SCIENTIFIC NOTE

Stink Bugs on Soybean in Northeastern Brazil and a New Record on the Southern Green Stink Bug, Nezara viridula (L.) (Heteroptera: Pentatomidae)

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Soybean [Glycine max (L.) Merrill] is a very important crop in Brazil. It has been expanding since its introduction in the south ca. 40 years ago, to the Central-West regions of the country. Recently, the crop has expanded toward the northeast (Hasse 1996). Similar to the other states, in Maranhão this legume increased dramatically in the region of Balsas County (latitude 7°31’S, longitude 46°02’W), with an estimated production of 600,000 ton in the 2000/2001 season (D. Klepker, personal communication).

During March and April 2001, field trips were made in the Balsas area, and stink bugs (Pentatomidae) were collected from soybean. The bugs were captured using a sweep net and by hand-picking. Insects were put in killing jars, sorted and pinned in the laboratory of the Embrapa Unit in Balsas. The bugs were taken to Londrina, in Paraná state, and deposited in the Insect Collection of the National Soybean Research Center of Embrapa.

Of the total of 108 specimens of bugs collected, seven species were identified. By far, the most abundant species was the neotropical brown stink bug, Euschistus heros (F.), comprising 82.4% (89) of the total. The other species were: Thyanta perditor (F.) 4.6% (5); Acrosternum impicticorne (Stal) 3.7% (4); A. ubicum Rolston 0.9% (1); Piezodorus guildinii (Westwood) 3.7% (4); Nezara viridula (L.) 3.7% (4); and Edessa meditabunda (F.) 0.9% (1).

Of all species collected the only exotic one, native from the Ethiopian Region (Hokkanen 1986), is the southern green stink bug, N. viridula. This bug has a worldwide distribution (DeWitt & Godfrey 1972, Todd & Herzog 1980, Todd 1989). Of the previous records on its geographical distribution in the Neotropical Region, the area where the bug was intercepted (Maranhão State) is not included. Therefore, with this new record, its distributional range is expanded. Apparently, because soybean is a preferred host plant of N. viridula, the bug is following the expansion of the crop to new areas. Despite being more adapted to the cooler areas of southern Brazil (Panizzi & Corrêa-Ferreira 1997), N. viridula is expanding its distribution to more tropical regions. However, the data show that the native brown stink bug, E. heros, once rare on soybean (Panizzi et al. 1977), among the different species, is the most adapted one to this new region.
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Literature Cited


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