

Intisari

Spodoptera frugiperda atau ulat grayak (*fall armyworm*) merupakan hama baru yang masuk ke Indonesia tahun 2019 dan menjadi hama utama tanaman jagung manis karena tingkat kerusakan yang parah serta kehilangan hasil yang besar. Penelitian ini bertujuan untuk mengetahui populasi dan intensitas serangan *S. frugiperda* pada setiap fase pertumbuhan tanaman jagung manis varietas jantan JM 341 dan betina JM 342. Penelitian dilaksanakan di lahan jagung milik petani mitra perusahaan benih UD Agro Nusantara Prima di Kecamatan Berbah menggunakan Rancangan Acak kelompok (RAK). Penelitian ini dilaksanakan saat musim penghujan pada bulan Oktober-Desember 2022. Hasil penelitian menunjukkan bahwa tidak terdapat perbedaan yang signifikan dari kedua perlakuan varietas terhadap populasi dan intensitas serangan *S. frugiperda*. Populasi dan intensitas serangan yang diperoleh pada kedua varietas tergolong rendah. Populasi larva tertinggi dan terendah ditemukan pada varietas betina JM 342, berturut-turut sebesar 6,33 larva per 10 tanaman pada 4 MST dan 0 larva per 10 tanaman pada 10 MST. Intensitas serangan larva *S. frugiperda* tertinggi dan terendah juga ditemukan pada varietas betina JM 342, berturut-turut sebesar 9,72% per tanaman pada 4 MST dan 1,11% per tanaman pada 10 MST.

Kata kunci: intensitas serangan, populasi, jagung manis, *Spodoptera frugiperda*

Abstract

Spodoptera frugiperda (fall armyworm) is a new pest that entered Indonesia in 2019 and has become a major pest of sweet corn due to its severe damage and large yield loss. This study aimed to determine the population and damage intensity of *S. frugiperda* at each growth phase of sweet corn varieties JM 341 male and JM 342 female. The research was conducted in a maize field owned by a partner farmer of UD Agro Nusantara Prima seed company in Berbah Subdistrict using a Randomised Block Design (RBD). This research was conducted during the rainy season in October-December 2022. The results showed that there was no significant difference between the two treatment varieties on the population and intensity of *S. frugiperda* infestation. The population and intensity of attack obtained in both varieties were low. The highest and lowest larval populations were found in the female variety JM 342, with 6.33 larvae per 10 plants at 4 weeks of planting and 0 larvae per 10 plants at 10 weeks of planting, respectively. The highest and lowest *S. frugiperda* larval attack intensity was also found in the female variety JM 342, at 9.72% per plant at 4 weeks of planting and 1.11% per plant at 10 weeks of planting, respectively.

Keywords: damage intensity, population, sweet corn, *Spodoptera frugiperda*