

Density of *Alabama argillacea* Larvae Affects Food Extraction by Females of *Podisus nigrispinus*

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The food extraction by adult females of *Podisus nigrispinus* (Dallas) (Heteroptera: Pentatomidae) from 3rd instar *Alabama argillacea* (Hübner) larvae was evaluated in the laboratory. The densities studied were converted to weight of prey offered: 15.7 (one larva); 44.1 (three larvae); 71.4 (five larvae); 117.4 (seven larvae) and 148.8 mg (nine larvae). The adult weight, the amount of food consumed, the weight of remaining larvae and the time taken to ingest the food were recorded every 24 h during 9 days to estimate the percentage of food consumed, the quantity and the percentage of food extracted from each larva, the quantity of food extracted per minute and the relative consumption rate. The quantity of food consumed (88.5% to 35.5%) and extracted (90.8% to 35.5%) by *P. nigrispinus* females from each larva decreased as the food available increased. The time spent by *P. nigrispinus* to ingest food and the quantity of remaining food were similar during the 9-day period of the adult stage of this predator. No interactions were observed between the age of females of this predator and the prey density. The weight gained (1.2–5.8 mg/9 days), body weight (35.5–42.3 mg) and the relative consumption rate (0.4–1.4 mg/mg/day) by females of this predator increased at a declining rate with the quantity of food available. *P. nigrispinus* may change its predatory behavior as a function of food available.

KEY WORDS: Cotton leafworm; food consumption; nutrition; predator.

Received March 27, 2007; accepted Nov. 1, 2007; <http://www.phytoparasitica.org> posting Dec. 25, 2007.

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