

Uji Ketahanan Tujuh Genotipe Kedelai (*Glicine max* (L.) merril) Terhadap Serangan Penyakit Karat Daun (*Phakopsora pachyrhizi*) Metode IWGSR. Endurance Test of Seven Soybean (*Glicine max* (L.) merril) Genotypes to Soybean Rust Attack (*Phakopsora pachyrhizi*) IWGSR Method.

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ABSTRACT

One of the factor that cause the decreasing of soybean production is disease attack that is caused by Phakopsora pachyrhizi. To solve this problem making breeder to create a new superior variety that endure to soybean rust attack with plant breeding program and endurance test by using IWGSR method. This research was held at Banjarsengon village, Patrang, Jember. This research used non factorial Randomized Block Design (RDB) with 13 genotypes that was consisted by 4 parentals (1) Rajabasa, (2) Dering, (3) Polije-2 dan (4) Polije-3, 7 crossing results RD, P2R, P2D, P2P3, P3R, P3D, P3P2 and 2 comparison varieties (1) Malabar, (2) Ringgit. The data was analyzed by using F Test (ANOVA) and if there was a significant effect will be continued with DMRT 5% level. The research result showed that P2D, P2P3, P3D, P3R and P3P2 genotypes had endurance to soybean rust attack with R notation (Resistance) and had the fast flowering age : 31,6 days, 31, 8 days, 32,2 days, 31,9 day and 32,4 day. The result each plant of that three genotypes were higher than other crossing result genotypes and four parental : Rajabasa, Dering, Polije-2 and Polije 3 about P2D (16,6 gr), P2P3 (16,5 gr), P3D (16,9 gr), P3R (16,0 gr) and P3P2 (16,2 gr). Based on the count of the result each hectare P2D, P2P3, P3D, P3R and P3P2 genotypes had high value, there were 2.76 ton, 2.78 ton, 2.67 ton, 2.62 ton and 2.70 ton.

Keywords: Endurance Test, IWGSR Method, Soybean Rust