

Mini data sheet on *Tetraleurodes perseae*

Added in 2003 - Deleted in 2006

**Reasons for deletion:**

*Tetraleurodes perseae* has been included in EPPO Alert List for more than 3 years and during this period no particular international action was requested by the EPPO member countries. In 2006, it was therefore considered that sufficient alert has been given and the pest was deleted from the Alert List.

*Tetraleurodes perseae* (Homoptera: Aleyrodidae - red-banded whitefly)

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| Why             | <i>Tetraleurodes perseae</i> came to our attention because it was recently found on avocado in Israel (see EPPO RS 2003/044), together with another pest <i>Oligonychus perseae</i> . <i>T. perseae</i> has also been introduced in the 1990s in California, most probably from Latin America. In both cases, it is suspected that the pest was brought on illegally introduced avocado planting material (budwood). As <i>T. perseae</i> is a new pest to the EPPO region which can be moved on avocado material, the EPPO Secretariat decided to add it to the EPPO Alert List.  |
| Where           | <i>T. perseae</i> was first discovered in San Diego, California (US) in 1982 but was only described in 1995. It is thought that this species originates from Latin America. The presence of <i>T. perseae</i> was detected in Israel in 2001, and it thought to have been brought on illegally introduced avocado planting material. Its presence was also reported in 2002 in Lebanon.<br>EPPO region: Israel (under official control), Lebanon.<br>North America: Mexico, USA (California, Florida).<br>Central America: more data needed.   |
| On which plants | <i>Persea americana</i> (avocado). Other hosts plants (Lauraceae only) have been reported (Nakahara, 1995), but in California <i>T. perseae</i> populations have only been found on avocado.   |
| Damage          | In California, <i>T. perseae</i> is not considered as a major pest of avocado. However, it is reported that the honeydew production by feeding nymphs can promote the development of sooty mould on leaves. Feeding by large numbers of <i>T. perseae</i> can deform immature leaves which can lead to premature leaf drop. So far, no transmission of viruses by <i>T. perseae</i> has been reported.   |
| Dissemination   | Natural dispersal occurs as adults of <i>T. perseae</i> can fly. Over long distances, movements of infested avocado plants can ensure its dissemination. The risk associated with movements of fruits appears very low.  |
| Pathway         | Plants for planting of <i>P. americana</i> , fruits (?).   |
| Possible risks  | Avocado is not widely grown in the EPPO region but is of economic importance at least in Israel and Spain. In Mexico, effective control is ensured by the use of parasitoids ( <i>Encarsia</i> and <i>Eretmocerus</i> species), but this may not be valid in the EPPO region. In Israel, official control measures are being implemented to prevent any further spread of <i>O. perseae</i> . Trade essentially concern avocado fruits which are not a risky pathway, but more attention should perhaps be paid to the movements of planting material to avoid any further introduction.   |
| Source(s)       | Hoddle, M.S. Soliman, G.N. (2000) Developmental and reproductive biology of the red-banded whitefly, <i>Tetraleurodes perseae</i> Nakahara (Homoptera: Aleyrodidae). Subtropical Fruit News, 8(1-2), 15-18.<br>Nakahara, S. (1995) Taxonomic studies of the genus <i>Tetraleurodes</i> (Homoptera: Aleyrodidae). Insecta Mundi, 91(1-2), 105-150 (abst.).<br>Swirski E, Wysoki M & Izhar Y, 2002. Subtropical Fruits Pests in Israel, Fruit Board of Israel, 284 pp.<br>NPPO of Israel, 2003-03.<br>INTERNET<br>European Whitefly Studies Network. An inventory of whiteflies in Belize: what relevance for EWSN? by J. Martin. <a href="http://www.whitefly.org/WhitefliesinBelize.htm">http://www.whitefly.org/WhitefliesinBelize.htm</a><br>University of California, Riverside (US). Biology of the red-banded whitefly, <i>Tetraleurodes perseae</i> Nakahara (Homoptera: Aleyrodidae) by G. Soliman and M.S. Hoddle. <a href="http://www.biocontrol.ucr.edu/RBW.html">http://www.biocontrol.ucr.edu/RBW.html</a> |