

Intisari

RESPONS FUNGSIONAL *Pardosa* sp. TERHADAP WERENG BATANG PADI COKELAT

Tria Wibawa
11/312657/PN/12250

Penelitian ini bertujuan untuk mengetahui tipe respons fungsional dan daya makan *Pardosa* sp. (Araneae: Lycosidae) terhadap hama wereng batang padi cokelat *Nilaparvata lugens* (Hemiptera: Delphacidae). Penelitian dilaksanakan di Pusat Studi Pengelolaan Sumber Daya Hayati Universitas Gadjah Mada. Stadia wereng batang padi cokelat yang digunakan adalah instar 4 dan imago. Predator yang digunakan dalam penelitian ini adalah *Pardosa* sp. jantan asal lahan tegalan tidak diketahui umurnya. Penelitian dilakukan dalam dua tahap yaitu daya makan maksimum *Pardosa* sp. terhadap wereng batang padi cokelat (*N. lugens*), dan kajian respons fungsional predator *Pardosa* sp. terhadap kepadatan wereng batang padi cokelat (*N. lugens*). Sebelum dilakukan pengujian, *Pardosa* sp. dilaparkan selama 3 jam. Daya makan maksimum dilakukan dengan menguji 5 ekor *Pardosa* sp. masing-masing diberi 15 ekor wereng batang padi cokelat. Kajian respons fungsional *Pardosa* sp. terhadap kepadatan populasi *N. lugens* dilakukan dengan memelihara seekor *Pardosa* sp. dengan diberi pakan *N. lugens* pada jumlah tertentu selama 24 jam. Seri kepadatan wereng batang padi cokelat yang diberikan sebanyak 2, 4, 8, 12, 16, 20, dan 24 ekor. Setiap seri diulang 5 kali. Jumlah mangsa dimakan diamati dalam 24 jam setelah predator diberi mangsa. Hasil penelitian menunjukkan kemampuan makan maksimum riil *Pardosa* sp. jantan terhadap wereng batang padi cokelat rerata sebanyak 8 ekor/24 jam, dan estimasi kemampuan makan maksimum berdasarkan perhitungan Holling sebanyak 14,64 ekor/24 jam. Respons fungsional *Pardosa* sp. jantan terhadap wereng batang padi cokelat mengikuti Holling tipe II.

Kata kunci: *Pardosa* sp., respons fungsional, wereng batang padi cokelat.

Abstract

FUNCTIONAL RESPONSE OF *Pardosa* sp. AGAINST RICE BROWN
PLANTHOPPER

Tria Wibawa
11/312657/PN/12250

This research was aimed to know the type of functional response and maximum feeding *Pardosa* sp. (Araneae: Lycosidae) against rice brown planthopper *Nilaparvata lugens* (Hemiptera: Delphacidae). The research was conducted at the Center for Study Management of Biological Resource Gadjah Mada University. The stadia of rice brown planthopper used was instar 4 and adults. Predator used in this research is *Pardosa* sp. male from field of unknown age. The study was conducted in two stages, they are the study of maximum feeding *Pardosa* sp. against rice brown planthopper (*N. lugens*), and the study of functional response *Pardosa* sp. against density of rice brown planthopper (*N. lugens*). The predator was fasted 3 hours before used. The maximum feeding conducted by tested 5 *Pardosa* sp. which were given 15 rice brown planthopper each. The study of functional response of *Pardosa* sp. against population density of *N. lugens* conducted by maintaining a *Pardosa* sp. by be fed *N. lugens* on a certain amount for 24 hours. Density series of rice brown planthopper given were 2, 4, 8, 12, 16, 20, and 24. Each series repeated five times. The number of prey eaten was observed within 24 hours after the predators released. The results showed that the ability of the real maximum prey *Pardosa* sp. against rice brown planthopper mean as many as 8 /24 hours, and the estimated maximum prey capabilities based on the calculation Holling as many 14.64 /24 hours. The functional response of *Pardosa* sp. against rice brown planthopper follow Holling's type II.

Keywords: *Pardosa* sp., functional response, rice brown planthopper.