Scientific Note

New Records of Plants Fed upon by the Uncommon Heteropterans
_Cyrtocoris egeris_ Packauskas & Schaefer and _C. trigonus_ (Germar)
(Hemiptera: Cyrtocoridae) in South America

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Novos Registros de Plantas Utilizadas Pelos Percevejos Raros _Cyrtocoris egeris_ Packauskas & Schaefer e _C. trigonus_ (Germar) (Hemiptera: Cyrtocoridae) na América do Sul

RESUMO - Durante o mês de março de 2000, foram coletados adultos dos percevejos cirtocorídeos _Cyrtocoris egeris_ Packauskas & Schaefer e _C. trigonus_ (Germar) em duas espécies de plantas e em dois locais distintos. No Brasil (Londrina, PR) adultos de _C. trigonus_ foram observados alimentando-se em hastes de guanxuma, _Sida rhombifolia_ L. (Malvaceae). Apesar de as fêmeas terem ovipositado em laboratório, as ninhas não sobreviveram nesse alimento. Na Argentina (Reconquista, Província de Santa Fé), adultos e ninhas de _C. egeris_ foram observados alimentando-se em vagens imaturas de soja, _Glycine max_ (L.) Merrill. Nas condições de laboratório utilizadas, as ninhas não conseguiram se desenvolver além do terceiro instar.

PALAVRAS-CHAVE: Heteroptera, _Sida rhombifolia_, _Glycine max_, soja, ecdisia, distribuição geográfica

ABSTRACT - During March 2000, nymphs and adults of the cyrtocorid bugs _Cyrtocoris egeris_ Packauskas & Schaefer and _C. trigonus_ (Germar) were observed on two different plants at two different localities. In Brazil (Londrina, Paraná State) adult _C. trigonus_ were found feeding on stems of the weed plant arrow leaf sida, _Sida rhombifolia_ L. (Malvaceae). Despite egg deposition in the laboratory, nymphs did not develop on this plant. In Argentina (Reconquista, Santa Fé Province), nymphs and adults of _C. egeris_ were observed feeding on immature soybean [ _Glycine max_ (L.) Merrill] pods. Under laboratory conditions, nymphs of neither species could be reared beyond the third instar.

KEY WORDS: Heteroptera, _Sida rhombifolia_, _Glycine max_, soybean, ecdisis, geographical distribution

The pentatomoid Cyrtocoridae, a small family comprised of only four genera and 11 species, is distributed throughout the neotropics, from Mexico south into Argentina (Packauskas & Schaefer 1998). Small and oddly shaped, with a prominent and more or less pointed hump on the scutellum, the bugs are not commonly found. Because of this and because of their minor economic importance, little is known about their biology.

The nymphs of the most widespread species, _Cyrtocoris egeris_ Packauskas & Schaefer, have been described [Brailovsky et al. 1988 - as _C. trigonus_ (Germar), Schaefer et al. 1998]; Brailovsky et al. also included some notes on the biology and habitat preference of this species and of _C. trigonus_ (as _C. obtusus_). During March 2000, living specimens of _C. trigonus_ were collected in Brazil (by ARP), and of _C. egeris_ in Argentina (by MCC), the former feeding on the weed arrow leaf sida, _Sida rhombifolia_ L. (Malvaceae), and the latter on soybean, _Glycine max_ (L.) Merrill (Leguminosae).

The Brazilian population (_C. trigonus_) was from Londrina, Paraná State, in southern Brazil. This is the southernmost record of this species, and is a new state record (see Packauskas & Schaefer 1998). The bugs (4 adults) were found feeding on the stems of arrow leaf sida, near a soybean field; the bugs clustered on the stem (Fig. 1), and remained there for long periods, apparently feeding. Although females laid
some eggs, laboratory rearing of nymphs without controlled incubators was unsuccessful, a failure which suggests that arrow leaf sida is an unsuitable host. Nymphs, after reaching the third instar, all died. Attempts to rear nymphs on immature soybean pods replaced every other day, in the laboratory, also failed. It might be that immatures primarily feed on roots and then move to feed on the entire plants.

The Argentine population (C. egeris) is from Reconquista, Santa Fé Province, in northern Argentina. This is the second set of Argentine specimens of C. egeris that has been examined. The first set (part of the paratype series) is from Misiones Province (place undetermined), also a northern province (Packauskas & Schaefer 1998). These two populations are near the southernmost part of the family’s range.

In Argentina, several adult and fifth instars of C. egeris were found on soybean, feeding through the mature pods presumably on the seeds within. Each feeding left a feeding puncture (stylet sheath) which became dark.

It is unlikely that Cyrtocoris species might become a minor pest of soybean, despite the widespread distribution of the genus in soybean-growing regions of South America (Packauskas & Schaefer 1998). Moreover, the inability to rear C. egeris through on soybean in the laboratory suggests this too may not be a wholly suitable host. Another species, Cyrtocoris gibbus (E.), is reported to feed on stems of other legume plants such as the trees Acacia sp. and “bracatinga” (Mimosa scabrella Bentham), in Rio de Janeiro (Costa Lima 1940, Silva et al. 1968). Adults of C. trigonus feed on Syngonium podophyllum Schott (Araceae), Acalipha [as Acalifa] sp. (Euphorbiaceae), Piper sp. and Potomorpha [as Potomorpha] umbellatum (L.) Miquel (Piperaceae) (Brailovsky et al. 1988, who identified this species as C. obtusus Horváth). And adult and nymphal C. egeris fed gregariously on the stems of Acalypha [as Acalifa] diversifolia Jacquin (Euphorbiaceae) and moved to the leaves when these became available; adults (but not nymphs?) could also feed on Piper sp. (Piperaceae) (Brailovsky et al. 1988).

Although complete development of C. trigonus did not occur in the laboratory on either arrow leaf sida or on soybean, the possibility that these plants are hosts should not be discarded. The bugs did indeed feed for long periods on these plants in the field. It is possible that the failure to rear the bugs reflects unsuitable laboratory conditions, not unsuitable food. Brailovsky et al. (1988) mention that precipitation (humidity in the laboratory?) seems to be more important in population growth than temperature or photoperiod. The fact that, like us, Brailovsky et al. (1988) also could not rear the bugs in the laboratory beyond the third instar, also suggests the bugs may require an alternate host for the later instars. Some of the Brazilian C. trigonus bore the local red soil on their backs. In Ecuador, adults and the last three instars of Cyrtocoris were collected on the ground by J. E. Eger (Schaefer et al. 1998). It is likely the bugs are associated with the leaf litter on the ground, and from there climb up onto plants to feed. In Mexico, C. egeris overwinters under bark or in the soil (Brailovsky et al. 1988). Just as the bugs seem not to be particularly host specific, so also does the site of feeding vary: on the stems or leaves of A. diversifolia (vegetative structures) (in Mexico, Brailovsky et al. 1988), on pods of soybean (reproductive structures), or on stems of arrow leaf sida (vegetative structures). Sida is a common weed often found near or on the edges of soybean.
fields. Soybean, only recently introduced into South America (especially in Brazil and in Argentina) is not a natural host of *Cyrtocoris*.

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**Literature Cited**


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