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CORRELATION AND PATH ANALYSIS OF THE RELATIONSHIP BETWEEN YIELD AND YIELD COMPONENTS IN FENUGREEK (*TRIGONELLA FOENICUM GRAECUM* L.)

F. Ayanoğlu(✉), M. Arslan A. Mert

University of Mustafa Kemal, Faculty of Agriculture,

Department of Field Crops, Hatay, TURKEY

ABSTRACT

The relationship between seed yield and 7 plant characteristics was studied by correlation and path analysis in thirty-five fenugreek genotype lines grown in two seasons. The seed yield was positively correlated with pod number/plant and negatively with days to flowering. The path analysis revealed that pod number/plant (0.55), pod length (0.15), seed number/pod (0.10) and 1000 seed weight (0.11) had a positive direct effect on seed yield, whereas days to flowering (-0.17), plant height (-0.03), and branch number/plant (-0.16) had a negative direct effect on the seed yield. Among yield components, pod number/plant had a greater direct effect on seed yield than pod length, the seed number/pod and 1000 seed weight. Pod number/plant had little indirect effect on yield through plant height, branch number/plant, pod length, seed number/pod and 1000 seed weight.

Key words: Fenugreek, *Trigonella foenicum graecum*, correlation coefficients, path analysis