

Data Sheets on Quarantine Pests

*Euphranta japonica***IDENTITY**

Name: *Euphranta japonica* (Ito)

Synonyms: *Rhacochlaena japonica* Ito

Taxonomic position: Insecta: Diptera: Tephritidae

Common names: Japanese cherry fruit fly (English)

Mouche japonaise du cerisier (French)

Bayer computer code: RHACJA

EPPO A1 list: No. 41 (in part)

EU Annex designation: I/A1 - as *Rhacochlaena japonica*

HOSTS

E. japonica attacks cherries in Japan (Hardy, 1983; Ito, 1983-5). The potential host range in the EPPO region would include cultivated cherries and possibly other *Prunus* species. As there is very little literature on this species it is possible that its full host range is not yet known.

GEOGRAPHICAL DISTRIBUTION

EPPO region: Absent, but could easily be mistaken for a superficially similar European species (*Euphranta toxoneura* (Loew)) whose larvae develop in leaf galls of *Pontania* spp. (Hymenoptera, Tenthredinidae) on *Salix* spp.

Asia: Japan (Northern).

EU: Absent.

BIOLOGY

There is no information available on the biology of *E. japonica*.

DETECTION AND IDENTIFICATION**Symptoms**

Not known, but attacked fruit will probably show signs of oviposition punctures.

Morphology**Larva**

Not described.

Adult

Colour: Head, margin of scutellum and legs orange; rest of body black; wing markings brown; wing with a complete apical crossband and no other complete crossbands; anterior edge of wing with two brown markings in cell sc, the basal of which reaches vein R2+3; another mark beyond the end of vein R1 extends to vein R4+5; posterior edge of wing with

two markings, one extending forward across the dm-cu crossvein and the other across the r-m crossvein; both these marks only extending as far forwards as vein R4+5.

Head: Three pairs of frontal setae and only one pair of orbital setae; first flagellomere rounded at apex.

Thorax: Scutum without presutural supra-alar setae; scutum with a pair of dorsocentral setae which are placed about half way between anterior and posterior supra-alar setae; scutellum flat, with four marginal setae (one basal and an apical pair); anatergite with long pale hairs which are distinct from the general pubescence.

Wing: Length 5-7 mm. Vein Sc abruptly bent forward at nearly 90°, weakened beyond this bend and ending at subcostal break; vein R1 with dorsal setulae; vein R4+5 with dorsal setulae at least as far as r-m crossvein; apex of vein M meeting C with a distinct angle; cell cup broader than half depth of cell bm, and usually about as deep as cell bm; cup extension short, never more than one fifth as long as vein A1+Cu2, and vein CuA2 straight along anterior edge of cup extension.

Abdomen: Female with an ovipositor that is shorter than the wing length, and straight. Wing length 5-7mm.

Detection and inspection methods

Although trapping methods have been developed for many tephritid quarantine pests, there has been no occasion to do this for *E. japonica*.

MEANS OF MOVEMENT AND DISPERSAL

Not documented, but *E. japonica* could presumably be carried as puparia in soil accompanying host plants or as larvae in fruits on host plants.

PEST SIGNIFICANCE

Economic impact

Although *E. japonica* was regarded as a pest by Watanabe (1939), Koyama (1989) did not mention it in his review of Japanese pest species, suggesting that its status as a pest is minimal. No further details are available.

Control

No information, though general methods for fruit fly control would presumably be applicable.

Phytosanitary risk

E. japonica was included in the EPPO A1 quarantine pest category "non-European Trypetidae", but only by a brief mention in the data sheet concerned (OEPP/EPPO, 1983). No other regional plant protection organization has considered it. Its lack of economic importance suggests that there is no justification for listing it individually as a quarantine pest.

PHYTOSANITARY MEASURES

According to the general EPPO recommendations for "non-European Trypetidae" (OEPP/EPPO, 1990), which could be applied to this species, plants of host species transported with roots from countries where these pests occur should be free from soil, or the soil should be treated against puparia. The plants should not carry fruits. The recommendations also propose requirements for fruits as such; if cherries were to be traded from Japan, the recommendations for *Rhagoletis* spp. affecting cherries could apply (EPPO/CABI, 1996).

BIBLIOGRAPHY

- EPPO/CABI (1996) *Rhagoletis cingulata* and *Rhagoletis indifferens*; *Rhagoletis fausta*. In: *Quarantine pests for Europe*. 2nd edition (Ed. by Smith, I.M.; McNamara, D.G.; Scott, P.R.; Holderness, M.). CAB INTERNATIONAL, Wallingford, UK.
- Hardy, D.E. (1983) The fruit flies of the tribe Euphrantini of Indonesia, New Guinea, and adjacent islands (Tephritidae: Diptera). *International Journal of Entomology* **25**, 152-205.
- Ito, S. (1983-5) *The Japanese fruitflies*. 1983, 1-48; 1984a-e, 49-96, 97-144, 145-192, 193-240, 241-288; 1985, 289-352. S. Ito, Osaka, Japan.
- Koyama, J. (1989) Pest status; south-east Asia and Japan. In: *World crop pests 3(A). Fruit flies; their biology, natural enemies and control* (Ed. by Robinson, A.S.; Hooper, G.), pp. 63-66. Elsevier, Amsterdam, Netherlands.
- OEPP/EPPO (1983) Data sheets on quarantine organisms No. 41, Trypetidae (non-European). *Bulletin OEPP/EPPO Bulletin* **13** (1).
- OEPP/EPPO (1990) Specific quarantine requirements. *EPPO Technical Documents* No. 1008.
- Watanabe, C. (1939) [On the parasitic wasps of fruit flies attacking cherry]. *Oyo-Dobutsugaku-Zasshi* **11**, 123-128.