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RESEARCH ARTICLE

Studies on interrelationship and path co-efficient analysis on the basis of fruit yield in eggplant (*Solanum melongena* L.)

■ Kailash Ram and P. Singh

SUMMARY

The genotypic and phenotypic correlation and path co-efficient in nineteen genetically diverse genotypes of eggplant were studied at Vegetable Research Station (C S Azad University and Technology, Kanpur) during *Kharif* season. Studies on relationship at genotypic level revealed positive and strong correlation of yield per plant, number of branches per plant, width of fruit, plant spread and fruit weight in parents, F_1s and F_2s, whereas significant and positive association of yield per plant with number of fruits per plant were observed in parents, F_1s and F_2s at phenotypic level. Path co-efficient analysis indicate that number of fruits per plant had highest direct/desirable effect on yield per plant followed by fruit weight in both F_1 and F_2 at genotypic and phenotypic level and days to flowering in F_1 and F_2 only at genotypic level. The highest positive direct effect on yield per plant was observed by most of the yield contributing characters, *i. e*., days to marketable maturity and number of branches per plant *via* number of fruits per plant, length of fruit and width of fruit, and plant spread *via* number of fruits per plant in F_1 and F_2 generations at both genotypic and phenotypic levels.

Key Words : Eggplant, Correlation, Path co-efficient, Character association

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