Effectivesness of the fungus Metarhizium spp. Against Army Caterpillars (Spodoptera frugiperda) on Corn Plants (Zea mays L.)

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ABSTRACT

Spodoptera frugiperda is a pest that is detrimental to corn plants. These larvae damage shoot leaves, young leaves or growing points, and can damage corn cobs. This research aims to determine the effectiveness of the fungus Metarhizium spp. in controlling Spodoptera frugiperda attacks on corn plants. This research was carried out from August to December 2023 in the plant protection laboratory and on corn cultivation land in Antirogo Village, Sumbersari District, Jember Regency. This research consisted of 2 stages, namely multiplying isolates of the fungus Metharizium spp using multiplication media such as corn rice and coarse rice bran. The second stage of the research was a field test by comparing two treatments, namely the treatment of the fungus Metharizium spp. Concentration 25 grams/100ml and deltamethrin treatment 2.5 ml/l. Spodoptera frugiperda pest population in the Metharizium spp. and deltamethrin were not significantly different when observed 24-38 HST. Spodoptera frugiperda pest intensity in the Metharizium spp. and deltamethrin were not significantly different when observed 24-38 HST. The results of corn cob weight were not significantly different between the Metharizium spp. and deltamethrin.

Keywords: S.furiperda, Metarhizium spp., corn