APLIKASI BAKTERI *Rhizobium spp.* PADA BERBAGAI DOSIS DALAM MEDIA GRANUL DAN SERBUK UNTUK MENINGKATKAN PRODUKTIFITAS KEDELAI VARIETAS DETAM 4 PRIDA

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ABSTRACT

This study tries to increase the productivity of soybean plants by the application of Rhizobium spp isolat Sumber Sari Kabupaten Jember. This research was conducted in September to December 2018, in the village of Rambigundam, Rambipuji District, Jember Regency. With a height of 52 meters above sea level and soil types of old litosol and young regosol. This research uses factorial randomized block design (RBD). The first factor is the type of biological fertilizer based on its shape, which is granules and powder symbolized by the letter (M), the second factor is the application dose of biological fertilizer, symbolized by the letter (D). repeated 4 times with 8 combinations. Factor I has 2 levels and Factor II has 4 levels. The application dosage of Rhizobium bacteria was not significantly different from the weight of 100 seeds, but it was very significantly different in plant height, number of leaves, growth of nodules, number of productive branches, number of pods, pod weight, seed weight. The treatment application dosage of rhizobium spp bacteria with the highest average yield of each parameter was carried out at a dose of 6gr, while the lowest average was found at a dose of 3gr of each parameter.

***Keywords**:detam 4 prida rhizobium spp, root nodules, soybean productivity*.