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RESEARCH ARTICLE: Estimation of genetic parameters, correlation and path-co-efficient analysis of *Amaranthus dubius* mart

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SUMMARY : In the present study, 25 genotypes and check variety CO-1 of *Amaranthus dubius* Mart. Collected from different places in the Chhattisgarh State were evaluated for different horticultural traits for genetic variation, character association and genetic diversity. High to moderate GCV and PCV values were found for fibre content %, harvest index %, dry matter %, fresh leaf weight, number of branches/plant and leaf breadth. Higher estimates of heritability coupled with higher genetic advance were observed for fiber content %, number of leaves/plant and yield/plot. Association studies revealed that genetic correlation co-efficients were higher than their phenotypic correlation co-efficients in most cases. From the correlation and path analysis, it can be concluded that emphasis should be given to plant height, number of leaves/plant, petiole length and stem girth for selecting high yielding genotypes.

KEY WORDS: Vegetable amaranths, Genetic variability, Correlation, Path analysis, Genetic divergence

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