

RESEARCH ARTICLE

Perse performance analysis for yield and its component traits in egg plant (*Solanum melongena* L.)

■ Kailash Ram and P. Singh

SUMMARY

The present investigation was conducted during *Kharif* season at Vegetable Research Station, Kalyanpur, C. S. Azad University of Agriculture and Technology, Kanpur. The experimental materials comprising 15 lines used as female parent and four testers used as male parent in line X tester fashion design and their sixty hybrids derived by crossing between female and male parent. The F_1 s were raised to get their seeds for raising F_2 population. The data were recorded on ten quantitative characters as under days to flowering, days to marketable maturity, plant height, number of branches per plant, number of fruits per plant, length of fruit, width of fruit, fruit weight, plant spread and yield per plant. Among the parent, the maximum variability was recorded in number of branches per plant followed by number of fruits per plant, yield per plant, width of fruit and length of fruit. In F_1 generation, number of branches per plant had highest variability followed by number of fruits per plant, width of fruit, length of fruit and yield per plant. Among F_2 population, the maximum variability was recorded in number of branches per plant followed by number of fruits per plant, width of fruit, length of fruit and plant spread. Crosses Ks 219 X T 3, KS 219 X AB 1, KS 233 X T 3, KS 235 X T 3, KS 247 X T 3, KS 263 X AB 1 and KS 228 X AB 1 showed highest per se performance for yield per plant and these are also observed better results for other yield contributing traits. The F_1 s showed maximum variability than parents and F_2 among the population. The study of genotypic variability among the parents and their progenies can be used successfully in breeding programme.

Key Words : Egg plant, *Perse* performance, Yield

How to cite this article : Ram, Kailash and Sing, P. (2025). *Perse* performance analysis for yield and its component traits in egg plant (*Solanum melongena* L.). *Internat. J. Plant Sci.*, **20** (1 and 2): 1-8, DOI: 10.15740/HAS/IJPS/20.1 and 2/1-8, Copyright@ 2025 : Hind Agri-Horticultural Society.

Article chronicle : Received : 12.11.2024; Revised : 01.04.2025; Accepted : 08.05.2025

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