Utilization of Entomopathogenic Nematode Steinernema spp. on Population and Intensity of Attack of Army Caterpillar Pest (Spodoptera frugiperda) on Glutinous Corn Plants

Supervised by Ir. Iqbal Erdiansyah, S.P., M.P., IPP

Puspita Mayu Rahmawati
Food Crop Production Technology Study Program
Department of Agricultural Production

ABSTRACT

Spodoptera frugiperda is a pest that attacks glutinous corn plants. Spodoptera frugiperda larvae attack corn plants, causing crop growth to be disrupted, resulting in crop failure. This study aims to determine the effectiveness of the entomopathogenic nematode Steinernema spp. in controlling the attack of Spodoptera frugiperda on corn plants. This research was conducted from August to November 2024 on corn cultivation land in Kebonsari village, Sumbersari District, Jember Regency. This study was carried out by comparing two treatments, namely the treatment of entomopathogenic nematode Steinernema spp. 1000 Jl/ml and the insecticide treatment with the active ingredient tetraniliprol 2.5 ml/l, with parameters of pest population, attack intensity, plant height, wet weight per sample, dry weight per sample and analyzed using the SPSS device. The results showed that the treatment of entomopathogenic nematodes and insecticides with the active ingredient tetraniliprol did not differ in the parameters of pest population observation, attack intensity, plant height and crop yield.

Keywords: S. frugiperda, entomopathogenic nematodes, corn