

Aleurotrachelus trachoides (Hemiptera: Aleyrodidae)

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
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Aleurotrachelus trachoides (Hemiptera: Aleyrodidae)

Why	Identified in the EPPO tomato study.
Where	<p>EPPO region: absent</p> <p>Africa: Gambia, Reunion Island (Evans, 2007) – the record for Gambia is based on interceptions in the UK (Malumphy, 2005)</p> <p>North America: Mexico, USA (California, Florida, Louisiana, Texas, Hawaii) (Evans, 2007, Hodges and Evans, 2005; Hara, 2011).</p> <p>Central America: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama (Dooley, 2006; Evans, 2007).</p> <p>Caribbean: Antigua and Barbuda, Bahamas, Barbados, Belize? (Martin, 2005), Cuba, Dominica, Dominican Rep., Guadeloupe; Haiti, Jamaica, Martinique, Puerto Rico, Trinidad and Tobago (Trinidad), Virgin Islands (CABI CPC, Evans, 2007).</p> <p>South America: Brazil, Colombia, Ecuador (Galapagos), Guyana, Peru, Suriname, Venezuela (CDF, 2013; CABI CPC, 2013; Evans, 2007, Morales et al., 2003)</p> <p>Oceania: Fiji, Guam, Tahiti and Rangiroa (Dumbleton, 1961; Evans, 2007).</p>
Climatic similarity	Low/medium. 5 common climates considering the countries and zones listed above. Considered as neotropical by Malumphy (2005)
On which plants	Highly polyphagous. Evans (2007) lists species in 28 families, among which the following Solanaceae hosts are: <i>Capsicum annuum</i> , <i>Capsicum frutescens</i> , <i>Capsicum</i> sp., <i>Cestrum nocturnum</i> , <i>Datura stramonium</i> , <i>Solanum lycopersicon</i> , <i>Lycopersicon</i> sp., <i>Nicotiana</i> sp., <i>Solanum melongena</i> , <i>Solanum nigrum</i> , <i>Solanum seaforthianum</i> , <i>Solanum</i> sp., <i>Solanum torvum</i> (Evans, 2007; Morales et al., 2003). The host list in Evans (2007) includes fruit trees, ornamentals and many other plants, e.g. <i>Annona muricata</i> , <i>Chamaedorea</i> sp., <i>Cocos nucifera</i> , <i>Bidens pilosa</i> , <i>Ipomoea batatas</i> ; <i>Dioscorea</i> sp.; <i>Leucaena</i> sp.; <i>Persea americana</i> , <i>Hibiscus elatus</i> ; <i>Ficus membranaceae</i> and <i>F. retusa</i> , <i>Psidium guajava</i> , <i>Morinda citrifolia</i> , <i>Citrus limon</i> , <i>Cleome</i> sp.; <i>Theobroma cacao</i> . Finally CABI CPC lists (among hosts not mentioned in Evans, 2007): Brassicaceae, Cucurbitaceae, <i>Lactuca sativa</i> (lettuce).
Damage	Whiteflies cause direct and indirect damage to plants by larval and adult feeding on leaves and stems. Feeding reduces productivity. The cosmetic value of fruit is reduced by honeydew production. The pest feeds on plants and sometimes fruit (http://www.ecured.cu/index.php/Mosca_blanca_del_aj%C3%AD)
Dissemination	Eggs, larvae and adults on leaves and stems, and may also feed on fruit. This pest was intercepted in the UK on sweet potato leaves (Malumphy, 2005; Mifsud et al., 2010), and in the USA on various species (Evans, 2007; not tomato, but various species such as <i>Capsicum</i> , herbs, <i>Mentha</i> , <i>Musa</i> , <i>Hibiscus rosa-sinensis</i> , <i>Jasminum</i> , <i>Chamaedora</i> , <i>Punica granatum</i>). It is known to have spread to Hawaii (late 1990s) and Guam (2003) (Martin, 2005), probably also Gambia. The pest is known to have spread in the Americas (e.g. Galapagos).
Pathway	Plants for planting, fruits and vegetables (incl. leaves), cut flowers of host plants from countries where <i>A. trachoides</i> occurs.
Possible risks	<i>A. trachoides</i> has major host crops in the EPPO region. The climatic similarity according to the EPPO Study between the area where it occurs and the EPPO region is low to medium. It may also establish in glasshouses.
Categorization	From PQR: Eastern Africa and Southern Africa, A1, 2001
Sources	<p>CABI CPC, 2013</p> <p>CDF. 2013. Galapagos Species Checklist. http://checklists.datazone.darwinfoundation.org/introduced-species/introduced-invertebrates/aleurotrachelus-trachoides-back-1912/ (Accessed August 2013)</p> <p>Dooley J. 2006. Whitefly pupae. <i>Aleurotrachelus</i>. http://keys.lucidcentral.org/keys/v3/whitefly/key/Aleyrodid%20Pupal%20Key%20to%20the%20Genera/Media/Html/Aleurotrachelus.htm</p>

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