ABSTRACT

GENETIC PARAMETER ESTIMATION OF AGRONOMIC CHARACTER OF SOYBEAN (*Glycine max* (L) Merrill) F_2 GENERATION FROM CROSSES BETWEEN WILIS X B3570

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Assembly of the soybean high yielding varieties can be done through the selection in a cross. Effectiveness of selection is influenced by the value of variability and heritability. The purposes of this research are for estimate the magnitude of genetic and phenotype variability, heritability in the broad sense, the mean population and the numbers of hope agronomic character soybean (*Glycine max* (L) Merrill) F_2 generation from crosses between Wilis x B3570.

This research was conducted at the experimental farm of Agriculture Faculty, University of Lampung, from November 2011 to February 2012. Seeds used are F_2 Wilis x B3570, Wilis, and B3570. This research was done by experimental design without repetition. The estimated parameter are genetic variability, phenotype variability, the mean population, and heritability in the broad sense.

Genetic and phenotype variability are indicated by character flowering age, plant height, harvest age, number of pods cropping, seed weight per plant, and weight of 100 grains. While the number of productive branches have a narrow genetic diversity. Magnitude of the heritability of agronomic character of soybean is high for all the variables observed. The vast variability and the higher heritability value, the selection to choose superior character more effective. 20% of selection from population obtained the numbers of hope for soybean F_2 generation cross between Willis x B3570 which has the advantage on the character of seed weight per plant and have a large median value.