

**Aplikasi Mikoriza dan PGPR (*Plant Growth Promoting Rhizobacteria*) Terhadap Vigor dan Produksi Benih Jagung Manis (*Zea mays saccharata Sturt*).**  
*Application Of Mycorrhiza and PGPR (Plant Growth Promoting Rhizobacteria) on Vigor and Sweet Corn Seed Production (Zea mays Saccharata.).* Advisor : Dr. Ir. Suharjo, MP and Aldita Adin Nugraha, SP, MP.

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### ***ABSTRACT***

The use of seeds with high growth rates is one of the efforts made to obtain maximum corn production. The purpose of this study was to determine the effect of PGPR and mycorrhizae on vigor and to increase the production of hybrid sweet corn (*Zea mays Saccharata.*). This study used a factorial randomized block design (RBD) in the form of the first factor, namely (M0) without mycorrhizae and (M1) mycorrhizae. The second factor is (P0) without PGPR, (P1) PGPR Seed Treatment, (P2) PGPR Post Emergency Spray. Mycorrhizal (M) treatment has a very significant effect (\*\*) on the parameters of simultaneous growth with an average of 73.61% in the treatment. administration of mycorrhizae (M1), flowering age with a mean of 53.8 days in mycorrhizal treatment + PGPR Seed Treatment (M1P1), weight of 1000 grains with an average of 10.70 grams in mycorrhizal + treatment without PGPR (M1P0), gave a significant difference (\*) on the weight parameter of cob + seeds with a mean of 64.30 grams in the mycorrhizal + without PGPR (M1P0) parameters. The PGPR (P) treatment had a very significant (\*\*) different effect on the vigor index parameter with an average of 63.02% in the PGPR Seed Treatment (P1) treatment, growing synchronously with an average of 80.73% in the PGPR Seed Treatment (P1) treatment, growth speed with an average of 11.20% in the PGPR Seed Treatment (P1) treatment, flowering age with a mean of 53.8 days in the mycorrhizal treatment + PGPR Seed Treatment (M1P1), weight of 1000 grains with an average of 10.70 grams in the mycorrhizal + treatment without PGPR (M1P0). The interaction between mycorrhizal treatment and PGPR gave significantly different effect (\*) on the parameters of flowering age with a mean of 53.8 days in the mycorrhizal treatment + PGPR Seed Treatment (M1P1), ear length with a mean of 12.80% in the mycorrhizal + treatment without PGPR (M1P0) and the weight of 1000 grains with a mean of 10.70 grams in the mycorrhizal + treatment without PGPR (M1P0)

***Keywords: Corn, Vigor, Mycorrhiza, PGPR***