Studies on Gene Action for Yield and Quality Traits in Yardlong Bean (Vigna unguiculata (L.) Walp. ssp. Sesquipedalis Verdc.)

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ABSTRACT

Gene action of fruit yield and quality traits in yardlong bean ($Vigna\ unguiculata\ (L.)$ Walp. ssp. $Sesquipedalis\ Verdc.$) were studied through half diallel analysis of 21 F_1 hybrids derived by crossing seven parental lines. The ratio of gca to sca variances revealed that non-additive gene action was predominant over additive gene action in the inheritance of all the characters studied except for number of primary branches per plant and days to first picking. Hence, heterosis breeding is suggested for exploitation of these traits.

Keywords: Diallel, Fruit yield, Gene action, Variance, Yardlong bean.