KARAKTERISTIK PENYEBARAN GEJALA KARAT TUMOR PADA BATANG TRUBUSAN SENGON (*Falcataria moluccana*)

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INTISARI

Sengon mempunyai sifat pertumbuhan yang sangat cepat (*fast growing species*). Petani lebih memilih menggunakan permudaan yang berasal dari trubusan. Semakin banyak pertanaman sengon akan diikuti meningkatnya kerusakan oleh penyakit karat tumor (*gall rust*) yang disebabkan jamur *Uromycladium tepperianum*. Penelitian ini bertujuan untuk mengetahui pola penyebaran gejala karat tumor dan penyebaran jaringan terinfeksi yang disebabkan oleh jamur *U. tepperianum* pada batang trubusan sengon.

Penelitian ini menggunakan metode survei (penelitian lapangan) dan Rancangan Acak Lengkap dengan dua faktor yaitu letak dan ukuran tumor (penelitian laboratorium). Batang trubusan tanpa gejala karat tumor digunakan sebagai kontrol. Parameter yang diamati berupa jumlah trubusan, diameter batang, jumlah tumor, kondisi tumor, dan ukurun tumor (lapangan) serta kerapatan dan luas penyebaran miselia jamur *U. tepperianum* (laboratorium).

Hasil penelitian menunjukkan persentase jumlah trubusan yang bergejala karat tumor pada batang bagian bawah paling banyak (62,5%) dibandingkan batang bagian tengah (49%) dan atas (30%), sedangkan persentase jumlah tumor terbanyak yaitu pada batang bagian bawah (43,95%) diikuti bagian tengah (35,77%) dan bagian atas (20,28%). Gejala karat tumor banyak muncul pada kelas diameter >3-5 cm (47,73%) diikuti kelas diameter 1-3 cm (34,63%) dan kelas diameter >5-8 cm (17,63%) serta didominasi tumor berukuran kecil. Persentase kerapatan miselia jamur *U. tepperianum* pada jaringan batang bagian atas (66,67%) tidak berbeda nyata dengan batang bagian bawah (67,78%), begitu juga dengan kerapatan miselia pada jaringan di sekitar tumor berukuran besar (70,00%) tidak berbeda nyata dengan tumor berukuran kecil (64,44%), sedangkan persentase kerapatan miselia pada jaringan di atas tumor (69,44%) lebih tinggi daripada di bawah tumor (65,00%). Persentase luas penyebaran di batang bagian atas (93,12%) lebih luas daripada bagian bawah (87,26%), sedangkan pada jaringan di sekitar tumor berukuran besar (88,97%) tidak berbeda nyata dengan tumor berukuran kecil (91,41%), namun luas penyebaran miselia pada jaringan batang di atas tumor (94,30%) lebih luas daripada di bawah tumor (86,09%). Batang trubusan sengon yang sehat juga terdapat miselia jamur dengan kerapatan dan luas penyebaran yang jauh lebih sedikit daripada batang yang menunjukkan gejala karat tumor.

Kata kunci: Gejala karat tumor, *Uromycladium tepperianum*, trubusan sengon

CHARACTERISTIC OF DITRIBUTION GALL RUST SYMPTOM ON SHOOT TOWARDS STEM OF SENGON (*Falcataria moluccana*)

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ABSTRACT

Sengon is fast growing species. Farmer prefers to use regeneration which is from shoot towards. Increasing number of sengon plantation will followed by increasing damaged by gall rust disease which caused by *Uromycladium tepperianum* fungi. This research aim to determine the distribution pattern of gall rust symptoms and distribution of infected tissue caused by *U. tepperianum* fungi on shoot towards sengon stem.

This research used survey method on the field and Completely Randomized Design (CRD) with two factors: location and size of gall rust on the laboratory. Shoot towards stem without gall rust symptom used as control. Observed parameters were the number of shoot towards, stem diameter, number of gall, gall condition, and size of gall on the field, also density and distribution range of fungi *U. tepperianum* mycelia on the laboratory.

The result showed that the percentage of shoot towards symptomatic gall rust on the bottom of stem was the highest (62,5%) compared with the middle (49%) and top (30%) of stem, whereas the highest percentage for the number of gall rust was on the bottom of stem (43,95%), then the middle (35,77%), and the top (20,28%). Many of gall rust symptom appeared on class of diameter >3-5 cm (47,73%) followed by class of diameter 1-3 cm (34,63%) and class of diameter >5-8 cm (17,63%) also dominated by small-size of gall rust. Percentage of rust mycelia density on top stem tissue (66,67%) was not significantly different with the bottom stem tissue (67,78%), as well as the percentage of mycelia density on the tissue around of large-size gall (70,00%) was not significantly different with on tissue around of small-size gall (64,44%). The percentage of mycelia density on the tissue above gall (69,44%) were higher than under the gall (65,00%). However, the percentage of mycelia distribution on the top of stem (93,12%) was higher than the bottom stem (87,26%), whereas on the tissue around of large-size gall (88,97%) was not significantly different with on the tissue around of small-size gall (91,41%). Mycelia distribution on tissue above gall (94,30%) was higher than under the gall (86,09%). While the healthy stem without gall were also shown mycelia with the density and distribution were much smaller than the stem which showing gall rust symptom.

Keywords: gall rust symptom, *Uromycladium tepperianum*, shoot towards of sengon