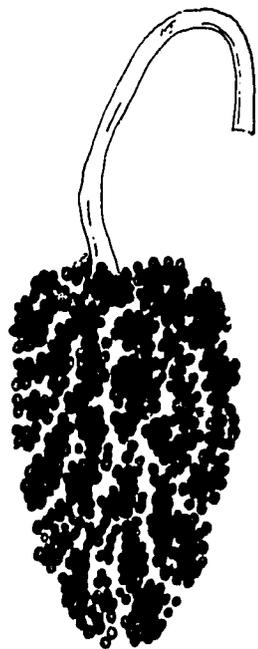
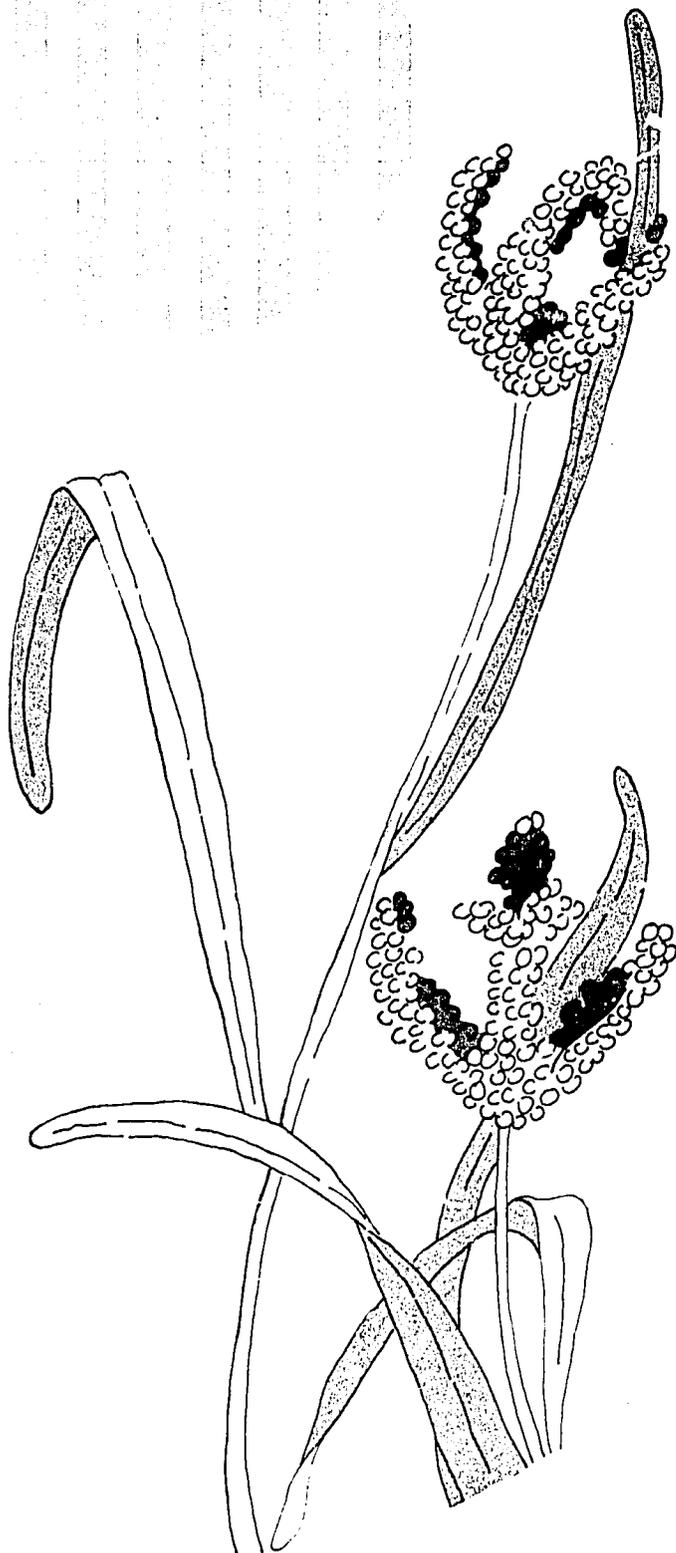


DIRECTORY OF GERMPASM COLLECTIONS



sorghum  
& millets



AGP:IBPGR/81/55  
November 1981

INTERNATIONAL BOARD FOR PLANT GENETIC RESOURCES

DIRECTORY OF GERMPLASM COLLECTIONS

3. CEREALS

IV. SORGHUM and MILLETS

by

N. Murthi Anishetty, W.G. Ayad and Jane Toll

IBPGR Secretariat  
Rome, 1981

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). The IBPGR, which was established by the CGIAR in 1974, is composed of its Chairman and 15 members; its Executive Secretariat is provided by the Food and Agriculture Organization of the United Nations. The basic function of the IBPGR, as defined by the Consultative Group, is to promote 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. The Consultative Group mobilizes financial support from its members to meet the budgetary requirements of the Board.

IBPGR Executive Secretariat  
Plant Production and Protection Division  
Food and Agriculture Organization of the United Nations  
Via delle Terme di Caracalla, 00100, Rome, Italy

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FOREWORD

With the development of a global network of genetic resources activities it has become increasingly apparent that there is an information gap relating to what material is held where. This gap will persist until all major collections are adequately documented and information, as well as samples, readily exchanged.

The IBPGR has therefore agreed to issue directories of collections which should not only be useful to scientists involved with genetic resources but also should stimulate curators to provide more detailed information.

The data included in these directories are, of necessity, incomplete: we have relied upon answers to questionnaires, data held in the Secretariat and in published reports, indexes, seminars and verbal communications. It is our intention to keep the directories under continuing review and to issue revisions as and when necessary. All data are being computerized so that ultimately we can answer queries more readily. We apologize to those centres which should have perhaps been included; but we have attempted to incorporate information on all major holdings. Additions and corrections will be welcomed.

The listings of the samples of sorghum have been standardized according to the generally acceptable race classification developed by Professors J.R. Harlan and J.M.J. de Wet of the University of Illinois, USA. The races and group names agreed for documentation purposes and issued in "Sorghum Descriptors" 1980 by the IBPGR and ICRISAT are listed in Appendix I. A list of the millet species included in this directory is provided in Appendix II.

J.T. Williams  
Executive Secretary

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ALGERIA

Institut de Développement des  
Grandes Cultures  
B.P. 16  
El Harrach  
Algiers

Curator/person in charge:	N. Kadra
Details of samples:	<u>S. bicolor</u> , 35 landraces
Geographical representation:	Algeria
Evaluation and documentation:	Partial and manual
Storage:	Active collection. Duplicates at Bari, Italy in long-term storage

ARGENTINA

Estación Experimental Agropecuaria  
INTA  
C.P. 5988  
Manfredi  
Córdoba

Curator/person in charge:	J.L. Scantambrolo/R.A. Parodi
Details of samples:	<u>S. bicolor</u> , 2700
Geographical representation:	Unspecified
Evaluation and documentation:	Partial and manual
Storage:	Active collection

AUSTRALIA

Division of Tropical Crops and Pastures  
CSIRO  
Cunningham Laboratory  
Mill Road, St. Lucia  
Queensland 4067

Curator/person in charge: E.F. Henzell  
Details of samples: S. bicolor, 1000  
Geographical representation: Unspecified  
Evaluation and documentation: Partial  
Storage: Active collection

BRAZIL

Empresa Brasileira de Pesquisa Agropecuária  
(EMBRAPA)  
Centro Nacional de Recursos Genéticos (CENARGEN)  
Cx. P. 10.2372  
70.000 Brasilia D.F.

Curator/person in charge: D. Giacometti (national coordinator for genetic resources)  
Details of samples: S. bicolor (details not known)  
Geographical representation: Unspecified  
Evaluation and documentation: Partial  
Storage: As an active collection at:  
Centro Nacional de Pesquisa de Milho e Sorgo (CNPMS)  
Cx. P. 151  
37.700 - Sete Lagoas - M.G.  
Curator - R. de Oliviera Feldmann  
Storage: The collection will be duplicated at CENARGEN, Brasilia where both long-term (-18°C) and medium-term (-1°C) stores will be operational in 1981

CHINA

Crop Germplasm Resources Institute (CGRI)  
Chinese Academy of Agricultural Sciences  
(CAAS)  
Beijing

Curator/person in charge: Xu Yun-Tian

Details of samples: S. bicolor Kaoliang and Broomcorn types ca.  
3000 landraces and introductions

Geographical representation: China and introductions

Evaluation and documentation: Partial

Storage: Active at 5 provincial agricultural acad-  
emies: Heilongjiang, Henan, Shanxi, Shandong  
and Liaoning. The CGRI coordinates the nation-  
al germplasm activities.

A medium-term store is under construction  
at Beijing and a long-term store is planned.  
This national genebank will hold duplicates  
of all germplasm collections

COLOMBIA

Instituto Colombiano Agropecuario (ICA)  
Tibaitatá  
AA 151123 El Dorado  
Bogotá

Curator/person in charge: L.E. Lopez

Details of samples: Sorghum spp., 912 cultivars

Geographical representation: Unspecified

Evaluation and documentation: Partial and computerized

Storage: Medium-term. Seeds stored at 5<sup>o</sup>C, long-term  
store proposed

ETHIOPIA

Plant Genetic Resources Center  
P.O. Box 30726  
Addis Ababa

Curator/person in charge:

Melaku Worede

Details of samples:

S. bicolor, 5000 + landraces and cultivars

Geographical representation:

Ethiopia

Evaluation and documentation:

ca. 4800 accessions evaluated at two locations for 15 morpho-agronomic characters

Storage:

Seed with 5-6% m.c. stored in cans at 4<sup>o</sup> C for medium-term storage and in foil packets at -20<sup>o</sup> C for long-term storage. Samples are held in an active collection at the Ethiopian Sorghum Improvement Project (ESIP), Nazret, and in medium-term storage at ICRISAT, India

FRANCE

Office de la Recherche Scientifique et  
Technique d'Outre-Mer (ORSTOM)  
Services Scientifiques Centraux  
70-74 Route d'Aulnay  
93140 Bondy

Curator/person in charge:

M.J. Pernes

Details of samples:

S. bicolor, 2626 landraces, wild and weedy types collected from 1975-1978

Geographical representation:

Benin, Mali, Niger, Nigeria, Senegal, Togo

Evaluation and documentation:

In progress for agronomic characters, disease resistance and climatic and edaphic adaptation

Storage:

Medium-term. Seeds stored at -5<sup>o</sup> C 30% R.H. Active collections at agricultural institutes in the country of origin of the collections (except Togo). Some duplicates at ICRISAT, India

FRANCE

Institut National de la Recherche Agronomique  
(INRA)  
Station d'Amélioration des Plantes  
97170 Petit-Bourg  
Guadeloupe

Curator/person in charge: H. Touvin

Details of samples: S. bicolor, 400 cultivars: dwarf, forage and grain types

Geographical representation: Unspecified

Evaluation and documentation: For adaptation, grain quality and disease resistance (rust, helminthosporium rhizoctonia)

GERMANY - DEMOCRATIC REPUBLIC

Zentralinstitut für Genetik und  
Kulturpflanzenforschung  
Corrensstrasse 3  
4325 Gatersleben

Curator/person in charge: C. Lehmann

Details of samples: S. alnum, S. bicolor 25 samples including cultivated and wild races: Bicolor, Kaffir, Kaffir-bicolor, Durra

Geographical representation: China and other countries

Evaluation and documentation: Partial and computerization in progress

Storage: Seeds with 8-9% m.c. stored in glass jars with silica gel at  $-15^{\circ}\text{C}$  for long-term storage and at  $-5$  to  $0^{\circ}\text{C}$  and 30% R.H. for medium-term storage

GERMANY - FEDERAL REPUBLIC

Institut für Pflanzenbau und Pflanzenzüchtung  
Bundesforschungsanstalt für Landwirtschaft  
Braunschweig - Völkenrode (FAL)  
Bundesallee 50  
D-3300 Braunschweig

Curator/person in charge: M. Dambroth

Details of samples: S. bicolor, 170 landraces and cultivars

Geographical representation: Mostly Yemen Arab Republic

Evaluation and documentation: Complete for disease resistance and biochemical and physiological characters. Data computerized

Storage: Seeds with 6% m.c. stored in sealed cans at -10°C for long-term storage and in paper bags at 4°C and 30% R.H. for medium-term storage

GHANA

Faculty of Agriculture  
University of Ghana  
Legon

Curator/person in charge: Mercer Quarshie

Details of samples: S. bicolor, 160 samples, races not specified

Geographical representation: Unspecified

Evaluation and documentation: Not available

Storage: Active collection

HUNGARY

Section for Plant Introduction and Gene Bank  
National Institute of Agrobotany  
Tápiószele 2766

Curator/person in charge: L. Holly

Details of samples: S. bicolor 82 samples including cultivated and wild races: Bicolor, Kafir, Caudatum, Durra, Guinea. The genebank lists these as species of Sorghum

Geographical representation: Introductions from collections in Belgium, Czechoslovakia, France, Hungary, Poland, USSR, Algeria, Egypt, Italy, Morocco, Botswana, South Africa, Zimbabwe, India, China, Japan Indonesia, Australia, Ecuador

Evaluation and documentation: In progress and partially computerized

Storage: Medium-term. Seeds with 5-8% m.c. stored in air-tight containers at 4°C and 15-50% R.H. Long-term store -20°C under construction

INDIA

All India Coordinated Sorghum  
Improvement Project  
Rajandranagar  
Hyderabad - 500030

Curator/person in charge: R.V. Vidyabushan

Details of samples: Not specified

Geographical representation: World-wide

Evaluation and documentation: Partial and manual

Storage: Active collection. Duplicates at ICRISAT, Hyderabad and also at various agricultural research stations in India

INDIA

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

Curator/person in charge: K.L. Mehra  
Details of samples: S. bicolor, 2000 + landraces  
Geographical representation: World-wide  
Evaluation and documentation: Partial and manual  
Storage: Active collection

INDIA

Genetic Resources Unit  
International Crops Research Institute  
for the Semi-Arid Tropics (ICRISAT)  
Patancheru P.O.  
Andhra Pradesh 502 324

Curator/person in charge: M.H. Mengesha  
Details of samples: S. bicolor, 16924 landraces, 237 cultivars, 1000 disease and pest-resistant lines, 127 wild and weedy races (aethiopicum, arundinaceum, versicolor, verticilliflorum, S. halepense 18, S. virgatum  
Geographical representation: World-wide  
Evaluation and documentation: Complete for 19 descriptors - days to 50% flowering, plant height, tillering, pigmentation, peduncle exertion, ear length, width, compactness and shape, glume colour and covering, grain colour and size, 100 seeds weight, threshability, lusture, presence of subcoat (endosperm texture), insect and disease resistance, striga and drought resistance. Data partially computerized  
Storage: Seeds with 10% m.c. stored in plastic-lined foil pouches at 4°C and 25% R.H. for medium-term storage. Duplicates at NSSL, Colorado, USA and the All-India Coordinated Sorghum Improvement Project, Hyderabad, India

IRAQ

Agricultural Research Centre (ARC)  
Plant Genetic Resources Unit  
Abu Ghraib  
Baghdad

Curator/person in charge: A.T. Sharif

Details of samples: S. bicolor, landraces unspecified

Geographical representation: Iraq

Evaluation and documentation: Partial and manual

Storage: Medium-term. Seeds stored in cans from 5<sup>o</sup>C to -10<sup>o</sup>C

ITALY

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

Curator/person in charge: E. Porceddu

Details of samples: S. bicolor, 50 landraces and cultivars

Geographical representation: Algeria, Spain, Tunisia

Evaluation and documentation: Data computerized

Storage: Seeds with 5-6% m.c. stored in sealed cans or vacuum sealed foil packets at -18<sup>o</sup>C for long-term storage and 0<sup>o</sup>C and 40% R.H. for medium-term storage. Duplicates at El Harrach, Algeria; Institute of Agronomy, Tunis, Tunisia; and INIA, Madrid, Spain

JAPAN

National Institute of Agricultural Sciences  
(NIAS)  
Division of Genetics  
Seed Storage Laboratory  
Kannondai 3.1.1  
Yatabe-machi  
Tsukuba-gun  
Ibaraki-ken 300-21

Curator/person in charge:

K. Kumagai

Details of samples:

S. bicolor, 466 landraces and cultivars

Geographical representation:

Unspecified

Evaluation and documentation:

Partial and computerized

Storage:

Seeds with 6-7% m.c. stored in vacuum sealed  
-10°C for long-term storage and in screw  
lid cans at -1°C and 35% R.H. for medium-  
term storage. Partially duplicated at Plant  
Germplasm Institute, Kyoto University, Japan.  
Curator: M. Tanaka

KENYA

FAO Sorghum and Millet Project  
Katumani

Curator/person in charge:

F. Pinto

Details of samples:

S. bicolor landraces, wild and weedy races  
and cultivars; not specified

Geographical representation:

Kenya, Uganda and introductions

Evaluation and documentation:

Unspecified

Storage:

Medium-term storage at 5°C. Stored at National  
Agricultural Research Station, P.O. Box 450,  
Kitale

MADAGASCAR

Institut de Recherches Agronomiques  
B.P. 1444  
Tananarive

Curator/person in charge:	M. Arrandeu
Details of samples:	<u>S. bicolor</u> , 300
Geographical representation:	Unspecified
Evaluation and documentation:	Unspecified
Storage:	Active collection

MALAWI

Chitedze Agricultural Research Station  
P.O. Box 158  
Lilongwe

Curator/person in charge:	P. Sibale
Details of samples:	<u>S. bicolor</u> , 483 landraces and wild types
Geographical representation:	Malawi
Evaluation and documentation:	Unspecified
Storage:	Medium-term. Seeds stored in tins, jars or packets at 6-10°C and 50% R.H. Duplicates at NSSL, Colorado, USA, and ICRISAT, India

MEXICO

Instituto Nacional de Investigaciones  
Agrícolas (INIA)  
Unidad de Recursos Genéticos  
Arcos de Belen, 79  
Mexico, D.F.1

Curator/person in charge: F. Cárdenas Ramos  
Details of samples: S. bicolor, 3000 introduced cultivars  
Geographical representation: Unspecified  
Evaluation and documentation: Partial and manual  
Storage: Active collection. Seeds stored in sealed paper bags at 5°C and 10% R.H.

PAKISTAN

Agricultural Research Council (ARC)  
Islamabad

Curator/person in charge: A. Khan  
Details of samples: S. bicolor, unspecified  
Geographical representation: Pakistan + introductions  
Evaluation and documentation: Unspecified  
Storage: Medium-term. Seeds stored in cans at 0°C

PAKISTAN

New Seed Farm  
Sargodha

Curator/person in charge: M.H. Chaudhary  
Details of samples: S. bicolor, 174  
Geographical representation: Pakistan  
Evaluation and documentation: Complete  
Storage: Uncontrolled temperature and humidity

ROMANIA

Research Institute for Cereals and  
Technical Plants  
8264 Fundulea  
Jud. Ilfor

Curator/person in charge:

P. Varga

Details of samples:

S. bicolor, 4900 landraces, wild and weedy  
races

Geographical representation:

Unspecified

Evaluation and documentation:

Partial and manual

Storage:

Active collection

SOMALIA

Central Agricultural Research Station  
AFGOI  
Lower Shabele Region

Curator/person in charge:

A.A. Majan

Details of samples:

S. bicolor, 94 landraces

Geographical representation:

Somalia

Evaluation and documentation:

Partial and manual

Storage:

Active collection. Duplicates at ICRISAT,  
India

SOUTH AFRICA

Division of Plant and Seed Control  
Department of Agricultural Technical Services  
P/Bag X179  
0001 Pretoria

Curator/person in charge: A.E. Swanepoel

Details of samples: Sorghum spp., 170 landraces and cultivars

Geographical representation: World-wide, but mainly southern Africa

Evaluation and documentation: Partial and computerized

Storage: Seeds are stored in aluminium foil at  $-15^{\circ}\text{C}$  for long-term storage and at  $5^{\circ}\text{C}$  at 45% R.H. for active collection. Duplicates are stored at crop research stations in South Africa

SPAIN

Instituto Nacional de Investigaciones Agrarias  
(INIA)  
Banco de Germoplasma  
Finca 'El Encin'  
Ap. 127 Alcala de Henares  
Madrid

Curator/person in charge: M. Bueno and A. Monteagudo

Details of samples: S. bicolor, unspecified, mostly cultivars

Geographical representation: Unspecified

Evaluation and documentation: Complete and in process of computerization

Storage: Medium-term. Seeds stored at  $-2^{\circ}\text{C}$ . Long-term stores  $-18^{\circ}\text{C}$  and 25-30% R.H. Duplicates at Bari, Italy and VLR, Leningrad, USSR

SRI LANKA

Agricultural Research Centre  
Maha Illuppallama

Curator/person in charge: J. Fernando  
Details of samples: S. bicolor, 28 landraces  
Geographical representation: Sri Lanka  
Evaluation and documentation: Unspecified  
Storage: Active collection. Duplicates at ICRISAT,  
India

SYRIA

Agricultural Research Centre  
Genetic Resources Unit  
P.O. Box 113  
Douma

Curator/person in charge: M.R. Rifaie  
Details of samples: Bicolor, 21 landraces  
Geographical representation: Syria  
Evaluation and documentation: Partial and manual  
Storage: Active collection. Seeds stored in cans at  
5°C

THAILAND

Faculty of Agriculture  
Kasetsart University  
Bangkhen  
Bangkok, 9

Curator/person in charge: S. Jinahyon  
Details of samples: Sorghum spp., 1500 samples  
Evaluation and documentation: Partial and manual  
Storage: Active collection

UNION OF SOVIET SOCIALIST REPUBLICS

N.I. Vavilov All-Union Institute of  
Plant Industry (VIR)  
44 Herzen Street  
Leningrad

Curator/person in charge: V.F. Dorofeev  
Details of samples: S. bicolor, 9615 landraces, cultivars and  
wild types  
Evaluation and documentation: Partial and computerized  
Storage: Seeds with 2-8% m.c. stored in sealed cans  
at 4-5<sup>o</sup>C and 30% R.H. for medium-term storage  
and at -10<sup>o</sup>C for long-term storage

UNITED STATES OF AMERICA

National Seed Storage Laboratory (NSSL)  
U.S. Department of Agriculture  
Colorado State University  
Fort Collins, Colorado 80523

Curator/person in charge: L.N. Bass

Details of samples: Sorghum spp., 15000 + landraces, cultivars and wild species

Geographical representation: World-wide

Evaluation and documentation: Passport data computerized

Storage: Long-term. Seeds with 4-7% m.c. stored in permanently sealed cans at -10<sup>o</sup> C. A designated base collection of the IBPGR. Mostly duplicated at ICRISAT, India

UNITED STATES OF AMERICA

Southern Regional Plant Introduction Station  
Experiment, Georgia 30212

Curator/person in charge: W.R. Longford

Details of samples: Sorghum aluum, S. bicolor, S. helepense, S. plumosum, S. propinguum, S. verticilliflorum and S. virgatum, 3365 landraces and cultivars, 255 hybrids, weedy and wild types: Bicolor, Caudatum, Caudatum-bicolor, Durra, Durra-bicolor, Guinea, Guinea-bicolor, Guinea-caudatum/Kafir-bicolor; aethiopicum, arundinaceum, henvisonii, japonicum, laxiflorum, miliaceum, niloticum, nitidum, pugnionifolium, saccharatum, stipodum, technicum, versicolor

Geographical representation: World-wide

Evaluation and documentation: In progress and computerized

Storage: Medium-term. Duplicates at NSSL, Colorado, USA and at ICFISAT, India. The Germplasm Resources Laboratory, Beltsville, Maryland 20705, is the national focal point for the introduction, documentation, initial distribution and exchange of germplasm. Plant Introduction Officer - G.A. White

UNITED STATES OF AMERICA

U.S. Sugar Crops Field Station  
Box 152  
Meridian, Mississippi 39301

Curator/person in charge:

Details of samples:

S. bicolor [sweet sorghums], 4610 lines  
(variability of many unknown)

Geographical representation:

World-wide

Evaluation and documentation:

Accessed and classified into 5 types: dwarf,  
shattercane, juicy sweet, dry sweet, exotic

Storage:

Active collection

UNITED STATES OF AMERICA

Mayagüez Institute of Tropical Agriculture  
USDA, SEA-AR  
P.O. Box 70  
Mayagüez, Puerto Rico 00708

Curator/person in charge:

A.R. Sotomayor

Details of samples:

S. bicolor, 4000 + landraces and cultivars

Geographical representation:

World-wide collection

Evaluation and documentation:

Partial and manual

Storage:

Active collection

VENEZUELA

Centro Nacional de Investigaciones  
Agropecuarias (CENIAP)  
Apartado 4653  
Maracay

Curator/person in charge: H. Mena

Details of samples: S. bicolor, 494 landraces and cultivars

Geographical representation: Venezuela and introductions

Evaluation and documentation: Partial and manual

Storage: Active collection. Seeds stored at 8°C and 45% R.H.

YEMEN ARAB REPUBLIC

American Sorghum Project  
Tihama

Curator/person in charge: K. Mansour

Details of samples: S. bicolor, 4000 landraces and cultivars

Geographical representation: Yemen and introductions

Evaluation and documentation: Unspecified

Storage: Active collection

YEMEN - PEOPLE'S DEMOCRATIC REPUBLIC

El-Kod Agricultural Research Centre  
Ministry of Agriculture and Agrarian Reform  
Aden

Curator/person in charge: AB. S. Mu' Allem

Details of Samples: S. bicolor landraces

Geographical representation: PDR Yemen

Evaluation and documentation: Partial and manual

Storage: Active collection

ZAMBIA

Mount Makulu Agricultural Research Station  
P.O. Box 7  
Chilanga

Curator/person in charge:

R.K. Chungu

Details of samples:

S. bicolor, 259 landraces and 33 introduced cultivars

Geographical representation:

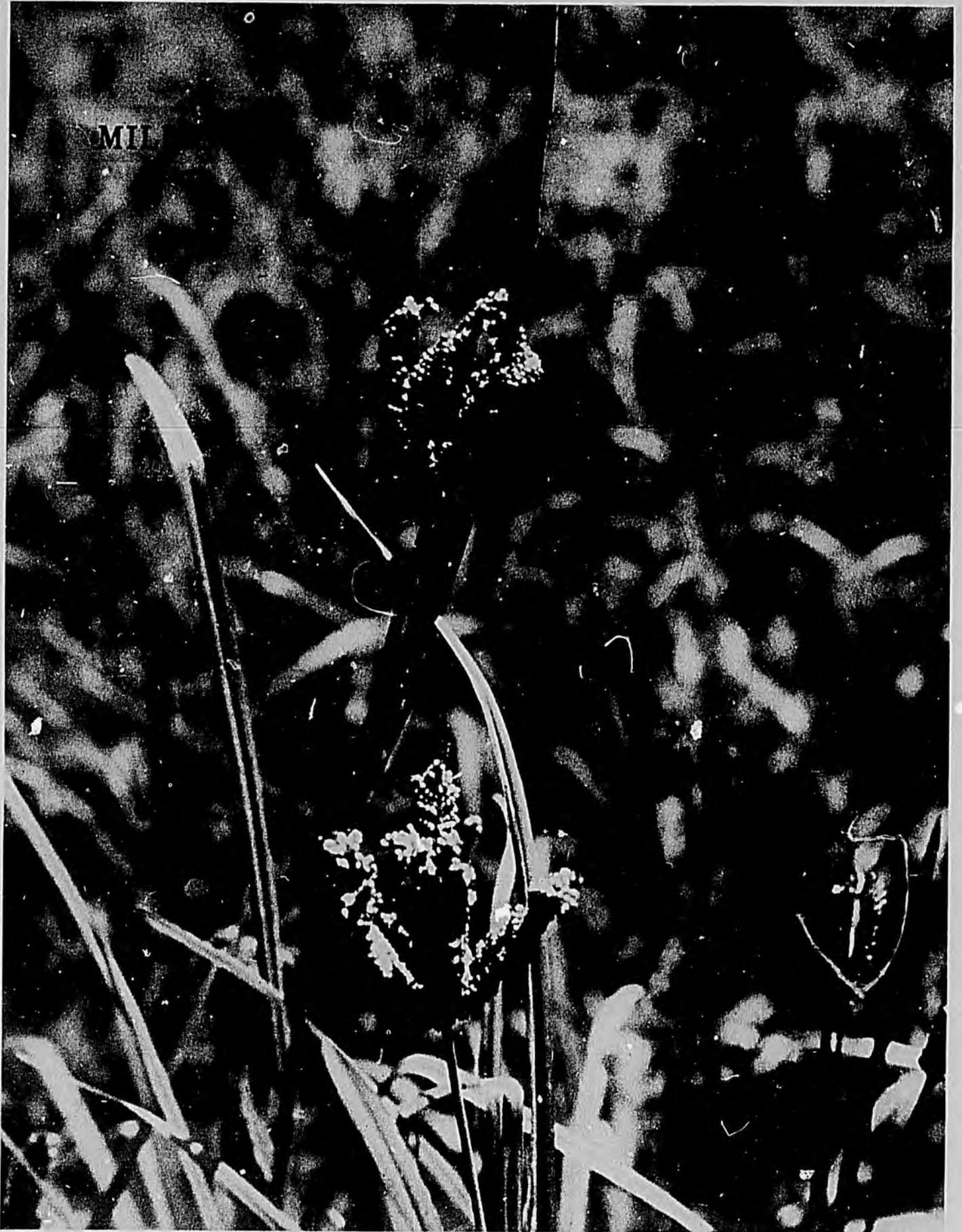
Zambia and introductions from ICRISAT

Evaluation and documentation:

Complete for yield

Storage:

Active collection. Seeds stored at 4-9<sup>o</sup> C and 55% R.H. Duplicates at the School of Agriculture, Zambia University, P.O. Box 2379, Lusaka, and NSSL, Colorado, USA



CANADA

Plant Gene Resources of Canada (PGRC)  
Agriculture Canada  
Ottawa Research Station, Building 75  
Ottawa, Ontario KIA 0C6

Curator/person in charge: R. Loiselle

Details of samples: Pennisetum americanum, 500 landraces, wild and weedy types

Geographical representation: Botswana, Kenya, Malawi, Nigeria, Yemen Arab Republic, Zambia

Evaluation and documentation: In progress and computerized

Storage: Long-term. Seeds of 7-8% m.c. stored in sealed laminated foil pouches at  $-20^{\circ}\text{C}$ . Designated by the IBPGR as a base collection for Pennisetum spp. Duplicates at ICRISAT, India; Chitedze Agricultural Research Station, Lilongwe, Malawi; Mount Makulu Agricultural Research Station, Chilanga, Zambia

CHINA

Institute of Crop Germplasm Resources  
Chinese Academy of Agricultural Sciences (CAAS)  
Beijing

Curator/person in charge: Xu Yun-Tian

Details of samples: Panicum miliaceum, details unknown; Setaria italica, 3226 landraces

Geographical representation: China

Evaluation and documentation: For plant height, leafiness, head size and compactness, drought-tolerance, pest resistance, glutinous or non-glutinous endosperm. Cytoplasmic-genic male sterility found in collections from Hsinhsiang, Henan Province

Storage: Active collections at institutes of the CAAS and at provincial agricultural academies where storage conditions vary from room temperature to  $-10^{\circ}\text{C}$ . The Institute of Crop Germplasm Resources coordinates national germplasm activities. A medium-term store is under construction at Beijing and a long-term store is planned. This national genebank will hold duplicates of all germplasm collections

CZECHOSLOVAKIA

Department of Genetic Resources  
Institute of Genetics and Plant Breeding  
16106 Prague 6 - Ruzyne 507

Curator/person in charge:

A. Drozdova

Details of samples:

Echinochloa frumentacea, Eleusine coracana,  
E. indica, Panicum miliaceum, Setaria  
italica, S. viridis

Geographical representation:

Czechoslovakia and other countries

Evaluation and documentation:

Partial and in process of computerization

Storage:

Seeds stored at 3-4<sup>o</sup> C for medium-term  
storage and at 20<sup>o</sup> C for long-term storage

ETHIOPIA

Plant Genetic Resources Center (PGRC)  
P.O. Box 30726  
Addis Ababa

Curator/person in charge:

Melaku Worede

Details of samples:

Unspecified number of landraces of Eleusine,  
Pennisetum, and Eragrostis tef

Geographical representation:

Ethiopia

Evaluation and documentation:

Partial and manual

Storage:

Seeds with 5-6% m.c. stored in cans at 4<sup>o</sup> C  
for medium-term storage and in foil packets  
at -20<sup>o</sup> C for long-term storage. Designated  
on a base collection for Eragrostis by the  
IBPGR

FRANCE

Office de la Recherche Scientifique et  
Technique d'Outre-Mer (ORSTOM)  
Services Scientifiques Centraux  
70-74 Route d'Aulnay  
93140 Bondy

Curator/person in charge:

M. J. Pernes

Details of samples:

Digitaria exilis, 215; Pennisetum americanum  
ca. 2100. Landraces, wild and weedy types

Geographical representation:

Benin, Cameroun, Central African Republic,  
Mali, Niger, Nigeria, Senegal, Togo, Upper  
Volta

Evaluation and documentation:

In progress for agronomic characters, adap-  
tation and disease resistance, notably re-  
sistance to *Sclerospora*

Storage:

Active collection. Seeds stored at 5°C and  
30% R.H. Duplicates as active collections  
held at agricultural institutions in the  
country of origin of collection (except  
Togo). Duplicates of pearl millet collection  
at ICRISAT, Hyderabad, India

GERMANY - DEMOCRATIC REPUBLIC

Zentralinstitut für Genetik und  
Kulturpflanzenforschung  
Corrensstrasse 3  
4325 Gatersleben

Curator/person in charge:

C. Lehmann

Details of samples:

Echinochloa colona, E. crus-galli, E.  
frumentacea, Eleusine coracana, E. indica,  
Panicum miliaceum, P. spontaneum, Setaria  
italica, S. viridis, 264 landraces, cul-  
tivars, wild and weedy types

Geographical representation:

Unspecified

Evaluation and documentation:

Partial and computerization in progress

Storage:

Seeds with 3-9°C m.c. stored in glass jars  
with silica gel at -15°C for long-term  
storage and at -5 to 0°C and 30% R.H. for  
medium-term storage

HUNGARY

Section for Plant Introduction and Gene Bank  
National Institute of Agrobotany  
Táp:ószele 2766

Curator/person in charge:

L. Holly

Details of samples:

Echinochloa crus-galli, 2 wild; Panicum miliaceum, 53 landraces and cultivars; Setaria italica, 2 landraces

Geographical representation:

Bulgaria, Czechoslovakia, Germany, Hungary, Kenya, Poland, Turkey, USSR

Evaluation and documentation:

Partial and computerized

Storage:

Medium-term. Seeds with 5-8% m.c., stored in airtight containers at 4<sup>o</sup> C and 15-50% R.H. Long-term store (-20<sup>o</sup> C) under construction

INDIA

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

Curator/person in charge:

K.L. Mehra

Details of samples:

Echinochloa sp., Eleusine coracana, E. indica, Panicum sp., Paspalum sp., Setaria italica

Geographical representation:

Unspecified

Evaluation and documentation:

Partial

Storage:

Active collection

INDIA

Genetic Resources Unit  
International Crops Research Institute  
for the Semi-Arid Tropics (ICRISAT)  
Patancheru P.O.  
Andhra Pradesh 502 324

Curator/person in charge:

M.H. Mengesha

Details of samples:

Echinochloa crus-galli details unknown;  
Eleusine coracana, E. indica, 1347 landraces,  
cultivars, wild and weedy types; Panicum  
miliaceum, 163 landraces; P. miliare, 214  
landraces; Paspalum scrobiculatum, 254;  
Pennisetum americanum, 13000 + landraces,  
cultivars and lines; Pennisetum spp. hybrids,  
wild and weedy types; Setaria italica, 736  
landraces

Geographical representation:

World collection including the Indian  
Pennisetum americanum collection

Evaluation and documentation:

Partial for P. americanum for plant height,  
head characters, maturity, grain types,  
environmental adaptation, disease resistance  
(rust, downy mildew, ergot, smut), pest  
resistance (stem borers, aphids, grass-  
hoppers, ear-head caterpillar, spider mites)  
yield range. Partial for other millets:  
plant height, days to 50% flowering, pig-  
mentation, lodging, peduncle exertion,  
panicle type, grain colour, glume length  
(for Eleusine), bristling (for Setaria).  
Data partially computerized

Storage:

Medium-term. Seeds with 10% m.c. stored  
in plastic-lined foil pouches at 4<sup>o</sup> C and  
25% R.H. Designated by the IBPGR as a base  
collection for Eleusine spp. and Panicum  
miliaceum. Duplicates at Chitedze Agri-  
cultural Research Station, Lilongwe, Malawi;  
Mount Makulu Agricultural Research Station,  
Chilanga, Zambia; NBPGR, New Delhi, India;  
Bangalore, India; PGRC, Ottawa, Canada (P.  
americanum) and ORSTOM, Bondy, France (West  
African P. americanum)

INDIA

All India Coordinated Millet Improvement  
Programme (AICMIP)  
College of Agriculture  
Shivajinagar,  
Poona 411005  
Maharashtra

Curator/person in charge:

G. Harinarayana

Details of samples:

Echinochloa frumentacea, 583; Eleusine coracana, 2944; Panicum miliaceum, 552; P. miliare, 218; Paspalum scrobiculatum, 1405; Setaria italica, 3588

Geographical representation:

Africa, China, USSR, India and other countries of South Asia

Evaluation and documentation:

In progress at the designated improvement centres for each species

Storage:

Active collection at Bangalore and other centres within India (Almora, Dindori, Nandyal, Rewa). There is duplication between centres. The Germplasm Unit at Bangalore is engaged in the mobilization, maintenance, multiplication, cataloguing and classification of millets other than pearl millet

INDIA

Germplasm Unit  
All India Coordinated Millets Improvement Project  
University of Agricultural Sciences  
Bangalore 560065

Curator/person in charge:

A. Seetharam

Details of samples:

Eleusine coracana, 2960; Setaria italica, 1429; Panicum miliare, 242; P. miliaceum, 552; Paspalum scrobiculatum, 842; and Echinochloa frumentacea, 199

Geographical representation:

India, Sri Lanka, China, USSR and various countries in Africa

Evaluation and documentation:

Partial and manual

Storage:

Unspecified

ITALY

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

Curator/person in charge:

E. Porceddu

Details of samples:

Pennisetum americanum, 32 landraces

Geographical representation:

Tunisia

Evaluation and documentation:

Partial and computerized

Storage:

Seeds with 5-6% m.c. stored in sealed cans or vacuum sealed foil packets at -18°C for long-term storage and 0°C and 40% R.H. for medium-term storage. Duplicates at Tunis, Tunisia

JAPAN

National Institute of Agricultural Sciences (NIAS)  
Division of Genetics  
Seed Storage Laboratory  
Kannondai 3.1.1  
Yatabe-machi  
Tsukuba-gun  
Ibaraki-ken 300-21

Curator/person in charge:

K. Kumagai

Details of samples:

Echinochloa crus-galli, 50; Eleusine coracana 31; Panicum miliaceum, 21; Setaria italica, 182. Landraces

Geographical representation:

Japan and China, Korea, USSR, Bhutan, India, Nepal, Sri Lanka

Evaluation and documentation:

Partial and computerized

Storage:

Seeds with 6-7% m.c., stored in vacuum sealed cans at -10°C for long-term storage and in screw lid cans at 1°C and 35% R.H. for medium-term storage. Duplicates at Plant Germplasm Institute, Kyoto, Japan

JAPAN

Plant Germplasm Institute  
Faculty of Agriculture  
Kyoto University  
Mukoshi  
Kyoto 617

Curator/person in charge:

M. Tanaka

Details of samples:

Echinochloa utilis, 65; Eleusine coracana,  
58; Panicum miliaceum, 62; Setaria italica,  
274. Landraces

Geographical representation:

Unspecified

Evaluation and documentation:

Data computerized

Storage:

Active collection. Seeds stored in vacuum  
sealed cans at 5°C and 50-70% R.H. Dupli-  
cates at NIAS, Tsukuba, Japan

MALAWI

Chitedze Agricultural Research Station  
P.O. Box 158  
Lilongwe

Curator/person in charge:

P. Sibale

Details of samples:

Eleusine coracana, 277; E. indica, 12,  
Pennisetum americanum, 291. Landraces, wild  
and weedy types

Geographical representation:

Malawi

Evaluation and documentation:

Unspecified

Storage:

Active collection. Seeds stored in tins,  
jars or packets at 6-10°C and 50% R.H.  
Duplicates at ICRISAT, India; NBPGR, New  
Delhi, India; and PGRC, Ottawa, Canada

PAKISTAN

New Seed Farm  
Sargodha

Curator/person in charge:	M.H. Chaudhary
Details of samples:	<u>P. americanum</u> , 36 lines
Geographical representation:	Pakistan
Evaluation and documentation:	Complete
Storage:	Uncontrolled temperature and humidity

POLAND

Plant Breeding and Acclimatization  
Institute (IHAR)  
Department of Central Plant Collection  
Radzikow

Curator/person in charge:	J. Szymer
Details of samples:	700 accessions of landraces and wild types. Species unspecified
Geographical representation:	Unspecified
Evaluation and documentation:	Partial for adaptation, yield components and disease resistance. Data computerized
Storage:	Active collection. Long-term store proposed

SRI LANKA

Agricultural Research Centre  
Maha Illuppallama

Curator/person in charge

J. Fernando

Details of samples:

Eleusine coracana, 31; Panicum miliaceum,  
4; Paspalum scrobiculatum, 2

Geographical representation:

Sri Lanka

Evaluation and documentation:

Unspecified

Storage:

Active collection. Duplicates at ICRISAT,  
India

TUNISIA

National Agricultural Institute  
Tunis

Curator/person in charge:

Details of samples:

Pennisetum americanum, 32 landraces

Geographical representation:

Tunisia

Evaluation and documentation:

Unspecified

Storage:

Active collection. Duplicates at Bari, Italy

UNION OF SOVIET SOCIALIST REPUBLICS

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

Curator/person in charge:

V.F. Dorofeev

Details of samples:

Echinochloa crus-galli, E. frumentacea,  
Eleusine coracana, Panicum miliaceum,  
Pennisetum americanum, Setaria italica,  
13892 landraces, cultivars, wild and weedy  
types

Geographical representation:

World-wide

Evaluation and documentation:

Partial and computerized

Storage:

Seeds with 2-8% m.c. are stored in sealed  
cans at 4-5<sup>o</sup>C and 30% R.H. for medium-term  
storage and at -10<sup>o</sup>C for long-term storage

UNITED STATES OF AMERICA

Coastal Plain Station  
Tifton, Georgia 31793

Curator/person in charge:

W.W. Hanna/G.W. Burton

Details of samples:

Pennisetum americanum, unspecified number  
of landraces, cultivars, wild and weedy  
types

Geographical representation:

Africa and Asia

Evaluation and documentation:

Partial and manual

Storage:

Medium-term storage at 4<sup>o</sup>C and 40% R.H.

UNITED STATES OF AMERICA

National Seed Storage Laboratory (NSSL)  
U.S. Department of Agriculture  
Colorado State University  
Fort Collins, Colorado 80523

Curator/person in charge:

L.N. Bass

Details of samples:

Eleusine coracana, ca. 700, unspecified number of Pennisetum americanum landraces, cultivars wild and weedy types

Geographical representation:

Unspecified

Storage:

Long-term. Seeds with 4-7% m.c. stored in permanently sealed cans at  $-18^{\circ}\text{C}$  to  $-20^{\circ}\text{C}$

UNITED STATES OF AMERICA

Southern Regional Plant Introduction Station  
Experiment, Georgia 30212

Curator/person in charge:

W.R. Longford

Details of samples:

Digitaria exilis, 1; D. iburua, 1; Echinochloa colona, 5; E. crus-galli, 22; E. frumentacea, 2; Eleusine coracana, 43; E. indica, 4; Panicum miliaceum, 8; Paspalum commersonii, 4; P. scrobiculatum, 12; Pennisetum americanum, 232; Setaria italica, 16; S. viridis, 1

Geographical representation:

World-wide

Evaluation and documentation:

Complete for morphological and agronomical characters. Data computerized

Storage:

Medium-term. The Germplasm Resources Laboratory, Beltsville, Maryland 20705, is the national focal point for the introduction, documentation, initial distribution and exchange of germplasm. Plant Introduction Officer - G.A. White

ZAMBIA

Mount Makulu Agricultural Research Station  
P.O. Box 7  
Chilanga

Curator/person in charge:

R.K. Chungu

Details of samples:

Eleusine coracana, 110 landraces; Pennisetum  
americanum, 24 landraces

Geographical representation:

Zambia

Evaluation and documentation:

Unspecified

Storage:

Active collection. Seeds stored at 4-9°C  
and 55% R.H. Duplicates at PGRC, Ottawa,  
Canada and ICRISAT, India

RACES AND GROUP NAMES OF SORGHUM

RACES		GROUP NAMES	
B	Bicolor	Rx	Roxburghii
G	Guinea	Sh	Shallu
C	Caudatum	Co	Conspicuum
K	Kafir	Gi	Guineense
D	Durra	Mg	Margaritiferum
GB	Guinea Bicolor	Nr	Nervosum
CB	Caudatum Bicolor	Do	Dochna
KB	Kafir Bicolor	Ka	Kaoliang
DB	Durra Bicolor	Br	Broom Corn
GC	Guinea Caudatum	Ft	Feterita
GK	Guinea Kafir	Ng	Nigricans
GD	Guinea Durra	Db	Dobbs
KC	Kafir Caudatum	Kr	Kaura
DC	Durra Caudatum	Zr	Zera-Zera
KD	Kafir Durra	Nd	Nandyal
AR	<u>arundinaceum</u>	Md	Maldandi
VG	<u>virgatum</u>	Ml	Milo
VE	<u>verticilliflorum</u>	Sg	Sudan grass
AE	<u>aethiopicum</u>	Mb	Membranaceum
PQ	<u>propinquum</u>	Kf	Kafir
DR	<u>drummondii</u>	Hg	Hegari
TW	Tetraploid Wild	Dr	Durra
AN	Anomalous	Sb	Subglabrescens
		Wn	Wani
		Ca	Cane
		Cg	Grain grass
		Pg	Patcha jonna (yellow pericarp jowars)
		Fr	Fera-Fera

(It is recognized that the list is incomplete and can be amended from time to time)

MILLET SPECIES INCLUDED IN THIS DIRECTORY

Digitaria exilis Stapf.

D. iburua Stapf.

Echinochloa colona (L.) Link.

E. crus-galli L.

E. frumentacea (Roxb.) Link.

E. utilis

Eleusine corocana (L.) Gaertn.

E. indica (L.) Gaertn.

Eragrostis tef. (Zuccagni) Trotter

Panicum miliaceum L.

P. miliare Lamk.

P. spontaneum Lysev.

Paspalum commersonii Lamk. = P. scrobiculatum L. var commersonii (Lam.) Stapf.

P. scrobiculatum L.

Setaria italica L.

S. viridis (L.) Beauv.

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