

FEEDING BEHAVIOR AND SUPERFICIAL DAMAGE TO SOYBEAN SEED BY *EDESSA MEDITABUNDA* (F.) AND *EUSCHISTUS HEROS* (F.) (HETEROPTERA: PENTATOMIDAE) IN THE GREENHOUSE

Flávia A.C. Silva¹; Jovenil J. Silva¹; Rogério A. Depieri¹; Weverton Cantone¹; Antônio R. Panizzi².

¹Laboratório de Bioecologia de Percevejos, Embrapa Soja, Rod. Carlos João Strass, Acesso Orlando Amaral, Londrina PR Brazil C.P. 251 Zip Code 86001-970; panizzi@cnpt.embrapa.br

²Laboratório de Entomologia, Embrapa Trigo, Rod. BR-285 km 294, Passo Fundo RS Brazil C.P. 451 Zip Code 99001-970.

Greenhouse studies were conducted to evaluate the feeding behavior and superficial damage to soybean seed by two pentatomid species, *Edessa meditabunda* (F.), and the Neotropical brown stink bug, *Euschistus heros* (F.). In the greenhouse, soybean plants (cv. BRS 282), at R6 stage of development were used, with pods and stem isolated with small plastic cages (6.0 cm diameter). Thirty couples of each species were used, each couple placed individually in each cage for 48 hours. Two daily observations (9 AM, and 3 PM) were taken, and the number of bugs (feeding or not) on the different plant parts was recorded. At maturity (R8 stage), seeds were harvested, imbibed in tetrazolium solution (2,3,5-triphenyl tetrazolium chloride), and placed in a germination chamber ($25 \pm 1^\circ\text{C}$) for 24h. Seeds were photographed into 20 x 20 mm square for measurement of the superficial damaged area using Photop software. The number of *E. meditabunda* on the plant structures was similar at 9 AM (mean number of 28.0 bugs), and 3 PM (24.3). Adults significantly ($P < 0.01$) preferred soybean stems (19.7 bugs) than pods (2.7). The majority (52.6%) of adults fed upside down. The number of *E. heros* on the plant structures was 13.7 bugs at 9 AM and 17.7 bugs at 3 PM, and were equally recorded on stems (7.3 bugs) and on pods (6.9); however, most insects (12.3 bugs) spent time on the cage net. The superficial damage to seeds (area of the cotyledon marked with tetrazolium solution) was significantly ($P < 0.01$) greater for *E. meditabunda* (22.89 mm²) compared to *E. heros* (12.47 mm²).

Financial support: CNPq