

GENETIC VARIABILITY STUDIES IN KHEDA *AMARANTHUS DUBIUS* MART. GENOTYPES COLLECTED FROM CHHATTISGARH

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Abstract: Twenty five genotypes of Kheda *Amaranthus dubius* Mart. collected from different agroclimatic region of Chhattisgarh were evaluated to assess the genetic variability, heritability and genetic advance for thirteen different yield contributing characters and important quality characters for yield traits. Significant genetic variation was observed for all the characters. High magnitude of genotypic as well as phenotypic coefficient of variations were recorded for traits viz., test weight of seed (30.83 and 30.96), plant height (29.22 and 29.57), leaf length (28.13 and 28.48) and yield kg per plot (28 and 29.28). The highest heritability was recorded for the characters viz., test weight of seed (99.10 %), plant height (97.70 %), leaf length (97.6 %), dry matter % (96.7 %), leaf width (95.0 %), number of branches per plant (91.6 %), yield kg/plot (91.6 %), petiole length (91.2). Genetic advance as percentage of mean was observed high for test weight of seed (63.44%), plant height (59.48 %), leaf length (57.21 %), yield kg/plot (55.27 %), leaf width (52.34 %), number of branches per plant (51.14%), dry matter% (49.29%), number of leaf per plant (44.52 %), petiole length (43.83 %), fibre content % (30.81 %), showing the possibility of improvement of these traits through selection.

Keywords: Variability, GCV, PCV, Heritability, Genetic advance, Khedha (*Amaranthus dubius* Mart.)

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