The Effect of Trichoma Pod Density on Several Genotypes of Soybean (Glycine max L.) on the Intensity of Attack of Pod Ladybugs (Riptortus linearis F.)

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ABSTRACT

Pod ladybug is one of the main pests on soybean plants. One of the factors that affect the resistance of plants to the attack of this pod ladybug is the presence of trichomes in soybean pods. This study aimed to determine the effect of pod trichome density on several soybean genotypes on the intensity of pod ladybug attack. This research was conducted for 4 months from December 2020 to March 2021. All of these activities were carried out in Tegal Gede Village, Sumbersari District, Jember Regency. This study used a non-factorial completely randomized design of 7 genotypes as treatment and consisted of 3 replications. The treatment factors consisted of GHJ 1, GHJ 2, GHJ 3, GHJ 4, GHJ 5, Anjasmoro and Dena 1. Data analysis using SPSS software and further tested using BNT (Beda Nyata Terkecil). The results showed that the Dena 1 variety with a density of 2.53 per mm² and the Anjasmoro variety with a density of 3.33 per mm² were significantly different from the GHJ 4 genotype which had the highest trichome density of 4.13 per mm². After performing a linear regression test on the Anjasmoro variety, it was found that the density of the trichomes had an effect on the intensity of attack as much as 87%.

Keywords: Soybeans, Trichoma, Riptortus linearis