KARAKTERISASI DAN UJI ANTAGONISME *Trichoderma* spp. DARI BERBAGAI LOKASI TERHADAP *Rhizoctonia solani* PENYEBAB PENYAKIT HAWAR PADA TANAMAN KEDELAI (*Glycine max* (L.) Merill)

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ABSTRAK

Penelitian ini bertujuan untuk mengidentifikasi karakterisasi *Trichoderma* spp. dan mengetahui potensi isolat *Trichoderma* spp. dalam menghambat pertumbuhan *R. solani* secara *in vitro* dan *in vivo*. Metode yang digunakan dalam penelitian terdiri dari 3 tahapan yaitu: isolasi dan karakterisasi isolat *Trichoderma* spp., uji antagonisme *in vitro* isolat *Trichoderma* spp. terhadap *R. solani* di laboratorium, dan uji antagonisme *in vivo* isolat *Trichoderma* spp. terhadap *R. solani* di *greenhouse* Dlingo, Bantul menggunakan RAL (Rancangan Acak Lengkap). Hasil karakterisasi pada *Trichoderma* UPN 16, *Trichoderma* isolat Gunungkidul, *Trichoderma* isolat Bantul dan *Trichoderma* isolat Kulon Progo mempunyai warna hijau tua dengan bentuk membulat dengan berdiameter 9 cm. Potensi *Trichoderma* UPN 16, isolat Gunungkidul, isolat Bantul dan isolat Kulon Progo mampu menekan serangan *Rizhoctonia solani* secara *in vitro* dan *in vivo* dengan persentase penghambatan sebesar 56%, 68%, 72%, dan 68%.

Kata kunci: *Trichoderma* spp., *R. solani*, kedelai, karakterisasi

CHARACTERIZATION AND ANTAGONISM TESTING *Trichoderma* spp. FROM VARIOUS LOCATIONS AGAINST *Rhizoctonia solani* CAUSES OF Blight DISEASE IN PLANTSSOYBEAN (*Glycine max* (L.) Merill)

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ABSTRACT

This study aims to identify the characteristics of *Trichoderma* spp. and determine the potential of *Trichoderma* spp isolates. in inhibiting growth *R. solani in vitro* and *in vivo*. The method used in the research consisted of 3 stages, namely: isolation and characterization of *Trichoderma* spp. isolates, in vitro antagonism test of *Trichoderma* spp. isolates. against *R. solani* in the laboratory, and in vivo antagonism test of *Trichoderma* spp isolates. against *R. solani* in the Dlingo greenhouse, Bantul using RAL (Completely Randomized Design). The characterization results of *Trichoderma* UPN 16, *Trichoderma* isolate from Gunungkidul, *Trichoderma* isolate from Bantul and *Trichoderma* isolate from Kulon Progo have a dark green color with a rounded shape with a diameter of 9 cm. The potential of *Trichoderma* UPN 16, Gunungkidul isolate, Bantul isolate and Kulon Progo isolate was able to suppress Rizhoctonia solani attacks in vitro and in vivo with inhibition percentages of 56%, 68%, 72%, and 68%.

Key words: *Trichoderma* spp., *R. solani*, soybean, characterization