Correlation and Path Analysis over Environments in Finger Millet [Eleusine coracana (L.) Gaertn]

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ABSTRACT

Correlation and path coefficient analysis were carried out using 18 genotypes of finger millet in 14 environments. Plant height, 1000 seed weight, productive tillers per plant, yield per plot, straw yield per plot, volume of root in mainfield, fingers per ear, volume of shoot in main field and weight of shoot in main field were positively correlated with seed yield over environments. The positive correlation of ear weight per plant, 1000 seed weight, yield per plot, volume of shoot in main field and weight of shoot in main field with seed yield and among themselves for these characters was observed suggesting that these are the major yield contributing traits in finger millet. Path coefficient analysis also showed direct positive contribution of ear weight per plant, 1000 seed weight, yield per plot, straw yield per plot, volume of root in main field, volume of shoot in main field and weight of shoot in main field on seed yield. These traits deserve special emphasis in selection while selecting for improvement in seed yield of finger millet.

Key words: Correlation, Finger Millet, Path Analysis.