

**Pengaruh Penambahan *Trichoderma* spp. terhadap
Perbaikan Media Tanah Pasir untuk
Pertumbuhan Cemara Udang (*Casuarina* sp.)**

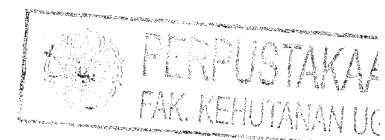
INTISARI

Media tanah pasir untuk pertumbuhan Cemara Udang mempunyai keterbatasan dalam penyediaan unsur hara sehingga kurang baik untuk mendukung keberhasilan tanaman yang diusahakan. Rekayasa unsur hara perlu dilakukan untuk mengatasi kendala tersebut, yaitu dengan penambahar bahan organik dan pemanfaatan *Trichoderma*. *Trichoderma* dapat memacu proses dekomposisi sehingga bahan organik dapat diserap lebih cepat oleh tanaman. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan *Trichoderma* terhadap perbaikan media tanah pasir untuk pertumbuhan bibit Cemara Udang.

Penelitian dilakukan selama 6 bulan. Rancangan percobaannya adalah faktorial dan ditempatkan dalam Rancangan Acak Lengkap berblok dengan 3 variabel, yaitu *Trichoderma* (tanpa *Trichoderma*, penambahan pelet *Trichoderma*); jenis media (pasir pantai, tanah tegalan, tanah berkapur); dan jenis pupuk (tanpa pupuk, pupuk kandang, kompos). Jumlah semai yang diuji sebanyak 450 semai. Parameter yang diamati meliputi persen hidup semai, jumlah bintil akar dan kualitas pertumbuhan semai. Hasil pengamatan dianalisis dengan analisis sidik ragam dengan taraf ketelitian 5 % dan uji lanjut DMRT.

Hasil penelitian menunjukkan adanya pengaruh penambahan *Trichoderma* pada media terhadap persen hidup semai, jumlah bintil akar dan kualitas pertumbuhan semai. Persen hidup semai sebesar 96% dari perlakuan pupuk kandang dengan penambahan *Trichoderma* (P1T1) pada tanah berkapur. Jumlah bintil akar terbanyak yaitu 9,50 dari perlakuan tanpa pupuk dengan penambahan *Trichoderma* (P0T1) pada tanah berkapur. Indeks kualitas semai Cemara Udang menunjukkan hasil yang baik yaitu rata-rata di atas 0,09. *Trichoderma* mampu menunjukkan pengaruhnya terhadap perbaikan media tanam.

Kata kunci : *Trichoderma*, media, pupuk, pertumbuhan semai.



The Effect of *Trichoderma* spp. Addition Towards the Improvement of Sandy Soil Media on the Growth of *Cemara Udang* (*Casuarina* sp.)

ABSTRACT

Sandy soil media for the growth of *Cemara Udang* has its limit in supplement of sufficient organic matters resulting in low support towards the successful growth of plantations. Therefore engineering of organic matter is needed to overcome these constraints, through the addition and utilization of organic matter such as *Trichoderma* can be used to increase the rate of decomposition, therefore making organic matter intake by the plant to become faster. This research is aimed to again knowledge on the effect of *Trichoderma* addition towards the improvement of sandy soil media of the growth of *Cemara Udang*.

The research was done in six months. Using the Factorial Experimental Design and placed under a complete Randomize Block Design with three variables, that are *Trichoderma* (without *Trichoderma*, with the addition *Trichoderma*) pills on media of (beach sandy field soil, and chalky soil) and also fertilization variation (without fertilization, fertilization using dung, and using compose). The quantity of seedlings tested as much as 450 seedlings. The parameters observed were percent of live seedlings, amounts of root spots and seedling growth quality. The observation outcomes were then analyzed using variable prints using significance rate 5 % to the be continued with DMRT analysis.

The outcome of the research shows that there was an effect of the addition of *Trichoderma* on the media towards live percentage of seedlings, amount of root spots and the quality of seedling growth. Percentage of live seedling at 96 % from treatment of *Trichoderma* addition on waste fertilization (P1T1) on chalk soil media. With the amount of root spots being the biggest at 9,50 from treatment of *Trichoderma* addition on unfertilized media (P0T1) also on chalk soil media. The index quality of *Cemara Udang* seedling shows a well outcome average at above 0,09. Its therefore proof that *Trichoderma* was able to show significant effects the quality increment at media.

Key words : *Trichoderma* media, fertilization, growth, seedlings

