

**The Influence Of Various Arbuscular Mychorrizal Genus On Soybean
(*Glycine max. L*) Growth And Production**
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ABSTRACT

*Mycorrhizae are fungi that are capable of mutualistic symbiosis with host plants. because the mycorrhizal life cycle requires energy that comes from plant photosynthesis. This causes the mycorrhizae to depend on the host plant. The purpose of this study was to determine the effect of inoculation of various genera of arbuscular mycorrhizae on the growth and production of soybean plants. This research was conducted from March to June 2021 at BBPP, Ketindan, Malang. This study used a non-factorial randomized design with 4 treatments, namely giving mycorrhizae with the genera *Glomus sp*, *Acaulospora*, *Gigaspora* and without treatment with 4 repetitions. This study used ANNOVA analysis of variance with a 5% BNT follow-up test. Based on the results of further tests, 5% BNT genus arbuscular mycorrhizal *Glomus sp* had a significant effect on plant height with an average of 61.08cm, number of leaves with an average of 4.33 and pod weight with an average of 70.17gr. This happens because the genus *Glomus* mycorrhizal has a smaller size compared to other genera so that it is more adaptive to the environment. While the number of flowers, number of pods, plant dry weight and root infection showed no significant difference. This is because there is no symbiosis in the roots when entering the generative period.*

Keywords: Glomus sp, Soybean, Mycorrhizae