Quantities Characters of Correlation and Heritability for Okra F₂ Population

Min-Li Liou¹, Jie-Wei Guo² and Shu-Tu Wu³

Abstract

The hybrid crosses F_1 , F_2 and their parents of okra were calculated heritability and genetic correlation of the 11 quantitative characters. The experiment result is:

Plant height, node number at first flowering, fruit number/plant and fruit diameter have high heritability value in hybrid population, and there is positive correlation between yield and plant height, primary branches, node number on main stem, node number at first flowering, days to flowering, fruit number/ plant, single fruit weight, fruit length. The four characters fruit number/ plant, single fruit weight, fruit length and yield, possess transgressive segregation phenomenon that can be used in hybrid breeding program. We expect that a high-yield variety with more fruit number/ plant, high single fruit weight can be selected in late generation of hybrid population.

Key words: Okra, Heritability, Correlation

¹Assistant of Chinan Branch Station, Kaohsiung DAIS.

²Instructor, Department of Agronomy, National Chia-yi University.

³Professor Department of Agronomy, National Chung Hsing University.