INTISARI

Spodoptera frugiperda merupakan hama utama tanaman jagung yang mampu menyerang sejak fase vegetatif hingga generatif serta menimbulkan kerugian signifikan secara global. Pengelolaan *S. frugiperda* pada fase vegetatif perlu mempertimbangkan kepadatan kelompok telur, agar tindakan dapat dilakukan sebelum penetasan dan timbulnya kerusakan tanaman. Penelitian ini bertujuan mengetahui distribusi spasial dan temporal kelompok telur *S. frugiperda* serta parasitoid yang berasosiasi. Pengamatan dilakukan pada tiga lokasi di Kecamatan Manisrenggo, Prambanan, dan Jogonalan, Kabupaten Klaten, Jawa Tengah, sejak umur 0 hingga 70 hari setelah tanam (HST). Pengamatan kelompok telur dilakukan pada 210 tanaman jagung yang dibagi ke dalam tiga petak sampel. Seluruh kelompok telur dikoleksi untuk dianalisis di laboratorium, pola sebaran dianalisis menggunakan rasio ragam terhadap rata-rata (VMR), Indeks Morisita, dan uji chi-square. Hasil penelitian menunjukkan jumlah kelompok telur bervariasi sepanjang fase pertumbuhan, meningkat pada fase vegetatif dan menurun pada fase generatif. Distribusi bersifat tidak merata baik secara horizontal maupun vertikal, dengan kecenderungan mengelompok pada tanaman bagian tepi dan tengah petak, serta pada daun bagian tengah dan atas. Tingkat parasitasi kelompok telur mencapai 35,71-69,57%, sedangkan parasitasi kelompok telur terparasit berkisar 46,46-78,83%. Dua jenis parasitoid telur teridentifikasi, yaitu *Telenomus* sp. dan *Trichogramma* sp., dengan dominasi *Telenomus* sp. (92,79-99,72%). Hasil penelitian ini memberikan dasar penting bagi strategi pengelolaan hama terpadu berbasis musuh alami sekaligus pengembangan metode sampling dan monitoring lapangan yang lebih efektif.

Kata kunci: *Spodoptera frugiperda*; kelompok telur; pola sebaran; parasitoid telur; tahap usia

ABSTRACT

Spodoptera frugiperda is a major pest of maize capable of attacking crops from the vegetative to the generative stages, causing significant yield losses worldwide. Effective management of *S. frugiperda* during the vegetative phase requires consideration of egg mass density so that control measures can be implemented before hatching and subsequent crop damage. This study aimed to examine the spatial and temporal distribution of *S. frugiperda* egg masses and their associated parasitoids. Observations were conducted in three maize fields located in Manisrenggo, Prambanan, and Jogonalan sub-districts, Klaten Regency, Central Java, from 0 to 70 days after planting (DAP). Egg mass observations were carried out on 210 maize plants divided into three sample plots. All egg masses were collected for laboratory analysis, while distribution patterns were assessed using the variance-to-mean ratio (VMR), Morisita's index, and chi-square tests. Results showed that the number of egg masses varied with plant growth, increasing during the vegetative stage and declining in the generative stage. Distribution was uneven both horizontally and vertically, with aggregated oviposition predominantly observed on plants located at the field edges and centers, and on middle to upper leaves. Egg mass parasitism ranged from 35,71-69,57%, with the level of parasitation in this infected egg ranged 46,46-78,83%. Two egg parasitoid species were identified, *Telenomus* sp. and *Trichogramma* sp., with *Telenomus* sp. being dominant (92,79-99,72%). These findings provide an essential basis for integrated pest management strategies utilizing natural enemies, as well as the development of more effective sampling and field monitoring methods.

Keywords: *Spodoptera frugiperda*; egg mass; distribution pattern; egg parasitoids; age stage