Morphological Characterization of Pigeonpea (*Cajanus cajan* (L.) Millsp.) Genotypes

S Venkata Naresh, B Govinda Rao, M Lal Ahmad and K L Narasimha Rao
Department of Genetics and Plant Breeding, Agricultural College, Bapatla- 522 101, A P

ABSTRACT

Forty nine genotypes of pigeonpea [*Cajanus cajan* (L.) Millsp.]. were characterized during kharif, 2010-11 at Regional Agricultural Research Station, Lam, Guntur for 15 morphological characters *viz*., anthocyanin colouration of hypocotyls, plant branching pattern, plant growth habit, stem colour, leaf shape, pubescence on lower surface of the leaf, flower colour, pattern of streaks on petal, pod colour, pod surface stickiness, pod waxiness, pod constriction, seed colour, seed colour pattern and seed shape as per Distinctiveness (D), Uniformity (U) and Stability (S) test guidelines of pigeonpea. Variability was observed for all morphological characters studied but for growth habit and stem pigmentation i.e. all genotypes are indeterminate and with green stem. Absence of anthocyanin on hypocotyls (79.59%); erect branches (53.06%); oblong leaves (77.53%); no pubescence (91.84%); yellow flowers(75.51%); sparse streaks on petals (44.59%); waxiness (55.1%); greenish brown pods (49%); non sticky pods (57.14%); slight constriction on pods (63.27%); uniform seeds (77.55%); dark brown colour of seeds (42.86%); and oval seeds (61.22%) are more common. These results help in protection of genotypes besides aiding for further utilization, without repetition or waste of time, to develop high yielding stress tolerant varieties and/or hybrids.

Key words : Cheacterization, DUS testing, Germplasm, Pigeonpea.