

Uji Efektivitas Ukuran Umbi dan Penambahan PGPR (*Plant Growth Promoting Rhizobacteria*) terhadap Pertumbuhan dan Hasil Bibit Umbi Bawang Merah (*Allium ascalonicum* L.). (*Effectiveness Test of Bulb Size and Addition of PGPR (Plant Growth Promoting Rhizobacteria) on the Growth and Yield of Shallot Bulb Seedlings (Allium ascalonicum* L.). Supervised by Leli Kurniasari S.P., M.Si.

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ABSTRACT

*Red onion (*Allium ascalonicum* L.) is one of the favorite commodities in Indonesia. This research aims to investigate the influence of bulb size and the addition of Plant Growth Promoting Rhizobacteria on the growth and yield of red onion seed bulbs. The experimental design employed a factorial randomized block design consisting of two treatment factors and was replicated three times. The first factor was bulb size (U), categorized into sizes <5 g (U1), 5-10 g (U2), and >10 g (U3). The second factor was PGPR concentration, with concentrations of 5ml/l (P1), 10ml/l (P2), and 15ml/l (P3). Data obtained from the research results underwent analysis of variance, followed by a Duncan's Multiple Range Test at a significance level of 5%. The research findings indicate that bulb size >10 g produced the best results, with 42 leaves, 14 bulbs, a wet weight of 53,56 g, and a dry weight of 43,34 g. Meanwhile, small bulb size (<5 g) yielded the best results for bulb diameter at 2,24 cm. The interaction between bulb size and PGPR concentration did not have a significant effect on all parameters.*

Keywords: red onion, bulb size, Plant Growth-Promoting Rhizobacteria