

## **PENGARUH FUNGISIDA METIL TIOFANAT TERHADAP PERKECAMBAHAN BENIH DAN PERKEMBANGAN KARAT TUMOR PADA SEMAI SENGON**

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### **INTISARI**

Peningkatan penanaman jenis sengon oleh petani, sebagai konsekuensi meningkatnya permintaan produk kayu sengon menyebabkan peningkatan permintaan benih sengon. Adanya penyakit karat tumor yang saat ini telah meluas hampir di seluruh Pulau Jawa, sangat membahayakan kesehatan pohon-pohon yang digunakan sebagai sumber benih sengon. Tujuan penelitian yaitu untuk mengetahui respon perlakuan fungisida dengan bahan aktif metil tiofanat 70% terhadap viabilitas benih dan kualitas semai sengon yang berasal dari benih terinfeksi jamur karat tumor, benih yang dijual bebas di pasaran dan benih dari tegakan sengon sehat.

Penelitian perlakuan fungisida dilakukan pada dua tahap yaitu pada saat masih berupa benih dan setelah pada fase semai. Benih dari masing-masing sumber diperlakukan dengan fungisida perawat benih metil tiofanat 70% dengan dosis perbandingan berat fungisida : berat benih = 12,5 g : 1000 g. Semai yang ditumbuhkan kemudian diperlakukan dengan fungisida perawat semai bahan aktif yang sama dengan dosis 1 g/l, dengan interval 7 hari sekali, selama 1 bulan.

Hasil penelitian menunjukkan bahwa fungisida perawat benih tidak berpengaruh nyata pada persen perkecambahan, persen benih busuk dan persen busuk pangkal. Pada tingkat semai fungisida perawat benih tidak berpengaruh nyata dalam menekan luas serangan maupun intensitas penyakit karat tumor. Akan tetapi pada semai yang berasal dari benih sehat, fungisida perawat semai berpengaruh nyata dalam menekan intensitas penyakit (IP), dengan kisaran IP dari benih: sehat = 2,7 – 22,3%, terinfeksi = 44,3-67%, pasaran = 22-64%). Semai yang berasal dari sumber benih sehat memiliki nilai rasio pertumbuhan relatif yang lebih tinggi (2,9 – 3,4%) dibandingkan semai yang berasal dari benih terinfeksi (2,4 – 2,9%) maupun pasaran (2,5 – 2,9%).

Kata kunci: benih sengon, karat tumor, metil tiofanat

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## **THE EFFECT OF METHYL THIOFANATE ON SEED GERMINATION AND GALL RUST DISEASE DEVELOPMENTS ON SEEDLING SENGON**

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### **ABSTRACT**

The increase of sengon plantation by farmers, as a consequence from the increasing demand for sengon wood products, causes the increasing of demand for sengon seed. The presence of gall rust disease that today has extended almost in the entire of Java Island is also very dangerous to the health of sengon trees that are used as the source of sengon seed. The purpose of this research was to determine the effect of fungicide application with active substance of methyl thiofanate 70% to the sengon seed's viability and sengon seedling's quality deprived from infected seeds by gall rust fungus, unknown seeds health status that were sold from free market and healthy seeds from healthy sengon's stand.

The fungicide treatment research was conducted into two phases, i.e. while still at seed stage and seedling stage. Seeds from each source were treated with seed dressing fungicide with methyl thiofanate 70% at dose comparison of weight of fungicide : weight of seed = 12.5 g : 1000 g. Grown Seedlings were treated with fungicide with same active substance for seed dressing with a dose of 1 g/l, with applied interval once of 7 day, for 1 month.

The results showed that there were no significant effect of seed dressing to percentage of seed germination, decayed seed and stalk base rot. In seedling level, seed dressing gave no significant effect in suppressing disease incident and disease intensity. However, seed dressing application from healthy seeds gave significant effect in reducing disease intensity (DI). At range of DI in seeds from healthy seeds = 2,7 – 22,3%, infected seeds = 44,3 – 67% and unknown seeds health status from the market = 22 – 64%. Seedlings from healthy seed source had higher relative growth rate (2,9 – 3,4%) than seedling from infected seed (2,4 – 2,9%) and from free market (2,5 – 2,9%).

Key words: seed sengon, gall rust, methyl thiofanate

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