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CORRELATION AND PATH COEFFICIENT ANALYSIS IN CHILLI FOR YIELD AND YIELD ATTRIBUTING TRAITS

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ABSTRACT

Association of correlation and cause effect analysis in six parents and their thirty hybrids from a diallel design were evaluated for fruit yield and its components. Statistically, significant variation was observed among tested materials for all the characters studied. Number of fruits per plant, fruit length, individual fruit weight, fruit girth, plant height and seeds per fruit were the major characters contributing to yield as these traits were significantly and positively associated with dry pod yield per plant. Maximum contribution of fresh fruits yield per plant to dry pod yield was observed in path analysis, which was followed by individual dry pod weight, number of fruits per plant, number of harvest, days to 50% flowering, pedicle length and number of branches per plant through higher direct effect. So, for increasing fruit yield per plant a chilli hybrid should have higher number of fruits per plant, coupled with large fruit length, high fruit girth and high average fruit weight.

KEYWORDS: Chilli, Correlation, Dry Pod Yield, Path Coefficient