

**PATH-COEFFICIENT ANALYSIS FOR SEED YIELD AND
RELATED CHARACTERS IN A POPULATION OF
DETERMINATE AND INDETERMINATE TYPES OF SESAME
(*Sesamum indicum L.*)**

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ABSTRACT

Selection of sesame genotypes with high seed yield is desirable aim in a breeding program. Seed yield is usually not increased by direct selection because it is under the influence of different traits. Therefore, it is very important to know the contributing characters to yield. There are many research on identifying seed yield components in indeterminate sesame, but not on gamma ray induced determinacy character of sesame. In this study, seed yield and related characteristics of a population involving determinate and indeterminate types were examined by simple correlation coefficients and for further classification by path-coefficient analysis. Number of capsule per plant was the highly correlated character with seed yield based on the correlation analysis. But, plant height had the largest direct effect on seed yield of determinate growth habit regarding the result of path-coefficient analysis differing from the results of earlier reports on indeterminate sesame types.

Key words: *Sesame, Sesamum indicum L. Determinate growth habit, Correlations, Path-coefficient analysis.*