

RESEARCH ARTICLE

Genetic variability and diversity for green forage yield in cowpea [Vigna unguiculata (L.) Walp.]

■ ANAMIKA NATH AND P.A. TAJANE

SUMMARY

The present investigation on genetic variability studies in cowpea [Vigna unguiculata (L.) Walp.] was conducted by using 44 genotypes of cowpea. High estimates of GCV were observed for green forage yield per plant, dry matter yield per plant, branches per plant in forage cowpea. The magnitude of PCV was more than GCV for all characters. High heritability accompanied with high genetic advance indicated additive gene control in the inheritance for green forage yield per plant, dry matter yield per plant, plant height at 50 per cent flowering, branches per plant. Correlation studies stressed the importance of characters viz., dry matter yield per plant, days to 50 per cent flowering, plant height at 50 per cent flowering, leaf: stem ratio and number of leaves per plant for green forage yield purpose. Path co-efficient analysis indicated that dry matter yield per plant and leaf: stem ratio had high positive direct effect on green forage yield per plant at the same time these traits also had significant and positive correlation with green forage yield per plant.

Key Words: Variability, Heritability, Cowpea, Genotypic and phenotypic correlation, Path analysis

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MEMBERS OF THE RESEARCH FORUM

Author to be contacted:

ANAMIKA NATH, Department of Plant Breeding and Genetics, Maharana Pratap University of Agriculture and Technology, UDAIPUR (RAJASTHAN) INDIA

Address of the Co-authors:

P.A. TAJANE, Department of Agricultural Botany, Mahatma Phule Krishi Vidyapeeth, Rahuri, AHMEDNAGAR (M.S.) INDIA