

**PENGARUH PEMBERIAN KOMPOS BLOK DAN MIKORIZA  
TERHADAP PERTUMBUHAN TANAMAN PULAI (*Alstonia scholaris*) DI  
KAWASAN KARST KARANGASEM, PONJONG, GUNUNGKIDUL**

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**INTISARI**

Kawasan Karst di Gunungkidul dikenal sebagai kawasan lahan kritis yang rentan mengalami kekeringan. Salah satu upaya untuk merehabilitasi lahan kritis adalah melalui kegiatan penanaman. Penelitian ini dilaksanakan di kawasan karst Karangasem, Ponjong, Gunungkidul. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian kompos blok dan mikoriza terhadap pertumbuhan tinggi dan diameter serta persentase hidup dari tanaman Pulai (*Alstonia scholaris*).

Rancangan penelitian dilakukan dengan rancangan RCBD (*Randomized Complete Blok Design*) menggunakan 3 (tiga) blok dengan masing-masing blok 16 (enam belas) plot berbentuk *line plot* yang merupakan kombinasi antara 4 (empat) perlakuan kompos blok yaitu kontrol, kompos blok 0,5 kg, kompos blok 1 kg, dan kompos blok 1,5 kg dan 4 (empat) perlakuan mikoriza yaitu kontrol, mikoriza A, mikoriza B, dan mikoriza C. Analisis data dilakukan dengan *software* SPSS yaitu uji ANOVA dan uji *Duncan Multiple Range Test* (DMRT) untuk sumber varian signifikan.

Hasil penelitian menunjukkan bahwa pemberian kompos blok dan mikoriza tidak memberikan pengaruh yang signifikan terhadap pertumbuhan tanaman Pulai (*Alstonia scholaris*) namun terdapat kecenderungan bahwa kombinasi antara kompos blok 1 kg dan mikoriza C memberikan hasil pertumbuhan tinggi terbaik yaitu sebesar 17,43 cm, kombinasi antara kompos blok 0,5 kg dan mikoriza B memberikan hasil pertumbuhan diameter terbaik sebesar 0,596 cm. Pengaruh yang tidak signifikan diduga diakibatkan oleh waktu penelitian di musim penghujan di mana ketersediaan air melimpah bagi tanaman sehingga fungsi kompos blok dan mikoriza sebagai upaya meningkatkan kemampuan mengikat air dan memperluas penampang penyerapan air dan hara belum dapat diamati dengan sempurna.

Kata kunci : Kompos blok, Mikoriza, *Alstonia scholaris*

**THE EFFECT OF COMPOST BLOCK AND MYCORRHIZA APPLICATION ON THE GROWTH OF PULAI (*Alstonia scholaris*) AT THE KARST AREA OF KARANGASEM, PONJONG, GUNUNGKIDUL**

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**ABSTRACT**

The Karst area in Gunungkidul is known as a critical land area that is vulnerable to drought. One of the efforts to rehabilitate critical land is through planting activities. This research was conducted in the Karangasem Karst area, Ponjong, Gunungkidul. The purpose of this study is to determine the effect of compost block and mycorrhiza application on the height and diameter growth, as well as the survival rate of Pulai (*Alstonia scholaris*).

The research design was conducted using a Randomized Complete Block Design (RCBD) with 3 (three) blocks, each consisting of 16 (sixteen) line plots. The plots were a combination of 4 (four) compost block treatments, namely control, 0,5 kg compost block, 1 kg compost block, and 1,5 kg compost block, as well as 4 (four) mycorrhiza treatments, namely control, mycorrhiza A, mycorrhiza B, and mycorrhiza C. Data analysis was performed using SPSS software, including ANOVA test and *Duncan Multiple Range Test* for significant source of variation.

The research results indicate that the application of compost block and mycorrhiza did not have a significant effect on the growth of Pulai plants (*Alstonia scholaris*). However, there is a tendency that the combination of 1 kg compost block and mycorrhiza C provided the best height growth result of 17,43 cm, while the combination of 0,5 kg compost block and mycorrhiza B provided the best diameter growth result of 0,596 cm. The insignificant effect was thought to be caused by the time of research in the rainy season when the availability of water was abundant for plants so that the function of compost block and mycorrhiza as an effort to increase the ability to enhance water holding capacity and expand the cross-section of water and nutrient absorption could not be observed perfectly.

Key words: Compost block, Mycorrhiza, *Alstonia scholaris*