SCIENTIFIC NOTE

Phytophagous *Neomegalotomus parvus* (Westwood) (Hemiptera: Alydidae) Feeding on Carrion and Feces

MAURÍCIO U. VENTURA[1], JOVENIL J. SILVA[2] AND ANTÔNIO R. PANIZZI[2]

[1]Universidade Estadual de Londrina, Departamento de Agronomia/CCA, Caixa postal 6001, 86051-970, Londrina, PR. E-mail: mventura@uel.br
[2]Embrapa Soja, Caixa postal 231, 86001-970, Londrina, PR.

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Percevejo Fitófago *Neomegalotomus parvus* (West.) (Hemiptera: Alydidae) Alimentando-se em Carcaças e Fezes de Animais

RESUMO - O percevejo fitófago *Neomegalotomus parvus* (West.) alimenta-se de vagens e sementes de leguminosas. Entretanto, pela primeira vez, em criações de laboratório, adultos foram verificados alimentando-se de cadáveres de adultos e ninfas de sua espécie. Ninfas de segundo ínstar, desprovidas de sementes de leguminosas, alimentando-se exclusivamente de ninfas mortas, atingiram o terceiro ínstar. No campo, adultos de *N. parvus* foram encontrados em carcaças e fezes de animais, aparentemente, em alimentação. Agregações de adultos foram verificadas sobre fezes de cães.

PALAVRAS-CHAVE: Insecta, Heteroptera, percevejo formigão, omnivoria.

ABSTRACT - The phytophagous bug *Neomegalotomus parvus* (West.) feeds on pods and seeds of legumes. However, by the first time, in a laboratory colony, adults were found feeding on coespecific nymph and adult cadavers. Second instar nymphs, deprived of leguminous seeds, fed exclusively on died nymphs, reached the third instar. In the field, adults of *N. parvus* were found on animal carrions and feces, apparently feeding. Aggregations of adults were found on dog feces, as well.

KEY WORDS: Insecta, Heteroptera, broatheaded bug, omnivory.

Alydidae bugs, or other primitive coreoids, are closely related to Leguminosae. They are not species-specific to any Leguminosae and feed on different leguminous plants (Schaefer 1980, Schaefer & Mitchell 1983).

The neotropical genus *Neomegalotomus* comprises *N. parvus* (West.), *N. latifascia* (Berg), *N. pallescens* (Stål), *N. consobrinus* (West.) and *N. debilis* (Walker) (Schaefer & Panizzi 1998, Schaffner & Schaefer 1998). *N. parvus* was recorded on common bean, *Phaseolus vulgaris* L. (Paradela Fº. *et al.* 1972, Chandler 1984, 1989), soybean, *Glycine max* (L.) Merril (Panizzi 1988), pigeon pea, *Cajanus cajan* (L.) Mill, lablab,

Dolichus lablab L. (Santos & Panizzi 1998b), pig bean, *Canavalia ensiformes* (L.) DC. and indigo, *Sesamum indicum* L. (Santos 1996). In common bean and soybean, *N. parvus* might reach pest status (Paradela Fº. *et al.* 1972, Santos & Panizzi 1988a).

We observed that *N. parvus* eshibits a series of feeding behaviors nor related to phytophagy. In laboratory colonies, nymphs and adults fed on dead nymphs and adults. Second instar nymphs (first instars do not feed), deprived of legume seeds. Reached the third instar feeding on dead nymphs of its coespecifics. In the field, adults were found on carrion and feces of animals. In a soybean field in Bela Vista do paraíso, PR, *N. parvus* were found aggregating (30 to 40 individuals) in dog feces at the time of soybean harvest.

Omnivory was also recorded to other species of Alydidae. *Megalotomus quinquespinosus* (Say) adult was observed to feed on another adult during 20 min. When little food was available (Yonke & Medler 1965) Second-instar *Alydus eurinus* Say were found feeding on eggs, and nymphs reached the third instar feeding exclusively on this diet (Yonke & Medler 1968). *A. eurinus* adults were also observed feeding on dead adults (Yonke & Medler 1968). In the field, *A. eurinus* and *M. quinquespinosus* (Say) were recorded on decomposing animal and fecal matter (Bromley 1937). Yonke & Medler (1965) suggested that Alydidae may feed on feces or carrion under extreme conditions when their primary food source is not available.

Schaefer (1980), rewiewing the food habits of Alydidae, poited out that these bugs are attracted to feces and carrion by water and concentrated semiliquid protein. They would be more successful in exploiting these food resources by their gregarious behavior and swiftly flying capacity. Aggregations, including heterotypic feeding aggregations, occurs in Alydidae (Schaefer 1980). Aldrich (1995) associated the attraction of Alydidae bugs to carrion and feces to the production of rancid secretions (short-chain fatty acids) by metathoracic scent glands in both sexes.

Opportunistic carnivory is an ordinary feature in Pentatomorpha and other Heteroptera (Sweet 1979). According to this author, the phytophagous Heteroptera after reaching a specific evolutionaty stage, would exploit nitrogen-rich sessile animal food, since animal protein are easely digested by plant tissues-evolved insect digestive system.

In conclusion, we report here for the first time, the feeding of the phytophagous *N. parvus* on carrion and feces, adding a new data to the literature on this alternative feeding behavior of alydid species.

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