

ABSTRACT

Shallot (*Allium cepa* L. var. *aggregatum*) is one of Indonesia's horticultural commodities that plays an important role both economically and as a food ingredient. Shallot production in Indonesia has declined despite increased market demand. The efforts to increase shallot production include using mycorrhiza and phosphate fertilizer to support the growth and production of shallot plants. This study aims to determine the effect of mycorrhiza and phosphate fertilizer application on the growth and production of shallots in Inceptisol soil. This study used a two-factor Randomized Block Design (RDB) with 3 replicates of the combination treatment. The first factor is the application of mycorrhizae consisting of three levels M0 (0 g/plant), M1 (10 g/ plant) and M2 (20 g/ plant). The second factor is phosphate fertilizer consisting of three levels F0 (0 kg/ha), F1 (35 kg/ha), and F2 (70 kg/ha). mycorrhizal treatment affected plant height at 14, 35, 42, and 49 days after planting (DAP), the number of leaves at 14-49 DAP, the number of tillers at 14-49 DAP, the number of bulbs per plot, and the weight loss of bulbs per plot of shallots. Phosphate fertilizer treatment affected plant height at 35-49 days after planting (DAP), number of leaves at 14-49 DAP, number of tillers at 14-49 DAP, number of bulbs per plot, and wet bulb weight per clump. The interaction between the combination of mycorrhiza and phosphate fertilizer treatments affected plant height at 35-49 days after planting (DAP), the number of leaves at 14-49 DAP, the number of tillers at 14 and 21 DAP and the number of bulbs per plot.

Keywords: Phosphate, Mycorrhiza, Inceptisol, Tajuk.