

INTISARI

Kajian lapangan tentang fluktuasi populasi harian ngengat *Spodoptera exigua* sebelum dan selama musim tanam bawang merah di lahan surjan Kabupaten Kulonprogo dalam musim kemarau bulan Oktober 2018 dan musim penghujan bulan November - Desember 2018. Hujan turun mulai 4 November 2018 dan tanam bawang merah 15 November 2018. Penelitian bertujuan untuk mengetahui dinamika populasi ngengat *S. exigua* sebelum dan sesudah musim tanam bawang merah serta mengetahui pengaruh arah mata angin terhadap tangkapan populasi ngengat *S. exigua*. Pengamatan populasi dilakukan setiap hari dalam 30 kali pengamatan pertama dan 3 hari sekali dalam 10 kali pengamatan berikutnya. Perangkap feromon digunakan untuk menjebak ngengat *S. exigua* yang dipasang pada sembilan titik dalam suatu lingkaran berdiameter 26 m dengan delapan arah mata angin (Utara, Timur Laut, Timur, Tenggara, Selatan, Barat Daya, Barat, Barat Laut) serta pusat, tiga ulangan. Hasil penelitian menunjukkan bahwa populasi ngengat *S. exigua* sangat tinggi pada 4 hari pengamatan awal saat musim kemarau (12-19 ekor/perangkap) kemudian berfluktuasi semakin berkurang hingga pengamatan terakhir pada musim hujan dan setelah musim tanam bawang merah (0,41 ekor/perangkap). Populasi ngengat *S. exigua* tidak dipengaruhi signifikan oleh arah mata angin dan berkorelasi negatif ($r = -0,4883$) dengan curah hujan.

Kata kunci: fluktuasi populasi, arah mata angin, bawang merah, *Spodoptera exigua*

ABSTRACT

The field study of daily populations fluctuation of *Spodoptera exigua* moths before and during onion planting season at “surjan” field in Kulonprogo Regency was carried out in the dry season of October 2018 and the rainy season of November - December 2018. Rainfall started in 4 November 2018 and onion was planted in 15 November 2018. The study aimed to determine the population dynamics of *S. exigua* moths at before and after the onion planting season and to know the effect of wind direction and rainfall to the *S. exigua* moth population. Population observation was carried out every day in the first 30 observations and once every 3 days in the next 10 observations. Pheromone traps were used to trap *S. exigua* moths which were installed at nine points in a circle with a diameter of 26 m with eight wind direction (North, Northeast, East, Southeast, South, Southwest, West, Northwest) and the center, with three replications. The results showed that the population of *S. exigua* moths was very high at the initial 4 days of observation during the dry season (12-19 moths/traps) then fluctuated to less and less until the last observation in the rainy season and after the onion planting season (0.41 moths/trap). The population of *S. exigua* moths was not significantly affected by wind direction and negatively correlated ($r = - 0.4883$) with rainfall.

Keywords: *fluctuation*, *S. exigua*, weather scoring, wind direction