

ABSTRAK

EFEKTIVITAS ASAP CAIR SERUTAN KAYU JATI TERHADAP PENYAKIT VIRUS GEMINI PADA TANAMAN TOMAT (*Solanum lycopersicum* Mill)

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Serangan virus gemini atau *tomatto yellow leaf curl virus* (TYCL), merupakan salah satu penyakit penting bagi tanaman tomat dan sayuran lainnya di Indonesia, yang dapat menyebabkan kehilangan hasil sekitar 75 hingga 100%. Asap cair diduga mengandung senyawa yang dapat menurunkan tingkat serangan penyakit virus gemini pada tanaman. Penelitian ini bertujuan untuk mengetahui efektivitas asap cair serutan kayu jati terhadap tingkat serangan virus gemini. Penelitian ini dilaksanakan pada bulan September sampai November 2021 di Rumah Kasa di Desa Sindangsari Kec Leuwigoong Kabupaten Garut, menggunakan Rancangan Acak Kelompok dengan perlakuan konsentrasi asap cair, yang terdiri dari lima taraf konsentrasi, yaitu : k_0 : 0 mL/L (kontrol), k_1 : 15 mL/L, k_3 : 20 mL/L, 25 mL/L, dan k_4 : 30 mL/L, masing-masing diulang empat kali. Hasil penelitian menunjukkan bahwa, aplikasi asap cair serutan kayu jati efektif menghambat tingkat serangan penyakit virus gemini. Konsentrasi 30 ml/L asap cair serutan kayu jati efektif menghambat tingkat serangan penyakit virus gemini pada tanaman tomat.

Kata Kunci: asap cair, virus gemini, tomat.

ABSTRACT

EFFECTIVENESS OF SHAVING TEAK WOOD LIQUID SMOKE AGAINST GEMINI VIRUS DISEASE ON TOMATTO PLANTS (*Solanum lycopersicum* Mill)

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Gemini virus attack or tomato yellow leaf curl virus (TYCL), is one of the important diseases for tomato and other vegetable plants in Indonesia, which can cause loss of yield of about 75 to 100%. Liquid smoke is thought to contain compounds that can lower the rate of attacks of gemini virus disease in plants. This study aims to find out the effectiveness of teak wood shaving liquid smoke against the rate of gemini virus attack. This study was conducted in September to November 2021 at Kasa House in Sindangsari Village, Leuwigoong District, Garut Regency, using a Randomized Group Design with liquid smoke concentration treatment, consisting of five concentration levels, namely: k_0 : 0 mL/L control, k_1 : 15 mL/L, k_3 : 20 mL/L, 25 mL/L, and k_4 : 30 mL/L, each repeated four times. The results showed that, The application of teak wood shaving liquid smoke effectively inhibits the rate of attack of gemini virus disease. The concentration of 30 ml/L of teak shaving liquid smoke effectively inhibits the rate of attack of gemini virus disease in tomato plants.

Keywords: liquid smoke, gemini virus, tomato