

ABSTRAK

PENGARUH KONSENTRASI S-H MIXTURE MODIFIKASI TERHADAP PERTUMBUHAN DAN PENYAKIT LAYU FUSARIUM (*Fusarium oxysporum* f.sp *gladioli*) PADA TANAMAN GLADIOL (*Gladiolus hybridus* L)

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Dalam budidaya gladiol, petani menghadapi banyak masalah diantaranya yang terpenting penyakit layu fusarium (*Fusarium oxysporum* f.sp *gladioli*). Upaya telah dilakukan untuk mengendalikan penyakit tular tanah tersebut melalui sterilisasi tanah, rotasi tanaman, dan penggunaan fungisida, namun hasilnya kurang memuaskan karena tidak dapat menurunkan intensitas penyakit secara efektif di lapangan. Oleh karena itu perlu dilakukan pembenah tanah, S-H Mixture adalah produk formulasi yang dikembangkan oleh peneliti di Taiwan yaitu Sun dan Huang dalam mengendalikan penyakit bawaan tanah. Penelitian ini dilakukan pada bulan Juli sampai November 2019 di laboratorium dan kebun percobaan Balai Penelitian Tanaman Hias Segunung Cianjur. Penelitian bertujuan untuk mengetahui pengaruh konsentrasi modifikasi S-H Mixture terhadap pertumbuhan dan hasil tanaman gladiol (*Gladiolus hybridus* L) serta pengendalian penyakit layu fusarium (*Fusarium oxysporum* f.sp *gladioli*). Penelitian ini menggunakan Rancangan Acak Kelompok non faktorial terdiri dari 6 taraf perlakuan yaitu P0 = kontrol, P1 = S-H Mixture 0,5%, P2 = S-H Mixture 1%, P3 = S-H Mixture 1,5%, P4 = S-H Mixture 2%, P5 = S-H Mixture 2,5% setiap perlakuan diulang sebanyak 5 kali. Hasil penelitian ini menunjukkan bahwa konsentrasi modifikasi S-H Mixture berpengaruh nyata terhadap tinggi tanaman, jumlah daun, persentase tanaman layu, tetapi tidak berpengaruh pada intensitas serangan umbi gladiol.

Kata kunci : S-H Mixture, *Fusarium oxysporum* f.sp *gladioli*, gladiol (*Gladiolus hybridus* L).

ABSTRACT

THE EFFECT OF S-H MIXTURE MODIFICATION CONCENTRATION ON GROWTH AND CONTROL OF FUSARIUM WILT (*Fusarium oxysporum f.sp gladioli*) IN GLADIOL PLANT (*Gladiolushybridus* L)

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In the cultivation of gladiolus, farmers face many problems including the most important fusarium wilt disease (*Fusarium oxysporum f.sp gladioli*). Efforts have been made to control these soil borne diseases through soil sterilization, crop rotation, and the use of fungicides, but the results are less satisfactory because they cannot reduce the intensity of the disease effectively in the field. Therefore it is necessary to improve the soil, S-H Mixture is a formulation product developed by researchers in Taiwan namely Sun and Huang in controlling soil-borne diseases. This research was conducted from July to November 2019 in the laboratory and experimental garden of the Ornamental Plant Research Institute Segunung, Cianjur. The research aims to determine the effect of the concentration of modified S-H Mixture on the growth and yield of gladiolus (*Gladiolus hybridus* L) and control of fusarium wilt (*Fusarium oxysporum f.sp gladioli*). This study uses a non factorial randomized block design consisting of 6 levels of treatment namely P0 = control, P1 = SH Mixture 0.5%, P2 = SH Mixture 1%, P3 = SH Mixture 1.5%, P4 = SH Mixture 2%, P5 = SH Mixture 2.5% each treatment was repeated 5 times. The results of this study indicate the concentration of modified S-H Mixture significantly affected plant height, number of leaves, percentage of wilted plants, but did not affect the intensity of gladiolus bulbs.

Keyword : S-H Mixture, *Fusarium oxysporum f.sp gladioli*, gladiol (*Gladiolus hybridus* L).