

**EVALUASI KOMPOSISI MEDIA TANAM DAN PENAMBAHAN
Trichoderma sp. PADA BIBIT SENGON (*Falcataria falcata* (L))
DI PERSEMAIAN PT. SUPRABARI MAPANINDO MINERAL**

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INTISARI

Kegiatan pertambangan batubara secara terbuka berpotensi menurunkan kualitas lingkungan, terutama melalui kerusakan lahan. Salah satu upaya untuk memulihkan lahan tambang adalah melalui revegetasi dengan memanfaatkan tanaman pionir seperti Sengon Solomon (*Falcataria falcata* (L)). Penelitian ini bertujuan untuk mengetahui pengaruh berbagai komposisi media tanam dan aplikasi *Trichoderma sp.* terhadap pertumbuhan bibit sengon pada fase persemaian. Penelitian dilaksanakan di lokasi persemaian milik PT Suprabari Mapanindo Mineral, Kalimantan Tengah, menggunakan Rancangan Acak Lengkap (RAL) dua faktor, yaitu campuran *Topsoil* dan kompos dengan perbandingan 1:1 (v/v), campuran *topsoil* dan kompos 3:1 (v/v), humus, *topsoil* murni, dan *overburden*, serta dua perlakuan aplikasi *Trichoderma sp.* (dengan dan tanpa aplikasi). Parameter yang diamati meliputi tinggi tanaman, diameter batang, jumlah daun, panjang akar, jumlah bintil akar, dan bobot kering bibit. Hasil penelitian menunjukkan bahwa jenis media tanam memberikan pengaruh signifikan terhadap sebagian besar parameter pertumbuhan bibit. Sebaliknya, aplikasi *Trichoderma sp.* secara umum tidak berpengaruh signifikan, kecuali pada parameter panjang akar. Interaksi antara media tanam dan aplikasi *Trichoderma sp.* juga hanya menunjukkan pengaruh nyata pada panjang akar. Di antara kelima media tanam yang digunakan, kombinasi *topsoil* dan kompos dengan perbandingan 1:1 (v/v) dan 3:1 (v/v) menghasilkan pertumbuhan bibit sengon terbaik.

Kata kunci: sengon, media tanam, *Trichoderma sp.*, revegetasi, reklamasi tambang

**EVALUATION OF GROWING MEDIA COMPOSITION AND
Trichoderma sp. APPLICATION ON SENGON SEEDLINGS (*Falcataria
falcata (L)*) IN THE NURSERY OF PT. SUPRABARI MAPANINDO
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ABSTRACT

Open coal mining activities have the potential to reduce environmental quality, especially through land destruction. One of the efforts to restore mining land is through revegetation by utilizing pioneer plants such as Sengon Solomon (*Falcataria falcata (L)*). This study aims to determine the influence of various compositions of planting media and applications of *Trichoderma sp.* on the growth of sengon seedlings in the seedbed phase. The research was carried out at a nursery location owned by PT Suprabari Mapanindo Mineral, Central Kalimantan, using a two-factor Complete Random Design (CRD), namely five types of planting media which was topsoil+compost 1:1 (v/v), topsoil+compost 3:1 (v/v), humus, topsoil, and overburden, as well as two application treatments of *Trichoderma sp.* (with and without the app). The observed parameters included plant height, stem diameter, number of leaves, root length, number of root nodules, and dry weight of seedlings. The results showed that the type of planting medium had a significant influence on most of the seedling growth parameters. On the other hand, the application of *Trichoderma sp.* has no significant effect, except on the root length parameters. Interaction between planting media and *Trichoderma sp.* also shows only a noticeable influence on root length. Among the five planting media used, the combination of topsoil and compost with a ratio of 1:1 (v/v) and 3:1 (v/v) produces the best growth of sengon seedlings.

Keywords: sengon, planting media, *Trichoderma sp.*, revegetation, mine reclamation