

Uji Aklimatisasi Beberapa Kultivar Kentang Dengan Pemberian Fungi Mikoriza Arbuskula *Acclimatization Test of Several Potato Cultivars with the Application of Arbuscular Mycorrhizal Fungi* **Dr. Ir. Nantil Bambang Eko S, M.Si**

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ABSTRACT

The decline in national potato production requires innovation in the provision of quality seeds, one of which is through tissue culture. The acclimatization stage is a critical phase that determines the success of planlet growth. This study aims to examine the effect of Arbuscular Mycorrhizal Fungi and cultivar differences, as well as their interaction on the growth and success of potato planlet acclimatization. The research was conducted from June to August 2025 in a screen house in Jetak Village, Sukapura, Probolinggo, with an average temperature of 20°C and relative humidity of 75%. The research method used a Complete Randomized Design Factorial with two factors. The first factor was three potato cultivars (Granola Kembang, Granola Lembang, and Atlantic Malang) and the second factor was three levels of AMF dosage (5 g, 7 g, and 10 g per 5 kg of planting medium). The parameters observed included plant height, number of leaves, wet weight, root length, and percentage of growth at 30 Days After Planting. The results of the analysis of variance (ANOVA) showed that the cultivar treatment only had a significant effect on the plant height parameter, with the Granola Kembang cultivar showing the highest result (13.96 cm). In contrast, the FMA dose treatment and the interaction between the two factors did not have a significant effect on all observation parameters. However, the percentage of planlet growth in all treatment combinations reached 100%. It was concluded that cultivar played a greater role in influencing plant height growth in the early acclimatization phase, while the application of FMA at the tested doses did not show a significant impact until 30 DAP.

Keywords: *Acclimatization, Arbuscular Mycorrhizal Fungi, Potatoes, Cultivars*