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RESEARCH PAPER

Study of correlation and path analysis in dual purpose sorghum [*Sorghum bicolor* (L.) Moench]

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Abstract : The present investigation was carried out to study the correlation and path analysis in dual purpose sorghum (*Sorghum bicolor* L.) with the set of thirty seven genotypes of sorghum grown in Randomized Block Design with four replications. The correlation analysis suggested that the magnitude of genotypic correlations was higher as compared to their corresponding phenotypic correlations indicating the inherent relationship among the characters studied. Path co-efficient analysis considering 15 characters as a causal variables showed that the number of leaves per plant had highest positive direct effect on grain yield per plant followed by panicle diameter, leaf length, protein per cent in grain and thousand grain weight. Grain yield per plant exhibited significant positive association with thousand grain weight, stem girth, leaf length, panicle length, panicle diameter, panicle weight and protein per cent in grain at both genotypic and phenotypic levels.

Key Words : Variability, Heritability, Correlation, Path co-efficient, Sorghum

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