Arvelius albopunctatus (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. EPPO (2015) EPPO Technical Document No. 1068, EPPO Study on Pest Risks Associated with the Import of Tomato Fruit, EPPO Paris [link] Africa Asia Oceania North America South-Central America and Caribbean Arvelius albopunctatus (Hemiptera: Pentatomidae) (green white spotted bug) Identified in the EPPO tomato study. It is an important pest of Solanaceae in Brazil Whv (Campos, 2007) and is recorded to have gained importance in the 1990s (Martinez and Folcia, 1999). EPPO region: absent Where North America: USA (Arizona, Florida, Texas) (NDSU, NDa) Central America: Guatemala, El Salvador, Honduras, Nicaragua, Panama (NDa) South America: Argentina (Misiones, Buenos Aires, Entre Rios - Martinez and Folcia, 1999; Rebagliati et al., 2005), Brazil (CABI CPC). NDSU (NDa) mentions Bolivia, Colombia, Ecuador, Guyana, Paraguay, Peru, Surinam, Uruguay, Venezuela. Caribbean: Barbados, Dominican Republic, Puerto Rico (CABI CPC from Shotman, 1989). NDSU (NDa) mentions Antigua, Bahamas, Cuba, Grenada, Haiti, Jamaica, Montserrat, St. Vincent, Trinidad, US Virgin Islands (St. Croix, St. Thomas) Medium. 7 common climates considering the countries and US states listed above, but Climatic similarity possibly lower (occurring in specific areas of the countries mentioned). Neotropical according to Martinez and Folcia (1999). On which plants Nymphs and adults feed on fruit and plants in the Solanaceae family, but according to some authors in other families. Tomato (Solanum lycopersicum), eggplant (Solanum melongena), sweet pepper (Capsicum annuum) (CABI CPC). Potato (Solanum tuberosum) and a number of wild hosts: Solanum ciliatum, S. bonariense, S. paniculatum, S. variabile, S.flagellare, S. acculeatissimun, S. gracile and Datura sp. (Martinez and Folcia, 1999). Martinez and Folcia (1999, citing others) note that some authors mention as host plants beans (Phaseolus vulgaris), soja (Glycine max), rice (Oryza sativa), cotton (Gossypium) and tobacco (Nicotiana tabacum). Recorded on mango (Mangifera indica) in Florida (USA) in 2009 (new plant record - Halbert, 2009 – no details) Eggs are laid on the plant. Damage is done by nymphs and adults, feeding on fruit. At the Damage damaged points, depressed areas are formed, which decrease the commercial quality of the tomato fruit. Sucking spots favour entry of secondary infection by pathogens. In Argentina, the duration of the life cycle was approximately 80 days on average (Martinez and Focia, 1999). The pest status of this species is not entirely clear. Martinez and Focia (1999) note that it has secondary importance on tomato but has gained importance in recent years. It is an important pest of Solanaceae, including tomato and potato, in Brazil according to Campos et al. (2007). However, although pest importance is mentioned in the latter two publications, Panizzi and da Silva (2010) mention that its pest status is controversial, and Garlet et al. (2010) consider it a predatory species. It is considered as a quarantine pest in California, where it was intercepted from Florida (CDT, 2009). Adults fly. Nymphs have legs and walk (but do not fly?). Eggs can be carried on leaves and Dissemination fruit. Pathway Plants for planting, fruits and vegetables of host plants from countries where A. albopunctatus occurs. (Not potato tubers). Possible risks Tomato, potato, eggplant and sweet pepper 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 medium. It may also establish in glasshouses. It is not clear if control methods are available. None found. Categorization CABI CPC. 2013. Sources Campos LA, Teixeira RA, De S. Martins F. 2007. Três Padrões Novos de Coloração de Ninfas de Arvelius albopunctatus (De Geer) (Hemiptera: Pentatomidae). Neotropical Entomology 36(6):972-975 (2007)

CDT. 2009. California Dog Team annual report 2008-2009.

http://www.cdfa.ca.gov/serp.html?q=arvelius&cx=001779225245372747843%3Avw_adoufr8&cof=FORID% 3A10&ie=UTF-8

- Garlet J, Roman M, Corrêa Costa E. 2010. Pentatomídeos (Hemiptera) associados a espécies nativas em Itaara, RS, Brasil. Biotemas, 23 (1): 91-96, março de 2010. mas.ufsc.br/volumes/pdf/volume231/91a96.pdf
- Halbert S. 2009. Entomology specimen report. Entomology section. DACS-P-00124 Volume 48, Number 1, January - February 2009. http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Plant-Industry-Publications/Tri-ology-FDACS-DPI/Volume-48-Number-1-January-February-2009/January-February-2009-Entomology-Section
- Martínez LE, Folcia AM. 1999. Aspectos morfológicos y biológicos de Arvelius albopunctatus (De Geer, 1773) (Hemíptera: Pentatomidae). Bol. San. Veg. Plagas, 25: 13-20, 1999.

http://www.magrama.gob.es/ministerio/pags/Biblioteca/Revistas/pdf_plagas%2FBSVP-25-01-013-020.pdf Panizzi AR, Da Silva JJ. 2010. New Records of Pentatomids as Hosts of Hexacladia smithii Ashmead

- (Hymenoptera: Encyrtidae) in Southern Brazil. Neotropical Entomology 39(4):678-679 (2010)
- Rebagliati PJ, Mola LM, Papeschi AG, Grazia J. 2005. Cytogenetic studies in Pentatomidae (Heteroptera): A review. 5) 43(3), 199–213.