

### Mini data sheet on *Trialeurodes ricini*

Added in 2000 - Deleted in 2006

**Reasons for deletion:**

A PRA carried out in the UK concluded that the risk presented by *Trialeurodes ricini* for the EPP0 region was not significant. In 2006, it was therefore removed from the EPP0 Alert List.

*Trialeurodes ricini* (Homoptera: Aleyrodidae) - Castor whitefly

Why	The NPPO of UK suggested that <i>Trialeurodes ricini</i> (synonym <i>T. rara</i> ) could be added to the EPP0 Alert List. This pest was recently introduced into Egypt. It was found there for the first time in September 1997 on <i>Ricinus communis</i> in Qalyubiya Governorate, and rapidly became widespread. It has been intercepted twice by UK on unspecified leaves from Cameroon and Nigeria (possibly <i>Amaranthus</i> leaves).
Where	<b>EPP0 region:</b> Egypt, Israel, Spain (Canary Islands). <b>Asia:</b> Brunei Darussalam, Hong Kong, India (Gujarat, Tamil Nadu, Uttar Pradesh), Iran, Iraq, Malaysia (peninsular), Pakistan, Philippines, Saudi Arabia, Thailand. <b>Africa:</b> Cameroon (unconfirmed), Chad, Côte d'Ivoire, Egypt, Kenya, Malawi, Nigeria, Sierra Leone, Sudan, Uganda.
On which plants	<i>T. ricini</i> is a polyphagous species. Its preferred hosts are: <i>Ricinus communis</i> (castor bean), <i>Dolichos lablab</i> , <i>Gossypium hirsutum</i> (cotton). But it can also feed on <i>Cucurbita maxima</i> (pumpkin), <i>Ipomoea batatas</i> (sweet potato), <i>Solanum melongena</i> (aubergine), <i>Phaseolus vulgaris</i> (bean), <i>Lycopersicon esculentum</i> (tomato), <i>Solanum tuberosum</i> (potato), <i>Cucurbita pepo</i> (melon), <i>Cumumis sativa</i> (cucumber), etc.
Damage	Adults and immature stages of <i>T. ricini</i> suck sap from the lower surface of the leaves which then wither and turn brown. Secretion of honeydew results in growth of sooty moulds. In Egypt, <i>T. ricini</i> has been reported as a vector of <i>Tomato yellow leaf curl begomovirus</i> .
Dissemination	Natural dispersal is ensured by flying adults. Movements of infested plants or fruits can ensure long distance dissemination.
Pathway	Infected plants for planting, vegetables and fruits from countries where <i>T. ricini</i> occurs.
Possible risks	<i>T. ricini</i> is a tropical and sub-tropical pest (most favourable temperatures appear to be 25 to 30 °C), and it appears unlikely that it could establish outdoors in most parts of the EPP0 region. However, it may present a risk for southern Europe, where many of its host plants are grown (cotton, cucurbits, tomato, aubergine, etc.). It may also present a risk for vegetable crops grown under glasshouse conditions. An additional concern is the transmission of <i>Tomato yellow leaf curl begomovirus</i> . Chemical and biological control (release of parasitoids, e.g. <i>Encarsia formosa</i> ) methods are available, but the pest is difficult to control.
Source(s)	NPPO of UK, 2000-01, Summary PRA by Dr A. MacLeod Abd-Rabou, S. (1999) New records of whiteflies in Egypt. Egyptian Journal of Agricultural Research, 77(3), 1143-1145. Anonymous (2000) Canary Islands results. EWSN Newsletter, no. 3, p 2. David, B.V.; Radha, N.V.; Seshu, K.A. (1973) Influence of weather factors on the population of the castor Aleyrodid <i>Trialeurodes rara</i> Singh. Madras Agricultural Journal, 60(7), 496-499. (abst.) Idriss, M.; Abdallah, N.; Aref, N.; Haridy, G.; Madkour, M. (1997) Biotypes of the castor bean whitefly <i>Trialeurodes ricini</i> (Misra) (Hom., Aleyrodidae) in Egypt: biochemical characterization and efficiency of geminivirus transmission. Journal of Applied Entomology, 121(9-10), 501-509. (abst.) Lourens, J.H.; Brader, L.; Van der Laan, P.A. (1972) Contribution à l'étude d'une 'mosaïque' du cotonnier au Tchad; distribution dans un champ; Aleyrodidae communs; essais de transmission de cotonnier à cotonnier par les Aleyrodidae. Coton et Fibres Tropicales, 27(2), 225-230. (abst) Martin, J.H. (1987) An identification guide to common whitefly pest species of the world (Homoptera: Aleyrodidae). Tropical Pest Management, 33(4), 298-322. McLeod, A.. (2002) Summary of PRA for <i>Trialeurodes ricini</i> , CSL, UK.

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