

Uji Daya Hasil Tujuh Genotipe Kedelai Unggul Generasi F7 Hasil Seleksi Pedigree. Yield Trial Seven Genotypes Soybean F7 Generation the Result of Pedigree Selection. Advisor: Dr. Ir. Nurul Sjamsijah, MP.

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ABSTRACT

*One of methods to increase the productivity of soybeans are using development of agricultural technology by plant breeding. This research was aimed to know and identify seven soybean genotypes F7 generation still has the early maturity and high production according to characteristic from the parents and more than comparison variety. The experiment was conducted in state Polytechnic of Jember from July 2017 until September 2017. The design was used non factorial Randomized Complete Block Design (RCBD) with 14 genotypes consist of four parents Polije 2 (P2), Polije 3 (P3), Dering (D) and Rajabasa (R), seven genotypes of the result selection RD, P2R, P2D, P3R, P3D, P2P3, P3P2, and comparison variety Wilis, Ringgit, and Malabar which consisting of 3 replications with 42 samples each experimental plot. The yield data if there are significant difference was analyzed by DMRT test at 5 % level. The result showed that the seven genotypes tested had a very significant effect (**) on the character of flowering age P3R (31.93 HST), harvest age P2P3 (68.53 HST), plant height P3D (36 cm), productive branch total P3D (4.33 pieces), pod content of 2, 3 and 4 P3D genotypes (31.47, 37.47, and 2.73 pieces), and weight of 100 grains RD (13.10 g). Character that showed significant effect (*) were found on pod content of 1 RD (7.47), yield each plant P3D (21.24 g), yield each plot P3D (0.96 kg), yield each hectare P3D (1.78 ton/ha), and yield potential per hectare (3.49 ton/ha). Genotype P3D can be recommended to be a new improved varieties.*

Keywords : *early maturity, genotypes, high production*