

RESEARCH ARTICLE

Correlation and path-coefficient analysis in Ramnad Mundu chilli (*Capsicum annuum* L.) for yield and quality traits

■ J. Phani Kumar, P. Paramaguru, T. Arumugam, N. Manikanda Boopathi and K. Venkatesan

SUMMARY

The present investigation was conducted to find the correlation and path-coefficient analysis for yield and yield contributing characters in Ramnad Mundu chilli (*Capsicum annuum* L.) during *Kharif* 2018-19. The experiment was conducted on Forty-seven Mundu chilli genotypes for 15 characters, which was laid out in Randomized Complete Block Design with two replications. From correlation study dry fruit yield per plant showed highly positive correlation with number of fruits per plant (0.971 G, 0.894 P), ripened fruit yield per plant (0.991 G, 0.949 P), number of seeds per fruits (0.383 G, 0.32 P), 1000 seed weight (0.369 G, 0.332 P), capsaicin % (0.302 G, 0.256 P) and number of primary branches per plant (0.267 G, 0.251 P) at both genotypic and phenotypic level. Path-coefficient analysis of different characters contributing towards the highest positive direct effect *via* number of fruits per plant (0.973), ripened fruit yield per plant (0.991), no. of seeds per fruit (0.383), 1000 seed weight (0.364), capsaicin % (0.302) and number of primary branches per plant (0.267). Hence, direct selection based on these characters would be effective in crop improvement through plant breeding in Mundu chilli.

Key Words : Ramnad mundu chilli, Anthracnose, *Colletotrichum* species, Correlation, Path co-efficient analysis

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