

THE IDENTITY OF *TERELLIA IMMACULATA* MACQUART (DIPTERA: TEPHRITIDAE: TEPHRITINAE)

D.L. HANCOCK

PO Box 2464, Cairns, Qld 4870

Abstract

Terellia immaculata Macquart, 1855 is placed as a new synonym of the Palearctic *Terellia longicauda* (Meigen, 1838). Its stated type locality of Marquesas Islands, French Polynesia, is regarded as an error, possibly for Marquise in NW France.

Introduction

The fruit fly species *Terellia immaculata* Macquart has remained unrecognised since its original description (Macquart 1855). The type female is in the Oxford University Museum of Natural History (OUMNH) and is presumed to be of French Polynesian origin. Bezzi (1913) listed it from the Marquise Islands, while Hardy and Foote (1989) and Norrbom *et al.* (1999) both regarded it as an unplaced species of Tephritidae from French Polynesia (Marquesas Islands). However, the tephritine tribe Terelliini, to which *Terellia* Robineau-Desvoidy belongs, has not otherwise been reported from either the Australasian or Oceanian Regions.

Through the kindness of Adrian Pont and James Hogan (OUMNH), I have been able to examine photographs of the type female. Apart from a missing head, the type is in reasonably good condition and diagnostic characters are clearly visible. It is undoubtedly the same taxon as *Terellia longicauda* (Meigen), a widespread Palearctic species.

Terellia longicauda (Meigen)

Trypeta longicauda Meigen, 1838: 356. (Bavaria, Germany).

Trypeta acuticornis Loew, 1846: 520. (? Wurttemberg, Germany).

Terellia immaculata Macquart, 1855: 145. (Iles Marquises [? Marquesas Is, French Polynesia] – error?). **Syn. n.**

Terellia (*Terellia*) *longicauda* (Meigen): Norrbom *et al.*, 1999: 222.

Type data. The type of *T. immaculata* carries the following labels: (1) [in handwriting of P.J.M. Macquart] – ‘*Terellia* R.D. / *immaculata* / ♀, Macq. n. sp.’; (2) [in handwriting of J.M.F. Bigot] – ‘*Trypeta immaculata*. ♀. / *Terellia*. id. Macq. / Ins. Marquis. Macq.’ [‘*rypeta*’ subsequently inserted after ‘*T*’ by J.E. Collin]; (3) [handwritten & printed] – ‘*T. immaculata* / EX COLL. BIGOT’; (4) [circular printed label with red border] – ‘Holo- / type’.

Comments. The characters of *T. immaculata* (particularly the scutal pattern, yellow scutellum, hyaline wing with a pale yellow stigma, sectional lengths of the medial vein, white-setose abdomen, long ovicape and aculeus shape) are consistent with those of *T. longicauda* as discussed and illustrated by White (1988) and Merz (1994). The stated type locality of ‘iles Marquises’ [Marquesas Is] is evidently erroneous and is possibly a misrepresentation of Marquise, a town near Boulogne in northwestern France.

Host plant. Larvae of *T. longicauda* feed in the flower heads of the thistle *Cirsium eriophorum* (L.) Scop. (Asteraceae: Cardueae) (White 1988, Merz 1994).

Distribution. Great Britain, central Europe and western Siberia to Spain, the Balkans and Iran (Norrbom *et al.* 1999).

Discussion

With the removal of *Terellia immaculata* from the faunal list for the Marquesas Islands, only two other species of Tephritidae remain, the widespread *Dioxya sororcula* (Wiedemann) and the endemic *Trupanea simplex* Malloch (Hardy and Foote 1989). Both belong in tribe Tephritini in the flower-infesting subfamily Tephritinae. No fruit-infesting species are known from these remote Pacific islands (Parea *et al.* 1996).

Acknowledgements

I thank Adrian Pont and James Hogan (UOMNH) for photographs of the type of *Terellia immaculata* and for help in interpreting the handwritten label data.

References

- BEZZI, M. 1913. Indian trypaneids (fruit flies) in the collection of the Indian Museum, Calcutta. *Memoirs of the Indian Museum* 3: 53-175, pls 8-10.
- HARDY, D.E. and FOOTE, R.H. 1989. Family Tephritidae. Pp 502-531, in: Evenhuis, N.L. (ed.), *Catalog of the Diptera of the Australian and Oceanian Regions*. Bishop Museum Special Publication 86. Bishop Museum Press, Honolulu and E.J. Brill, Leiden; 1155 pp.
- LOEW, H. 1846. Fragmente zur Kenntniss der europäischen Arten einiger Dipterengattungen. *Linnaea Entomologica, Berlin* 1: 319-530, pl. III.
- MACQUART, P.J.M. 1855. Diptères exotiques nouveau ou peu connus. 5e supplément. *Mémoires de la Société des Sciences, de l'Agriculture et des Arts de Lille* (1854) (2) 1: 25-156, 7 pls.
- MEIGEN, J.W. 1838. *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten. Siebenter Theil oder Supplementband*. Schultz, Hamm; xii + 434 + [1] pp.
- MERZ, B. 1994. *Diptera Tephritidae*. Insecta Helvetica Fauna 10. Schweizerische Entomologische Gesellschaft, Geneva; [vii] + 198 pp.
- NORRBOM, A.L., CARROLL, L.E., THOMPSON, F.C., WHITE, I.M. and FREIDBERG, A. 1999. Systematic database of names. Pp 65-251, in: Thompson, F.C. (ed.), *Fruit fly expert identification system and systematic information database*. *Myia* 9. Backhuys Publishers, Leiden; ix + 524 pp.
- PUREA, M., PUTOA, R. and MUNRO, E. 1996. Fauna of fruit flies in the Cook Islands and French Polynesia. Pp 54-56, in: Allwood, A.J. and Drew, R.A.I. (eds), *Management of fruit flies in the Pacific*. Aciar Proceedings No. 76. Australian Centre for International Agricultural Research, Canberra; 267 pp.
- WHITE, I.M. 1988. *Tephritid flies (Diptera: Tephritidae)*. [Royal Entomological Society of London] Handbooks for the identification of British insects. Vol. 10. Part 5a. British Museum (Natural History), London; 134 pp.



Hancock, D L. 2007. "The identity of *Terellia immaculata* Macquart (Diptera: Tephritidae: Tephritinae)." *The Australian Entomologist* 34(4), 119–120.

View This Item Online: <https://www.biodiversitylibrary.org/item/310487>

Permalink: <https://www.biodiversitylibrary.org/partpdf/344271>

Holding Institution

Entomological Society of Queensland

Sponsored by

Atlas of Living Australia

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Entomological Society of Queensland

License: <http://creativecommons.org/licenses/by-nc-sa/4.0/>

Rights: <http://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.