

Cyrtopeltis modesta (Hemiptera: Miridae)

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
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***Cyrtopeltis modesta* (*Engytatus modestus*) (Hemiptera: Miridae) (tomato bug, tomato suck bug)**

Why	Identified in the EPPO tomato study.
Where	<p>EPPO region: absent</p> <p>North America: Canada (in glasshouses; Anon. 2009; Colorado University, 2011; Agriculture and Agri-food Canada, 2006); Mexico (Schuh, 2002-2013; Carvalho and Da Silva, 1977); USA (Texas, Georgia – Schuh, 2002-2013; California - UC IPM, 2011; Mississippi, South Carolina Hawaii - Carvalho, 1960, Colorado (in glasshouses? Colorado University, 2011),</p> <p>Central America: Guatemala, El Salvador (Schuh, 2002-2013; Carvalho and Da Silva, 1977)</p> <p>Caribbean: Puerto Rico, Cuba (Schuh, 2002-2013)</p> <p>South America: Ecuador (Galapagos), Peru, Brazil, Chile (Schuh, 2002-2013, CDF, 2013; Carvalho and Da Silva, 1977)</p> <p>Uncertain record: Argentina (http://www.coleoptera-neotropical.org/6_Arthropoda/6a/pais/Hemiptera_Argentina.html). This record comes from a very general website and original publications were not found.</p>
Climatic similarity	Medium. 7 common climates or fewer considering the countries and the southern USA States listed above. It is recorded to have been introduced in greenhouses in Colorado and Ontario (Colorado University, 2011).
On which plants	Tomato (UC IPM, 2011; Hawaii Edu, ND, Anon., 2009, Schuh, 2002-2013). Also <i>Amaranthus</i> , <i>Cleome</i> , <i>Mikania congesta</i> , tobacco (Schuh, 2002-2013). Squash, gourd, tobacco, potato, watermelon, eggplant, beans, weeds (Colorado University, 2011)
Damage	Eggs are laid in stems; nymphs and adults feed on stems and are mobile (UC IPM, 1998, 2011; Colorado University 2011). Damage may lead to blossom drop, dropping of young fruit, and breakage, stunted growth (UC IPM, 2011; Agriculture and Agri-food Canada, 2006). The only reported association with fruit was found in Canadian publications: Agriculture and Agri-food Canada (2006) report that nymphs and adults can feed on stems and fruit, and Anon. (2009 – publication not available, cited in a list of pests) mention that this species was found on fruit in Canada. Economic damage on tomato is occasional in California (UC IPM, 2011). The pest was introduced to Hawaii, where it became a pest of tomato and tobacco (Carvalho, 1960). In Canada, it causes occasional damage to greenhouse tomatoes in British Columbia and Ontario (Agriculture and Agri-food Canada, 2006) [Reminder for searches: misspelled “ <i>Cryptopeltis</i> ” in UC IMP (2011)].
Dissemination	Adults fly. <i>C. modestus</i> seems to have spread (introduced at least to Hawaii; in Colorado and Canada, introduced in greenhouses; Colorado University, 2011). <i>Cyrtopeltis</i> spp. was intercepted on tomato in the USA (USDA, 2009).
Pathway	Fruits and vegetables (only if parts of stems attached?), plants for planting of host plants from countries where <i>C. modesta</i> occurs.
Possible risks	Tomato and several other 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 medium. It may also establish in glasshouses. It is not clear if control methods are available.
Categorization	Quarantine pest for Korea Rep 2011 (from IPP)
Sources	<p>Agriculture and Agri-Food Canada. 2006. Crop Profile for Greenhouse Tomato in Canada. Pesticide Risk Reduction Program, Pest Management Centre, Agriculture and Agri-Food Canada. http://publications.gc.ca/collections/collection_2009/agr/A118-10-24-2006E.pdf</p> <p>Anon. 2009. POIR 2009-110. Pest and diseases associated with Canadian grown greenhouse grown tomato, bell pepper, cucumber and eggplant. Ottawa: Canadian Food Inspection Agency. Unpublished.</p> <p>Carvalho JCM. 1960. New Species of <i>Cyrtopeltis</i> from the Hawaiian Islands with a Revised Key (Hemiptera: Miridae). Vol. XVII, No. 2, July, 1960 249</p>

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