

Uji Efektivitas Ter Dalam Mengendalikan Penyakit Karat Tumor Pada Batang Trubusan Sengon Umur 4 Tahun Di Hutan Rakyat

INTISARI

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Gejala tumor pada batang trubusan sengon yang disebabkan oleh jamur *Uromycladium tepperianum* merupakan gangguan penting yang sampai saat ini belum ditemukan cara penanganannya. Ter yang umum digunakan untuk menutup luka akar akibat bekas infeksi jamur akar pada tanaman perkebunan bersifat racun terhadap jamur. Diharapkan efek yang sama terjadi pada penggunaan ter untuk menutup bekas luka (kerokan) pada batang yang menunjukkan gejala karat tumor. Tujuan penelitian adalah untuk mengetahui efektivitas ter dalam menekan munculnya kembali gejala selama 1 dan 6 bulan setelah aplikasi, serta mengevaluasi dan menganalisis keberadaan miselia jamur karat tumor pada batang trubusan sengon setelah enam bulan tanpa perlakuan ter.

Penelitian menggunakan 25 batang trubusan sengon yang menunjukkan gejala karat tumor. Dua puluh batang dikerok tumornya dan pada bagian tersebut dilabur ter setiap dua minggu sekali selama 1 bulan, sedangkan 5 batang lainnya hanya dikerok saja (kontrol). Pengamatan dilakukan setiap 1 minggu sekali dengan karakteristik yang diamati berupa jumlah dan ukuran tumor yang muncul berdasarkan skor dan digunakan untuk menghitung intensitas kemunculan tumor selama 1 bulan dan setelah 6 bulan tanpa perlakuan. Evaluasi keberadaan miselia dilakukan dengan metode perendaman menggunakan larutan *Lactophenol cotton blue* dengan konsentrasi 10 ml/l selama 24 jam. Bagian kayu yang direndam adalah 10 cm bagian atas, bawah, dan tepat dibagian kerokan yang dilabur dengan ter, yang masing-masing bagian tersebut dipotong melintang (*disk*) setebal 1 cm. Luas disk yang berwarna biru diukur menggunakan dotgrid.

Ter efektif menekan 100% munculnya kembali gejala tumor selama 1 bulan. Setelah 6 bulan tidak dilabur ter, intensitas tumor yang muncul sebesar 32,13% (efektivitas ter menurun sebesar 74,37% menjadi 25,63%). Intensitas miselia pada batang yang dilabur ter dan tidak muncul tumornya kembali setelah 6 bulan tanpa dilabur di bagian atas kerokan (8,42%-26,05%) secara nyata cenderung lebih rendah, tengah (5,98%-21,86%) dan bawah (10,02%-32,43%) cenderung sama dibandingkan kontrol (tanpa dilabur ter). Batang yang muncul tumornya kembali memiliki intensitas miselia pada bagian atas (4,48%-18,79%) cenderung lebih rendah, tengah (16,69%-28,91%) cenderung lebih tinggi, dan bawah (8,08%-22,43%) cenderung sama dibandingkan kontrol.

Kata kunci : trubusan sengon, gejala karat tumor, ter.

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Tar Effectiveness Test to Control Gall Rust Disease on Coppice of Sengon Age 4 Years in Community Forest

ABSTRACT

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Gall symptoms at coppice sengon stem that is caused by *Uromycladium tepperianum* fungus is important disturbance that until now it has not been found the appropriate control methods. Commonly, tar is used to cover the wound by root fungus infection on the plantation and it has poisonous character for fungus. So that, the same effect on tar treatment to cover the wound (scraping) at the stem that showed gall rust symptom was expected. The objective of the research were to know the effectiveness of tar to control gall rust for 1 month and 6 month after application, and to evaluate and analyze the presence of gall rust mycelia on sengon stem after 6 month without tar.

The research consists of 25 coppice sengon stem with gall rust symptom. 20 stems were scraped and smeared by tar every 2 weeks for 1 month, whereas 5 stem were just scraped. The observation were conducted every once a week with characteristics such as the intensity and size of galls that appeared for 1 month and 6 month later without treatment. To evaluate gall rust mycelia presence used dyeing methods using *Lactophenol cotton blue* solution with concentration approximately 10 ml/l for 24 hour. The wood which would be dyed on *Lactophenol cotton blue* were cut about 10 cm from the top, middle, and bottom with the thickness about 1 cm. The blue color incidence on the disk were measured using dotgrid.

Tar was 100% effective in order to control appeared gall for 1 month. After 6 month without tar treatment, the galls intensity were 32,13% (the effectiveness were decreased about 74,37% became 25,63%). The mycelia intensity in the stem with tar treatment that did not reappear gall after 6 month without smeared again at the top of screaped were (8,42%-26,05%) was significantly lower, at the middle (5,98%-21,86%) and the bottom were (10,02%-32,43%) same as control. The stem that reappeared the gall had mycelia intensity at the top (4,48%-18,79%) was lower, at the middle (16,69%-28,91%) was higher, and the bottom (8,08%-22,43%) was same as control.

Key word: sengon coppice, gall rust symptom, tar.

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