OPTIMALISASI HASIL BAWANG MERAH (*Allium ascalonicum* L.) Var. Bima Brebes DENGAN KOMBINASI PEMUPUKAN NPK, MIKORIZA DAN POC *Sargassum* sp.

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ABSTRAK

Shallots are a key horticultural commodity in Indonesia, with growing demand. To meet this growing production demand, an appropriate fertilization strategy is required. This study aimed to determine the optimal combination of NPK fertilizer, mycorrhizal fertilizer, and *Sargassum* sp. liquid organic fertilizer (POC) for shallot growth and yield. The research method used was a single-factor RAL with treatments P0: without NPK + without mycorrhiza + without POC, P1: without NPK + without mycorrhiza + POC 40 mL/L, P2: without NPK + mycorrhiza 10 g/plant + POC 40 mL/L, P3: ½ NPK + without mycorrhiza + POC 40 mL/L, P4: ½ NPK + mycorrhiza 10g/plant + No POC, P5: ½ NPK + mycorrhiza 10g/plant + POC 40 mL/L, P6: 1 NPK + without mycorrhiza + without POC, P7: 1 NPK + without mycorrhiza + POC 40 mL/L, P8: 1 NPK + mycorrhiza 10g/plant + No POC, P9: 1 NPK + mycorrhiza 10g/plant + POC 40 mL/L. Analysis of research data using Sidik Ragam at the 5% level, further tested with DMRT at the 5% level. Application treatment with the composition of P9 (1 NPK + mycorrhiza 10 g/plant + POC 40 mL/L) resulted in optimal growth and yield of shallots.

Kata kunci : Bawang merah, NPK, mikoriza, POC *Sargassum* sp.

OPTIMIZATION OF SHALLOT (*Allium ascalonicum* L.) var. Bima Brebes YIELD WITH A COMBINATION OF NPK, MYCORRHIA AND POC FERTILIZER *Sargassum* sp.

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ABSTRACT

Shallots are a key horticultural commodity in Indonesia, with growing demand. To meet this growing production demand, an appropriate fertilization strategy is required. This study aimed to determine the optimal combination of NPK fertilizer, mycorrhizal fertilizer and *Sargassum* sp. liquid organic fertilizer (POC) for shallot growth and yield. The research method used was a single-factor RAL with treatments P0: without NPK + without mycorrhiza + without POC, P1: without NPK + without mycorrhiza + POC 40 mL/L, P2: without NPK + mycorrhiza 10 g/plant + POC 40 mL/L, P3: ½ NPK + without mycorrhiza + POC 40 mL/L, P4: ½ NPK + mycorrhiza 10g/plant + No POC, P5: ½ NPK + mycorrhiza 10g/plant + POC 40 mL/L, P6: 1 NPK + without mycorrhiza + without POC, P7: 1 NPK + without mycorrhiza + POC 40 mL/L, P8: 1 NPK + mycorrhiza 10g/plant + No POC, P9: 1 NPK + mycorrhiza 10g/plant + POC 40 mL/L. Analysis of research data using analysis of variance at the 5% level, further tested with DMRT at the 5% level. Application treatment with the composition P9 (1 NPK + mycorrhiza 10 g/plant + POC 40 mL/L) resulted in optimal growth and yield of shallots.

Keywords: Shallots, NPK, mycorrhizae, *Sargassum* sp. POC