

INTISARI

POTENSI *Pardosa pseudoannulata* (ARANEAE: LYCOSIDAE) SEBAGAI PREDATOR WERENG HAMA PADI

ISMA'IL RAJI AL-FARUQI
20/459536/PN/16730

Wereng punggung putih (WPP) (*Sogatella furcifera* Horvarth) dan wereng batang cokelat (WBC) (*Nilaparvata lugens* Stal.) merupakan hama penting padi. Sementara itu, laba-laba serigala (LLS) (*Pardosa pseudoannulata*) sering dijumpai di sawah. Penelitian ini bertujuan untuk mengetahui potensi LLS sebagai predator wereng padi, dilihat dari kemiripan pola distribusi spasial LLS dengan WPP, dependensi dan agregasi LSS terhadap WPP, dan daya makan maksimum LLS pada WBC. Penelitian lapangan dilakukan pada bulan Mei hingga Juli 2024 di Kapanewon Ngemplak, Kalasan, dan Depok di Kabupaten Sleman, serta di Kapanewon Sentolo, Kabupaten Kulonprogo. Penelitian lapangan dilakukan pada populasi LLS dan WPP yang diamati pada 30 unit sampel yang diambil dengan metode acak sistematis pada lahan sebelum tanam, vegetatif awal dan akhir, generatif dan setelah panen. Unit sampel pengamatan LLS dan WPP pada fase tanam padi adalah rumpun padi. Pengujian daya makan maksimum LLS pada WBC dilakukan di laboratorium. Hasil penelitian menunjukkan bahwa LLS berpotensi sebagai predator wereng padi. Pola distribusi spasial LLS mirip dengan WPP yaitu mengelompok. Dependensi LLS terhadap WPP tidak signifikan, kelimpahan LLS ditentukan 26% oleh kelimpahan WPP. Walaupun kelimpahan WPP berkorelasi positif dan cukup kuat ($r = 0,5105$), agregasi LLS terhadap WPP sangat lemah. Daya makan LLS cukup tinggi yang dipengaruhi oleh jenis kelamin dan stadia WBC. LLS jantan dapat memakan WBC nimfa instar 3 dan imago sebanyak 7,9 ekor dan 4,6 ekor/24 jam, sedangkan LLS betina dapat memakan nimfa instar 3 dan imago sebanyak 12,4 ekor dan 10,5 ekor/24 jam.

Kata kunci: daya makan maksimum, *Pardosa pseudoannulata*, pola distribusi spasial, wereng batang cokelat, wereng punggung putih.

ABSTRACT

POTENCY OF *Pardosa pseudoannulata* (ARANEAE: LYCOSIDAE) AS A PREDATOR OF THE RICE PLANTHOPPER

ISMA'IL RAJI AL-FARUQI
20/459536/PN/16730

The white-backed planthopper (WBP) (*Sogatella furcifera* Horvath) and the brown planthopper (BPH) (*Nilaparvata lugens* Stal.) are significant rice pests. The wolf spider (WS) (*Pardosa pseudoannulata*) is commonly found in rice fields. This study aims to determine the potential of WS as a predator of rice planthoppers by examining the spatial distribution patterns of WS and WBP, the dependency and aggregation of WS towards WBP, and the maximum feeding capacity of WS on BPH. Field research was conducted from May to July 2024 in Kapanewon Ngemplak, Kalasan, and Depok in Sleman Regency, and Kapanewon Sentolo, Kulonprogo Regency. Observations of WS and WBP populations were made at 30 sample units using a systematic random method during pre-planting, early and late vegetative, generative, and post-harvest stages. The sample units for WS and WBP observations during rice planting were rice clumps. The maximum predation capacity of WS on BPH was tested in the laboratory. Results showed that WS has potential as a predator of rice planthoppers. The spatial distribution pattern of WS was similar to WBP, both being clustered. WS dependency on WBP was not significant, with WBP abundance determining 26% of WS abundance. Although WBP abundance was moderately correlated ($r = 0,5105$) with WS, WS aggregation towards WBP was very weak. WS had high predation capacity influenced by sex and BPH stage. Male WS consumed 7,9 third-instar BPH nymphs and 4,6 adults/24 hours, while female WS consumed 12,4 third-instar nymphs and 10,5 adults/24 hours.

Keywords: brown planthoppers, maximum feeding capacity, *Pardosa pseudoannulata*, spatial distribution patterns, white-backed planthopper.