

Abstrak

**PENGARUH ARAH MATA ANGIN PADA PEMASANGAN PERANGKAP
TERHADAP HASIL TANGKAPAN NGENGAT *Spodoptera exigua* PADA DAN DI
LUAR PERTANAMAN BAWANG MERAH**

Renik Bamulatus
15/383454/PN/14285

*Departemen Hama dan Penyakit Tumbuhan, Fakultas Pertanian,
Universitas Gadjah Mada, Yogyakarta*

Informasi tentang sumber infestasi serangga hama dapat digunakan untuk deteksi dini perkembangan populasi serangga tersebut. Penelitian bertujuan untuk mengetahui pengaruh arah mata angin pada pemasangan perangkap terhadap hasil tangkapan ngengat *Spodoptera exigua* pada dan di luar pertanaman bawang merah. Pengamatan jumlah ngengat diamati berkala setiap 3 hari sebanyak 15 kali pengamatan. Perangkap feromon seks dipasang di pusat pertanaman bawang merah dan kurang lebih 300 m dari pinggir pertanaman bawang merah mengikuti empat arah mata angin (Utara, Timur, Selatan dan Barat), di empat desa sebagai ulangan yaitu Kecamatan Wates (Desa Giripeni) dan Kecamatan Panjatan (Desa Gotakan I, Desa Gotakan II dan Desa Gotakan III), Kabupaten Kulon Progo. Hasil kajian menunjukkan bahwa arah mata angin pada pemasangan perangkap feromon seks tidak berpengaruh signifikan terhadap hasil tangkapan ngengat. Rerata jumlah kumulatif ngengat *S. exigua* di dalam areal pertanaman bawang merah signifikan paling tinggi (7,3 ekor/perangkap), sedangkan di perangkap pada keempat arah angin yaitu dari Utara, Timur, Selatan dan Barat (3,9; 1,9; 1,4 dan 0,6 ekor/perangkap) relatif sama. Berbagai jenis tanaman di luar lahan bawang merah percobaan - *Capsicum*, *Amarantus*, *Zea mays*, *Jatropha* – diduga sebagai inang alternatif dan menjadi sumber infestasi.

Kata kunci : arah mata angin, bawang merah, perangkap feromon seks, *Spodoptera exigua*

Abstract

THE EFFECT OF WIND DIRECTION IN TRAP INSTALLATIONS TO THE CATCHING RESULT OF *Spodoptera exigua* MOTH WITHIN AND OUTSIDE THE SHALLOT PLANTATIONS

Renik Bamulatus
15/383454/PN/14285

*Departement of Pest and Plant Diseases, Faculty of Agriculture,
Universitas Gadjah Mada, Yogyakarta*

Information about sources of infestations of pest insects can be used for early detection of the development of the insect population. The study aimed to determine the effect of the wind direction in trap instalations to the catching result of *Spodoptera exigua* moths within and outside the shallot plantations. The moth numbers were observed periodically at every 3 days with 15 observations. The sex pheromone traps were installed at the center of shallot plantations and at approximately 300 m away from the edge of the shallot plantations followed four wind direction (North, East, South and West), in four villages as replicates namely Wates District (Giripeni Village) and Panjatan District (Gotakan I Village, Gotakan II Village and Gotakan III Village), Kulon Progo Regency. The results showed that the wind direction in instalation of the sex pheromone trap did not significantly influence the catch of the moths. Average of cumulative numbers of *S. exigua* moth within shallot plantations was significantly highest (7.3 moths/trap), while amongst fourth traps namely North, East, South and West (3.9, 1.9, 1.4 and 0.6 moths/trap) were relatively similar. Various plants at outside the shallot field trials – Capsicum, Amaranthus, *Zea mays*, *Jatropha* - may be as the alternative host plant and being the infestation sources.

Keyword : wind direction, shallot, sex pheromone trap, *Spodoptera exigua*