

**The Growth of Red Betel Stem Cuttings On Various Compositions of
Planting Media and Dosage *Trichoderma harzianum***

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ABSTRACT

One solution that can be done to increase production is by carrying out vegetative propagation by stem cuttings. Apart from that, to support growth ability, it can be done by applying cow dung fertilizer and *Trichoderma harzianum* on the planting media. This research aims to determine the composition of the planting media and dosage *Trichoderma harzianum* best for growth red betel stem cuttings. The experiment used was a field experiment which was prepared using a two-factor Completely Randomized Design (CRD), the first factor was the composition of the planting media with cow dung fertilizer 1:1, 1:2 and 2:1 and the second factor was the various dosage *Trichoderma harzianum* 40, 50 and 60 grams. The data obtained was analyzed for diversity using analysis of variance at the 5% level and followed by DMRT at the 5% level. To compare the treatment with the control, an Orthogonal Contrast Test was carried out. The research results showed that there was no real difference between the combination of treatments and control plants. There is an interaction between the combination of planting media and dosage *Trichoderma harzianum*. The combination planting media with cow dung fertilizer (1:2) with *Trichoderma harzianum* 50 grams gave the best results in all parameters.

Keyword : Red Betel Cuttings, Cow Dung Fertilizer, and *Trichoderma harzianum*