APPLICATION OF POTASSIUM AND MYCORRHIZAE FERTILIZER DOSES ON THE GROWTH AND YIELD OF SHALLOT PLANTS (Allium ascalonicum L.)

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ABSTRACT

Shallots are one of the leading horticultural crops and have been cultivated intensively by farmers. Shallots are classified as one of the horticultural commodities that have a high selling value on the market because shallots have many uses. This research aims to obtain the best dose of potassium and mycorrhiza for the growth and yield of shallots.. The research was carried out in August-November 2023 at the Experimental Garden of the Faculty of Agriculture, UPN "Veteran" Yogyakarta, Ngeropoh, Condongcatur Village, Kapanewon Depok, Sleman Regency, Special Region of Yogyakarta. The research method used was a field experiment arranged in one factor completely randomized design. There were 10 treatments of potassium dose and mycorrhiza, namely KCl 60 kg/ha + no mycorrhiza, KCl 100 kg/ha + mycorrhiza 5 g/plant, KCl 100 kg/ha + mycorrhiza 10 g/plant, KCl 100 kg/ha + mycorrhiza 15 g/plant, KCl 200 kg/ha + mycorrhiza 5 g/plant, KCl 200 kg/ha + mycorrhiza 10 g/plant, KCl 200 kg/ ha + mycorrhiza 15 g/plant, KCl 300 kg/ha + mycorrhiza 5 g/plant, KCl 300 kg/ha + mycorrhiza 10 g/plant, KCl 300 kg/ha + mycorrhiza 15 g /plant. The results of the study showed that the KCl 200 kg/ha + mycorrhiza 10 g/plant treatment gave better results than other treatments in the parameters of tuber diameter, fresh weight of tubers per clump, sun dry weight of tubers per clump and harvest index.

Keywords: Shallot, potassium, mycorrhiza