

Short Communication

Plant Genetic Resources Activities at NBPGR Regional Station, Akola

D. P. PATEL, T. R. LOKNATHAN AND S. S. RAO

National Bureau of Plant Genetic Resources Regional Station, PKV Campus, Akola

The Regional Station at Akola was established in 1977, in the campus of Punjabrao Krishi Vidyapeeth. The prime objective of this station is to explore, collect, evaluate, maintain, catalogue and conserve the vast genetic diversity of agri-horticultural crops of Central and Western India and also of the introduced material suited to sub-humid environments. The efforts made are briefly dealt with.

Collection of Germplasm

Nine exploration trips have been undertaken and both crop specific (onion and garlic) and multicrop collection programmes carried out. The diversity collected is listed in Table 1. The regions explored were Vidarbha, Marathwada, western

TABLE 1. CROP DIVERSITY COLLECTED IN CENTRAL INDIA BY NBPGR, REGIONAL STATION, AKOLA

Crop Group	Crops collected	Samples collected			
		1980	1981	1986	Total
Cereals & Pseudocereals	Paddy, wheat, maize and amaranth	40	291	43	374
Millets	Sorghum, pearl millet, finger millet, kodo millet, foxtail millet, barnyard millet, proso millet, little millet.	132	367	46	545
Legumes	Sem, cowpea, mung bean, urid, gram, Horse gram, ricebean, pea, pigeon pea, lentil, khesari, french bean, lima bean, soybean, winged bean, sword bean, double bean etc.	134	1185	61	1380
Vegetables	Onion, garlic, brinjal, chillies, tomato, okra, kenaf, bitter gourd, guar, snake-gourd, drumstick, sponge gourd, <i>tinda</i> , <i>methi</i> , carrot, bottlegourd etc.	76	1206	34	1316
Oilseeds	Sesame, linseed, castor, safflower, brassicae, groundnut, niger and sunflower.	114	588	66	768
Others	Job's tear, ginger, yam, tobacco, <i>Colocasia</i> , turmeric, citrus, papaya, custard, apple, <i>Sesbania</i> , <i>Vernonia</i> , <i>Jatropha</i> etc.	22	221	16	259
Total		518	3858	266	4642

Maharashtra, south western and Eastern Madhya Pradesh (Chhattisgarh), north western Andhra Pradesh, south-western Karnataka. The collections were also made from remote hilly areas of Gawilgarh Hills, Mahadeo Hills and Maikala hills of Satpura ranges. Samples were also collected from the tribal dominated areas like Bastar, Melghat (Amravati), Bagicha and Jashpur (Raigarh, M. P.) etc. Much variability was collected in millets, grain legumes, oilseeds, vegetables, bulbous crops, tuber crops etc.

Germplasm Evaluation and Maintenance

At present the Regional Station has the working collection of nearly 21,000 germplasm lines, major crop groups being grain legumes/pulses (7,330), oilseeds (5,170), minor millet (5,850), vegetables (1,968) and pseudo-cereals (884). The crop-wise germplasm holding being maintained is as follows :

A. Grain Legume Crops : Soybean (*Glycine max*)-2,311; pigeon-pea (*Cajanus cajan*)-2,000; chickpea (*Cicer arietinum*)-1,341; horsegram (*Macrotyloma uniflorum*) 602; french bean (*Phaseolus vulgaris*)-346; winged bean (*Psophocarpus tetragonolobus*)-251; cowpea (*Vigna unguiculata*)-41; Lentil (*Lens esculenta*)-247; Lima bean (*Phaseolus lunatus*)-20 and khesari (*Lathrus sativus*)-28.

B. Oilseeds Crops : Sesame (*Sesamum indicum*)-1,990; safflower (*Carthamus tinctorius*)-1,773; groundnut (*Arachis hypogaea*)-496; Niger (*Guizotia abyssinica*)-267; linseed (*Linum usitatissimum*)-513 and castor (*Ricinus communis*)-129.

C. Millets and Minor Millets : Foxtail millet (*Setaria italica*)-915; kodo millet (*Paspalum scrobiculatum*)-501; proso millet (*Panicum miliaceum*)-476; little millet (*Panicum sumatrense*)-271; finger millet (*Eleusine coracana*)-1,761; barnyard millet (*Echinochloa* sp.)-398 and Sorghum (*Sorghum bicolor*)-1,526.

D. Vegetable Crops : Guar (*Cyamopsis tetragonoloba*)-27; okra (*Abelmoschus esculentus*)-533; chillies (*Capsicum annum*)-90; egg plant (*Solanum melongena*)-27, garlic (*Allium sativum*)-523 and onion (*Allium cepa*)-735.

E. Horticultural and other crops : Pomegranate-3; *Leucaena*-33; *Simarouba glauca*-1; *Malphigia* species-1; Papaya-2; Jojoba-1; Job's tear-9; jute mallow-8; kenaf-11 and mesta-4.

Germplasm Exchange and Supplies

The Regional Station has supplied seed samples of over 23,000 diverse germplasm to different institutes. The seed samples supplied included crops such as soybean (8,176), safflower (3,182), sesame (2,395), minor millets (3,499), kulthi (1,202), amaranth (1,809) and others (2,743).

The Regional Station has also published crop catalogues on soybean, sesame and French bean.