

LECTOTYPE DESIGNATIONS FOR FRUIT FLIES¹ (Diptera : Tephritidae)

By **D. Elmo Hardy**

DEPT. OF ENTOMOLOGY, UNIVERSITY OF
HAWAII, HONOLULU, HAWAII, 96822

Abstract : Lectotypes of tephritid fruit flies are selected and here designated from syntype series in various museums.

While studying types of fruit flies from Southeast Asia, many species were found where no types have been previously designated. The following lectotypes were selected from syntype series in various museums. I am grateful to many colleagues at these museums who gave me wholehearted cooperation during this study : Dr W. Ellis, Zoologisch Museum der Universiteit van Amsterdam ; D. F. Mihályi, Hungarian Natural History Museum, Budapest ; Dr L. Lyneborg, Universitetets Zoologiske Museum, Copenhagen ; Dr G. Morge, Deutsches Entomologisches Institut, Eberswalde ; Dr P. Freeman, H. Oldroyd, K. Smith, A. Pont and B. Cogan, British Museum (Nat. Hist.), London ; Prof. C. Ponci and Dr C. Leonardi, Museo Civico di Storia Naturale, Milano ; Dr J. Nast, Polish Institute of Zoology, Warsaw ; Dr A. Stone and G. Steyskal, U. S. National Museum, Washington.

Van der Wulp and de Meijere Types
Zoological Museum, Amsterdam

Euphranta (Staurella) maculifrons (de Meijere), 1914, *Tijds. Ent.* **57** : 211, pl. 6, fig. 15 (*Staurella*).

Two ♀♀ in collection, Wonosobo. 1 designated lectotype.

Paroxyna stigmosa (de Meijere), 1915, *Tijds. Ent.* **58** (Suppl.): 83, pl. 2, fig. 4 (*Tephritis*).

Series in collection, Sumatra. 1 ♂ designated lectotype.

Ptilona brevicornis van der Wulp, 1880, *Tijds. Ent.* **23** : 185, pl. 11, fig. 7.

4 syntypes, Java. ♀ designated lectotype.

Ptilona notabilis van der Wulp, 1880, *Tijds. Ent.* **23** : 187, pl. 11, fig. 9-11.

Series in collection, Padang, Sumatra. ♂ designated lectotype.

Rioxa sexmaculata (van der Wulp), 1880, *Tijds. Ent.* **23** : 185. (*Ptilona*).

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Series of syntypes in collections of Zoological Museum, Amsterdam and Natural History Museum, Leiden, from Sumatra. Male lectotype in Amsterdam designated.

Rhabdochaeta pulchella de Meijere, 1904, *Bijdr. Dierk.* **17**: 109, pl. 8, fig. 22-23.

8 syntypes, plus 4 specimens from Java. 1 ♀ designated lectotype.

Spathulina nigrifemorata (de Meijere), 1914, *Tijds. Ent.* **57**: 220 (Oxyina) = **New Synonym** of *Spathulina acrolenca* Schiner, 1868.

Specimens from Nongkodjadar, Java. ♀ designated lectotype.

Themara jacobsoni de Meijere, 1915, *Tijds. Ent.* 58 (Suppl.): 47, pl. 1, fig. 8.

Series in collection, Sumatra. Three syntypes in British Museum (Nat. Hist.) and 3 specimens, Sumatra, in Natural History Museum, Leiden. 1 ♂, Pulu Babi, Sumatra, Zoological Museum, Amsterdam, designated lectotype.

Hendel and Doleschall Types

Hungarian Natural History Museum, Budapest

Diarrhagma paritii (Doleschall), 1856 *Tijds. Ned. Indie* **10**: 412, pl. 1, fig. 2 (*Tephritis*).

3 syntypes, 1 ♂, 1 ♀, and 1? (abdomen lost). ♂ specimen from Amboina designated lectotype = synonym of *modestum* (Fabricius).

Tritaeniopteron excellens (Hendel), 1915, *Ann. Mus. Nat. Hung.* **13**: 441, pl. 9, fig. 14 (*Sophira*).

♂ and ♀ syntypes. ♂ from Kankan, Formosa, designated lectotype.

Wiedemann and Fabricius Types

University Zoological Museum, Copenhagen

Diarrhagma modestum (Fabricius), 1805, *Syst. Antl.*, 278 (*Dacus*).

2 ♀ syntypes, Bengal, India. 1 is headless, the other specimen designated lectotype.

Platensina acrostacta (Wiedemann), 1824, *Anal. Ent.* **54**: 119, and 1830, *Ausser. Zweifl. Ins.* **2**: 501 (*Trypeta*).

2 syntypes, East India, 1 ♂ designated lectotype.

(Osten Sacken)

Deutsches Entomologisches Institut, Eberswalde, D. D. R.

Enicoptera proditrix Osten Sacken, 1882, *Berl. Ent. Zeits.* **26**: 233.

4 ♀, 1 ♂ syntypes, "philippinen." ♂ designated lectotype.

Bezzi, Grimshaw and Westwood Types

British Museum (Nat. Hist.), London

Callantra eumenoides (Bezzi), 1916, *Bull. Ent. Res.* **7**: 119 (*Mellesis*).

♂ and ♀ syntypes, Burma. ♂ designated lectotype.

Phaeogramma vittipennis Grimshaw, 1901, *Fauna Hawaiiensis* 3 (1), Diptera, p. 48, pl. 2, fig. 26-27.

♂ and ♀ syntypes, Molokai Mts., Hawaii. ♂ designated lectotype.

Spheniscomyia binocularata Bezzi, 1928, *Dipt. Fiji*, 115, fig. 35.

6 syntypes, Fiji Islands. 1 ♂ designated lectotype.

Themara horsefieldi (Westwood), 1850, *Trans. Ent. Soc. Lond.* 5 : 235, pl. 23, fig. 2 (*Achias*)
=synonym of *maculipennis* (Westwood).

Series in collection. ♂, Java, designated lectotype.

Bezzi Types

Museo Civico di Storia Naturale, Milano

Callantra bioculata (Bezzi), 1919, *Phil. J. Sci.* 15 (5) : 437, pl. 2, fig. 4 (*Mellesis*).

♂ lectotype, Mt. Makiling, Laguna, Philippines.

Callantra nummularia (Bezzi), 1916, *Bull. Ent. Res.* 7 : 115 (*Mellesis*).

♂ lectotype, Mt. Banahao, Laguna, Philippines.

Callantra pedunculata (Bezzi), 1916, *Bull. Ent. Res.* 7 : 115 (*Mellesis*).

♂ lectotype, Mt. Makiling, Laguna, Philippines.

Dacus (Nesodacus) ablepharus (Bezzi), 1919, *Phil. J. Sci.* 15 (5) : 422, pl. 1, fig. 2
(*Chaetodacus*).

♂ lectotype, Malinao, Tayabas, Philippines.

Dacus (Nesodacus) atrichus (Bezzi), 1919, *Phil. J. Sci.* 15 (5) : 420, pl. 1, fig. 1 (*Chaetodacus*).

♂ lectotype, Batbatan I., Antique, Philippines.

Dacus (Strumeta) dorsalis occipitalis (Bezzi), 1919, *Phil. J. Sci.* 15 (5) : 423, pl. 1, fig. 3
(*Chaetodacus ferrugineus* var. *occipitalis*).

♂ lectotype, Manila, Philippines.

Dacus (Strumeta) limbiferus (Bezzi), 1919, *Phil. J. Sci.* 15 (5) : 424, pl. 1, fig. 5 (*Chaetodacus* as var. of *ferrugineus*).

♂ lectotype, Batbatan I., Antique, Philippines.

Dacus (Strumeta) mcgregori (Bezzi), 1919, *Phil. J. Sci.* 15 (5) : 426, pl. 1, fig. 7 (*Chaetodacus*).

♂ lectotype, Batbatan I., Antique, Philippines.

Dacus (Zeugodacus) pubescens (Bezzi), 1919, *Phil. J. Sci.* 15 (5) : 434, pl. 2, fig. 2
(*Chaetodacus*).

♂ lectotype, Los Banos, Laguna, Philippines.

Dacus (Zeugodacus) tetrachaetus (Bezzi), 1919, *Phil. J. Sci.* 15 (5) : 431, pl. 1, fig. 10
(*Chaetodacus*).

♂ lectotype, Batbatan, Antique, Philippines.

Rhabdochaeta melanura Bezzi, 1926, *Spolia Zeylan.* 13 : 311, fig. 2.

♂ lectotype, Baguio, Benguet, Philippines.

Enderlein Types

Zoological Institute, Warsaw

All the types of species described by Enderlein, 1911, *Zool. Jahrb., Syst.* 31 : 407-60 (except *Trypeta formosana* and *Agrochira achiodes*, the latter is a Platystomatidae) which were in the Stettin Zoological Museum are present in the Polish Academy of Sciences, Institute of Zoology, Warsaw.

Colobostroter pulchralis Enderlein, 1911 : 445.

Type of the genus. 5 syntypes, 2 ♂♂, 3 ♀♀ from Soekaranda, Sumatra, I.1894 (H. Dohrn). 1 ♂ designated lectotype.

1 topotype ♀ in British Museum (Nat. Hist.) collection, also 1 ♂ and 1 ♀, Sandakan, Borneo (Baker) in the U. S. National Museum.

Enicoptera gigantea Enderlein, 1911 : 413.

6 syntypes, both sexes, Soekaranda and Liangagas, Sumatra, I. 1894 (H. Dohrn). 1 ♂ from first locality, designated lectotype.

Euphranta nigra Enderlein, 1911 : 439, fig. Q.

1 ♂, 2 ♀ syntypes, Soekaranda, Sumatra (H. Dohrn). ♂ designated lectotype.

Hendelina superflucta (Enderlein), 1911 : 428 (*Trypeta*).

2 syntypes, 1 ♂, 1 ♀, Takao, Formosa. ♂ designated lectotype.

Metasphenisca bezziana (Enderlein), 1911 : 424 (*Trypeta*).

1 ♂, 2 ♀ syntypes, Asmara, Eritrea, 1908 (Kristensen). 1 ♀ designated lectotype, ♂ headless.

Paroxyna bisetosa (Enderlein), 1911 : 455, fig. Y and Z (*Ensina*).

3 syntypes, 1 ♂, 2 ♀; 1 ♂ and 1 ♀ mounted on 1 pin, Takao, Formosa. ♂ designated lectotype = synonym of *sororcula* (Wiedemann).

Pliomelaena sauteri (Enderlein), 1911 : 456, fig. A₁ (*Tephritis*).

3 syntypes, 1 ♂, 2 ♀, Formosa. ♂ from Ryukokado, S. Formosa, designated as lectotype.

Rioxa sumatrana Enderlein, 1911 : 449, fig. U.

Syntypes ♂ and ♀, Soekaranda, Sumatra. ♂ designated lectotype = synonym of *sexmaculata* (Wulp).

Tetraeuaresta catharinensis (Enderlein), 1911 : 431 (*Euresta*).

1 ♂, 1 ♀ syntypes, S. Catharina, Brazil. ♀ designated lectotype, ♂ abdomen broken = synonym of *T. obscuriventris* (Loew).

Trupanea diluta (Enderlein), 1911 : 459 (*Urellia*).

1 ♂, 2 ♀ syntypes, Argentina. ♂ designated lectotype.

Bezzi Types

U. S. National Museum, Washington, D. C.

Carpophthorella capillata (Bezzi), 1913, *Phil. J. Sci.* **8** : 324 (*Gastrozona*).

11 syntypes, both sexes. ♀ lectotype, Los Banos, Laguna, Philippines. Also, 4 syntypes in British Museum (Nat. Hist.).

Carpophthorella luteiseta (Bezzi), 1913, *Phil. J. Sci.* **8** : 325 (*Gastrozona*).

♂ lectotype, Los Banos, Laguna, Philippines. Also, a series of syntypes in British Museum (Nat. Hist.) and in Zoological Museum, Helsinki.

Dacus (Strumeta) pedestris (Bezzi), 1913, *Phil. J. Sci.* **8** : 322 (*Chaetodacus ferrugineus* var. *pedestris*).

Syntypes, both sexes. ♂ lectotype, Mt. Makiling, Laguna, Philippines.

Dacus (Zeugodacus) mundus (Bezzi), 1919, *Phil. J. Sci.* **15** (5) : 429, pl. 1, fig. 9 (*Chaetodacus*).

Syntypes, both sexes. ♀ lectotype, Los Banos, Laguna, Philippines.

Dacus (Zeugodacus) scutellinus (Bezzi), 1916, *Bull. Ent. Res.* **7** : 113, pl. 2, fig. 11 (*Chaetodacus*).

Syntypes, both sexes. ♀ lectotype, Mt. Makiling, Luzon, Philippines.

Hexacinia stigmatoptera Hendel, 1928, *Ent. Mitt.* **17** (5) : 353.

4 syntypes, both sexes. ♀ lectotype, Majayjay, Laguna, Philippines. 3 syntypes in the British Museum (Nat. Hist.).

Monacrostichus citricolus Bezzi, 1913, *Phil. J. Sci.* **8** : 323.

8 syntypes, both sexes. ♂ lectotype, Los Banos, Laguna, Philippines. 1 syntype in Deutsches Entomologisches Institut, Eberswalde, D. D. R.

Rioxa caeca Bezzi, 1913, *Phil. J. Sci.* **8** : 326.

15 syntypes, both sexes. ♀ lectotype, Los Banos, Laguna, Philippines.

Spilocosmia bakeri Bezzi, 1913, *Phil. J. Sci.* **8** : 327.

4 syntypes, both sexes. ♂ lectotype, Mt. Makiling, Laguna, Philippines. 2 ♀ syntypes from Los Banos in British Museum (Nat. Hist.) and 1 ♂, same locality, in Museo Civico di Storia Naturale, Milano.

