

BULLETIN ZOÖLOGISCH MUSEUM

UNIVERSITEIT VAN AMSTERDAM

Vol. 11 No. 10 1987

LIST OF TYPE SPECIMENS OF DROSOPHILIDAE (DIPTERA) IN THE COLLECTIONS OF THE ZOÖLOGICAL MUSEUM AMSTERDAM

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ABSTRACT

The collection of Drosophilidae contains 358 type specimens of 122 species out of 23 genera. 74 of these species were described by De Meijere. With few exceptions the flies were collected in Indonesia. A list of the type specimens is given.

INTRODUCTION

One of the leading dipterists at the beginning of this century was J.C.H. De Meijere who described hundreds of species from specimens mainly collected in the then Netherlands Indies now Indonesia. Descriptions of 76 new species of Drosophilidae were included by him in several papers between 1906 and 1924. The collections established by him are now kept in the Zoölogisch Museum Amsterdam.

In addition to 74 species described by De Meijere the collection now contains type specimens of 48 species described by the following authors: Bächli, Carson and Okada, Duda, Okada, Tsacas and Chassagnard, Villeneuve, and Van der Wulp. These authors made descriptions based on specimens owned by the Zoölogisch Museum, or sent type specimens to the Museum as a gift.

The following list contains 358 type specimens of

122 species, which are arranged in alphabetical order. In total there are 23 holotypes, 26 paratypes, 16 lectotypes, 42 paralectotypes, 1 neotype and 250 syntypes. For species described before 1970 the essential details of collection sites and number of specimens are cited. The type specimens recorded are listed with details of the labels, as far as is considered to be essential. Different labels are separated by a slash (/). Remarks on the status and the condition of the type specimens are added where needed. New lectotype designations are indicated in upper-case letters. In addition some comments are given, especially on the systematic position and synonymy. These data are based on the catalog of Wheeler (1981).

Compared with the original data given by De Meijere the type collection is nearly complete. Some additional specimens are found in the Zoological Mu-

- 1 syntype ♂: Edw. Jacobson Sinabang Simalur Sum. II. 1913 / 1705 / *Sphyrnoceps brunneus* det. De Meijere / phot. / (left wing missing).
 2 syntypes ♂♂: Edw. Jacobson Sinabang Simalur Sum. II. 1913.

- brunnescens** De Meijere, 1911:417 (*Stegana*)
 Citation: Batavia, März, 3 Ex., Jacobson leg.; Salatiga, Mai, Docters van Leeuwen leg.
 1 syntype ♀: E. Jacobson Batavia Java Maart 1908 / *Stegana brunnescens* det. De Meijere Type.
 1 syntype ♂: Java V. 1909 Salatiga Doct. v. Leeuwen / *Stegana brunnescens* d. M. det. De Meijere.
 1 syntype ♀: E. Jacobson Batavia Java Maart 1908.
 Comment: This is as synonym of *Stegana lateralis* van der Wulp, 1897.

- cincta** De Meijere, 1911:395 (*Drosophila*)
 Citation: Gunung Salak nahe Buitenzorg (Java), November, Jacobson leg.
 LECTOTYPE ♂: Goenoeng Salak Tjomas bij Buitenzorg XI. 07 Jacobson / *Drosophila cincta* det. De Meijere Type / G. Bächli vidit 1967 No. 4561 / (Lectotype by present designation).
 Comment: This species is now included in *Leucophenga*.

- cinctifrons** De Meijere, 1924:47 (*Chymomyza*)
 Citation: G. Talamau, Juni.
 1 syntype ♂: G. Talamau Sum. 6. 1917 Jacobson / *Drosophila cinctifrons* det. De Meijere Type.
 1 syntype ♂: G. Talamau Sum. 6. 1917 Jacobson / *Drosophila cinctifrons* n. sp.
 1 syntype ♂: G. Talamau Sum. 6. 1917 Jacobson.
 1 syntype ♀: Gunung Talamau Sum. 6. 1917 Jacobson / *Drosophila cinctifrons* d. M. det. De Meijere.
 2 syntypes ♂♀: Edw. Jacobson Gun. Talamau Sum. 6. 1917.

- coeruleifrons** De Meijere, 1911:421 (*Camilla*)
 Citation: Berg Ungaran nahe Semarang, October, 1 Ex. Jacobson leg.
 Holotype ♂: Java X. 01 Semarang Jacobson / op ... Oeng-garan / *Camilla coeruleifrons* det. De Meijere.
 Comment: This species is now included in *Liodrosophila*.

- colocasiae** Duda, 1924:252 (*Drosophila*)
 Citation: ... 1♂, 1♀, labelled "Nongkodjadjar Jacobson 1911, von *Colocasia antiquarum*."
 LECTOTYPE ♂: Nongkodjadjar Java Colocasia / *Drosophila Colocasiae* Det. Dr. O. Duda n. sp. ♂ / Lectotype selected by M. R. Wheeler July 1969 / (Lectotype by present designation).
 1 paralectotype ♂: Nongkodjadjar Januar 1911 Jacobson / *Drosophila Colocasiae* ♀ / Uit bloemkolven v. *Colocasia antiquorum* / phot. / (head, left wing and some legs missing).

Comment: This species is now included in *Drosophilella*.

- contracta** Duda, 1926: 55 (*Liodrosophila*)
 Citation: ... 3 ♀♀ aus Fort de Kock.
 1 syntype ♀: Fort de Kock (Sumatra) 920 M. leg. E. Jacobson 1925 / L. *contracta* ♀ d. Duda.

- convergens** De Meijere, 1911:400 (*Drosophila*)
 Citation: Semarang, März, April, Jacobson leg.
 1 syntype ♀: E. Jacobson Samarang Java Maart 1909 / *Drosophila convergens* det. De Meijere Type.
 2 syntypes ♂♂: E. Jacobson Samarang Java Maart 1909.
 1 syntype ♀: E. Jacobson Samarang Java Apr. 1909 / *Drosophila convergens* d. M. det. De Meijere.
 2 syntypes : Java Jacobson.
 Comment: This species is now included in *Stegana*.

- cristata** De Meijere, 1914:273 (*Colocasiomyia*)
 Citation: Nongkodjadjar, Januar, aus Blütenkolben von *Colocasia antiquorum*, JACOBSON leg.
 2 syntypes ♀♀ (on 1 pin): 1799 / E. Jacobson Nongkodjadjar JAVA Jan 1911 / uit bloemkolven v. *Colocasia antiquorum* / *Colocasiomyia cristata* det. De Meijere Type.
 1 syntype ♂: E. Jacobson Nongkodjadjar JAVA Jan 1911.
 1 syntype ♂: uit Bloemkolven v. *Colocasia antiquorum* Java Jacobson.
 1 syntype ♂: Java Jacobson / *Colocasiomyia cristata* de Meij. Cotype.
 1 syntype ♂: Java Jacobson .
 Comment: This species was included by De Meijere in the family Sphaeroceridae.

- deflexa** Duda, 1924:222 (*Drosophila*)
 Citation: Europa.
 3 paralectotypes ♂♂ (on 1 pin): 16. 7. / *D. deflexa* m. n. sp. Det. Dr. O. Duda.
 1 paralectotype ♀: 11. 8. / *D. deflexa* n. sp. ♀ Det. Dr. O. Duda.

- dentata** Duda, 1924:205 (*Drosophila*)
 Citation in Bächli (1974).
 Neotype ♂: Fort de Kock (Sumatra) 920 M. leg. E. Jacobson 1925 / auf Pilzen / *Dasydrosophila dentata* Duda Typus ♂ 1926 d. Duda / *D. (H.) dentata* Duda Neotypus ♂ H 374 G. Bächli det. 1972.

- dimidiata** De Meijere, 1906:194 (*Hypselothyrea*)
 Citation: Neu-Guinea: Satteberg, Huon Gulf (Biró, 1899).
 1 syntype ♂: N.-Guinea Biró 1899 / Satteberg Huon-Gulf / *Hypselothyrea dimidiata* de Meij., de Meij. det. '05 Type.

- fenestrata** Duda, 1923:36 (*Phorticella fenestrata* De Meijere i. litt.)

- Drosophila inconspicua** d. M. det. De Meijere.
1 syntype ♂: E. Jacobson Nongkodjadjar JAVA Jan 1911.
- Isatoldea** Bächli, 1974:305 (*Drosophila*)
1 paratype ♂: Fort de Kock (Sumatra) 920 M. leg. E. Jacobson 1925 / *Dasydrosophila latifrons* Duda var. *astioidea* Duda ♂, det. O. Duda 1926 / *D. (H.) isatoides* Paratype ♂ H 362 G. Bächli det. 1972.
- jacobsoni** Duda, 1926:59 (*Dettopsomyia*)
Citation: ... aus Fort de Kock: 9 ♂♂, 4 ♀♀.
2 syntypes ♂♂ (on 1 pin): Fort de Kock (Sumatra) 920 M. leg. E. Jacobson 1925 / *D. Jacobsoni* ♂ d. Duda .
2 syntypes ♂♀: Fort de Kock (Sumatra) 920 M. leg. E. Jacobson 1925 / *D. Jacobsoni* d. Duda
- jacobsoni** Duda, 1926:66 (*Drosophila latifrons* var. *Jacobsoni*)
Citation: ... vier ♂♂ und ein ♀ (Fort de Kock).
1 paralectotype ♂: Fort de Kock (Sumatra) 920 M. leg. E. Jacobson 1924 / *Dasydrosophila Jacobsoni* n. sp. ♂ d. Duda / *Dasydrosophila latifrons* Duda var. *Jacobsoni* Duda ♂ det. O. Duda 1926 Cotype! / *D. (H.) jacobsoni* Duda Paratype ♂ H 411 G. Bächli det. 1972.
- javana** De Meijere, 1911:422 (*Camilla*)
Citation: Batavia, October, 2 Exx.; Semarang, April, mehrere Exx., Jacobson leg.
1 syntype ♀: Batavia X. 07 Jacobson / *Camilla javana* det. De Meijere Type.
1 syntype ♂: Batavia X. 07 Jacobson / *Camilla javana* d. M. det. De Meijere.
8 syntypes ♂♀: E. Jacobson Samarang Java Apr 1909.
Comment: This species is now included in *Sphaerogastrelia*. There is an additional specimen labelled "Batavia X. 07 Jacobson" considered to be supernumerary.
- latifascia** De Meijere, 1914:261 (*Drosophila*)
Citation: Salatiga, DOCTERS VAN LEEUWEN leg.
1 syntype ♀: Java 1909 Salatiga Doct. v. Leeuwen / *Dr. latifasciata* det. De Meijere Type.
1 syntype ♀: Java Salatiga Doct. v. Leeuwen / *Drosophila latifascia* d. M. det. De Meijere .
- limbipennis** De Meijere, 1908:156 (*Drosophila*)
Citation: Semarang, einige Exemplare, Jacobson leg.
1 syntype ♀: E. Jacobson Semarang Java / *Drosophila limbipennis* d. Meij. Type / G. Bächli vidit 1967 No. 4553.
1 syntype ♂: Semarang Jacobson leg. / G. Bächli vidit 1967 No. 4554.
1 syntype ♀: Java Jacobson / G. Bächli vidit 1967 No. 4556.
Comment: This species is now included in *Leucophenga*. The three syntypes are probably not conspecific.

- lineata** De Meijere, 1911:420 (*Stegana*)
Citation: Java: Gunung Pantjar nahe Buitenzorg, März, 3 Exx. Jacobson leg.
1 syntype ♂: E. Jacobson Goenoeng Pantjar Buitenzorg Maart 1908 / *Stegana lineata* det. De Meijere Type.
1 syntype ♀: E. Jacobson Goenoeng Pantjar Buitenzorg Maart 1908 / *Stegana lineata* d. M. det. De Meijere.
1 syntype ♀: E. Jacobson Goenoeng Pantjar Buitenzorg Maart 1908.
Comment: The present name of this species is *Zaprionus multistriatus* Duda, 1923.
- lineolata** De Meijere, 1914:254 (*Drosophila*)
Citation: Gunung Gedeh, März, JACOBSON leg.
1 syntype ♂: E. Jacobson Goenoeng Gedeh Java Maart 1911 / *Drosophila lineolata* det. De Meijere Type.
- lugubrina** Duda, 1924:224 (*Drosophila*)
Citation: Europa.
2 paralectotypes ♀♂ (on 1 pin): 24. 4. 21 / *Dros. ♂♀ lugubrina* Det. Dr. O. Duda.
Comment: This is considered to be a synonym of *Drosophila littoralis* Meigen, 1830.
- maculiceps** Duda, 1924:183 (as *Phortica variegata* var. *maculiceps* De Meijere, i. litt.)
Citation: Sumatra.
1 syntype ♂: 7016 / E. Jacobson Sum. Air Njuruk Dempu 1400 M. 8. 1916 / *Drosophila maculiceps* det. De Meijere Type.
1 syntype ♀: Air Njuruk Dempu Sum. 1400 M. 6. 1916 Edw. Jacobson / *Phortica variegata* Det. Dr. O. Duda.
Comment: This species is now included in *Amiota*.
- maculiventris** De Meijere, 1908:155 (*Drosophila*)
Citation: Semarang, März, 1 Ex., Jacobson leg.
Holotype ♀: Java II. III. '06 Semarang Jacobson / *Drosophila guttiventris* det. De Meijere Type / G. Bächli vidit 1967 No. 4545 / (head missing).
Comment: This is considered to be a synonym of *Leucophenga bellula* Bergroth, 1894.
- maura** De Meijere, 1911:406 (*Drosophila*)
Citation: Wonosobo (Java), Mai, Jacobson leg.
LECTOTYPE ♂: E. Jacobson Wonosobo Java Mei 1909 / *Drosophila maura* det. De Meijere Type / G. Bächli vidit 1967 No. 4564 / (Lectotype by present designation).
Comment: This species is now included in *Pararhinoleucophenga*.
- meijerel** Duda, 1924:224 (*Aclatoxenus*)
Citation: Java.
1 syntype ♂: E. JACOBSON Samarang Java Dec. 1909 / *Aclatoxenus javanus* ♂ n. sp. d. Duda / Duda Syst.

3 syntypes ♂♀ (on 1 pin): 7085 / Edw. Jacobson Suban Ajam Sum. 7. 1916 / *Dros. xanthogaster* m. ♂♀ Det. Dr. O. Duda.

xenalocasiae ♂♀ Okada, 1980:218 (*Drosophila*)
2 paratypes : Wulai TAIWAN 2 VIII 1974 N. Watanabe / 11947 / *Drosophila "colocasiae"* of Okada nec Duda.

SYSTEMATICALLY ARRANGED LIST OF SPECIES

The species are listed in the original as well as in the present generic affiliation. Synonyms are given in parentheses.

Aclerixenus : *meijerei*
Amiota : *maculiceps, parallelinervis, varipes*
Amphoroneura : *obscura, rufithorax*
Camilla : *coeruleifrons, javana, pusilla, rugulosa*
Chymomyza : *cinctifrons, obscura, rufithorax*
Colocasiomyia : *cristata*
Curtonotum : *angustipenne*
Dettopsomyia : *acrostichalis, jacobsoni, pictipes, preciosa*
Discomyza : *punctipennis*
Drosophila : *abbreviata, albiceps, albicincta, albicornis, albincola, albolimbata, albonotata, alternata, amabilis, angusta, angustipennis, argentata, argentina, atropygia, baseogrisea, bicolor, binotata, bistriata, brunnea, cincta, colocasiae, convergens, deflexa, dentata, flavissima, frontata, gibbosa, gracilis (= eugracilis), gratiosa, hirsuta, hirticornis, hypopygialis, inconspicua, isatoidea, jacobsoni, latifascia, limbipennis, lineolata, lugubrina (= littoralis), maculiventris, maura, menisgra, metallescens, minuta (= hirtominuta), montium, nigra De Meijere (= meijerei), nigra Duda (= hirtonigra), nigrofemorata, obscurata, ochrifrons, ornatipennis, parabrunnea, paradentata, pictipes, pictula, pilicrus, plurilineata (= busckii), poecilogastra, preciosa, pressobrunnea, pugionata, pumilio, punctipennis (= lurida), quadrilineata, quadripunctata, quadriradiata, quadriseriata, ruberrima, salatigae, scutellaris, semiatra, seminigra, senilis, separata, silvata, simplex, strigifrons, subfasciata, sublineata, subpollinosa, sumatrensis, tectifrons, tibjodas, trifasciata, triseta, tristipes, ungarensis, unicolor (= monocolor), ustulata, xanthogaster*
Drosophilella : *alocasiae, colocasiae, pistilicola, stamenicola, xenalocasiae*
Hypselothyrea : *dimidiata, guttata*
Leucophenga : *abbreviata, albiceps, albicincta (= albofasciata), argentata, argentina, cincta, gibbosa, limbipennis, maculiventris (= bellula), ornatipennis (= ornata), quadripunctata, salatigae, subpollinosa*
Liodrosophila : *coeruleifrons, contracta, pusilla, rugulosa*
Lisocephala : *bicolor, binotata, metallescens*
Microdrosophila : *bimaculata, frontata, tectifrons*

Mycodrosophila : *albicornis, amabilis, gratiosa, separata*
Paradrosophila : *flavissima, quadriradiata*
Paramycodrosophila : *pictula*
Pararhinoleucophenga : *maura*
Phortica : *maculiceps, parallelinervis, varipes*
Phorticella : *bistriata, fenestrata*
Protostegana : *annulosa*
Scaptomyza : *bimaculata, substrigata*
Sphaerogastrella : *javana*
Sphyrnoceps : *brunnea*
Stegana : *annulosa, brunnescens (= lateralis), convergens, lineata, nigrifrons, obscuricornis, scutellata, undulata*
Tanygastrella : *gracilis, hypopygialis*
Zaprionus : *lineatus (= multistriatus), obscuricornis*

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Received : 27 July 1987
 Distributed: 17-XII-1987