 3 accessions <u>B. intermedia</u> , 1 accession <u>B. lomatogona</u> , 1 accession <u>B. vulgaris</u> subsp. <u>macrocarpa</u> , 5 accessions <u>B. macrorrhiza</u> , 2 accessions <u>B. patellaris</u> , 5 accessions <u>B. vulgaris</u> subsp. <u>patula</u> , 3 accessions <u>B. procumbens</u> , 3 accessions <u>B. trigyna</u> , 3 accessions <u>B. webbiana</u> , 3 accessions Unidentified, 2 accessions
Maintenance of collection:	As seeds. Medium-term seed storage at 5°C and 40% RH (36m ²)
Duplication of collection:	<u>B. vulgaris</u> at US1 A and partially at National Agriculture Research Centre, Japan
Availability:	Available in limited quantity
Quarantine:	No known restrictions
Evaluation:	Evaluation has been carried out on the following characters: ploidy, yield, sugar content, root quality, bolting resistance, leaf spot resistance (<u>Cercospora beticola</u>) and combining ability
Documentation:	Partial and manual

NETHERLANDS

Centre for Genetic Resources the Netherlands (CGN)	Telephone: (08370) 191 12
P.O. Box 117	Telex: 75044 DLOWA NL
NL-6700 AC Wageningen	Cable:
Curator/person in charge:	M. Mesken / L. J. M. van Soest

Details of collection:	<u>Beta atriplicifolia</u> , 3 wild donated by USSR <u>B. intermedia</u> , 1 wild from Netherlands <u>B. lomatogona</u> , 11 wild donated by FRG, Poland and USA <u>B. macrorrhiza</u> , 4 wild donated by FRG, Poland and USA <u>B. maritima</u> subsp. <u>orientalis</u> , 2 wild donated by USSR <u>B. patellaris</u> , 8 wild donated by FRG, GDR, Poland, USA and USSR <u>B. procumbens</u> , 4 wild donated by FRG, GDR, Poland and USA <u>B. trigyna</u> , 7 wild donated by FRG, USA and USSR <u>B. vulgaris</u> subsp. <u>cicla</u> , 10 local cultivars from France and Greece <u>B. vulgaris</u> subsp. <u>macrocarpa</u> , 3 wild donated by GDR and Poland <u>B. vulgaris</u> subsp. <u>maritima</u> , 100 accessions from France - selections from original collection of 106 plants from 20 localities in Normandy <u>B. vulgaris</u> subsp. <u>patula</u> , 2 wild donated by FRG and USA <u>B. vulgaris</u> subsp. <u>vulgaris</u> , 94 mainly old cultivars from Netherlands and other countries in Europe <u>B. webbiana</u> , 4 wild donated by FRG, GDR and USA; 50 old cultivars of fodder sugar beet from Belgium, Germany, Greece, Netherlands, Pakistan and USSR; 15 old and commercial cultivars of red table beet from Greece and Netherlands; and 25 old cultivars of sugar beet from Western Europe and USSR
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NETHERLANDS (cont.)

BETA

- Maintenance of collection: As seeds. Medium-term seed storage at 2°C and 20% RH, at present in paper bags. Shortly, the entire collection will be transferred to Centre for Genetic Resources the Netherlands (CGN), long-term seed storage at -20°C in airtight laminated aluminium foil bags
- Duplication of collection: Braunschweig, FRG; ZIGÜK, Gatersleben, GDR; Radzikow, Poland and VIR, Leningrad, USSR
- Availability: Freely available but seed quantities of wild material at present limited. Regeneration is planned
- Quarantine: No known restrictions
- Evaluation: Partial
- Documentation: Computerized. CGN has agreed to set up an international data base for Beta genetic resources

POLAND

Institute for Plant Breeding
and Acclimatization
Plac Weysenhoffa, 11
85-950 Bydgoszcz

Telephone: Bydgoszcz 22 87 34
Telex: 0562188 IHAR PL
Cable:

Curator/person in charge: L. Dalke

Details of collection: Wild species from following sections:

Corollinae:
Beta lomatogona (2x and 4x)
B. macrorrhiza
B. trigyna

Patellares:
B. patellaris
B. procumbens
B. webbiana

Nanae:
B. nana

Vulgares:
B. atriplicifolia
B. vulgaris subsp. macrocarpa
B. vulgaris subsp. maritima
B. vulgaris subsp. orientalis
B. vulgaris subsp. patula

In addition to above, 70 cultivars and breeders' lines of sugar beet and 42 cultivars and breeders' lines of fodder beet mainly from European countries

- Maintenance of collection: Section Corollinae species maintained as live perennial plants. Others as seeds with 7% moisture content in airtight glass jars at 5° to 7°C. This collection will be duplicated at the National Department of Plant Genetic Resources where long-term seed storage will be operational
- Duplication of collection: No information
- Availability: Small quantities of seeds available. Restriction for breeders' lines

BETA

Quarantine: No known restrictions
Evaluation: In progress
Documentation: Computerized in the Plant Breeding and Acclimatization Institute, Radzików

SPAIN

Cátedra de Genética
Escuela Técnica Superior de Ingenieros Agrónomos
Universidad Politécnica
Camino de Vera, 14
46022 Valencia

Telephone: (6) 361 50 51 ext. 182
Telex: 62808
Cable:

Curator/person in charge: F. Nuez
Details of collection: Beta vulgaris subsp. vulgaris, 67 old cultivars
Maintenance of collection: Medium-term seed storage at -3° to -5°C and 20% to 30% RH
Duplication of collection: No information
Availability: No information
Quarantine: No information
Evaluation: No information
Documentation: No information

SPAIN

Estación Experimental de Aula Dei
Consejo Superior de Investigaciones Científicas (CSIC)
P.O. Box 202
Montaña 177
Zaragoza

Telephone: (976) 70 95 11 / 70 95 36
Telex:
Cable:

Curator/person in charge: J. Lasa
Details of collection: Beta vulgaris subsp. vulgaris (sugar), 269 accessions
Maintenance of collection: In sealed bags in cold chamber
Duplication of collection: No information
Availability: No information
Quarantine: No information
Evaluation: Cercospora resistance, drought and salinity tolerance
Documentation: No information

SWITZERLAND

BETA

Station Fédérale de Recherches Agronomiques
de Changins
Route de Duillier
CH-1260 Nyon

Telephone: (022) 61 54 51
Telex: 22 785 CH
Cable:

Curator/Person in charge: G. Kleijer / S. Badoux

Details of collection: Beta vulgaris subsp. cicla, 5 old cultivars and 45 landraces
B. vulgaris subsp. vulgaris, 45 landraces
All from Switzerland

Maintenance of collection: Seed populations stored in medium-term seed storage at 2°C and 30% RH, in paper envelopes, with 100g seed

Duplication of collection: No information

Availability: Freely available on request or exchange basis

Quarantine: Phytosanitary certificate required for export or import of germplasm

Evaluation: Complete

Documentation: Partial and manual

TURKEY

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

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

Curator/person in charge: E. Firat

Details of collection: Beta lomatogona, 4 accessions
B. macrorrhiza, 1 accession
B. trigyna, 1 accession
B. vulgaris subsp. adanensis, 2 accessions
B. vulgaris subsp. cicla, 21 landraces and primitive cultivars
B. vulgaris subsp. vulgaris, 65 landraces and primitive cultivars, including
sugar, red, fodder, and white beets
Beta spp., 5 unidentified
All wild and collected from different regions and localities of Turkey

Maintenance of collection: As seed populations. Medium-term seed storage at 0°C and long-term seed storage at -20°C, in moisture proof containers. Relative humidity is not controlled in the cold store. Volume of containers: 170cm³ for long-term seed storage and 430cm³ for medium-term storage. Containers used are polyethylene covered tin cans with airtight lids

Duplication of collection: Some accessions of this germplasm are held at the Department of Plant Biology, University of Birmingham, B15 2TT, UK. Curator: B.V. Ford-Lloyd. For further information see Williams, J.T. and Ford-Lloyd, B.V. (1975) Beet in Turkey. FAO/IBPGR Pl. Genet. Resources Newsl. 11: 3-6

Availability: Freely available, except for those accessions needing multiplication or regeneration

Quarantine: All restrictions for import mentioned in the order of Government published in State paper of 18.10.76 No. 15738 must be observed

BETA

- Quarantine: (cont.) Viz. "Diseases, pests and plants the importation of which is prohibited into the country". Turkish Republic Ministry of Food, Agriculture and Animal Husbandry
- Evaluation: Some of the accessions have been evaluated. For details refer to the following publications: Dale, M.F.B. (1980) Breeding patterns in the genus Beta, section Beta. Ph.D. Thesis, Univ. of Birmingham, UK. Ford-Lloyd, B.V. and Williams, J.T. (1975) A revision of Beta section vulgaris (Chenopodiaceae), with new light on the origin of cultivated beets. Bot. J. Linn. Soc., 71: 89-102. Tan, A. (1982) An evaluation of variation of beets collected from the Mediterranean Region. M.Sc. Thesis, Univ. of Birmingham, UK
- Documentation: Complete and computerized

UNION OF THE SOVIET SOCIALIST REPUBLICS

N.I. Vavilov All-Union Scientific Research
Institute of Plant Industry (VIR)
42-44, Herzen Street
190000 Leningrad

Telephone: 215 91 25 / 211 50 93
Telex:
Cable:

Curator/person in charge: V I. Krivchenko

- Details of collection: Beta intermedia, 1 accession from USA
B. lomatogona, 1 accession from Azerbaijan, USSR
B. macrorrhiza, 1 accession from Azerbaijan, USSR
B. maritima subsp. orientalis, 1 accession from India
B. patellaris, 1 accession from USA
B. perennis, 1 accession from Azerbaijan, USSR
B. procumbens, 1 accession from GDR
B. trigyna, 1 accession from Armenia, Crimea and Ukrain, USSR
B. vulgaris subsp. asiatica, 6 accessions
B. vulgaris subsp. cicla, 1 accession from Netherlands
B. vulgaris subsp. europaea convar. crassa, 10 accessions
B. vulgaris subsp. europaea convar. esculenta, 8 accessions
B. vulgaris subsp. europaea convar. saccharifera, 20 accessions
B. vulgaris subsp. maritima, 1 accession from Sweden
There are many more accessions of Beta species (including wild forms) in this collection but only the above are listed in the Delectus Seminum 1982-85

- Maintenance of collection: As seeds. Long-term seed storage at -10°C, in sealed cans and medium-term seed storage at 4° to 5°C and 30% RH
- Duplication of collection: No information
- Availability: No information
- Quarantine: Imported material must go through quarantine
- Evaluation: No information
- Documentation: Computerized and complete. A Delectus Seminum is periodically published giving list of samples available for exchange

UNITED KINGDOM

BETA

Department of Plant Biology
University of Birmingham
P.O. Box 363
Birmingham B15 2TT

Telephone: (021) 472 13 01 ext. 3116
Telex: 338938 SPAPHY G
Cable:

- Curator/Person in charge: B. V. Ford-Lloyd
- Details of collection: Beta vulgaris subsp. cicla and B. vulgaris subsp. vulgaris, 46 accessions of garden beet; 30 accessions of fodder beet; 25 accessions of mangel; 209 accessions of sugar beet; and 278 primitive cultivars and others
B. vulgaris subsp. maritima, 178 accessions
Other wild species, 205 accessions
All from Europe (excluding Greece), Mediterranean and North Africa and donated by: INRA, Mennesson and Momont-Henvette, France; Zwaan, Netherlands; Svalof, Sweden
PBI and Nickersons, UK and individual collections from IBPGR
- Maintenance of collection: As seeds, populations. Long-term seed storage at -20°C, in sealed aluminium packets for approx. 50% of collection, other 50% in medium-term seed storage at 4°C, in refrigerators
- Duplication of collection: Institut für Pflanzenbau und Pflanzenzüchtung, Braunschweig, FRG; Greek Gene Bank, Thessaloniki, Greece and Institute of Horticultural Research, Wellesbourne, UK
- Availability: Restricted to very few seeds as samples are small. Also this is a working collection where facilities in terms of manpower for dealing with large requests are limited
- Quarantine: No restrictions for export but imported germplasm must go through plant quarantine
- Evaluation: Limited evaluation has been carried out
- Documentation: Complete for passport and collection data. Information held on micro-computer floppy diskettes with mainframe backup dBase II computer system. For more information see Ford-Lloyd, B.V. *et al.* (1982) Beet germplasm in the Canary Islands. FAO/IBPGR Pl. Genet. Resources Newsl. 50: 24-27

UNITED STATES OF AMERICA

Sugar Crops Research Division
Crops Research Division, USDA
Beltsville, Maryland 20705

Telephone:
Telex:
Cable:

- Curator/person in charge: G. E. Coe
- Details of collection: Beta vulgaris subsp. vulgaris, 400+ progenies from USDA collection and breeders' lines originally from European commercial varieties of 1920-30; 29 male-steriles cytoplasm from Turkish B. vulgaris subsp. maritima
Beta spp., some wild
- Maintenance of collection: As seeds. Short-term seed storage at ambient temperatures and RH, in cloth bags, paper packets and glass jars
- Duplication of collection: A few at the NSSL, Fort Collins, Colorado, USA
- Availability: For the first 5 years after a seed release is made, they are available only to US companies and members of the Beet Sugar Development Foundation

BETA

Quarantine: Foreign shipments go through the US Inspection House

Evaluation: These lines are mostly resistant (in various degrees) to Aphanomyces black root and Cercospora leaf spot. One has some tolerance to Sclerotium rolfsii. Some are cytoplasmic male-sterile lines and their maintainers (O-types)

Documentation: Computerized

UNITED STATES OF AMERICA

Sugar Beet Research Unit
Agricultural Research Service, USDA
Crops Research Laboratory
Colorado State University
Fort Collins, Colorado 80523

Telephone:
Telex:
Cable:

Curator/person in charge: R. J. Hecker

Details of collection: Beta vulgaris subsp. vulgaris, approx. 100 inbred lines derived from old commercial cultivars and hybrids of cultivars x culinary beets from USA. These inbreds were developed from commercial cultivars and cultivar hybrids in the 1930s and 1940s

Maintenance of collection: As seed. Short-term seed storage at ambient temperatures but very low humidity, in paper envelopes inside metal box (not airtight). Viability of some samples may be low

Duplication of collection: Not duplicated

Availability: Available but restricted to only a few grammes of seed provided sufficient material exists

Quarantine: Standard US Department of Agriculture regulations apply. Samples may be requested through George White, Plant Introduction Officer, USDA

Evaluation: The collection has been evaluated for sucrose percentage, Cercospora resistance, curly top resistance, hypocotyl colour and root colour

Documentation: Partial and manual

UNITED STATES OF AMERICA

National Seed Storage Laboratory (NSSL)
Colorado State University
Fort Collins, Colorado 80523

Telephone: (303) 484 04 02
Telex: CSU 910-930-9008
Cable:

Curator/person in charge: S. Eberhart

Details of collection: Beta atriplicifolia, 1 accession
B. intermedia, 1 accession
B. lomatogona, 3 accessions
B. macrorrhiza, 1 accession
B. patellaris, 6 accessions
B. procumbens, 4 accessions
B. trigyna, 1 accession
B. vulgaris subsp. cicla, 24 accessions
B. vulgaris subsp. macrocarpa, 5 accessions
B. vulgaris subsp. maritima, 31 accessions from Greece (9), India (1), Turkey (3) and unknown (18)

UNITED STATES OF AMERICA (cont.)

BETA

Details of collection: (cont.)	<u>Beta vulgaris</u> subsp. <u>patula</u> , 1 accession <u>B. vulgaris</u> subsp. <u>vulgaris</u> , 87 garden beets from Canada (1), India (2), Iran (1), Pakistan (1), USA (15) and unknown (67); 9 mangels from USA (1) and unknown (8); 635 sugar beets from Argentina (1), Chile (39), China (21), France (1), Hungary (3), India (1), Republic of South Africa (1), Turkey (1), USA (72), Yugoslavia (10) and unknown (495) <u>B. webbiana</u> , 1 accession <u>Beta</u> spp. 2 accessions from Chile (1) and India (1)
Maintenance of collection:	As seeds. Long-term seed storage at -18°C, in sealed moisture-proof bags, with no RH control
Duplication of collection:	Partially duplicated in working collections of USDA Research Stations
Availability:	Freely available if samples not available from another source
Quarantine:	Seeds should be requested from Dr. G. White, Plant Introduction Officer, USDA
Evaluation:	NSSL is a base collection and does not evaluate the samples
Documentation:	Computerized and complete for passport data only. Ms. Linda Sonnen is in charge of information on accessions

UNITED STATES OF AMERICA

Sugar Beet Production Research Unit
U.S. Agricultural Research Station
1636 East Alisal Street
P.O. Box 5098
Salinas, California 93901

Telephone: (408) 468 22 53
Telex:
Cable:

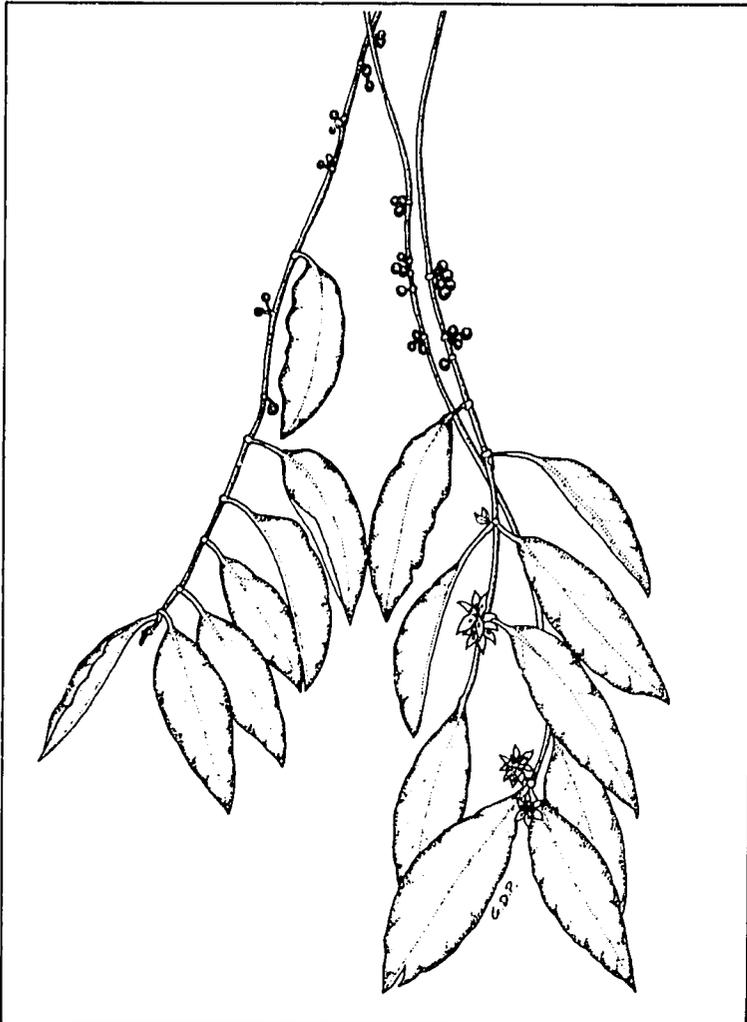
Curator/person in charge: R. Lewellen / M. H. Yu

Details of collection:	<u>Beta vulgaris</u> subsp. <u>vulgaris</u> , 158 cultivars, breeding lines and landraces from Canada, Chile, China, Europe, USA and USSR Wild: <u>Patellares</u> <u>B. campanulata</u> , 12 accessions from Canary Islands, Spain and western & outer Mediterranean region <u>B. patellaris</u> , 56 accessions from Canary Islands, Spain and western & outer Mediterranean region <u>B. patellaris</u> x <u>B. procumbens</u> , 2 accessions from Canary Islands, Spain and western & outer Mediterranean region <u>B. procumbens</u> , 28 accessions from Canary Islands, Spain <u>B. procumbens</u> x <u>B. patellaris</u> , 1 accession <u>B. webbiana</u> , 15 accessions from Canary Islands, Spain <u>B. webbiana</u> x <u>B. vulgaris</u> subsp. <u>vulgaris</u> , 2 accessions <u>B. vulgaris</u> subsp. <u>eicla</u> (4x) x <u>B. webbiana</u> , 5 accessions Corollinae <u>B. intermedia</u> , 6 accessions from Asia Minor, Turkey <u>B. lomatogona</u> , 37 accessions from Asia Minor, Turkey <u>B. lomatogona</u> x <u>B. trigyna</u> , 6 accessions <u>B. vulgaris</u> subsp. <u>orientalis</u> , 1 accession from Asia Minor, Turkey <u>B. macrorrhiza</u> , 12 accessions from Hungary, Turkey and Caucasus, USSR <u>B. macrorrhiza</u> x <u>B. trigyna</u> , 2 accessions <u>B. trigyna</u> , 45 accessions Caucasus and Crimea, USSR (21), Hungary and Turkey (24) <u>B. vulgaris</u> subsp. <u>vulgaris</u> x <u>B. trigyna</u>
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BETA

Designation of collection: (cont.)	Nanae <u>B. nana</u> , 3 accessions from Greece Vulgares <u>Beta atriplicifolia</u> , 3 accessions from Spain <u>B. vulgaris</u> subsp. <u>macrocarpa</u> , 1 accession from Mediterranean coast <u>B. vulgaris</u> subsp. <u>maritima</u> , 4 accessions from the coastlines of the Mediterranean and the English Channel <u>B. vulgaris</u> subsp. <u>patula</u> , 1 accession from Madeira Island, Portugal <u>B. penta</u> , 1 accession Donated by Hellenic Sugar Industry, Greece; Japan Sugar Beet Improvement Foundation, Japan and University of Birmingham, UK
Maintenance of collection:	As seeds. Base collection stored at NSSL, Fort Collins, Colorado, USA, in 10000 seed (120g) quantities. Only working collection maintained at Salinas as seeds, in glass jars
Duplication of collection:	Plant Introduction Station, Iowa State University, Ames, Iowa, USA; NSSL, Fort Collins, Colorado, USA; University of Birmingham, Department of Plant Biology, UK <u>B. trigyna</u> partially duplicated at Wageningen, Netherlands and the Japan Sugar Beet Improvement Foundation, Japan
Availability:	Specific samples only will be available upon request to <u>bona fide</u> breeders and research scientists of <u>Beta</u> spp.
Quarantine:	As per US quarantine rules
Evaluation:	Only limited amount of evaluation has been carried out. For further information see "Resistance to <u>Heterodera schachtii</u> in Patellares section of the genus <u>Beta</u> " in <u>Euphytica</u> 33 (December 1984)
Documentation:	Partial and manual

Coffea



BRAZIL

COFFEA

Empresa Brasileira de Pesquisas Agropecuárias (EMBRAPA)
Centro Nacional de Recursos Genéticos (CENARGEN)
Caixa Postal 10.2372, 70.770 Brasília

Telephone: 272 42 03 / 272 02 53
Telex: (061) 1622 / 273-0100
Cable:

Curator/person in charge:

J. Silva

Other curators: E. A. Vilela Morales/CENARGEN and A. Carvalho/IAC (active collection)

Details of collection:

Coffea arabica, 275 primitive and commercial cultivars
C. canephora, 19 wild and primitive cultivars

Wild species:

C. bengalensis, 1 accession

C. brevipes, 1 accession

C. congensis, 1 accession

C. eugenioides, 1 accession

C. kapakata, 1 accession

C. liberica, 1 accession; and 1 accession Dewevrei

C. mauritiana, 1 accession

C. racemosa, 1 accession

C. salvatrix, 1 accession

C. stenophylla, 1 accession

Maintenance of collection:

As seeds. Active collection kept at Instituto Agronomico de Sao Paulo (IAC), Campinas, Sao Paulo

Duplication of collection:

C. arabica partly duplicated at Estação Experimental, IAC, Sao Paulo, Brazil

Availability:

Available provided request for material is received before the month of June. Requests for germplasm should be sent to the Chief, CENARGEN

Quarantine:

Imported material must pass through quarantine at IAC

Evaluation:

Collection evaluated as per IBPGR Descriptor List for C. arabica

Documentation:

Partial and computerized

CAMEROON

Institut de la Recherche Agronomique (IRA)
B.P. 2123
Yaounde-Messa

Telephone:
Telex:
Cable:

Curator/person in charge:

P. M. Bauharmont

Details of collection:

Coffea arabica, 584 primitive cultivars, landraces, commercial cultivars and selections from all countries of the world cultivating Arabica coffee, donated by FAO, CTFT, INEAC, IRCA, IRCC and ORSTOM
C. canephora, 170 hybrids of commercial cultivars and selections from Cameroon, Central African Republic, Côte d'Ivoire, Madagascar and Zaïre; 198 clones donated by INEAC and IRCC

418 morphotypes of specific hybrids and primitive forms from Cameroon

380 wild types collected in Cameroon, by IRA-IBPGR missions:

C. brevipes

C. canephora

C. congensis

C. liberica

Psilanthus spp.

COFFEA

Maintenance of collection:	As trees. Single plants, clones and populations
Duplication of collection:	Duplicates of <u>Coffea arabica</u> are partially held at ORSTOM, IRCC, INEAC and other institute growing <u>C. arabica</u> . Robusta coffee duplicated at IRCC and ORSTOM
Availability:	Available with agreement of the Cameroon government
Quarantine:	Imported material must possess phytosanitary certificate from the country of origin
Evaluation:	Evaluation has been carried out on the following characters: yield, disease and drought resistance, chemical and granulometric characteristics
Documentation:	Partial and manual

COLOMBIA

Centro Nacional de Investigaciones
de Café Pedro Uribe Mejía (CENICAFE)
División de Investigación y Experimentación
Federación Nacional de Cafeteros de Colombia
Chinchiná - Caldas

Telephone: 75 61 - 65 51
Telex: 83454
Cable: CENIC CO

Curator/person in charge: J. Castillo Z.

Details of collection: Coffea arabica, 886
C. bengalensis, 1
C. canephora, 58
C. congensis, 8
C. eugenioides, 8
C. kapakata, 2
C. liberica, 19
C. racemosa, 5
C. salvatrix, 1
C. stenophylla, 1
C. travancorensis, 1
Interspecific hybrids: 84 local and 18 introductions
Intraspecific of C. arabica: 586 local and 126 introductions

Maintenance of collection:	Field genebank at Estación Experimental de Naranjal
Duplication of collection:	Not duplicated
Availability:	Seeds available in limited quantity during the second half of the year. Clones also available only with six months advance notice
Quarantine:	A phytosanitary certificate from the Instituto Colombiano Agropecuario (ICA) will be supplied upon export of material. Import of material subject to quarantine at ICA, Bogotá
Evaluation:	On-going for yield and type of grain
Documentation:	Published in "Revista CENICAFE"

COSTA RICA

Centro Agronomico Tropical de Investigación
y Enseñanza (CATIE)
Unidad de Recursos Genéticos
Apartado 74, Turrialba

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

Curator/person in charge:

H. Frömbreg

Details of collection:

Coffea arabica, 1179 accessions from Brazil (99), Burundi (39), Cameroon (1), Central African Republic (1), Colombia (38), Congo (2), Costa Rica (41), Cuba (2), Ecuador (4), El Salvador (19), Ethiopia (545), Guatemala (26), India (12), Kenya (25), Madagascar (1), Malawi (26), Mexico (8), Panama (1), Portugal (151), Puerto Rico (54), Réunion, France (3), Sri Lanka (3), Tanzania (27), Thailand (2), Uganda (1), Venezuela (5), Zaire (11) and unknown (32)

C. bengalensis, 4 primitive cultivars from India

C. canephora, 48 accessions from: Angola (1), Ecuador (2), El Salvador (1), Guatemala (1), India (1), Indonesia (13), Madagascar (1), Philippines (1), Portugal (6), Puerto Rico (4), Sri Lanka (3), South West Africa (3), Uganda (3) and Zaire (8)

C. congensis, 7 wild from Angola (1), Brazil (2), Kenya (1), Portugal (2) and unknown (1)

C. eugenioides, 7 wild from Central African Republic (1), India (1), Puerto Rico (1), Tanzania (1), Zaire (2) and unknown (1)

C. kapakata, 1 wild from Congo

C. kivuensis, 1 wild from Congo

C. liberica, 26 wild from Brazil (2), Costa Rica (3), Côte d'Ivoire (3), El Salvador (1), Guatemala (1), Honduras (1), Malaysia (1), Madagascar (2), Panama (1), Philippines (2), Puerto Rico (3), Sri Lanka (5) and unknown (1)

C. mauritiana, 4 wild from Réunion, France

C. racemosa, 27 wild from: Angola (2), Brazil (1), Mozambique (1), Portugal (20) and unknown (3)

C. salvatrix, 2 wild from Colombia (1) and Tanzania (1)

C. stenophylla, 2 wild from Guatemala

C. travancorensis, 1 wild from India

Maintenance of Collection:

As seeds. Long-term seed storage at -20°C (110m^3) and medium-term seed storage at 5°C and 30% to 35% RH (55m^3), in hermetically sealed plastic or aluminium containers

Duplication of collection:

No information

Availability:

Available in limited quantity (requests will be met if sufficient seed is available)

Quarantine:

Export and import through quarantine

Evaluation:

No information

Documentation:

Computerized for passport data

COTE D'IVOIRE

Institut de Recherches du Café et du Cacao
et autres Plantes Stimulantes (IRCC)
B.P. 808, Divo

Telephone:
Telex:
Cable:

Curator/person in charge:

F. Anthony

Details of collection:

This is an ORSTOM and IRCC collection with over 6000 genotypes of wild coffee collected by missions in Cameroon (1983), Central African Republic (1975), Côte d'Ivoire (1975 to 1981), Ethiopia (1966), Kenya (1977) and Tanzania (1982)

COFFEA

Details of collection: (cont.)	<p><u>Coffea arabica</u>, 1480 wild from Ethiopia, donated by FAO (Kenya); 50 accessions from Kenya; 150 cultivars from Brazil, Costa Rica and other countries, donated by IAC and IICA</p> <p><u>C. brevipes</u>, 80 wild from Cameroon</p> <p><u>C. canephora</u>, 460 wild from Cameroon (30), Central African Republic (180) and Côte d'Ivoire (250)</p> <p><u>C. congensis</u>, 1430 wild from Cameroon (1000) and Central African Republic (430)</p> <p><u>C. eugenioides</u>, 1140 wild from Kenya</p> <p><u>C. humilis</u>, 230 wild from Côte d'Ivoire</p> <p><u>C. liberica</u>, 220 wild from Cameroon (60) and Côte d'Ivoire (160); and 650 wild and primitive cultivars from Central African Republic</p> <p><u>C. staudtii</u>, 120 wild from Cameroon</p> <p><u>C. stenophylla</u>, 90 wild from Côte d'Ivoire</p> <p><u>C. zanguebariae</u>, 460 wild from Kenya (100) and Tanzania (360)</p> <p><u>Psilanthus</u>, 140 wild from Cameroon, Central African Republic and Côte d'Ivoire</p>
Maintenance of collection:	As individual plants and clones: at the IRCC Station at Divo (for samples from low altitudes) and at ORSTOM Station, Man (Mont Tonkoui, 1100m) for samples collected at higher altitudes. Some accessions are also maintained as seeds which are dehydrated to 40% and stored in containers at 15° to 20°C
Duplication of collection:	Centre de Ressources Génétiques, Station du Café, Jimma, Ethiopia; Station de Boukoko, Central African Republic; Coffee Research Station, Ruiru, Kenya; IRA, Nkolbisson and Fombot, Cameroon and Ilaka-East, Madagascar
Availability:	Available with agreement of Ministère de l'Education National et de la Recherche Scientifique, Côte d'Ivoire
Quarantine:	Imported material must have a phytosanitary certificate and undergo quarantine at Montpellier in France or at Abidjan in Côte d'Ivoire
Evaluation:	The material has been evaluated for 40 to 50 descriptors plus enzymatic systems, yield, fertility, botanical characteristics, taste, morphological characters, technical and agronomical characters, physiological and chemical characters
Documentation:	Manual and complete for passport data and manual and partial for evaluation data. Computerization in progress

COTE D'IVOIRE

Institut de Recherches du Café et du Cacao et autres Plantes Stimulantes (IRCC)	Telephone: 30 30 32
Centre de Cooperation Internationale en Recherche Agronomique pour le Developpement (CIRAD)	Telex:
Direction Côte d'Ivoire	Cable:
B.P. 1827	
Abidjan 01	

Curator/person in charge: P. Charmetant

Details of collection: Coffea arabica, 50 spontaneous and 40 breeding lines and cultivars from Brazil, Colombia, Costa Rica and Ethiopia

C. canephora, 800 accessions from Cameroon, Côte d'Ivoire, Madagascar, Uganda and Zaire

C. liberica, 50 accessions from Côte d'Ivoire

Maintenance of collection: As trees. Clones on plantations

COTE D'IVOIRE (cont.)

COFFEA

Duplication of collection: CENICAFE, Colombia; IRA, Cameroon; IICA, Costa Rica and IRCC, Togo

Availability: Available with agreement of the Ministère de l'Education Nationale et de la Recherche Scientifique, Côte d'Ivoire

Quarantine: Quarantine is compulsory for any importation of material

Evaluation: Productivity, architecture, organoleptic characteristics and combination ability

Documentation: Partial and manual

ETHIOPIA

Plant Genetic Resources Centre (PGRC)
Institute of Agricultural Research
P.O. Box 30726
Addis Ababa

Telephone: 18 03 81
Telex: 21361 GTZ ET
Cable: GENE BANK, ADDIS ABABA

Curator/person in charge: M. Worede

Details of collection: Coffea arabica, 522 accessions

Maintenance of collection: As seeds. Long-term seed storage at -10°C with seeds dried to a moisture content of 4% to 7% and medium-term seed storage at 4°C and 30% to 40% RH, in hermetical sealed aluminium foil bags. For more details see Krauss, A. (1983) ILCA Newsl. 4: 9-12

Duplication of collection: Jimma Research Station, Ethiopia

Availability: Freely available

Quarantine: Material must go through quarantine

Evaluation: In progress using IBPGR Descriptor List. For more details see Engels, J.M.M. (1985) FAO/IBPGR Pl. Genet. Resources Newsl. 61: 13-18

Documentation: Computerized and in progress using HP 125 micro-computer. HP 3000 computer with data base management system "MINISIS" belonging to ILCA is also being utilized. In future a link between the two computers will be established. For further information on collections see PGRC/E ILCA Newsl. 8, April 1985

ETHIOPIA

Jimma Research Station
Institute of Agricultural Research
P.O. Box 192
Jimma

Telephone:
Telex:
Cable:

Curator/person in charge: D. Tadesse

Details of collection: Coffea arabica, 1200 spontaneous, landraces, primitive and commercial cultivars from Ethiopia; and 84 commercial cultivars donated by India (66) and Lyamungu, Tanzania (18)

Maintenance of collection: As trees. Populations

Availability: Restricted

Duplication of collection: Not duplicated

COFFEA

Quarantine: Imported plant material must go through quarantine
 Evaluation: Evaluation thorough and complete for yield and coffee berry disease
 Documentation: Computerized

INDIA

Coffee Research Station
 Central Coffee Research Institute
 Chikmagalur District
 Karnataka 577 117

Telephone: 43
 Telex:
 Cable: CCRI BALEHONNUR

Curator/person in charge: M. S. Srinivasan

Details of collection: Section - Paracoffea: C. bengalensis
C. travancorensis
C. wightiana
 All accessions indigenous germplasm from India
 Section - Eucoffea
 Subsection
 a. Erythrocoffea C. arabica, 329 accessions from several countries
C. canephora subvar. robusta, 240 accessions from Sri Lanka
 Erect types from Java
 Spreading types from Côte d'Ivoire Guatemala and Ugan
C. canephora var. laurentii from Guadeloupe, France, Liberia, Madagascar and Vietnam
 Erect types from Costa Rica, Côte d'Ivoire and Uganda
C. congensis from Indonesia, Portugal, Uganda and one unknown
 b. Pachycoffea C. abeokutae from Sri Lanka
C. liberica from Sri Lanka and Uganda
 Dewevrei from numerous places
 c. Melanocoffea C. stenophylla from Costa Rica, Guatemala, India (Devarshola, Nilgiris), Puerto Rico and one unknown
 d. Mozabicoffea C. eugenioides from Brazil, Costa Rica, East Africa, Kenya and Tanzania
C. racemosa, 6 accessions from Portugal
C. salvatrix from Tanzania
C. zanguebariae from India

Maintenance of collection: As trees. Populations

Duplication of collection: At other Substations of the Institute

Availability: Requests for material will be considered if made through Food and Agriculture Organization of the United Nations

Quarantine: Phytosanitary certificate and import permit are required. Additional declarations in certificate should include the following: material should be declared free from American leaf spot (Omphalia flavida), coffee berry borer (Hypothenemus hampli) and virus diseases. Import of coffee germplasm is possible only through the Director, Coffee Research Station, Chikmagalur, Karnataka 577 117. Applications for import permits should be addressed to: Plant Protection Adviser to the Government of India, Directorate of Plant Protection, Quarantine and Storage, N.H. IV, Faridabad 121 001, India

INDIA (cont.)

COFFEA

Evaluation: In progress for characters essential for plant improvement
Documentation: Manual and partial. Further documentation is in progress

KENYA

Coffee Research Station
Coffee Research Foundation
Coffee Board of Kenya
P.O. Box 4
Ruiru

Telephone: Thika 210 47 / 210 92 / 226 52
Telex
Cable: "COFFRES" RUIRU

Curator/person in charge: J. B. O. Owuor

Details of collection: Coffea arabica, 277 landraces collected in Ethiopia by FAO mission in 1964; 62 landraces collected by ORSTOM mission in 1966; 250 varieties donated by various Institutes; 3 wild from Marsabit, Kenya, donated by Institut de Recherches du Café, du Cacao et autres Plantes Stimulantes and Institut Français de Recherche Scientifique pour le Développement en Coopération (IFCC-ORSTOM)
C. eugenioides, 28 wild from Marsabit, Kenya, donated by IFCC-ORSTOM
C. zanguebariae, 13 wild from Kenya, donated by IFCC-ORSTOM
Coffea spp., 1 unidentified donated by IFCC-ORSTOM

Maintenance of collection: As trees, single plants and populations. As seeds, in short-term seed storage at 18°C with 41% moisture content

Duplication of collection: IFCC-ORSTOM, Bingerville, Côte d'Ivoire; PGRC Ethiopia and Lyamungu, Tanzania

Availability: Only seed samples available for exchange

Quarantine: Imported material must be accompanied by a phytosanitary certificate and import permit

Evaluation: Evaluation has been carried out on the following characters: Coffee berry disease resistance, rust resistance, growth habit, yield and quality

Documentation: Partial and manual

PERU

Estación Experimental Agropecuaria de Tulumayo
Instituto Nacional de Investigación
y Promoción Agropecuaria (INIPA)
km 26, Carretera Tingo Maria-Aucayacu
Apartado 78
Tingo Maria

Telephone:
Telex:
Cable:

Curator/person in charge: A. José / Benito Sullca / R. Echeverría Trujillo

Details of collection: Coffea arabica, 84 breeding lines from Brazil, donated by UFV (36), Costa Rica (30) and Centro de Investigação das Ferrugens do Cafeeiro (CIFIC), Oeiras, Portugal (18); and 6 commercial cultivars from Peru
C. canephora, 9 breeding lines from Central African Republic

Maintenance of collection: As plants, in the field

Duplication of collection: Duplicated at Estación Experimental de Sivia-Ayacucho and at Pichanaki - Huancayo, Peru and possibly at CENARGEN, Brazil

COFFEA

- Availability:** Available in limited quantity of 100 seeds only when the plants are in harvest season. Clones available as budwood only
- Quarantine:** Import of material must adhere to quarantine regulations laid down by Ministry of Agriculture (Plant Health Department)
- Evaluation:** Evaluation has been carried out on the following characters: Sample type, yield in kg/ha carried out over two years and resistance to Hemileia vastatrix. Clones evaluated for latex l/ha and kg/ha of dry weight
- Documentation:** Manual and complete for evaluation data. Evaluation data have been published and are available. The data have also been sent to the donors of material

PORTUGAL

Centro de Investigação das Ferrugens
do Cafeeiro (CIFC)
Quinta do Marquês
P-2780 Oeiras

Telephone: (1) 243 15 05 / 243 04 42
Telex: 63698 EAN P (Attn. CIFC)
Cable:

Curator/person in charge: C. J. Rodrigues Jr.

Details of collection: Coffea arabica, 14 wild from Ethiopia and Sudan, donated by USDA, USA; and 22 commercial cultivars from Angola, Brazil, Costa Rica, India, Kenya and Tanzania, donated by various Experimental Centres

C. canephora, 3 spontaneous from Angola, donated by various Experimental Centres

C. congensis, 6 spontaneous from Côte d'Ivoire, donated by IFCC, France

Dewevrei, 6 selections from Brazil, donated by IAC, Brazil

C. eugenioides, 5 selections from Kenya and Tanzania, donated by IAC, Brazil; GERDAT, France; Lyamungu Research Station, Tanzania and Ruiru Research Station, USA

C. kapakata, 2 wild from Angola, donated by ICA, Angola and IAC, Brazil

C. liberica, 3 commercial cultivars from Angola and S. Tomé and Príncipe, donated by ICA, Angola; BFAP, S. Tomé and Príncipe and USDA, USA

C. mauritiana, 2 spontaneous donated by USDA, USA

C. racemosa, spontaneous from Mozambique, donated by USDA, USA

C. salvatrix, 1 spontaneous from Tanzania, donated by USDA, USA

C. arabica x C. canephora, Híbrido de Timor, 4 spontaneous from Timor, donated by SPT, Timor

Híbrido Devamachy, 1 spontaneous from India, donated by Coffe Research Station, Balehonnur, India; and 6 breeders' lines

C. arabica x C. liberica, 6 commercial cultivars from India, donated by Coffe Research Station, Balehonnur, India

Kawisari hybrid, 1 spontaneous donated by USDA, USA

- Maintenance of collection:** As plants, in greenhouse. Clonally replicated plants or seeds
- Duplication of collection:** Seeds and clones of the hybrids made and selected at CIFC have been forwarded to the Experimental Centres of most of the coffee producing countries
- Availability:** Freely available as seeds or clones
- Quarantine:** No information
- Evaluation:** Mainly for leaf rust resistance
- Documentation:** Partial and manual

RWANDA

COFFEA

Station de Rubona
Institut des Sciences Agronomiques du Rwanda (ISAR)
B.P. 138, Butare

Telephone:
Telex:
Cable:

Curator/Person in charge.

L. Gahamanyu

Details of collection:

Coffea arabica, 139 mainly primitive cultivars and breeding lines from Brazil, Burundi, Cameroon, Costa Rica, Ethiopia, Guatemala, India, Kenya and Uganda, donated by IFCC, INEAC, ISABU, Coffee Board of Kenya, etc.

Maintenance of collection:

As trees and plants. Single plants, clones and populations

Duplication of collection:

Duplicates held at IFCC and Institut des Science Agronomiques du Burundi (ISABU) and INERA

Availability:

No information

Evaluation:

The material has been evaluated for yield, drought and disease resistance, and granulometric and organoleptic qualities

Documentation:

Manual and partial

TANZANIA

Lyamungu Coffee Research Station
Tanzania Agricultural Research Organization (TARO)
P.O. Box 3004, Lyamungu

Telephone:
Telex:
Cable:

Curator/person in charge:

G. H. Semuguruka

Details of collection:

Coffea arabica, 42 commercial cultivars from Ethiopia
C. canephora, 19 commercial cultivars from Guatemala
C. congensis, 4 breeders' lines from Amani, Tanzania
C. congo, 1 wild from Madagascar
Dewevrei, 2 breeders' lines from Portugal
C. eugenioides, 10 wild from Kenya
Ibo, 1 wild from Mozambique
C. kapakata, 1 wild from India
C. khasiana, 1 wild from Himalaya, India
C. liberica, 5 wild from Abeokuta, Liberia; 6 breeders' lines from Lake Chad area
C. ligustroides, 1 wild from Chipete forest, Angola
C. mauritiana, 1 wild from Madagascar and Mauritius
C. mufindiensis, 1 wild from Mufindi, Tanzania
C. racemosa, 1 wild from Portugal
C. salvatrix, 1 breeders' line from Mozambique
C. stenophylla, 1 breeders' line from Guatemala
C. swynnertonii, 1 wild from Inhambane, Mozambique
C. zanguebariae, 1 wild from southwest India

Maintenance of collection:

As trees, plants and seed. Clonal and replicated plants

Duplication of collection:

Not duplicated in Tanzania

Availability:

Freely available

Quarantine:

Phytosanitary certificate required

Evaluation:

Most of the samples have been evaluated for yield, quality and disease resistance

Documentation:

Partial

UNITED STATES OF AMERICA

COFFEA

Subtropical Horticulture Research Station
Agricultural Research Service (ARS)
United States Department of Agriculture (USDA)
13601 Old Cutler Road
Miami, Florida 33158

Telephone:
Telex:
Cable:

Curator/person in charge: P. K. Soderholm

Details of collection: Coffea arabica, 292 accessions from Africa and Central and South America
C. bengalensis, 1 accession from India
C. canephora, 2 accessions from Indonesia and West Africa
All cultivars donated by Coffee Research Station, Chikmagalur, India

Dewevrei, 2 accessions from Brazil
Conuga, 1 accession from Indonesia
Klaimii, 1 accession from Africa
C. racemosa, 5 accessions
All cultivars, donated by Centro de Investigaçao das Ferrugens do Cafeeiro (CIFC), Oeiras, Portugal

Maintenance of collection: As trees

Duplication of collection: CATIE, Turrialba, Costa Rica and Central Coffee Research Station, Chikmagalur, Kamataka, India

Availability: Freely available in seed form

Quarantine: Requester must supply import permit

Evaluation: Evaluated for cold tolerance

Documentation: Partial and computerized. Catalogue of plant germplasm available

UNITED STATES OF AMERICA

College of Tropical Agriculture
University of Hawaii
461 W. Lanikaula Street
Hilo, Hawaii 96720

Telephone: (808) 935 28 85
Telex:
Cable: UNIHAW HILO HAWAII

Curator/person in charge: Ph. J. Ito

Details of collection: Coffea arabica, 24 accessions, 2 of typica
C. canephora, 2 accessions
C. congensis, 1 accession
C. liberica, 2 accessions
C. racemosa, 1 accession
Dewevrei, 1 accession

Maintenance of collection: As trees, several plants per accession

Duplication of collection: No information

Availability: Available in limited quantity

Quarantine: Quarantine inspection and import permit required

Evaluation: Evaluated for adaptation, yield and quality

Documentation: No information

ZAIRE

COFFEA

Institut National pour l'Etude et
la Recherche Agronomique (INERA)
B.P. 1513
Yangambi, Kisangani

Telephone:
Telex:
Cable:

Curator/person in charge: N. Masembo

Details of collection: Coffea abeokutae, 1 wild from Java, Indonesia
C. arabica, 3 commercial cultivars from Brazil, INEAC introduction
C. canephora, 27 wild (collected by INERA); cultivated species from Central Africa, Congo, Côte d'Ivoire, Uganda and Zaïre
C. delanana, 2 wild and primitive cultivars from Central Africa, donated by IFCC
C. edonir, 2 wild from Côte d'Ivoire, donated by IFCC
C. eugenioides, 1 wild from Zaïre
C. horsfieldiana, 1 wild from Java, Indonesia
C. kapakata, 1 wild from Java, Indonesia
C. kivuensis, 1 wild from Zaïre
C. lebruniana, 1 wild from Côte d'Ivoire, donated by IFCC
C. liberica, 3 wild from Central Africa, Côte d'Ivoire and Zaïre, donated by IFCC and INEA
C. stenophylla, 2 wild and primitive cultivars
C. xenophylla, 1 wild from Mozambique
Dewevrei, 11 wild from Central Africa, Côte d'Ivoire, Indonesia and Zaïre, donated by IFCC and INEAC
Klainii, 1 wild from Madagascar

Maintenance of collection: As trees, plants or populations

Duplication of collection: No information

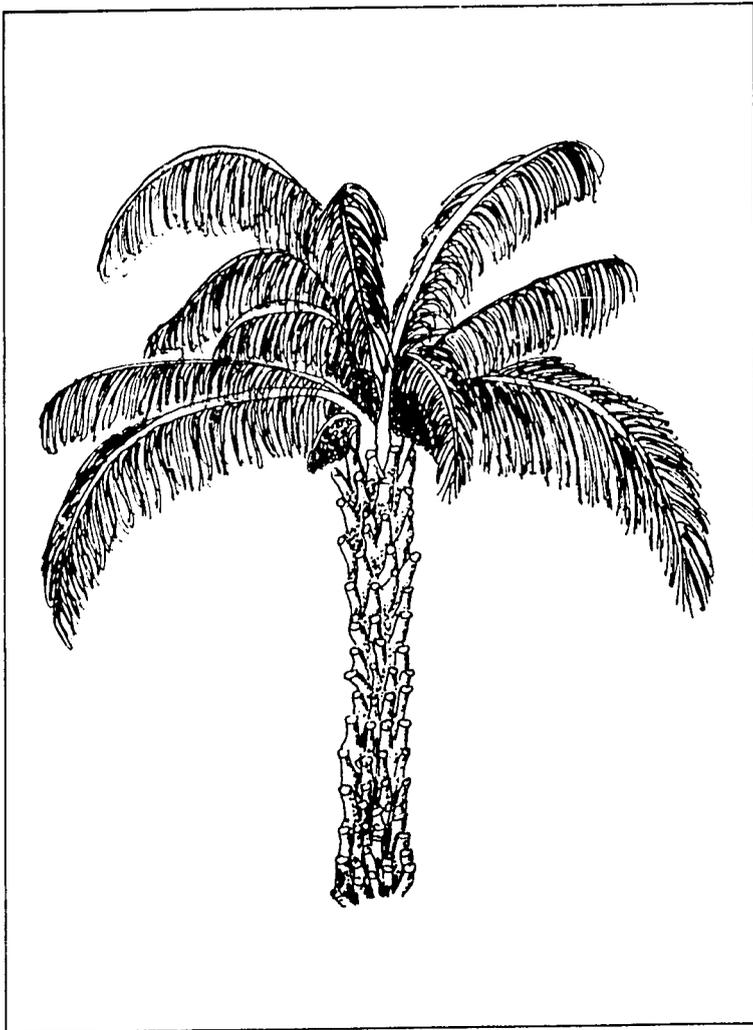
Availability: Limited quantity of budwood is available for exchange subject to the approval of the Scientific Board of the Institute

Quarantine: Imported germplasm material must have a phytosanitary certificate

Evaluation: The entire collection has been evaluated for fruit characteristics, earliness and yield

Documentation: Manual

Elaeis



COTE D'IVOIRE

ELAFIS

Departement Oléagineux du CIRAD
Station Principale de la Mé
Institut de Recherches pour les Huiles et
Oléagineux (IRHO)
B.P. 13
Bingerville

Telephone:

Telex:

Cable:

Curator/person in charge: J. C. Jacquemard

Details of collection: Elais guineensis

1. Group "A" selections ("DELI"), several hundred distinct samples of breeding lines from legitimate crosses, from Indonesia and Malaysia
2. Group "B" selections ("Afrique"), several hundred samples of breeding lines and legitimate crosses, from Benin, Congo, Côte d'Ivoire, Nigeria and Zaire
3. Recent explorations of open-pollinated crosses, several samples from Angola, Cameroon and Côte d'Ivoire
4. Hybrids of groups "A" x "B", over 1000 plants (IRHO), inter-group compatible
5. Multiplied hybrids, over 40 accessions of commercial seed samples obtained after artificial pollination
6. In vitro plants, 84 clones from high yielding trees
7. E. melanococca x E. guineensis, and cross-pollinated samples, several hundred samples from: Brazil, Colombia, Costa Rica, Panama, Suriname

Maintenance of collection: Mostly in form of trees: 300ha in genealogical field, 300ha test field for hybrids, 20ha for clones, 170ha for E. melanococca and hybrids. The seeds are maintained in a cold room at 20° to 22°C and 50% to 60% RH in containers for up to 24 months. Pollen is stored at -18°C in glass test-tubes of 0.25g for 6 to 12 months

Duplication of collection: EMBRAPA, Brasilia, Brazil and PORIM, Malaysia

Availability: Available upon permission from the relevant Ministry. Pollen, seeds as well as plants are available for exchange

Quarantine: Vegetative material must pass through quarantine

Evaluation: The following evaluation has been carried out:
1. and 2. These populations have parents which have a high potential for yield when crossed with parents from the other groups
3. These populations have interesting characters for increasing variability in existing germplasm. Further tests in progress
4. Currently being tested for use as parents
5. Hybrids being evaluated for higher yields (potential for 4 to 12 tonnes of oil per annum with 260mm of water deficiency annually and monthly
6. Evaluated for palms able to yield more than 5 tonnes of oil per annum. Further trials in progress
7. Being evaluated for suitability for crosses with E. guineensis in order to introduce genes for slow growth; quality of oil; disease resistance, etc. Selections in progress

Documentation: Manual

ECUADOR

ELAEIS

Estación Experimental Santo Domingo
Instituto Nacional de Investigación
Agropecuaria (INIAP)
Apartado 2600, Santo Domingo

Telephone:
Telex:
Cable

Curator/person in charge:

A. Palma L.

Details of collection:

Elaeis guineensis, 80 progenies from Ecuador and Malaysia, material from Jardín Botánico de Lancetilla, Honduras, donated by IRHO, NIFOR and United Brands
E. oleifera, 1 accession from Colombia, donated by ICA, Colombia

Maintenance of collection:

As trees on plantations

Duplication of collection:

Not duplicated

Availability:

Available

Quarantine:

No information

Evaluation:

Part of the collection under evaluation for breeding purposes

Documentation:

Complete and manual

GHANA

Plant Genetic Resources Unit
Crops Research Institute
P.O. Box 7, Bunso

Telephone: KUMASI 62 21/2
Telex:
Cable: CROPSEARCH

Curator/person in charge:

H. L. O. Holloway

Details of collection:

Elaeis guineensis:

92 advanced breeding lines from Nigeria, donated by Nigerian Institute for Oil Palm Research:

Tenera, 17 selfings

Tenera x Tenera, 12 crosses

Tenera x Pisifera, 7 accessions

Dura, 7 selfings

Deli Dura, 6 selfings

Deli Dura x Deli Dura, 6 accessions

Deli Dura x Dura, 1 accession

Dura x Dura, 1 accession

E. oleifera x E. guineensis, 1 accession

Dura x Tenera, 22 accessions

Deli Dura x Tenera, 10 accessions

Dura x Pisifera, 2 accessions

10 advanced breeding material from Côte d'Ivoire, donated by IRHO:

Tenera, 2 accessions

Deli Dura x Tenera, 2 accessions

Deli Dura x Pisifera, 2 accessions

Deli Dura x Deli Dura, 3 accessions

E. oleifera, (mixed seeds), 1 accession

Deli Dura x Deli Dura, 7 accessions from Malaysia, donated by Chemera Res. Station

53 secondary breeding materials from Ghana, donated by Oil Palm Research Centre:

Deli Dura x Tenera, 19 accessions

Tenera x Tenera, 14 accessions

GHANA (cont.)

ELAEIS

Details of collection: (cont.)	Dura x Dura, 11 accessions Tenera x Pisifera, 9 accessions
Maintenance of collection:	As seeds and pollen. Long-term seed storage at -10°C
Duplication of collection:	No information
Availability:	Available on exchange basis provided sufficient time is allowed for processing seeds or pollen
Quarantine:	All seed exports are accompanied by phytosanitary certificates issued by the Pathology Section of the Crops Research Institute, Kumasi
Evaluation:	The collection has been evaluated for the following characters: growth habit, fruit characteristics, earliness, oil content and disease and pest resistance
Documentation:	No information

INDIA

Research Centre
Central Plantation Crops Research Institute
Indian Council of Agricultural Research (ICAR)
Pacha
P.O. Box 695 562
Palode, Kerala

Telephone:
Telex:
Cable:

Curator/person in charge:	K. V. Ahamed Bavappa
Details of collection:	<u>Elaeis guineensis</u> , 1 indigenous and 6 exotic accessions from Côte d'Ivoire, Indonesia, Malaysia, Nigeria and Zaire
Maintenance of collection:	As trees
Duplication of collection:	No information
Availability:	Freely available on exchange basis. Requests to be routed through the National Bureau of Plant Genetic Resources (NBPGR), New Delhi
Quarantine:	Seednuts can be imported after obtaining permission from Director, NPBGR
Evaluation:	Preliminary yield evaluation
Documentation:	No information

INDONESIA

Balai Penelitian Perkebunan Medan
Jalan Brigjen Katamso
P.O. Box 104
Medan

Telephone: 32 40 47 / 32 42 20
Telex:
Cable: RISPA, Medan

Curator/person in charge:	S. Mangoensoekarjo
Details of collection:	<u>Elaeis guineensis</u> Dura, 10 breeders' lines, families Tenera, 4 families Pisifera, 1 family

ELAEIS

Details of collection: (cont.)	<u>Elaeis oleifera</u> , 3 trees, primitive cultivars, from Colombia <u>E. guineensis</u> x <u>E. oleifera</u> , hybrids, 220 trees
Maintenance of collection:	As trees
Duplication of collection:	No information
Availability:	Freely available
Quarantine:	No known restrictions
Evaluation:	In progress
Documentation:	Manual

MALAYSIA

Palm Oil Research Institute of Malaysia (PORIM)	Telephone:	03-335155 or 335775
P.O. Box 10620	Telex:	31604, 31609 MA
Kuala Lumpur	Cable:	PALMSERCH, KUALA LUMPUR

Curator/person in charge: N. Rajanaidu

Details of collection:	<u>Elaeis guineensis</u> , 1300 semi-wild from Cameroon, Nigeria and Zaire <u>E. oleifera</u> , 167 wild/semi-wild from Colombia, Costa Rica, Honduras, Nicaragua, Panama and Suriname
Maintenance of collection:	As trees. Field genebank with single plants. The collection is located at 6, Persiaran Institusi, Bandar Baru Bangi, Selangor For further information see Rajanaidu, N. (1981) Oil-palm genetic resources: current methods of conservation. FAO/IBPGR Pl. Genet. Resources Newsl. 48: 25-30
Duplication of collection:	In Cameroon and Zaire
Availability:	On exchange basis between institutes of raw germplasm only
Quarantine:	Requestor must supply import permit. Intermediate quarantine at Kew, UK
Evaluation:	Evaluation has been carried out on following characters: yield, fatty acid composition and bunch analysis
Documentation:	Computerized. Most of the evaluation and collection data is complete. PORIM is currently building up a data base on fatty acid composition of its germplasm collection including <u>E. guineensis</u> and <u>E. oleifera</u> and their hybrids. For further information see: Tan Boon Keng and S. H. Ong (1985) Analysis of palm oil composition by computerized gas chromatography, paper presented at Asian Chemical Conference, Singapore. Rajanaidu, N. et al. (1985) The performance of inter-origin commercial D x P planting material. Proceedings of the International Workshop on Oil-Palm Germplasm Utilization, PORIM, Bangi, 26-27 March (1985). Rajanaidu et al. (1979) Collecting oil-palm (<u>Elaeis guineensis</u> Jacq.) genetic material in Nigeria. MARDI Res. Bull. 7: 1-27. Rajanaidu, N. (1983) <u>Elaeis oleifera</u> collection in South and Central America. FAO/IBPGR Pl. Genet. Resources Newsl. 56: 42-51

NIGERIA

Nigerian Institute for Oil Palm Research
Private Mail Bag 1030
Benin City

ELAEIS

Telephone: Benin 53
Telex:
Cable: PALMS BENIN

Curator/person in charge: C. O. Okwuagwu

Details of collection: Elaeis guineensis, wild and semi-wild from provinces of Aba, Calabar, Igala, Ufuma, Umuabi in Nigeria and from Angola, Ghana, Jamaica, Malaysia and Zanzibar; and breeding populations from Ecuador, Benin, Cameroon, Côte d'Ivoire, Malaysia, and Zaire
E. madagascarensis, wild type from Madagascar. Local collections or donated by: NIFOR/MARDI, INIAP, Governmental Agency, IRHO, United Plantations, Socfin and Chemara

Maintenance of collection: As trees

Duplication of collection: NIFOR/MARDI collection of Nigerian gene pool II. Also held at PORIM, Malaysia

Availability:: Available only with bilateral arrangement

Quarantine: Quarantine regulations applicable to all import and export

Evaluation: Evaluation has been carried out on continuous bunch yield, standard fruit and bunch composition analysis

Documentation: Complete and manual, on individual palm basis

ZAIRE

Institut National pour l'Etude et
la Recherche Agronomique (INERA)
B.P. 1513
Yangambi, Kisangani

Telephone:
Telex:
Cable:

Curator/person in charge: M. Monsheviale

Details of collection: Elaeis guineensis, 44 spontaneous from Rwanda; 16824 breeding lines from Benin (2176), Congo (2191), Côte d'Ivoire (1992), Malaysia (2553), Senegal (29), Sumatra (780) and Zaire (7103); and 70 commercial cultivars from Zaire
E. guineensis type albescens, 421 spontaneous from Zaire
E. idollatica, 143 wild from Nigeria
E. madagascarensis, 44 spontaneous from Madagascar
E. oleifera, 85 breeding lines from South America
Material donated by: Socfin, IEAN, Pobé, IRHO, Côte d'Ivoire, INERA and from International Programme

Maintenance of collection: As trees

Duplication of collection: Institut de Recherche pour les Huiles et Oléagineux (IRHO), Côte d'Ivoire

Availability: Freely available on exchange basis and in limited quantity

Quarantine: Imported material must have a phytosanitary certificate and must go through quarantine. Germplasm will be sent only if import permit from the country of destination is submitted

Evaluation: The collection has been evaluated for fruit characteristics, wilt resistance and oil yield

Documentation: Partial and manual

Gossypium



ARGENTINAGOSSYPIMUM

Estación Experimental Regional Agropecuaria (EEA)
 Instituto Nacional de Tecnología Agropecuaria (INTA)
 Casilla No. 25, C.P. 4700 Catamarca

Telephone:
 Telex:
 Cable:

Curator/person in charge: J. L. Dardanelli

Details of collection: Gossypium barbadense, 35 cultivars from Egypt, USA and USSR; and 190 local populations from north and northeast Argentina
G. hirsutum, 12 landraces

Maintenance of collection: No information

Duplication of collection: At INTA Stations at La Banda (Curator: L. Gardenal) and Saenz Pena

Availability: Freely available

Quarantine: No known restrictions

Evaluation: In progress for disease resistance and fibre characteristics

Documentation: Partial and manual

AUSTRALIA

Herbarium of the Northern Territory
 Conservation Commission of the Northern Territory
 P.O. Box 2134
 Alice Springs, Northern Territory 5750

Telephone:
 Telex:
 Cable:

Curator/Person in charge: A. Mitchell

Details of collection: Gossypium australe, 61 accessions
G. bickii, 9 accessions
G. cunninghamii, 5 accessions
G. sturtianum, 17 accessions
 All wild and from Northern Territory, Australia

Maintenance of collection: As plants and dried herbarium specimens

Duplication of collection: No information

Availability: Herbarium material available for taxonomic study

Quarantine: Strict quarantine procedures for import of plant material

Evaluation: No information

Documentation: Computerized and complete

CHINA

Institute of Industrial Crops
 Jiangsu Academy of Agricultural Sciences (JAAS)
 Xiaolinwei, Nanjing

Telephone:
 Telex:
 Cable: 6000 Nanjing

Curator/person in charge: S. Y. Qian

Details of collection: Gossypium spp., 31 different wild species

Maintenance of collection: As plants and seeds

GOSSYPIUM

Duplication of collection:	No information
Availability:	Freely available
Quarantine:	Strict quarantine procedures for import of plant material
Evaluation:	In process for disease and insect resistance and fibre characteristics
Documentation:	No information

CZECHOSLOVAKIA

Institute of Tropical and Subtropical
Agriculture
University of Agriculture
165 21 Praha 6 - Suchbátov

Telephone: (2) 34 41 07
Telex: 122323 VSZP C
Cable:

Curator/person in charge:	P. Valicek
Details of collection:	<u>Gossypium</u> spp., 25 wild
Maintenance of collection:	No information
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information
Evaluation:	No information
Documentation:	No information

FRANCE

Institut de Recherche du Coton
et des Textiles Exotiques (IRCT)
Centre de Cooperation Internationale en Recherche
Agronomique pour le Développement (CIRAD)
Boite Postal 5035
F-34032 Montpellier Cedex

Telephone: (01) 505 14 07
Telex: 620871 INFRANCA Paris
Cable: IRCTE, Paris

Curator/person in charge:	J. Gouhtiere
Details of collection:	<u>Gossypium arboreum</u> , 8 old cultivars <u>G. barbadense</u> , 150 wild, 258 landraces, 104 old cultivars and 2 mutant/genetic stocks <u>G. herbaceum</u> , 18 old cultivars <u>G. hirsutum</u> , 75 wild, 607 landraces, 665 old cultivars and 87 mutant/genetic stocks
Maintenance of collection:	As seeds. Medium-term seed storage at 4°C and 45% RH, seeds with 7% moisture content. Seeds delinted with sulphuric acid. Seed regeneration every six years at IRCT Station in Costa Rica
Duplication of collection:	No information
Availability:	No information
Quarantine:	No information

FRANCE (cont.)

GOSSYPIMUM

Evaluation: Fibre: length, uniformity ratio, micronaire, percentage of mature fibres, tenacity, thinness ratio, reflection, yellowing index. Thread: strength, length, aspect, neps. Seeds: lint percentage, impurities percentage, oil percentage, total protein content, gossypol. Germination: percentage year 1, percentage year 2, percentage year 4, percentage year 6

Documentation: Manual and complete. For further information see following: Ano, G. and Schwendiman, J. (1983) Multi-phase collecting missions for cotton (I), and Ibid (1983) Cotton collecting in three South American countries (II) FAO/IBPGR Pl. Genet. Resources Newsl. 54: 2-10. Ibid (1984) Gossypium survey: Collecting in Peru (III) FAO/IBPGR Pl. Genet. Resources Newsl. 57: 32-37

GREECE

Greek Gene Bank
North Greek Agricultural Research Centre
P.O. Box 105 14
541 10 Thessaloniki

Telephone: (031) 47 15 44
Telex:
Cable:

Curator/person in charge: A. Zamanis

Details of collection: Gossypium spp., 265 old cultivars

Maintenance of collection: Long-term seed storage at -20°C and medium-term seed storage at 0° to 2°C and 30% RH

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: No information

Documentation: No information

GREECE

Cotton and Industrial Plants Research Institute
Sindos
57400 Thessaloniki

Telephone: (031) 79 94 44
Telex:
Cable:

Curator/person in charge: S. Galanopoulou / S. Sotiriadis

Details of collection: Gossypium barbadense, 16 old cultivars
G. herbaceum, 1 primitive cultivar from Greece
G. hirsutum, 500 mainly old cultivars and breeders lines, few landraces from Bulgaria, Greece, France, USSR, USA and Yugoslavia; and 250 mutant/genetic stocks
G. thurberi, 1 wild from USA

Maintenance of collection: As seeds. Medium-term seed storage at -2°C and 30% RH and long-term seed storage at -20°C. G. hirsutum accessions in cold store, rest as plants in a nursery

Duplication of collection: At Greek Gene Bank

Availability: Available on exchange basis

GOSSYPIMUM

- Quarantine: Phytosanitary certificate is necessary indicating the disease-free condition of the imported seeds
- Evaluation: Earliness, Verticillium resistance and superior quality
- Documentation: Complete and computerized for material stored in genebank. Manual for the field collection

INDIA

Central Institute for Cotton Research (CICR)
Indian Council for Agricultural Research (ICAR)
95, Pushp Kunj, Canal Road
New Ramdaspath, Nagpur 440 010

Telephone: 263 23 / 224 43
Telex: 0715-267 IN
Cables: KAPASSANSTHAN

Curator/Person in charge: Chokhey Singh

Details of collection: Germplasm maintained at different CICR centres in India

	<u>hirsutum</u>	<u>barbadense</u>	<u>arboreum</u>	<u>herbaceum</u>
CICR, Nagpur	3850	254	888	252
CICR, Coimbatore	2163	205	150	-
PAU, Ludhiana	2525	-	1380	-
HAU, Hissar	643	-	427	-
IARI, Sirsa	299	7	63	-
UAU, Sriganaga Nagar	22	-	-	-
PKV, Akola	480	-	-	242
MPKV, Rahuri	684	-	-	-
MKV, Parbhani	-	-	1200	-
GAU, Surat	256	120	120	160
JNKVV, Indore	89	20	-	-
TNAU, Kovilpatti	478	-	342	-
TNAU, Coimbatore	724	113	-	-
APAU, Guntur	207	23	-	-
APAU, Nandyal	-	-	186	23
UAS, Dharwar	259	61	-	57
Total	12329	626	4680	734

Details of collections maintained at National Centre for Cotton Germplasm Conservation and Coordination (NCCGCC), Central Institute for Cotton Research (CICR), Nagpur 440 010 are as follows. Curator/person in charge: N. L. Bhale

Gossypium arboreum, 888 accessions from India

G. barbadense, 254 landraces, commercial cultivars and breeding lines from Egypt, USA, USSR and West Indies

G. hirsutum, 3850 mostly commercial cultivars and breeding lines, collection representing all cotton growing countries of the world

G. hirsutum, 5 wild from USA

G. herbaceum, 252 accessions from India

Gossypium spp., several wild donated by USDA

Other perennial types, 11 accessions from Czechoslovakia and France

Maintenance of collection: As seeds, in cold store. The wild species and perennials are maintained as permanent trees/plants on plantation

Duplication of collection: Some samples are held at USDA, and a few at VIR, Leningrad, USSR

Availability: Available on exchange basis and subject to permission from ICAR, Rajendra Prasad Road, Krishi Bhavan, New Delhi

INDIA (cont.)

GOSSYPIUM

Quarantine: Phytosanitary certificate and import permit are required. Additional declarations in certificate should include the following: material should be declared free from black arm (*Xanthomonas malvacearum*) and *Glomerella gossypii*. Import of cotton germplasm is possible only through the Director, CICR, Nagpur. Applications for import permits should be addressed to: Plant Protection Adviser to the Government of India, Directorate of Plant Protection, Quarantine and Storage, N.H. IV, Faridabad 121 001, India

Evaluation: Evaluation has been carried on the following characters: lint kg/ha, staple length, resistance to jassids, sucking pests, bollworms, yarn counts, texture types, cotton-seed yield kg/ha, seed index (g), lint %, kernel %, oil content % on dry weight basis, oil content % on 10% moisture basis, free gossypol % and kernel protein content %. Fibre: length (mm), width (micrometre), convolutions per cm, reversals per cm, convolution angle deg., spiral angle deg., X-ray angle deg., uniformity ration, fineness, bale strength. Every year about half the number of samples are regenerated in the field with limited populations

Documentation: Manual and partial

ISPAEL

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

Telephone: (03) 98 04 58
Telex: 341118 BXTV IL
Cable:

Curator/person in charge: M. Zur

Details of collection: Gossypium hirsutum, 10 wild, 10 old cultivars and 320 breeding material

Maintenance of collection: Long-term seed storage at -10°C

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: Drought, salinity and disease resistance and high nutrition level

Documentation: Yearly publication of List of Introductions

MALAWI

Cotton Productivity Research Unit
Makoka Agricultural Research Station
Private Mail Bag 3
Thondwe (near Zomba)

Telephone: Thondwe 251/4
Telex:
Cable:

Curator/person in charge: C. F. Chigwe

Details of collection: Gossypium hirsutum, 350 commercial cultivars and breeding lines from the African continent, donated by FAO, IRCT and USDA

Maintenance of collection: As seeds, in cold store in screwtop aluminium containers

GOSSYPIMUM

Duplication of collection:	Some in Swaziland, Tanzania, USA and Zimbabwe
Availability:	Freely available
Quarantine:	Request for seed should be accompanied by import permit. Phytosanitary certificate required. Seeds should be treated with fungicide and delinted before despatch. Imported seeds must go through quarantine
Evaluation:	No information
Documentation:	Manual

MEXICO

Instituto Nacional de Investigaciones
Agrícolas (INIA)
A.P. 6-882 or 6-883
México 6, D.F.

Telephone: 585 60 44
Telex:
Cable:

Curator/person in charge: F. Cardenas Ramos

Details of collection: Gossypium arboreum, 11 wild donated by USDA
G. armourianum, 1 wild from Mexico
G. barbadense, 6 cultivars from Brazil, donated by USDA
G. davidsonii, 1 wild from Mexico
G. gossypoides, 1 wild from Mexico
G. harknessii, 1 wild from Mexico
G. herbaceum, 7 wild donated by USDA
G. hirsutum, 192 wild from Mexico, and 78 cultivars from USA and USSR donated the USDA
G. laxum, 1 wild from Mexico
G. lobatum, 1 wild from Mexico
G. thurberi, 1 wild from Mexico
G. trilobum, 1 wild from Mexico

Maintenance of collection: As seeds and as live plants in case of the wild spp. Seeds in medium-term seed storage at 0° to 5°C and 30% RH, in airtight glass jars containing approx. 2000 seeds

Duplication of collection: This collection has been partially duplicated in the NPGS/USA and at the N.I. Vavilov All-Union Scientific Research Institute (VIR), Leningrad, USSR

Availability: Available for research purposes only

Quarantine: No known restriction

Evaluation: The collection has been partially evaluated. Further evaluation is in progress

Documentation: Partial and computerized

PAKISTAN

Central Cotton Research Institute
Pakistan Central Cotton Committee
P.O. Box 572
Old Shujabad Road
Multan

Telephone: 301 51/2
Telex:
Cable: COTONSERCH, Multan

Curator/person in charge: M. R. Chaudhry (cultivated species)
M. Anwar Mirza (wild species)

PAKISTAN (cont.)

GOSSYPIMUM

Details of collection:

Cultivated species:

Gossypium arboreum, 21 accessions from Bangladesh (1), Burma (2), India (2) and Pakistan (16)G. barbadense, 56 accessions from Egypt (44), USA (11) and USSR (1)G. herbaceum, 4 accessions from India (2) and Pakistan (2)G. hirsutum, 979 accessions from Afghanistan (1), Argentina (7), Australia (9), Brazil (7), Burma (6), China (13), Central America (78), Côte d'Ivoire (4), East Africa (1), Ethiopia (32), France (20), Greece (4), India (15), Iran (10), Kampuchea (6), Kenya (2), Malawi (16), Mexico (20), Morocco (4), Mozambique (6), Nigeria (11), Pakistan (293), Puerto Rico (7), Philippines (1), Republic of South Africa (15), Sudan (16), Swaziland (16), Syria (13), Tanzania (14), Turkey (9), Uganda (3), USA (236), USSR (27), West Africa (3) and Zaire (6)G. hirsutum, 153 cultivars with special characters: nectariless (40), glandless (14), fregobract (15), glandless and nectariless (2), frego and nectariless (6), high gossypol (27), high gossypol and nectariless (13), okra leaf (18), okra leaf and nectariless (1), red leaf (5), red leaf and frego (1), red leaf, frego and nectariless (1), yellow leaf (1), yellow okra (1), pilose type (4), cluster type (4)

Bacterial blight resistant cultivars are as follows: hairy acala (HA types)

Ethiopia (12), acala medium staple (AMSI types) Ethiopia 2, UKAC2 (67) 577,

Tanzania (1), LB types USA (10), multi-adversity resistant (MAR types) USA (12), CIMAR breeders' lines from Pakistan (30)

G. anomalum, * 1 accession from northern and southern AfricaG. arboreum, * 2 cultivated from India and PakistanG. areysianum, 1 accession from Arabian PeninsulaG. aridum, 1 accession from west central MexicoG. australe, * 1 accession from northern AustraliaG. barbadense race Egyptian, * 38 cultivated from EgyptG. barbadense var. braziliense, * 1 semi-wild (kidney cotton) from BrazilG. barbadense var. darwinii, 1 accession from Galapagos IslandsG. bickii, * 1 accession from north central AustraliaG. capitis-viridis, * 1 accession from Cape VerdeG. davidsonii, * 1 accession from Sonora and Baja California, MexicoG. gossypoides, 1 accession from Oaxaca, MexicoG. herbaceum, * 2 cultivated from AsiaG. hirsutum race latifolium, *G. hirsutum race marie-galante, * 1 wild from USAG. hirsutum race richmondii, * 1 wild from USAG. incanum, * 1 accession from Arabian PeninsulaG. klotzschianum, 1 accession from Galapagos IslandsG. lanceolatum, 1 accessionG. mustelinum, 1 accession from north eastern BrazilG. raimondii, 1 accession from west central PeruG. somalense, * 1 accession from north eastern AfricaG. stocksii, * 1 accession from Arabia and PakistanG. sturtianum, 1 accession from central and eastern AustraliaG. sturtianum var. nandewareense, 1 accession from eastern AustraliaG. thurberi, * 1 accession from Sonora, MexicoG. tomentosum, 1 accession from Hawaii, USAG. trilobum, 1 accession from west central MexicoGossypium spp., several hundred samples of cultivated and wild species located at Multan

Some of the accessions have been donated by Texas A&M University, College Station, Texas, USA; University of Arizona, Tucson, USA; University of Khartoum, Shambat, Sudan; Institute of Tropical and Subtropical Agriculture, Praha, Czechoslovakia

Maintenance of collection:

As seeds, in case of accessions marked *. The rest propagated through seasonal grafts every year

Duplication of collection:

Not duplicated

GOSSYPIMUM

- Availability:** Available on exchange basis. Seeds of accessions marked * can be exchanged for the following species: G. armourianum, G. harknessii, G. laxum, G. lobatum, G. longicalyx, G. nelsonii, G. robinsonii, G. triphyllum
- Quarantine:** Material can be exchanged through Pakistan Central Cotton Committee, Moulvi Tamizuddin Khan Road, Karachi-I and/or Quarantine Cell, Quarantine Mycologist, Department of Plant Protection, Ministry of Agriculture, Government of Pakistan, Jinnah Avenue, Malir Halt, Karachi. Pakistan
- Evaluation:** The collection has been evaluated for characters of economic importance and resistance to diseases such as bacterial blight
- Documentation:** Partial and manual

PAKISTAN

Cotton Research Institute
Sakrand
Sind

Telephone:
Telex:
Cable:

Curator/Person in charge: Senior Scientific Officer (Plant Breeding and Genetics)

Details of collection: Gossypium arboresum, 71 cultivars from Bangladesh (4), India (3), Pakistan districts: Khanpur (20), Faisalabad (6), Mirpurkhas (6), Tandojam (5), Sakrand selections (4), old collection (20), J.B. Hutchinson's collection (1) and USA (2) G. barbadense, 38 cultivars from India (1), Pakistan (16), Peru (1), USA (11), USSR (1), old collection (8) G. hirsutum, 757 cultivars from Australia (3), Brazil (6), China (7), France (10), India, from an old collection of undivided Sind and Punjab (2 + 140), Iran (5), Nigeria (10), Pakistan, following districts: Multan (120), Faisalabad (25), Khanpur (4), Mirpurkhas (24), Tandojam selections (12), Tandojam (4), Philippines (2), Puerto Rico (3), South Africa (28), Sudan (11), Syria (60), Thailand (10), Turkey (23), Uganda (3), USA (110), USSR (10). Also includes samples from private donors J. B. Hutchinson (73), K. J. Brown (41) and CIA (11)

- Maintenance of collection:** As single plants in nursery
- Duplication of collection:** Central Cotton Research Institute, Multan
- Availability:** Freely available. All requests must be addressed to: Pakistan Central Cotton Committee, Moulvi Tamizuddin Khan Road, Karachi-I
- Quarantine:** Imported material must possess phytosanitary certificate. For more details contact: Quarantine Cell, Quarantine Mycologist, Department of Plant Protection, Ministry of Agriculture, Government of Pakistan, Jinnah Avenue, Malir Halt, Karachi
- Evaluation:** Evaluation has been carried out on the following characters: Plant stature, hairiness, growth habit, leaf characters, flower characters, boll characters and other characteristics of economic importance
- Documentation:** Partial and manual

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: A. Borrero
Details of collection: Gossypium hirsutum, 119 accessions
Maintenance of collection: No information
Duplication of collection: No information
Availability: No information
Quarantine: No information
Evaluation: No information
Documentation: No information

SUDAN

Cotton Breeding Section
University of Khartoum
Shambat

Telephone:
Telex:
Cable:

Curator/Person in charge: H. Khalifa

Details of collection: Gossypium arboreum race bengalense, 5 accessions
G. arboreum subsp. cernuum, 1 accession
G. arboreum race indicum, 3 accessions
G. arboreum race sinense, 41 accessions
G. arboreum race soudanense, 20 accessions
G. barbadense, 23 accessions
G. burmanicum, 8 accessions
G. herbaceum var. africanum, 25 accessions
G. herbaceum race persicum, 6 accessions
G. herbaceum var. kuljianum, 2 accessions
G. herbaceum race wightianum, 11 accessions
G. herbaceum race acerifolium, 9 accessions
G. hirsutum race morillii, 64 accessions
G. hirsutum race palmeri, 52 accessions
G. hirsutum race latifolium, 5 accessions
G. hirsutum race punctatum, 235 accessions
G. hirsutum race marie-galante, 62 accessions
Gossypium spp., over 700 accessions including genetic stocks & introduced varieties of different species (55); and genetic stocks carrying genes singly or in combination conferring resistance to bacterial blight (58)
Wild species as follows:
G. anomdum
G. arevsianum
G. aridum
G. armourianum
G. australe
G. bickii
G. davidsonii
G. gossypoides
G. harknessii
G. incanum

GOSSYPIMUM

Details of collection: (cont.)

GOSSYPIMUM

G. klotzschianum
Gossypium raimondii
G. robinsonii
G. somalense
G. sturtianum
G. thurberi
G. longicalyx x G. sturtianum var. nandewarensis

Maintenance of collection: Seeds stored in coldstore. Wild species preserved as living plants at Shambat

Duplication of collection: No information

Availability: No information

Evaluation: No information

Documentation: No information on documentation but see Khalifa, H. (1980) Gossypium germplasm in Africa. FAO/IBPGR Pl. Genet. Resources Newsl. 42: 28-32

SYRIA

Cotton Bureau
 Ministry of Agriculture and Agrarian Reform
 Aleppo

Telephone: 42800-01-42814
 Telex:
 Cable: COTTONBUREAU, Aleppo

Curator/person in charge: F. Khouri

Details of collection: Gossypium spp., 110 commercial cultivars and breeders' lines from China, Greece, Iran, Pakistan, Philippines, Sudan, Syria, Turkey, USA, USSR and Venezuela donated by FAO, Rome, Italy and USDA, USA

Maintenance of collection: No information

Duplication of collection: No information

Availability: No information

Quarantine: No information

Evaluation: No information

Documentation: No information

UNION OF THE SOVIET SOCIALIST REPUBLICS

N.I. Vavilov All-Union Scientific Research
 Institute of Plant Industry (VIR)
 42-44, Herzen Street
 190000 Leningrad

Telephone: (314) 22 34 / 48 48
 Telex:
 Cable:

Curator/person in charge: V. I. Kravchenko

Details of collection: Gossypium arboreum, 850 cultivars and 13 primitive and other forms of 5 subspp. from Africa, China, India, Korea and the Near East
G. barbadense, 791 cultivars from 31 countries, and 29 primitive and other forms of 7 subspp. from Brazil, Bolivia, Colombia, Peru and Venezuela
G. herbaceum, 681 cultivars from Africa and India, and 31 accessions of 9 subspp. from Afghanistan, China, Korea, Near East and Pakistan

UNION OF THE SOVIET SOCIALIST REPUBLICS (cont.)GOSSYPIMUM

Details of collection: (cont.)	<p><u>Gossypium hirsutum</u>, 3221 cultivars from 83 countries, and 86 primitive and other forms of 14 subsp. from Bahamas, Colombia, Cuba, Guatemala, Mexico The following diploid species are also represented in the collection:</p> <p><u>G. anomalum</u>, 2 accessions <u>G. aridum</u>, 9 accessions <u>G. amourianum</u>, 10 accessions from Central America <u>G. australe</u>, 2 accessions from Australia <u>G. bickii</u>, 2 accessions <u>G. capitis-virdis</u>, 2 accessions <u>G. davidsonii</u>, 11 accessions <u>G. gossypoides</u>, 14 accessions <u>G. harknessii</u>, 11 accessions <u>G. incanum</u>, 2 accessions <u>G. klotzschianum</u>, 8 accessions <u>G. laxum</u>, 10 accessions <u>G. lobatum</u>, 14 accessions <u>G. raimondii</u>, 8 accessions <u>G. robinsonii</u>, 1 accession from Central America <u>G. stocksii</u>, 2 accessions from Afro-Asian group <u>G. sturtianum</u> var. <u>nandewarensis</u>, 2 accessions <u>G. sturtianum</u>, 1 accession <u>G. thurberi</u>, 12 accessions <u>G. tomentosum</u>, 3 accessions from Hawaii, USA <u>G. trilobum</u>, 14 accessions <u>G. triphyllum</u>, 2 accessions</p>
Maintenance of collection:	Cultivars are stored as seed in medium-term seed storage at -5°C. Wild diploid species as well as subsp., forms and ruderal types as plants in glasshouses
Duplication of collection:	No information
Availability:	Only those samples mentioned in the <i>Delectus Seminum</i> which is published periodically are available for exchange
Quarantine:	Imported material must pass through quarantine
Evaluation:	In progress
Documentation:	Computerized and complete. A <i>Delectus Seminum</i> is periodically published listing samples available for exchange

UNITED STATES OF AMERICA

Cotton Research Centre
Agricultural Research Service (ARS)
United States Department of Agriculture (USDA)
4207 East Broadway
Phoenix, Arizona 85040

Telephone: (602) 261 42 21
Telex:
Cable:

Curator/person-in-charge:	E. L. Turcotte
Details of collection:	<u>Gossypium barbadense</u> , 600 primitive cultivars from Central and South America
Maintenance of collection:	As seed populations. Long-term seed storage at -20°C, no RH control, 0.45m ³ freezers
Duplication of collection:	At NSSL, Fort Collins, Colorado, USA
Availability:	No restrictions but requests should be limited to 25 seeds per accession

GOSSYPIMUM

Quarantine: All seeds for export sent through USDA Plant Germplasm Quarantine Centre
 Evaluation: Part of collection being converted to a day-neutral habit
 Documentation: Partial and manual

UNITED STATES OF AMERICA

Delta Branch Experiment Station
 Stoneville, Mississippi 38776

Telephone:
 Telex:
 Cable:

Curator/person in charge:

Details of collection: Gossypium hirsutum, 1587 obsolete varieties

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

Duplication of collection: At National Seed Storage Laboratory (NSSL), Fort Collins, USA

Availability: Up to 25 seed per sample, if sufficient seed is available

Quarantine: No information

Evaluation: The following characters have been evaluated for some of the accessions: leaf colour, leaf hairs, petal colour, petal spot, pollen colour, grams/boll, seed index, lint %, UHM, draw sl/raw st mean, T0, T1, E1, micronaire, Area-A and Area-D

Documentation: Computerized and complete

UNITED STATES OF AMERICA

Agricultural Research Service (ARS)
 United States Department of Agriculture (USDA)
 P.O. Drawer DN
 College Station, Texas 77841

Telephone: (713) 260 93 11
 Telex:
 Cable:

Curator/person in charge: A. E. Percival

Details of collection: Gossypium anomalum, 3 accessions from Africa
G. arboreum (2n), 189 primitive cultivars from Asia
G. areysianum, 1 accession from Middle East
G. aridum, 4 accessions from Mexico
G. armourianum, 5 accessions from Mexico
G. barbadense, 3 wild from Caribbean Islands
G. bickii, 5 accessions from Australia
G. capitiviridis, 3 accessions from Cape Verde
G. costulatum, 2 accessions from Australia
G. cunninghamii, 1 accession from Australia
G. davidsonii, 5 accessions from Mexico
G. gossypoides, 4 accessions from Mexico
G. harknessii, 3 accessions from Mexico
G. herbaceum (2n), 130 accessions from Asia
G. hirsutum, 2300 races from Afghanistan, Argentina, Australia, Azores, Portugal, Bahamas, Barbados, Belize, Brazil, Bulgaria, Chad, Colombia, Costa Rica, Côte d'Ivoire, Cuba, Curaçao (Netherlands), Dominican Republic, Egypt, El Salvador, Ethiopia, France, Marquesas Is., French Guiana, Ghana, Grand Cayman (UK), Grenada, Guam, Guatemala, Haiti, Honduras, India, Iran, Jamaica, Mali, Mexico, Mozambique, Netherlands, Nicaragua, Nigeria

UNITED STATES OF AMERICA (cont.)

GOSSYPIMUM

- Details of collection: (cont.) Panama, Peru, Philippines, Saint Vincent, Senegal, Seychelles Is., Spain, St. Kitts Is. (UK), Sudan, Surinam, Thailand, Trinidad and Tobago, USA, USA, Puerto Rico, USA, Samoa East Is., USA, Virgin Is., USSR, Venezuela, Virgin Is. (UK) and Wallis Is. (France)
- G. incanum, 3 accessions from Mexico
G. klotzschianum, 53 accessions from Galapagos Islands
G. laxum, 1 accession from Mexico
G. lobatum, 2 accessions from Mexico
G. longicalyx, 1 accession from Africa
G. mustelinum, 1 accession from Brazil
G. nelsonii, 3 accessions from Australia
G. pilosum, 4 accessions from Australia
G. populifolium, 6 accessions from Australia
G. pulcnellum, 1 accession from Australia
G. raimondii, 56 accessions from Peru
G. robinsonii, 3 accessions from Australia
G. somalense, 3 accessions from Middle East
G. stocksii, 3 accessions from Middle East
G. sturtianum, 7 accessions from Australia
G. sturtianum var. nandewarensis, 6 accessions from Australia
G. thurberi, 7 accessions from Mexico
G. trilobum, 8 accessions from Mexico
G. triphyllum, 2 accessions from Africa
- Maintenance of collection: G. hirsutum, 1500 cultivars at Delta Branch Station, Stoneville, Mississippi, USA
G. barbadense, 700 at Cotton Research Centre, Phoenix, USA. Accessions collected from Caribbean and South America
 As seeds: most samples are kept at ambient temperatures and humidity. Where seeds are few, samples maintained at 0°C until they are multiplied
- Duplication of collection: National Seed Storage Laboratory, Fort Collins, Colorado, USA, as sufficient seed becomes available
- Availability: Each request is limited to 25 seeds per accession
- Quarantine: No information
- Evaluation: The following characters have been evaluated for some of the accessions: Plant height, relative maturity, relative productiveness, pubescence, flowering score, petal colour, petal spot, pollen colour, grams/boll, lint %, seed coat %, lint index, UHD, draw sl/raw st mean, TO, E1, micronaire, Areo-A, Areo-D, seed oil %, seed coat %, embryo %, seed coat index, embryo index, Coletotrichum resistance, Verticillium resistance and seed protein %
- Documentation: Computerized and complete. Print-out available on request. Report of the USDA/IBPGR collecting mission to the Caribbean Islands of Curaçao, Aruba and Bonair, Dominican Republic, Jamaica, Grand Cayman, Puerto Rico, South Florida, and Trinidad and Tobago with passport data available (AGPG:IBPGR/85/94)

ZAIRE

Institut National pour l'Etude et
 la Recherche Agronomique (INERA)
 Secteur du Sud-Est
 B.P. 237
 Gandajika

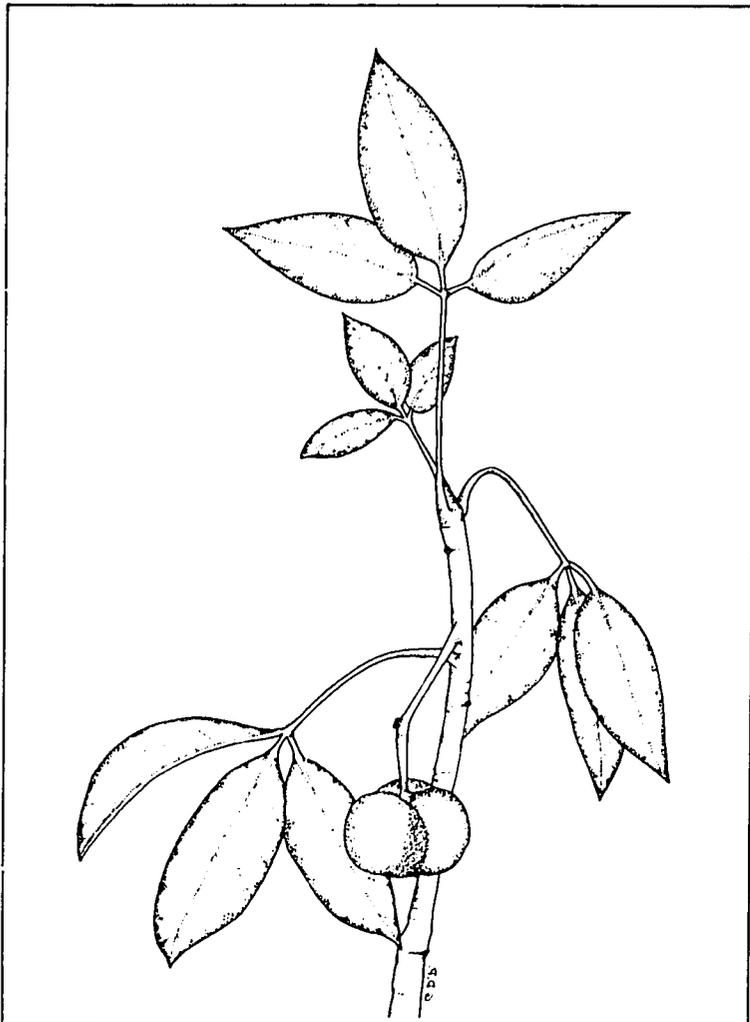
Telephone:
 Telex:
 Cable:

Curator/person in charge: N. M. Vigheri

GOSSYPIMUM

Details of collection:	<p><u>Gossypium anomalum</u>, 19 wild from Sudan</p> <p><u>G. arboreum</u> var. <u>Karanganni</u>, 19 wild from Sudan</p> <p><u>G. arboreum</u> var. <u>Mollisoni</u>, 32 wild from Sudan</p> <p><u>G. arboreum</u> subsp. <u>sanguineum</u>, 15 wild from Bambari, Central African Republic</p> <p><u>G. arboreum</u> race <u>soudanense</u>, 28 wild from Uganda</p> <p><u>G. arboreum</u> var. <u>gaorani</u>, 12 wild from Sudan</p> <p><u>G. areysianum</u>, 14 wild from Sudan</p> <p><u>G. aridum</u>, 13 wild from Uganda and USA, donated by University of Texas, USA</p> <p><u>G. barbadense</u>, 9 primitive cultivars from Zaire</p> <p><u>G. barbadense</u> var. <u>barbadense</u>, 13 primitive cultivars from Nicaragua, used by local Indians</p> <p><u>G. davidsonii</u>, 39 wild from Sudan</p> <p><u>G. gossypioides</u>, 7 wild from Mexico and Texas, USA</p> <p><u>G. harknessii</u>, 27 accessions from Mexican and Californian deserts, donated by Beltsville, USA</p> <p><u>G. herbaceum</u> var. <u>Dharwar</u>, 32 wild from Sudan</p> <p><u>G. herbaceum</u> var. <u>Kumpta</u>, 18 wild from Sudan</p> <p><u>G. herbaceum</u> var. <u>Surat</u>, 5 wild from Sudan</p> <p><u>G. hirsutum</u>, 6 primitive cultivars from Zaire</p> <p><u>G. hirsutum</u>, 11 mutants, variety C2-1366, INERA</p> <p><u>G. hirsutum</u>, 12 mutants, variety NC2, INERA</p> <p><u>G. hirsutum</u>, 7 mutants, variety NC8, INERA</p> <p><u>G. hirsutum</u>, 22 mutants, variety C2-145, INERA</p> <p><u>G. hirsutum</u>, 14 mutants, variety Gar 105, INERA</p> <p><u>G. hirsutum</u>, 5 mutants, haploid cotton court (asynapsis)</p> <p><u>G. hirsutum</u> var. <u>Rider red</u>, 10 primitive cultivars from Texas, USA</p> <p><u>G. hirsutum</u> race <u>marie-galante</u>, 67 primitive cultivars from USA, donated by Beltsville, USA</p> <p><u>G. hirsutum</u>, 5 mutants, haploid of variety C2-1368, INERA</p> <p><u>G. kirkii</u>, 5 wild from Uganda</p> <p><u>G. klotzschianum</u>, 5 wild from Mexico and California, USA</p> <p><u>G. longicalyx</u>, 4 wild from Uganda</p> <p><u>G. microcarpum</u>, 14 wild from Zaire</p> <p><u>G. raimondii</u>, 22 wild from Sudan and USA</p> <p><u>G. stocksii</u>, 15 accessions from Sudan</p> <p><u>G. sturtianum</u>, 13 wild from Sudan</p> <p><u>G. sturtianum</u> var. <u>nandewarensis</u>, 11 wild from Texas, USA</p> <p><u>G. thespesia</u>, 1 wild from Zaire</p> <p><u>G. thurberi</u>, 8 wild from Belgium</p> <p><u>G. tomentosum</u>, 21 wild from Hawaii, USA</p> <p>All mutants are from Zaire and donated by INERA</p>
Maintenance of collection:	As trees
Duplication of collection:	Institut de Recherches du Coton et des Textiles Exotiques, IRCT, France; Cotton Breeding Section, University of Karthoum, Shambat, Sudan; and USDA, USA
Availability:	Available in limited quantity, only with permission of the Director of INERA
Quarantine:	Imported germplasm must have phytosanitary certificate. Germplasm will be exported only on receipt of import permit from the country of destination
Evaluation:	The collection has been evaluated for yield, earliness and resistances to diseases
Documentation:	Partial and manual

Hevea



BRAZIL

HEVEA

Centro Nacional de Pesquisa de
Seringueira e Dendê (CNPDS)
Caixa Postal 319
CEP 69.000 Manaus, Amazonas

Telephone: 233 56 68 / 233 56 12
Telex:
Cable:

Curator/person in charge: E. Lleras

Details of collection: Hevea brasiliensis, 990 cultivars (which include 520 primitive cultivars) and 9 wild relatives from Brazil

Maintenance of collection: As trees

Duplication of collection: Rubber Research Institute of Malaysia (RRIM) and Institut de Recherches sur le Caoutchouc (IRCA), France

Availability: Freely available. Requests for material should be sent to the Chief, CENARGEN

Quarantine: No known restrictions

Evaluation: No information

Documentation: No information

FRANCE

Institut de Recherches sur le Caoutchouc (IRCA)
Centre de Cooperation Internationale en Recherche
Agronomique pour le Développement (CIRAD)
42, rue Scheffer
F-75016 Paris

Telephone: (1) 704 32 15
Telex: 620871 INFRANCA PARIS
Cable: INFRANCA-PARIS

Curator/person in charge: D. Nicolas

Details of collection: Hevea brasiliensis, 200 selected clones from Indonesia, Malaysia, Sri Lanka and Vietnam; 500 breeders' clones from Côte d'Ivoire; 200 primitive clones and 2500 primitive cultivars from the Amazon basin

Maintenance of collection: As trees and budwood. Collection maintained in Africa, French Guiana and Guadeloupe

Duplication of collection: CNPDS, Manaus, Brazil and RRIM, Malaysia

Availability: Primitive material under control of International Rubber Research and Development Board (IRRDB)

Quarantine: Material arriving from South and Central America must pass through quarantine

Evaluation: No information

Documentation: No information

INDIA

Rubber Research Institute of India
Rubber Board (Government of India)
Kottayam 686 009

Telephone: 8311 (7 lines)
Telex: 888 205 RUBR IN
Cable: RUBRBOARD

Curator/person in charge: Deputy Director (botany)

HEVEA

Details of collection:	<u>Hevea brasiliensis</u> , several types of commercial and experimental value <u>H. benthamiana</u> , 1 wild <u>H. spruceana</u> , 1 wild All material from Brazil and donated by China, Indonesia, Liberia, Malaysia, Sri Lanka and Thailand
Maintenance of collection:	Bush nursery. Clonally replicated plants
Duplication of collection:	Clones mutually exchanged between different countries are available at the respective Institutes
Availability:	Available under bilateral agreement only
Quarantine:	Material for export or import must pass thorough quarantine
Evaluation:	Evaluation has been carried out for the following characters: growth characters, yield and other secondary characters like disease and wind tolerance
Documentation:	Partial and manual

INDONESIA

Research Institute for Estate Crops
National Centre for Rubber Research
Sungei Putih
P.O. Box 416
Medan

Telephone: 32 77 87 / 32 44 44
Telex:
Cable: RUBPUTIH

Curator/person in charge: A. Madjid

Details of collection: Hevea brasiliensis, 421 breeders' lines and commercial cultivars from Brazil
Following wild spp. mostly from Brazil:
H. benthamiana
H. collina
H. confusa
H. guianensis var. lutea
H. pauciflora
H. spruceana
The collection also comprises the following number of H. brasiliensis breeders' lines:
232 from North Sumatra: AVROS (71), AP (16), APS (8), BPM (40), K (10), SR (12), Sb (21), RR (18), TM (11), GYT (3), HAPM (14), T (4) and USP (4). 47 from Java: PR (30), GT (1), LCB (5), WR (1), BD (3), Tjir (2), Harbel (1), LMOD (1), Wagga (1), Mil (1), Soc (1). 47 from Malaysia: RRIM (33), PB (8), CHEM (5), GL (1); 24 from Sri Lanka: RRIC (5), NAB (3), RLD (16). 41 from Vietnam: IRC1 (10), TR (31); 1 from Thailand: KRS (1); 29 from Brazil: F (6), FX (18), FB (2), IAN (3)
Some donated by Good Year Sumatra Plant

Maintenance of collections:	As trees and in budwood nurseries
Duplication of collection:	Some at Sembawa, Bogor and Jember Experiment Stations, Indonesia Selected cultivars are grown by other IRRDB Rubber Research Institutes
Availability:	Available on mutual exchange basis (not necessarily for rubber cultivars) upon approval of the Ministry of Agriculture

INDONESIA (cont.)

HEVEA

- Quarantine: Any import of rubber material is subject to quarantine procedures as per ANPRC agreement. No rubber plants may be exported without prior permission from the Ministry of Agriculture
- Evaluation: Evaluation has been carried out on all plants with particular emphasis on yield characters
- Documentation: No special documentation is available. Data on collection have been published

LIBERIA

Firestone Plantations Company
Harbel

Telephone:
Telex:
Cable: FIRESTONE

- Curator/person in charge: G. K. Baier
- Details of collection: Hevea brasiliensis, 15 commercial cultivars from Far East and 1200 clonally replicated plants in trials from Liberia and West Africa
- Maintenance of collection: As trees. Clonally replicated plants
- Duplication of collection: No information
- Availability: No information
- Quarantine: No information
- Evaluation: In progress but no information available
- Documentation: Partial and manual

MALAYSIA

The Rubber Research Institute of Malaysia (RRIM)
P.O. Box 10150
Kuala Lumpur 01-02

Telephone: 46 70 33
Telex:
Cable: Searching Kuala Lumpur

- Curator/person in charge: P. K. Yoon
- Details of collection: Hevea spp., 22 cultivars; 303 primitive cultivars and 30 wild relatives from Brazil, Malaysia and Peru; 11500 wild from Brazil
- Maintenance of collection: As trees. Clonally replicated plants
- Duplication of collection: No information
- Availability: Not available
- Quarantine restrictions: No information
- Evaluation: Evaluation has been carried out on the following characters: yield, girth, disease resistance, branching and bark characteristics
- Documentation: No information

SRI LANKA

HEVEA

Rubber Research Institute of Sri Lanka
Department of Genetics & Plant Breeding
R. R. I. Substation
Matugama

Telephone: Agalawata 26
Telex:
Cable: RUBRS Agalawata

Curator/person in charge: N. E. M. Jayasekera

Details of collection: Hevea brasiliensis, 163 commercial cultivars from China, India, Indonesia, Malaysia, Sri Lanka (98) and Vietnam; and 100 wild from the states of Acre, Mato-Grosso and Rondônia, Brazil

Maintenance of collection: As trees, budgrafted on rootstock seedlings. Breeding material, as clonally propagated trees

Duplication of collection: Rubber Research Institute of Malaysia (RRIM)

Availability: Freely available

Quarantine: None

Evaluation: Breeding material: yield, girth, disease resistance, wind stability, latex colour and susceptibility to dry bark (brown bast)

Documentation: Partial and manual

UNITED STATES OF AMERICA

Subtropical Horticulture Research Station
Agricultural Research Service (ARS)
United States Department of Agriculture (USDA)
13601 Old Cutler Road
Miami, Florida 33158

Telephone:
Telex:
Cable:

Curator/person in charge: P. K. Soderholm

Details of collection: Hevea brasiliensis, cultivars
H. brasiliensis x H. benthamiana,
Hybrids of pre 1958 selections of AVROS, FX, IAN, P, PB, PR, RRI and TJ clones
70 accessions from Brazil, Costa Rica, Indonesia and Sri Lanka

Maintenance of collection: As trees

Duplication of collection: No information

Availability: Freely available in limited quantity (1 or 2 budsticks per tree)

Quarantine: Import permit must be provided with requests

Evaluation: No recent evaluation has been carried out

Documentation: Partial and computerized

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