

ABSTRACT

PERFORMANCE, VARIABILITY, AND HERITABILITY OF AGRONOMIC CHARACTER OF STRING BEANS (*Vigna unguiculata*) F₁ GENERATION OF CROSSESTHREE VARIETIES

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To increase the production of beans, it is necessary to use of superior varieties. The assembly of superior varieties can be obtained by intersecting the two elders who have differences. The result of intersecting between genotype beans can be seen through the performances shown on next-generation (F₁). On the results of a cross in a different between elders can be expected there is diversity between the results of a cross. This research proposed to look at the performance, variability and value guess heritability agronomic broad sense character beans generation F₁ crosses of the results of the three genotypes. The seeds used are F₁ seed beans which are the result of a cross between a Red-White x Black seed coat (AxB), Black x Red-White seed coat (BxA), Black x Brown seed coat (BxC), Chocolate x Red-White seed coat (CxA), the seed elder Red-White seed coat, the seed elder Black seed coat, and the seed elder Brown seed coat. This research was conducted with complete randomized design (RKTS), analyzed by using a analyse of varian, and continued with LSI (Least

Significant Increase). The results showed that the phenotype diversity of agronomic characters of long bean genotypes of three interchanges result is spacious for all variables. For the diversity of agronomic characters of long bean genotypes yield crosses three genotypes are spacious for the variable age of flowering, harvest dried pods age, number of pods of the plant, average number of pods of the plant, average length of locul (castor beans), the number of total seed, weight of seeds, but to the variable age harvest fresh pods, the number of stalks of flowers, the average length of the pods of the plant, average number of plant locul (castor beans) and weights 100 seeds is narrow. Broad sense heritability value magnitudes of characters of Agronomy resulting F_1 generation long bean crosses of the results of the three genotypes for the variable age of flowering and the average length of lokul is high, harvest dried pods age variable, the number of pods of the plant, average number of pods of the plant, and the number of total seeds is medium, variable age pods fresh harvest, the number of stalks of flowers, the average length of the pods of the plant, average number of locul (castor bean) plants, seed plants, weights and weight of 100 seeds is low.

Key words: keragaan, diversity, heritability, long beans, the F_1 generation.