Euschistus servus (Hemiptera: Pentatomidae)

This short description has been prepared in the framework of the EPPO Study on Pest Risks Associated with the Import of Tomato Fruit. The whole study can be retrieved from the EPPO website.

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Africa	Asia	Oceania	North America	South-Central America and Caribbean

***Euschistus servus* (Hemiptera: Pentatomidae) (brown stink bug)**

Why	Identified in the EPPO tomato study. *E. servus* is one of several polyphagous stink bugs that attack tomato in the North America (see also *E. conspersus*). Another *Euschistus*, *E. conspersus* was dealt with separately as many references differ, but *E. conspersus* and *E. servus* should be reviewed in parallel. McPherson and McPherson (2000) note that there are two subspecies *E. s. servus* and *E. s. euschistoides*, which have different distributions (respectively, South-East USA to California, and northern part of North America; overlapping in a band from Maryland to Kansas). Subspecies are distinguished here only when such distinction is made in publications.
Where	**EPPO region**: absent **North America**: Canada (British Columbia as *E.s. euschistoides*, Maw, 2011; across the southern part, Gomez and Mizell. 2013). USA (throughout; Gomez and Mizell, 2013), Mexico (CABI CPC,Tarango-Rivero and González-Hernández, 2009). Most of eastern North America (Borges et al., 2001). See under "why" for distribution of subspecies.
Climatic similarity	High. 13 common climates considering the countries listed above, but likely to be lower (occurring in specific areas of the countries mentioned).
On which plants	Tomato, peach, cotton, pecan, maize, lucerne, soybean, sorghum, okra, millet, wheat, beans, peas, tobacco, mullein (Borges et al., 2001 citing others; Gomez and Mizell, 2013; Mizell, ND; Hall and Teetes, 1981, Schaefer and Panizzi, 2000, citing others, CABI CPC).
Damage	Eggs are laid on foliage, adults and nymphs feed on fruit, and are mobile. Adults and nymphs feed on vegetative parts, flowers, stems and foliage of the plant, as well as seed, nut or fruit (Gomez and Mizell, 2013) *E. servus* is the most economically important stink bug according to Schaefer and Panizzi (2000). It is a serious pest of tomato and various other vegetable crops in South Carolina (Clemson Cooperative Extension, 2009). This is the main stink bug on fruit in north Florida (Mizell, ND). Together with other stink bugs, it is a serious pest of seed, grain, nut and fruit crops in the southern USA (Gomez and Mizell, 2013). In cotton, stink bugs, incl. *E. servus* for Georgia, emerged as major pests following changes in cultural practices and control measures against other pests (Tillman and Cottrell, 2012). *E. servus* is not mentioned amongst stink bugs pests of tomato for California in UC IPM (2011) (unlike *E. conspersus*).
Dissemination	Adults fly and disperse between fields and crops.
Pathway	Fruits (especially if green parts attached?), plants for planting, of host plants from countries where *E. servus* occurs.
Possible risks	Many hosts are major crops in the EPPO region. The climatic similarity according to the EPPO Study between the area where it occurs and the EPPO region is high.
Categorization	Quarantine pest for Korea Rep 2011
Sources	Borges M, Zhang A, Camp M, Aldrich J. 2001. Adult diapause morph of the brown stinkbug, *Euschistus servus* (Heteroptera). Neotropical Entomology 30(1): 179-182 (2001) CABI CPC. 2013 Clemson Cooperative Extension. 2009. Tomato insect pests. HGIC 2218HOME & GARDEN INFORMATION CENTER http://www.clemson.edu/extension/hgic. (Accessed August 2013) Gomez C, Mizell RF. 2013. *Euschistus servus* (Say) (Insecta: Hemiptera: Pentatomidae). University of Florida. Featured creatures. http://entnemdept.ufl.edu/creatures/veg/bean/brown_stink_bug.htm. (Accessed December 2013) Hall DG, Teetes GL. 1981. Alternate host plants of sorghum panicle-feeding bugs in southeast central Texas. Southern Entomologist Vol 6 (3): 220-228 Maw E. 2011. Checklist of the Hemiptera of British Columbia, 2011. Exported and modified from database underlying Maw H.E.L., Foottit, R.G., Hamilton, K.G.A., Scudder, G.G.E. 2000. Checklist of the Hemiptera of Canada and Alaska. NRC Press, Ottawa, 220 pp.

McPherson JE, McPherson R. 2000. Stink Bugs of Economic Importance in America North of Mexico. CRC Press, 19/09/2000 - 272 pages. http://books.google.dk/books?id=sPoMyfDh5sYC&dq=Stink+Bugs+of+Economic+Importance+conspersus&hl=da&source=gbs_navlinks_s

Mizell RF. ND. Monitoring Stink Bugs with the Florida Stink Bug Trap. University of Florida. http://nfrec.ifas.ufl.edu/MizellRF/stink_bugs/stink_bugs.htm (Accessed December 2013)

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