

B-33 : MORPHOLOGICAL VARIABILITY AND CROSS-COMPATIBILITY IN BRINJAL AND RELATED SPECIES

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The Plant Genetic Resources Centre, Gannoruwa, has collected a wide range of germplasm of brinjal (*Solanum melongena*) and its relatives such as elabatu (*Solanum melongena* var. *insanum*), tibbatu (*S. violaceum*), ahas batu (*S. macrocarpon*), del batu (*S. capsicoides*), gona batu (*S. torvum*), wel tibbatu (*S. trilobatum*), kalukanberiya (*S. americanum*) and katu wel batu (*S. virginianum*).

A study was carried out to characterize these germplasm accessions and to determine the cross-compatibility between the species.

Data were recorded in conformity with the IBPGR crop descriptor list for brinjal. Thirty four characters were observed.

The results indicated that there were marked differences between the species for qualitative characters such as plant growth habit, flower colour, fruit shape and colour, presence of prickles etc. and quantitative characters such as days to

flowering, plant height, fruit length, weight and volume, number of seeds per unit fruit volume and seed weight (100). These results should be useful in selecting parental materials for crop improvement.

Cross-compatibility studies showed that brinjal (*S. melongena*) could be crossed with elabatu (*S. melonga* var. *insanum*) and ahas batu (*S. macrocarpon*).