

in the material for days to 50% flowering and days to maturity. High heritability coupled with high genetic advance was observed for plant height indicates scope for improvement through simple selection.

Grain yield showed significant positive association with clusters per plant, plant height, pods

per plant, primary branches and seeds per pod and low association with days to 50 percent flowering and days to maturity. EC334160 is sugar podded and early in flowering, EC398588, EC398599 and EC342007 were long podded and EC398588 possessed high yield per plant.

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## Characterization of Cowpea Germplasm Introduced from Indigenous and Exotic Sources

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Thirty seven germplasm accessions of cowpea (*Vigna unguiculata* (L.) Walp.), procured from NBPGR, New Delhi were characterized on the basis of morphological traits during *khariif*, 2002 at CCS Haryana Agricultural University, Hissar. Among 37 accessions, 22 have been designated with IC and NIC numbers indicating their native origin while, 15 have been designated with EC numbers indicating their alien origin. On the basis of market value of the accessions, 4 of the indigenous and 3 of the exotic sources were found to be fodder type, while rest of the accessions were grain type. However, among grain types, 6 accessions from indigenous and 7 from exotic sources were of early maturing types, while 17 belonging to normal maturity group had 12 from indigenous sources and 5 from the exotic ones. All the indigenous collections showed field resistance to CYMV while one of the exotic collections was found susceptible. Among indigenous collections, 16 accessions had violet flowers, 4 of intermediate type and 2 with white flowers, whereas among exotic collections, 13 had violet flowers and 1 each had white and intermediate

flower colour, respectively. As for as plant height is concerned, 4 were tall, 14 were medium tall and 4 were dwarf among the indigenous collections while, among exotic collections, 2 were tall, 7 were medium and 6 were dwarf in stature. Thirteen accessions were viny, and 9 were non-viny in growth habit among the indigenous sources while among exotic collections, 6 had viny growth and 9 had non-viny growth habit. Some of the accessions, namely NIC 22780, 22789, 22810 were observed as early maturing and high grain yielder; NIC 260A, 22815, 23010 as normal maturing and high grain yielder among indigenous collections while EC 367678 as high fodder yielder, EC 244018, 367680, and 367713 as early maturing and high grain yielder and EC 309500, 332354 as normal maturing and high grain yielder among the exotic collections were found to be very promising. Three accessions namely, IC 202824, NIC 23010 and IC 201073 had market traits as well. The promising collections mentioned above can be used in cowpea improvement programme.