

VERSLAGEN EN TECHNISCHE GEGEVENS
Instituut voor Taxonomische Zoölogie (Zoölogisch Museum)
Universiteit van Amsterdam

No. 14

A world check-list of the Ctenophorinae
(Diptera, Tipulidae)

E.A. Boersma

1 oktober 1977

A world check-list of the Ctenophorinae
(Diptera, Tipulidae)

E.A. Boersma

Abstract

A list of the species and subspecies, including synonyms, of the tipulid subfamily Ctenophorinae is provided. References to the literature are nearly complete. The distribution of the species is indicated by abbreviations and figures referring to the geographic regions and subregions. A survey of the distribution of the 5 genera is given separately.

Introduction

An up to date check-list of the world is compiled on approximately the entire literature on the subject. The subfamily contains 165 species and subspecies, of which most are distributed in the northern part of the world.

Valid species and subspecies are numbered by genus in an alphabetical sequence, while synonyms are listed in the index only.

Savchenko, 1973, divides the genus *Ctenophora* in 3 subgenera (*Cnemoncosis*, *Ctenophora* and *Xiphuromorpha*), and the genus *Tanypera* into 2 subgenera (*Protanyptera* and *Tanyptera*), but for the practical reasons they are not used in the check-list.

A compilation of the world distribution is given in table 1. Faunal regions and subregions are shown on map 1, drawn after Oosterbroek

and Schuckard, 1976.

I wish to thank Dr. Br. Theowald (Amsterdam) and Drs. P. Oosterbroek (Amsterdam) for their information and suggestions.

Abbreviations used for the regions are:

nea = nearctic
neo = neotropic
pal = palaeartic
or = oriental

Amsterdam, 20 juli 1977

Subfamilie Ctenophorinae

Ctenophorinae Kertész, 1902, Catalogus dipterorum hucusque descriptorum,
Vol. 2: 265

Tribus Ctenophorini

Ctenophorini Brunetti, 1911, Rec. Indian Mus., 6: 235

Genus Ctenophora Meigen, 1803

Flabellifera Meigen, 1800, Nouvelle classification des mouches à deux
ailes (Diptera L.) d'après un plan tout nouveau : 13 (Diagnosis, with
four unnamed species)

Suppressed by I.C.Z.N., 1963, Opinion 678: 339

Ctenophora Meigen, 1803, Magazin Insektenk. (Illiger), 2: 263

Genotype: Tipula pectinicornis Linnaeus, designated by Westwood, 1840,
An introduction to the modern classification of insects, Synopsis of the
genera of British insects, Order 13: 128

Cnemoncosis Enderlein, 1921, Zool. Anz., 52: 219

Genotype: hilgendorfi Enderlein, by monotype (= Ctenophora Nohirae
Matsumura).

Distribution:

1. amabilis Takahashi, 1960

Mushi, 34 (4): 110.

Savchenko, 1973: 246.

pal 13.

Distribution:

2. *apicata* Osten-Sacken, 1864 nea 1, 2.
 Proc. ent. Soc. Philad., 3: 46
 Alexander, 1919: 817; 1920b: 394; 1929b: 232;
 1942: 218; 1962: 8; 1965a: 19.
3. *elegans* Meigen, 1818 pal 9,11.
 Syst. Besch., 1: 163.
 Macquart, 1834: 79; Schiner, 1864: 502; v.d.
 Wulp, 1877: 352; Osten-Sacken, 1886: 168;
 Pierre, 1924a: 22; Mannheims, 1951: 30
 (Flabellifera); Theowald, 1957: 9 (Flabellifera);
 Mannheims & Theowald, 1959: 24 (Flabellifera);
 Mannheims & Pechlaner, 1963: 6 (Flabellifera);
 Savchenko, 1973: 238.
 - *pectinicornis* Fabricius (nec Linnaeus, 1758),
 1775: 747 (Tipula); 1781: 399 (Tipula); 1787: 32
 (Tipula); 1794: 238 (Tipula); 1805: 17 (Tipula).
 - *pilosa* Pierre, 1924a: 22; 1924b: 83.
4. *fastuosa* Loew, 1871 pal 9-13.
 Besch. eur. Dipt., 2: 25.
 Osten-Sacken, 1886: 168; Mannheims, 1951: 31
 (Flabellifera); 1954a: 155 (Flabellifera);
 Mannheims & Theowald, 1959: 24 (Flabellifera);
 Mannheims & Pechlaner, 1963: 6 (Flabellifera);
 Savchenko & Violovich, 1967: 359 (Flabellifera);
 Savchenko, Violovich & Narchuk, 1972: 82
 (Flabellifera); Savchenko, 1973: 225.
 - *yezoana nigrobasalis* Alexander, 1936b: 171.

Distribution:

5. *festiva* Meigen, 1804

pal 9, 11.

Klass. Beschr. eur. zweifl. Ins., 1: 88.
Meigen, 1818: 162; Macquart, 1826: 140;
1834: 78; Schiner, 1864: 502; v.d. Wulp,
1877: 351; Osten-Sacken, 1886: 168;
Huguenin, 1888: 16; Cziřek, 1911: 47;
Pierre, 1924a: 22; Mannheims, 1951: 31
(Flabellifera); 1954a: 155 (Flabellifera);
Theowald, 1957: 24 (Flabellifera); Mannheims &
Pechlaner, 1963: 6 (Flabellifera); Savchenko,
1973: 228.

6. *flaveolata* (Fabricius, 1794)

pal 9, 11.

Ent. syst., 4: 234 (Tipula).
Meigen, 1804: 87; Fabricius, 1805: 19 (Tipula);
Meigen, 1818: 161; Macquart, 1826: 139; Staeger,
1840: 2; Zetterstedt, 1851: 4014; Walker, 1856:
336; Schiner, 1864: 500; v.d. Wulp, 1877: 351;
Wallengren, 1882: 17; Osten-Sacken, 1886: 167;
Huguenin, 1888: 15; Cziřek, 1911: 45; Pierre,
1924a: 22; Nielsen, 1925: 112 (Flabellifera);
Audcent, 1932: 7 (Flabellifera); Coe, 1950: 8;
Mannheims, 1951: 31 (Flabellifera); 1954a: 155
(Flabellifera); 1954b: 30 (Flabellifera);
Theowald, 1957: 9 (Flabellifera); Mannheims &
Theowald, 1959: 23 (Flabellifera); Mannheims &
Pechlaner, 1963: 6 (Flabellifera); Savchenko,
1973: 237.

Distribution:

- *crocata* Schrank, 1871: 423 (*Tipula*).
7. *guttata* Meigen, 1818 pal 9-11.
Syst. Besch., 1: 165.
Zetterstedt, 1851: 4016; 1852: 4361; Schiner,
1864: 501; v.d. Wulp, 1877: 350; Wallengren,
1882: 17; Osten-Sacken, 1886: 167; Cziřek,
1911: 46; Pierre, 1924a: 22; Nielsen, 1925:
111; Mannheims, 1951: 29 (*Flabellifera*);
1954a: 155 (*Flabellifera*); 1954b: 30
(*Flabellifera*); Theowald, 1957: 9 (*Flabellifera*);
Mannheims & Theowald, 1959: 24 (*Flabellifera*);
Mannheims & Pechlaner, 1963: 6 (*Flabellifera*);
Savchenko, Violovich & Narchuk, 1972: 82
(*Flabellifera*); Savchenko, 1973: 243.
8. *ishiharai* Alexander, 1953 pal 13.
Philipp. J. Sci., 82: 39.
Alexander, 1953a: 72; 1954b: 265; Takahashi,
1960: 104; Savchenko, 1973: 224.
9. *magnifica* Loew, 1869 pal 11.
Besch. eur. Dipt., 1: 12.
Osten-Sacken, 1886: 168; Mannheims, 1951: 31
(*Flabellifera*); Savchenko, 1973: 229.
10. *miyamotoi* miyamotoi Takahashi, 1960 pal 13.
Mushi, 34 (4): 108.
Savchenko, 1964: 188 (*Flabellifera*);
1973: 245.

Distribution:

11. *miyamotoi claripennis* Mannheims, 1967 pal 9.
Bonn. zool. Beitr., 18: 202.
Savchenko, 1973: 277.
12. *nikkoensis* Takahashi, 1960 pal 13.
Mushi, 34 (4): 107.
Savchenko, 1973: 236.
-? *biguttata* Matsumura, 1916: 454; Alexander,
1924a: 596; 1925c: 2; 1936b: 172; Takahashi,
1960b: 105.
13. *nohirae* Matsumura, 1916 pal 13.
Thous. ins. Japan., 2: 451.
Matsumura, 1931: 392; Esaki, 1932: 176; 1950:
1531; Alexander, 1953b: 30, 41; Takahashi,
1960b: 104; Savchenko, 1973: 223.
- *hilgendorfi* Enderlein, 1921: 219 (*Cnemoncosis*).
14. *nubecula* Osten-Sacken, 1864 nea 1, 3
Proc. ent. Soc. Philad., 3: 45.
Alexander, 1920b: 392; 1942: 219; 1965a: 19.
15. *ornata* Meigen, 1818 pal. 9-11.
Syst. Besch., 1: 161.
Curtis, 1824: 57; Walker, 1856: 336; Schiner,
1864: 500; Huguenin, 1888: 15; Verrall, 1888:
93; Pierre, 1924a: 22; Audcent, 1932: 6

Distribution:

(Flabellifera); Coe, 1950: 8; Mannheims, 1951: 31 (Flabellifera); 1954a: 155 (Flabellifera); Theowald, 1957: 24 (Flabellifera); Mannheims & Pechlaner, 1963: 6 (Flabellifera); Savchenko, 1973: 232.

16. *pectinicornis* (Linnaeus, 1758) pal 9, 11.
Syst. nat., 10: 585 (Tipula).
Linnaeus, 1761: 430 (Tipula); 1767: 970 (Tipula);
Schrank, 1781: 421 (Tipula); Gmelin, 1792: 2812
(Tipula); Schrank, 1803: 63 (Tipula); Meigen,
1804: 86; 1818: 160; Macquart, 1826: 138; Meigen,
1830: 285; Macquart, 1834: 78; Zetterstedt, 1838:
849; Staeger, 1840: 2; Zetterstedt, 1851: 4012;
1855: 4002; Walker 1856a: 325; Schiner, 1864: 500;
v.d. Wulp, 1877: 340; Wallengren, 1882: 17; Engel,
1884: 259; Osten-Sacken, 1886: 167; Huguenin, 1888:
15; Czižek, 1911: 43; Pierre, 1924a: 22;
Nielsen, 1925: 110; Audcent, 1932: 7 (Flabellifera);
Coe, 1950: 8; Mannheims, 1951: 29 (Flabellifera);
1953: 344 (Flabellifera); 1954a: 155 (Flabellifera);
1954b: 30 (Flabellifera); Theowald, 1957: 9
(Flabellifera); Mannheims & Theowald, 1959: 24
(Flabellifera); Mannheims & Pechlaner, 1963: 6
(Flabellifera); Savchenko, 1973: 240.

Distribution:

- variegata Fabricius, 1775: 749 (Tipula);
1781: 402 (Tipula); 1787: 322 (Tipula); Gmelin,
1792: 2814 (Tipula); Fabricius, 1794: 236
(Tipula); Meigen, 1804: 76; Fabricius, 1805: 17,
- nigrocrocea de Geer, 1776: 400 (Tipula).
+ splendor Harris, 1782: 56 (Tipula).
- fulvida Bigot, 1860: 769 (Xiphura).

- 17. perjocosa Alexander, 1940 pal 13.
Notes Ent. chin., 8: 2.
Savchenko, 1973: 247

- 18. pselliophoroides Alexander, 1938 or 16.
Lingnan Sci. J., 17: 337.
Alexander, 1940b: 5; 1973: 11.

- 19. siberica Portschinsky, 1872 pal 10.
Horae Soc. ent. ross., 9 (1/4): 287.
Osten-Sacken, 1886: 167 (Xiphura);
Alexander, 1925c: 1; Savchenko, 1973: 248.

- 20. tricolor Loew, 1869 pal 10, 13.
Beschr. eur. Dipt., 1: 10.
Osten-Sacken, 1886: 168; Savchenko, 1973: 234.
-? biguttata Matsumura, 1961: 454; 1931: 392;
Alexander, 1936b: 172; Takahashi, 1960b: 105.
-? femurrubra Alexander, 1936b: 172; Wu, 1940:
20.

Distribution:

21. yezoana Matsumura, 1916 pal 10, 13.
Thous. ins. Japan, 2: 124.
Matsumura, 1931: 392; Alexander, 1936c: 170;
Takahashi, 1960b: 104; Alexander, 1966: 119;
Savchenko, 1973: 227.
- uniplagiata Alexander, 1924b: 442 (Cnemidopsis).

Genus Pselliophora Osten-Sacken, 1886

Pselliophora Osten-Sacken, 1886, Berl. ent. Z., 30: 165
Genotype: Tipula laeta Fabricius, designated by Brunetti, 1912, Diptera
Nematocera (excluding Chironomidae and Culicidae). In: The fauna of British
India, including Ceylon and Burma. Vol. 1: 200

Distribution:

1. annulipes Enderlein, 1921 or 17.
Zool. Anz., 52: 225.
Alexander, 1973: 11 (Ctenophora).
2. annulosa (v.d. Wulp, 1884) or 17.
Notes Leyd. Mus., 6: 253 (Ctenophora).
Brunetti, 1911: 241; Alexander, 1973: 11
(Ctenophora).
3. approximata Brunetti, 1918 or 14.
Rec. Indian Mus., 15: 259.
Alexander, 1963: 22 (Ctenophora); 1973: 11

Distribution:

- (Ctenophora); Joseph, 1973: 67 (Ctenophora).
4. *ardens* (Wiedemann, 1821) or 16, 17,
Diptera exotica 1: 20 (Ctenophora).
Brunetti, 1911: 238; Alexander, 1927b: 90;
1938c: 224; 1938e: 339; 1973: 12 (Ctenophora),
5. *aurantia* Brunetti, 1918 or 16.
Rec. Indian Mus., 15: 260.
Alexander, 1963: 22 (Ctenophora); 1973: 12
(Ctenophora); Joseph, 1973:67 (Ctenophora).
6. *bakeri* Alexander, 1925 or 17.
Philipp. J. Sci., 27: 77.
Alexander, 1973: 12 (Ctenophora).
7. *biaurantia* Alexander, 1938 or 16.
Philipp. J. Sci., 66: 96.
Alexander, 1973: 12 (Ctenophora).
8. *bicinctifer* Alexander, 1922 or 17.
Philipp. J. Sci., 21: 383.
Alexander, 1923d: 480; 1973: 12 (Ctenophora).
9. *bicolor* Edwards, 1925 or 17.
Treubia, 6: 168.
Alexander, 1973: 12 (Ctenophora).

Distribution:

10. *bifascipennis* Brunetti, 1911 pal 13, or 16.
Rec. Indian Mus., 6: 241.
Alexander, 1936a: 228; 1938a: 1; 1938e: 339;
Wu, 1940: 21; Savchenko, 1964: 189; Alexander,
1973: 12 (Ctenophora); Savchenko, 1973: 206,
- *fumiplena* (var.) Osten-Sacken (nec. Walker,
1856), 1886: 171.
- *sacceni* Edwards, 1916: 257.
- *horikawae* Matsumura, 1916: 449 (Dictenidia);
Alexander, 1920a: 261 (Dictenidia).
- *compta* Enderlein, 1921: 220.
- var. *nigrithorax* Enderlein, 1921: 221.
11. *binghami* Edwards, 1921 or 16.
Ann. Mag. nat. Hist., (9) 7: 375.
Alexander, 1973: 12 (Ctenophora).
12. *brunnipennis* Edwards, 1926 or 17,
Notul. ent., 6: 42.
Alexander, 1973: 12 (Ctenophora).
13. *cavalerie* Alexander, 1922 or 16.
Bull. Mus. natn. Hist. nat. Paris., 28: 298.
14. *chaseni* Edwards, 1932 or 17.
Bull. Raffles Mus., 7: 66.
Alexander, 1938b: 96; 1973: 12 (Ctenophora).

Distribution:

15. *chrysofila* (Walker, 1857) or 16, 17,
J. Proc. Linn. Soc., 1: 6 (Ctenophora).
Brunetti, 1911: 238; Edwards, 1932: 66;
Alexander, 1973: 12 (Ctenophora).
- *stigmosa* Edwards, 1921: 376.
16. *compedita* (Wiedemann, 1821) or 17.
Diptera exotica, 1: 21 (Ctenophora).
Brunetti, 1911: 238; Alexander, 1923a: 100;
1973: 12 (Ctenophora).
17. *ctenophorina* Riedel, 1913 or 16.
Ent. Mitt., 2: 274.
Edwards, 1916: 255; Brunetti, 1918: 258;
Alexander, 1920a: 262; 1923a: 100; 1936a: 227;
1938b: 97; 1973: 12 (Ctenophora).
18. *curvipes* v.d. Wulp, 1884 or 17.
Notes Leyd. Mus., 6: 254.
Brunetti, 1911: 238; Alexander, 1973: 12
(Ctenophora).
19. *dendrobia* Edwards, 1932 or 17.
Bull. Raffles Mus., 7: 67.
Alexander, 1973: 12 (Ctenophora).
20. *divisa* Brunetti, 1911 or 16, 17.
Rec. Indian Mus., 6: 242.
Edwards, 1916: 254; Brunetti, 1918: 258;
Enderlein, 1921: 224; Alexander, 1963: 22 (Ctenophora);
1973: 12 (Ctenophora).

Distribution:

21. dolens (Osten-Sacken, 1882) or 17.
Berl. ent. Z., 26: 94 (Ctenophora).
Brunetti, 1911: 240; Alexander, 1973: 12
(Ctenophora).
22. fasciipennis Enderlein, 1921 or 17.
Zool. Anz., 52: 222.
Alexander, 1973: 13 (Ctenophora).
23. flammipes Edwards, 1926 or 17.
Notul. ent., 6: 42.
Alexander, 1973: 13 (Ctenophora).
24. flavibasis Edwards, 1926 pal 13.
Ann. Mag. nat. Hist., (8) 18: 256,
Alexander, 1973: 13 (Ctenophora).
25. flavifemur Enderlein, 1921 or 17.
Zool. Anz., 52: 221.
Alexander, 1973: 12 (Ctenophora).
26. flavofasciata flavofasciata Brunetti, 1918 or 16.
Rec. Indian Mus., 15: 259.
Edwards, 1924: 304; Alexander, 1963: 22
(Ctenophora); 1973: 13 (Ctenophora);
Joseph, 1973: 68 (Ctenophora).

Distribution:

27. *flavofasciata gracilicornis* Edwards, 1921 or 16.
Ann. Mag. nat. Hist., (9) 7: 377 (as sp.).
Alexander, 1970: 308 (Ctenophora); 1973: 13
(Ctenophora).
28. *flavostigma* Alexander, 1923 or 16.
Bull. Mus. natn, Hist, nat. Paris., 29: 99.
Alexander, 1973: 13 (Ctenophora).
29. *formosana* Enderlein, 1921 or 16.
Zool. Anz., 52: 222.
- *enderleini* Alexander and Alexander, 1973:
12 (Ctenophora).
30. *fumiplena* (Walker, 1856) pal 13.
Insecta Saundersiana, 1: 449 (Ctenophora),
Osten-Sacken, 1886: 168; Bigot, 1891: 255;
v.d. Wulp, 1896: 36; Brunetti, 1911: 240;
Edwards, 1916: 256; Alexander, 1923b: 72;
1936a: 228; Wu, 1940: 22; Saychenko, 1973: 207.
31. *fuscipennis* (Macquart, 1846) or 17.
Mem. Soc. Sci. Agric, Lille, (1845) 1844: 10
(1846: 138).
Alexander, 1938b: 98; 1973: 13 (Ctenophora).
- *javanica* Doleschal, 1856: 406 (Ctenophora);
v.d. Wulp, 1884: 406 (Ctenophora),

Distribution:

32. *fuscolimbata* Alexander, 1938 or 16,
Lingnan Sci. J., 17: 341.
Alexander, 1973: 13 (Ctenophora).
33. *galatea* Alexander, 1921 pal 13.
Insecutor Inscit. menstr., 9: 182.
Alexander, 1938e: 341; Savchenko, 1973: 209,
34. *gaudens* (Walker, 1860) or 17,
J. Proc. Linn. Soc., 4: 93 (Ctenophora),
Brunetti, 1918: 258; Alexander, 1925d; 375;
1973: 13 (Ctenophora).
35. *gloria* Alexander, 1923 or 16,
Bull. Mus. natn. Hist. nat. Paris, 29: 97,
Alexander, 1973: 13 (Ctenophora).
36. *harmandi* Alexander, 1923 or 16.
Bull. Mus. natn. Hist. nat. Paris, 29: 98,
Alexander, 1973: 13 (Ctenophora).
37. *henryi* Edwards, 1927 or 15.
Spolia zeylan, 14: 124.
Alexander, 1973: 13 (Ctenophora),
38. *hoffmanni* Alexander, 1932 or 16.
Lingnan Sci. J., 11: 506.
Alexander, 1973: 13 (Ctenophora).

Distribution:

39. *hoppo* Matsumura, 1916 or 16.
Thous. ins. Japan, 2: 447.
Alexander, 1938e: 342; 1973: 13 (Ctenophora),
- *semirufa* Edwards, 1916: 255; Brunetti, 1918:
258.
40. *idalia* (Osten-Sacken, 1882) or 17.
Berl. ent. Z., 26: 94 (Ctenophora).
Brunetti, 1911: 241; Alexander, 1925b: 78;
1973: 13 (Ctenophora).
41. *igorota* Alexander, 1923 or 17.
Philipp. J. Sci., 22: 480.
Alexander, 1973: 13 (Ctenophora).
42. *immaculipennis* Brunetti, 1911 or 16.
Rec. Indian Mus., 6: 243.
Alexander, 1963: 22 (Ctenophora); 1973: 14
(Ctenophora); Joseph, 1973: 68 (Ctenophora).
43. *incunctans* (Walker, 1860) or 17.
J. Proc. Linn. Soc., 4: 93 (Ctenophora).
Brunetti, 1911: 239; Enderlein, 1921: 224
(as var. *ochrifemur*); Alexander, 1922b: 381;
1973: 14 (Ctenophora).
- *velutina* v.d. Wulp, 1884: 256 (Ctenophora).

Distribution:

44. *insignes* de Meijere, 1904 or 17.
Bijdr. Dierk., 18: 87.
Brunetti, 1911: 241; Alexander, 1973: 14
(Ctenophora).
45. *invenustipes* Alexander, 1932 or 17.
Philipp. J. Sci., 48: 597.
Alexander, 1973: 14 (Ctenophora).
46. *isshikii* (Matsumura, 1916) pal 13.
Thous. ins. Japan, 2: 453 (Ctenophora).
Alexander, 1921b: 182; Matsumura, 1931:
392; Esaki, 1932: 175; Masaki, 1933: 94;
Esaki, 1950: 1530; Alexander, 1953b: 30
(Ctenophora); Savchenko, 1973: 209.
47. *jubilata* Alexander, 1938 or 16.
Lingnan Sci. J., 17: 342.
Alexander, 1973: 14 (Ctenophora).
48. *kangeanensis* Alexander, 1938 or 17.
Philipp. J. Sci., 66: 94.
Alexander, 1973: 14 (Ctenophora).
49. *kershawi* Alexander, 1923 or 16.
Proc. Hawaii. ent. Soc., 5: 257.
Alexander, 1932b: 505; 1973: 14 (Ctenophora).

Distribution;

50. *koreana* Masaki, 1939 pal 13.
Mushi, 12: 90.
Savchenko, 1973: 209.
51. *ladelli* Edwards, 1932 or 16.
Bull. Raffles Mus., 7: 65.
Alexander, 1973: 14 (Ctenophora).
52. *laeta* (Fabricius, 1794) or 14, 15.
Ent. syst., 4: 239 (Tipula).
Brunetti, 1911: 240 (as var. *trilineata*);
1918:257; Enderlein, 1921: 221 (as var.
strigidorsum); Alexander, 1963: 22 (Ctenophora,
as var. *trilineata*); 1973: 14 (Ctenophora).
53. *lancipes* Edwards, 1921 or 16,
Ann. Mag. nat. Hist., (9) 8: 105.
Alexander, 1973: 14 (Ctenophora).
54. *latifascipennis* Brunetti, 1918 or 15,
Rec. Indian Mus., 15: 260.
Alexander, 1963: 22 (Ctenophora); 1973; 14
(Ctenophora).
55. *lauta* Alexander, 1936 pal 13.
Philipp. J. Sci., 59: 227.
Savchenko, 1973: 206.

Distribution:

56. *longicornis* de Meijere, 1924 or 17.
Tijdschr. Ent., 67: 5.
Alexander, 1973: 14 (Ctenophora).
57. *luctuosa* de Meijere, 1916 or 17.
Tijdschr. Ent., 59: 199.
Brunetti, 1918: 258; Alexander, 1938b: 95;
1938c: 224; 1973: 14 (Ctenophora).
58. *margarita* (Alexander, 1965) neo 5,
J. Kans. ent. Soc., 38: 401 (Ctenophora),
Alexander, 1973: 14 (Ctenophora).
59. *mcgregori* Alexander, 1925 or 17,
Philipp. J. Sci., 27: 78.
Alexander, 1973: 14 (Ctenophora).
60. *mecocera* (Alexander, 1970) or 16.
Trans. Am. ent. Soc., 96: 307 (Ctenophora).
Alexander, 1973: 15 (Ctenophora).
61. *mesamericana* Alexander, 1944 neo 5,
Bon. Ent. venez., 3: 41.
Alexander, 1965b: 401 (Ctenophora);
1970: 7 (Ctenophora).

Distribution:

62. *nigribasis* Edwards, 1921 or 16.
Ann. Mag. nat. Hist., (9) 7: 374.
Alexander, 1973: 15 (Ctenophora).
63. *nigrithorax* v.d. Wulp, 1904 or 17.
in de Meijere, Bijdr. Dierk., 18: 87.
Brunetti, 1911: 238; Alexander, 1973: 15
(Ctenophora).
64. *nigrorum* Alexander, 1929 or 17.
Philipp. J. Sci., 40: 248.
Alexander, 1973: 15 (Ctenophora).
65. *ophionea* Edwards, 1921 or 17.
Ann. Mag. nat. Hist., (9) 7: 375.
Alexander, 1973: 15 (Ctenophora).
66. *pachyrhinoides* Edwards, 1932 or 17.
Bull. Raffles Mus., 7: 66.
Alexander, 1973: 15 (Ctenophora).
67. *pendleburyi* Edwards, 1928 or 17.
J. fed. Malay St. Mus., 14: 128.
Alexander, 1973: 15 (Ctenophora).
68. *penicillata* Edwards, 1928 or 17.
J. fed. Malay St. Mus., 14: 128.
Alexander, 1973: 15 (Ctenophora).

Distribution:

69. *perdecora* Alexander, 1922 or 17.
Philipp. J. Sci., 21: 380.
Alexander, 1932a: 598; 1973: 15 (Ctenophora).
70. *plagiata* Edwards, 1926 or 17.
Notul. ent., 6: 42.
Alexander, 1973: 15 (Ctenophora).
71. *praefica praefica* Bezzi, 1916 or 17.
Publications of the Bureau of Science.
Government Laboratories Manila. Publ. 10: 10.
Brunetti, 1918: 258; Alexander, 1922b: 381;
1925d: 374; 1973: 15 (Ctenophora).
72. *praefica fenestrella* Alexander, 1925 or 17.
Philipp. J. Sci., 28: 374.
Alexander, 1938e: 341; 1973: 15 (Ctenophora).
73. *pumila* Alexander, 1922 or 17.
Philipp. J. Sci., 21: 382.
Alexander, 1973: 15 (Ctenophora).
74. *reserva* Edwards, 1921 or 16.
Ann. Mag. nat Hist., (9) 7: 374.
Alexander, 1973: 15 (Ctenophora).

Distribution:

75. *rubella* Edwards, 1923 or 17.
Treubia, 3: 180.
Alexander, 1973: 15 (Ctenophora).
76. *rubra* Osten-Sacken, 1886 or 16, 17.
Berl. ent. Z., 30: 171.
Brunetti, 1911: 238; Alexander, 1973: 15
(Ctenophora).
77. *scalator* Alexander, 1920 or 16.
Ann. ent. Soc. Am., 13: 262.
Alexander, 1973: 16 (Ctenophora).
78. *scurra* Alexander, 1940 or 17.
Philipp. J. Sci., 73: 376.
Alexander, 1973: 16 (Ctenophora).
79. *septentrionalis* Alexander, 1921 pal 13.
Insecutor Inscit. menstr., 9: 182.
Alexander, 1925c: 4; 1938e: 338; Savchenko,
1973: 210.
80. *sikkimensis* Enderlein, 1921 or 16.
Zool. Anz., 52: 223.
Alexander, 1973: 16 (Ctenophora).

Distribution:

81. *speciosa* Edwards, 1916 or 16.
Ann. Mag. nat. Hist., (8) 18: 254.
Brunetti, 1918: 258; Alexander, 1923a: 98;
1936a: 227; 1938b: 97; 1973: 16 (Ctenophora).
82. *stabilis* Alexander, 1936 or 16.
Philipp. J. Sci., 59: 226.
Alexander, 1938b: 97; 1973: 16 (Ctenophora).
83. *sternobola* Alexander, 1938 or 16.
Lingnan Sci. J., 17: 339.
Alexander, 1973: 16 (Ctenophora).
84. *stigmatica stigmatica* v.d. Wulp, 1904 or 17.
in de Meijere, Bijdr. Dierk., 18: 88.
Brunetti, 1911: 238; Alexander, 1938b: 95;
1973: 16 (Ctenophora).
85. *stigmatica flavoscutellaris* Alexander, 1938 or 17.
Philipp. J. Sci., 66: 95.
Alexander, 1973: 16 (Ctenophora).
86. *strigipennis* de Meijere, 1913 or 17.
Tijdschr. Ent., 56: 5.
Brunetti, 1918: 258; Alexander, 1973: 16
(Ctenophora).

Distribution:

87. *suspirans suspirans* (Osten-Sacken, 1882) or 17.
Berl. ent. Z., 26: 93 (Ctenophora).
Brunetti, 1911: 241; 1918: 258; Alexander,
1973: 16 (Ctenophora).
88. *suspirans hilaris* Bezzi, 1916 or 17.
Publications of the Bureau of Science.
Government Laboratories Manila. Publ. 10: 9
(as var.).
Alexander, 1973: 16 (Ctenophora).
89. *taprobanes* (Walker, 1848) or 17.
List of specimens of dipterous insects in the
collection of the British Museum. Vol. 1: 77
(Ctenophora).
Brunetti, 1911: 240; Alexander, 1920a: 262;
1973: 16 (Ctenophora).
90. *terminales* Brunetti, 1911 or 15.
Rec. Indian Mus., 6: 244.
Alexander, 1973: 16 (Ctenophora).
91. *tigriventris* Alexander, 1925 or 17.
Philipp. J. Sci., 28: 375.
Alexander, 1929a: 249; 1973: 16 (Ctenophora).
92. *tinctipennis tinctipennis* Edwards, 1932 or 16.
Bull. Raffles Mus., 7: 65.
Alexander, 1934a: 434; 1973: 16 (Ctenophora).

Distributions:

93. *tinctipennis orbitalis* Alexander, 1934 or 17.
Philipp. J. Sci., 54: 434.
Alexander, 1973: 16 (Ctenophora).
94. *tripudians* Bezzi, 1916 or 17.
Publications of the Bureau of Science.
Government Laboratories Manila. Publ. 10: 10.
Brunetti, 1918: 258; Alexander, 1922b: 381;
1973: 16 (Ctenophora).
95. *upsilon* Alexander, 1938 or 17.
Philipp. J. Sci., 66: 97.
Alexander, 1973: 16 (Ctenophora).
96. *venezuelensis* Alexander, 1944 neo 7.
Boln. Ent. venez., 3: 38.
Alexander, 1944b: 144; 1965b: 401 (Ctenophora).
97. *vulcan* Alexander, 1923 pal 13.
Ann. ent. Soc. Am., 16: 71.
Savchenko, 1973: 207.
98. *xanthopimpla* Enderlein, 1921 pal 13.
Zool. Anz., 52: 224.
Alexander, 1940a: 122; 1940b: 5; Wu, 1940: 23;
Alexander, 1973: 17 (Ctenophora); Savchenko,
1973: 208.
- *quadrivittata* Edwards, 1921: 347; Wu, 1940: 22.

Genus Phoroctenia Coquillet, 1910

Phoroctenia Coquillet, 1910, Proc. U.S. natn. Mus., 37: 589

Genotype: Ctenophora angustipennis Loew (= vittata angustipennis Loew).

Malpighia Enderlein, 1912, Zool. Jb., 32: 18

Genotype: Ctenophora vittata Meigen (= Phoroctenia vittata vittata (Meigen)).

Distribution:

1. vittata vittata (Meigen, 1830) pal 9, 10, 13.
Syst. Besch., 6: 285 (Ctenophora).
Osten-Sacken, 1886: 167 (Xiphura); Enderlein,
1912: 18 (Malpighia); Lackschewitz, 1935: 4
(Malpighia); Wu, 1940: 21 (Malpighia); Mannheims,
1951: 27 (Malpighia); 1954b: 30 (Malpighia);
Takahashi, 1960b: 101 (Ctenophora); Alexander,
1965a: 20 (Ctenophora); Savchenko, Violovich &
Narchuk, 1972: 82; Savchenko, 1973: 213.
- nigricoxa Lundström, 1907: 7 (Ctenophora).
-? immaculata Becker & Schnabl, 1926: 33 (Ctenophora).

2. vittata angustipennis (Loew, 1872) nea 3, 4.
Berl. ent. Z., 16: 51 (Ctenophora, as sp.).
Alexander, 1949: 276; 1965a: 20 (Ctenophora);
1967: 17 (Ctenophora); Savchenko, 1973: 215.
- similis Williston, 1893: 63 (Ctenophora).

Genus Dictenidia Brullé, 1833

Dictenidia Brullé, 1833, Anns Soc. ent. Fr., 2: 401

Genotype: Ctenophora bimaculata Linnaeus (= bimaculata bimaculata Linnaeus).

Ceroctena Rondani, 1856, Dipterologiae Italicae prodromus. Vol. 1: 186

Genotype: Ctenophora bimaculata Linnaeus (= Dictenidia bimaculata bimaculata Linnaeus).

Dicera Lioy, 1863, Atti Ist. veneto Sci., (3) 9: 216

Genotype: Ctenophora bimaculata Linnaeus (= Dictenidia bimaculata bimaculata Linnaeus).

Distribution:

1. bimaculata bimaculata (Linnaeus, 1761) pal 9-13.
Fauna svec., 2: 433 (Tipula).
Linnaeus, 1767: 972 (Tipula); Fabricius, 1775: 751
(Tipula); de Geer, 1776: 402 (Tipula); Fabricius,
1781: 404 (Tipula); Gmelin, 1792: 2816 (Tipula);
Fabricius, 1794: 240 (Tipula); Schrank, 1803: 67 (Tipula);
Meigen, 1804: 86 (Ctenophora); Fabricius, 1805: 18
(Ctenophora); Meigen 1818: 156 (Ctenophora); Ruthe,
1831: 1208 (Ctenophora); Macquart, 1834: 80
(Ctenophora); Zetterstedt, 1838: 848 (Ctenophora);
Staeger, 1840: 2 (Ctenophora); Zetterstedt, 1851:
4022 (Ctenophora); Walker, 1856a: 335 (Ctenophora);
Schiner, 1864: 449 (Ctenophora); Loew, 1871: 24;
v.d. Wulp, 1877: 348 (Ctenophora); Wallengren,

Distribution

- 1882: 15 (Ctenophora); Verrall, 1888: 27;
Hueguenin, 1888: 13; Czižek, 1911: 39; Alexander,
1920a: 261; Pierre, 1924a: 19; Nielsen, 1925: 107;
Alexander, 1925c: 14; 1927a: 6; Audcent, 1932: 6;
Coe, 1950: 7; Mannheims, 1951: 25; 1954a: 155;
1954b: 30; Theowald, 1957: 9; Mannheims & Theowald,
1959: 23. Mannheims & Pechlaner, 1963: 5; Mannheims
& Savchenko, 1967: 148; Savchenko & Violovich,
1972: 82; Savchenko, 1973: 199.
- idriensis Scopoli, 1763: 316 (Tipula).
 - pectinata Gmelin, 1792: 2819 (Tipula).
 - paludosa Fabricius, 1794: 239 (Tipula); Meigen, 1804:
86 (Ctenophora); Fabricius, 1805: 19 (Ctenophora); Meigen,
1818: 157 (Ctenophora); 1830: 284 (Ctenophora).
2. *bimaculata fulvida* (Bigot, 1860) pal 9, 11.
Annls Soc. ent. Fr., 8: 769 (Xiphura, as sp.).
Osten-Sacken, 1886: 167 (Xiphura, as sp.);
Savchenko, 1973: 202.
3. *formosana* Alexander, 1920 or 16.
Ann. ent. Soc. Am., 13: 261.
Alexander, 1934b: 23; 1973: 11 (Ctenophora).
4. *glabrata* Alexander, 1938 pal 13.
Philipp. J. Sci., 66: 312.
Wu, 1940: 20; Alexander, 1953b: 43; 1970: 312
(Ctenophora); Savchenko, 1973: 197.

Distribution:

5. *inaequipectinata* Alexander, 1934
Philipp. J. Sci., 55: 21.
Alexander, 1936a: 230; 1953b: 43; 1970: 312
(Ctenophora); 1973: 11 (Ctenophora).
or 16.
6. *luteicostalis luteicostalis* Alexander, 1936
Philipp. J. Sci., 59: 228.
Alexander, 1936b: 169; Savchenko, 1973: 198.
pal 13.
7. *luteicostalis longisector* Alexander, 1940
Philipp. J. Sci., 73: 381.
Alexander, 1940b: 5; 1973: 11 (Ctenophora).
pal 13, or 16.
8. *manipurana* (Alexander, 1970)
Trans. Am. ent. Soc., 96: 308 (Ctenophora).
Alexander, 1973: 11 (Ctenophora).
or 16.
9. *miyatakei* Alexander, 1953
Philipp. J. Sci., 82: 42.
Alexander, 1953a: 72; 1954a: 23; 1970: 312
(Ctenophora); Savchenko, 1973: 194.
pal 13.
10. *pictipennis pictipennis* (Portschinsky, 1887)
Horae Soc. ent. ross., 21: 3 (Ctenophora).
Alexander, 1925c: 1 (Ctenophora); Alexander,
1936b: 170; Wu, 1940: 21; Alexander, 1953b: 43;
Mannheims & Savchenko, 1967: 148; Savchenko &
Violovich, 1972: 82; Savchenko, 1973: 195.
- *fasciata semifasciata* Alexander, 1925a: 392.
pal 10, 12, 13.

Distribution:

11. *pictipennis fasciata* Coquillet, 1898 pal 10, 13.
Proc. U.S. natn. Mus., 21: 304 (as sp.).
Alexander, 1918: 449 (as sp.); 1920a: 261
(as sp.); 1925a: 392 (as sp.); 1925c: 4
(as sp.); Matsumura, 1931: 303; Alexander,
1936b: 170; Esaki, 1950: 1530 (as sp.);
Alexander, 1953a: 41; 1954a: 23; Savchenko,
1973: 196.
12. *pictipennis fumicosta* Savchenko, 1973 pal 13.
Fauna SSSR. 2 (5): 197.
13. *rhadinoclada* (Alexander, 1978) or 16.
Trans. Am. ent. Soc., 96: 308 (Ctenophora).
Alexander, 1973: 11 (Ctenophora).
14. *sauteri* Enderlein, 1921 or 16.
Zool. Anz., 52: 225.
Alexander, 1934b: 23; 1973: 11 (Ctenophora).
15. *stalactitica* Alexander, 1940 pal 13, or 16
Philipp. J. Sci., 73: 379.
Alexander, 1940b: 5; 1970: 312 (Ctenophora);
1973: 11 (Ctenophora).

Distribution:

Tribus Tanypterini

Tanypterini Savchenko, 1966, Fauna Ukraini, 14 (1): 86

Genus Tanyptera Latreille, 1804

Tanyptera Latreille, 1804, Nouveau dictionnaire d'Histoire naturelle.
Vol. 24: 188

Genotype: Tipula atrata Linnaeus, by monotype (= atrata atrata Linnaeus).

Xiphura Brullé, 1832, Annsl Soc. ent. Fr., (1) 1: 206

Genotype: Ctenophora atrata Linnaeus, by monotype (= Tanyptera atrata atrata Linnaeus).

Mesodictenidia Matsumura, 1931, 6000 Illustrated Insects of the Japanese-Empire.: 395

Genotype: macraeformis, Matsumura, by monotype (= Tanyptera gracilis Portschinsky).

Distribution:

1. angustistyla Alexander, 1924

Ann. ent. Soc. Am., 17: 441.

Alexander, 1925c: 4; 1936a: 226; 1953b: 142;

1954a: 25; 1955: 365 (Ctenophora); Takahashi,

1960a: 15; Savchenko, 1973: 262.

pal 10, 13.

Distribution:

2. *antica antica* Alexander, 1938 pal 13.
Philipp. J. Sci., 66: 311.
Alexander, 1940a: 122; 1940b: 5; Wu, 1940: 23;
Alexander, 1941b: 28; Savchenko, 1973: 258.
3. *antica anticoides* Alexander, 1940 or 16.
Philipp. J. Sci., 73: 379.
Alexander, 1940a: 122; 1973: 17 (Ctenophora).
4. *atrata atrata* (Linnaeus, 1758) pal 9-12.
Syst. nat., 10: 586 (Tipula).
Linnaeus, 1761: 433 (Tipula); 1767: 972 (Tipula);
Fabricius, 1775: 750 (Tipula); 1781: 403 (Tipula);
1787: 323 (Tipula); Gmelin, 1792: 2815 (Tipula);
Fabricius, 1794: 238 (Tipula); Meigen, 1804: 85
(Ctenophora); Fabricius 1805: 19 (Ctenophora); Meigen,
1818: 158 (Ctenophora); Macquart, 1826: 137
(Ctenophora); Zetterstedt, 1838: 848 (Ctenophora);
Perris, 1840: 92 (Ctenophora); Zetterstedt, 1851:
4017 (Ctenophora); 1855: 4902 (Ctenophora); Walker,
1856a: 336 (Ctenophora); Schiner, 1864: 499
(Ctenophora); Loew, 1871: 24 (Ctenophora); v.d. Wulp,
1877: 349 (Ctenophora); 1881: 147 (Ctenophora);
Wallengren, 1882: 16 (Ctenophora); Verrall, 1888:
27 (Xiphura); Huguenin, 1888: 14 (Xiphura); Cziřek,
1911: 41 (Xiphura); Pierre, 1924a: 20; Nielsen, 1925:
109; Alexander, 1929b: 232; Masaki, 1933: 93;
Alexander, 1941b: 28; Coe, 1950: 8; Mannheims, 1951: 19;

Distribution:

1953: 344; 1954a: 155; 1954b: 30; Theowald,
1957: 9; Mannheims & Pechlaner, 1963: 6;
Savchenko, Violovich & Narchuk, 1972: 82;
Savchenko, 1973: 265.
- *ichneumonea* de Geer, 1776: 350 (Tipula);
Latreille, 1805: 286.
- *flavicornis* Meigen, 1818: 166 (Ctenophora).
- *ruficornis* Meigen, 1830: 284 (Ctenophora);
Macquart, 1834: 79 (Ctenophora); Staeger,
1840: 3 (Ctenophora); Schiner, 1864: 500
(Ctenophora); v.d. Wulp, 1877: 349 (Ctenophora);
Loew, 1871: 24 (Ctenophora); Wallengren, 1882:
16 (Ctenophora); Huguenin, 1888: 14 (Xiphura);
Czižek, 1911: 43 (Xiphura).
- *villaretiana* Brullé, 1832: 208 (Xiphura).
- *nigrofasciata* Brullé, 1832: 208 (Xiphura);
Macquart, 49.
- *amoena* Loew, 1871: 32 (Ctenophora); 1873:3
(Ctenophora).

5. *atrata portschinskyi* (Enderlein, 1912) pal 10, 13.
Zool. Jb., 32: 21 (Malpighia, as sp.).
- *vittata* Meigen, sensu Portschinsky, 1872: 289
(Ctenophora, sec. type (Savchenko, 1973)).
- *amoena* Loew, var. a & var. b sensu Portschinsky,
1872: 290 (Ctenophora, sec. type (Savchenko, 1973)).
- *variabilis* var. a & var. b Enderlein, 1912: 24
(Xiphura).

Distribution

- ? minuta Portschinsky, 1872: 288 (Xiphura).
- jozana Matsumura, 1916: 450 (Xiphura);
Alexander, 1924a: 596; 1925a: 392; 1925b: 2;
Matsumura, 1931: 398 (Xiphura); Esaki, 1932:
175; Alexander, 1936b: 174; Esaki, 1950: 1530;
Alexander, 1953b: 143; Takahashi, 1960a: 10.
-atrata jozana Savchenko & Violovich, 1967: 359;
Savchenko, 1973: 268.
6. atrata przewalskii Savchenko, 1973 pal 10.
Fauna SSSR, Noviiia Seriiia no. 105, Diptera,
Vol. 2 (5): 272.
7. atrata unilineata Alexander, 1936 pal 10, 13.
Philipp. J. Sci., 59: 174 (as jozana unilineata).
Wu, 1940: 23 (as jozana unilineata); Savchenko,
1973: 271.
8. brevipecten (Alexander, 1955) pal 13.
Ann. ent. Soc. Am., 48: 364 (Ctenophora).
Alexander, 1954a: 25 (Ctenophora).
9. chrysophaea Alexander, 1941 or 16.
Philipp. J. Sci., 76: 27.
Alexander, 1973: 17 (Ctenophora).
10. cognata Alexander, 1936 pal 13.
Philipp. J. Sci., 59: 225.
Wu, 1940: 23; Savchenko, 1973: 260.

Distribution

11. *dorsalis* (Walker, 1848) nea 1, 2.
List of specimens of dipterous insects in the collection of the British Museum. Vol. 1: 76 (Ctenophora).
Alexander, 1929b: 232; 1942: 219; 1962: 8 (Ctenophora); Byers, 1963: 147; Alexander, 1965a: 20.
- *succedens* Walker, 1856b: 448 (Ctenophora); Alexander, 1942: 218; 1965a: 20 (Ctenophora).
- *frontalis* Osten-Sacken, 1864: 48 (Ctenophora); Alexander, 1919: 816; 1920b: 394; 1921a: 989; 1922a: 61; 1929b: 232; 1930: 271; 1941a: 287; 1942: 217; 1962: 8 (Ctenophora); 1965a: 20 (Ctenophora).
- *fumipennis* Osten-Sacken, 1864: 47 (Ctenophora); Alexander 1919: 817; 1920b: 394; 1921a: 988; 1929b: 232; 1930: 271; 1941a: 287; 1942: 217; 1962: 8 (Ctenophora); 1965a: 20 (Ctenophora).
- *topazina* Osten-Sacken, 1864: 47 (Ctenophora); Alexander, 1919: 817; 1928: 57; 1929b: 232; 1941a: 287; 1942: 217; 1962: 8 (Ctenophora, as var.); 1965a: 20 (Ctenophora, as var.).
12. *gracilis* (Portschinsky, 1872) pal 10, 13.
Horae Soc. ent. ross., 9: 289 (Ctenophora).
Osten-Sacken, 1886: 167 (Xiphura); Alexander, 1924a: 596; 1925c: 1; Savchenko, Violovich & Narchuk, 1972: 82; Savchenko, 1973: 257.

Distribution:

- macra Loew, 1873: 2 (Ctenophora); Matusumura, 1916: 121 (Xiphura).
 - macraeformis Matsumura, 1931: 395 (Mesodictenidia); Takahashi, 1960a: 13.
13. *indica* (Brunetti, 1918) or 16.
Rec. Indian Mus., 15: 257 (Xiphura).
Alexander, 1936a: 226; 1963: 22 (Ctenophora);
1973: 17 (Ctenophora).
14. *nigricornis nigricornis* (Meigen, 1818) pal 9-11.
Syst. Besch., 1: 159 (Ctenophora).
Macquart, 1826: 138 (Ctenophora); 1834: 80
(Ctenophora); Zetterstedt, 1838: 848 (Ctenophora);
1851: 4020 (Ctenophora); Walker, 1856a: 336
(Ctenophora); Wallengren, 1882: 16 (Ctenophora);
Osten-Sacken, 1886: 167 (Xiphura); Verrall,
1888: 27 (Xiphura); Bergroth, 1899: 118
(Ctenophora); Pierre, 1924a: 20; Audcent,
1932: 6; Coe, 1950: 7; Mannheims, 1951: 27;
1954a: 155; 1954b: 30; Theowald, 1957: 9;
Mannheims & Pechlaner, 1963: 6; Savchenko,
1973: 273.
15. *nigricornis fumibasis* Alexander, 1925 pal 13.
Ann. Mag. nat. Hist., (9) 15: 275 (as *jozana*
fumibasis).

Distribution:

- Alexander, 1953b: 44 (as *jozana fumibasis*);
Takahashi, 1960a: 11 (as sp.); Savchenko,
1973: 275.
16. *nigricornis* kotan Takahashi, 1960 pal 10. 13.
Mushi, 33 (3): 12 (as sp.)
Savchenko, Violovich & Narchuk, 1972: 82;
Savchenko, 1973: 274.
17. *parva* (Portschinsky, 1887) pal 13.
Horae Soc. ent. ross., 21: 4 (Ctenophora).
Alexander, 1925c: 1; Savchenko, 1964: 190;
1973: 264.
- *flavoposticata* Alexander, 1954a: 24
(Ctenophora); 1954b: 266 (Ctenophora);
Takahashi, 1960a: 14.
18. *perangusta* Alexander, 1953 pal 13.
Philipp. J. Sci., 82: 141.
Alexander, 1954a: 25 (Ctenophora);
1955: 365 (Ctenophora); Takahashi, 1960: 16;
Savchenko, 1973: 264.
19. *stackelbergiana* Savchenko, 1973 pal 10.
Fauna SSSR, Noviiia Seriiia no. 105, Diptera,
Vol. 2 (5): 260.

Distribution:

20. subcognata Alexander, 1940
Philipp. J. Sci., 73: 377.
Savchenko, 1973: 260.

pal 13.

21. tsurugiana Takahashi, 1960
Mushi, 33 (3): 15.
Savchenko, 1973: 263.

pal 13.

INDEX OF SPECIES, SUBSPECIES AND SYNONYMS

amabilis Takahashi (Cten)
amoena Loew = atrata atrata (Tan)
amoena Loew, var. a & var. b sensu Portschinsky = atrata Portschinskyi (Tan)
angustipennis Loew = vittata angustipennis (Phor)
angustistyla Alexander (Tan)
annulipes Enderlein (Psel)
annulosa van der Wulp (Psel)
antica antica Alexander (Tan)
antica anticoides Alexander (Tan)
anticoides Alexander = antica anticoides (Tan)
apicata Osten-Sacken (Cten)
approximata Brunetti (Psel)
ardens Wiedemann (Psel)
atrata atrata Linnaeus (Tan)
atrata jozana Matsumura = atrata portschinskyi (Tan)
atrata portschinskyi Enderlein (Tan)
atrata przewalskii Savchenko (Tan)
atrata unilineata Alexander (Tan)
aurantia Brunetti (Psel)
bakeri Alexander (Psel)
biaurantia Alexander (Psel)
bicinctifer Alexander (Psel)
bicolor Edwards (Psel)
bifascipennis Brunetti (Psel)
biguttata Matsumura = nikkoensis (Cten), tricolor (Cten)
bimaculata bimaculata Linnaeus (Dict)
bimaculata fulvida Bigot (Dict)

binghami Edwards (Psel)
brevipecten Alexander (Tan)
brunnipennis Edwards (Psel)
cavalerie Alexander (Psel)
chaseni Edwards (Psel)
chrysophaea Alexander (Tan)
chrysophyla Walker (Psel)
claripennis Mannheims = moyamotoi claripennis (Cten)
cognata Alexander (Tan)
compedita Wiedemann (Psel)
compta Enderlein = bifascipennis (Psel)
crocata Schrank = flavelolata (Cten)
ctenophorina Riedel (Psel)
curvipes van der Wulp (Psel)
dendrobia Edwards (Psel)
divisa Brunetti (Psel)
dolens Osten-Sacken (Psel)
dorsalis Walker (Tan)
elegans Meigen (Cten)
enderleini Alexander & Alexander = formosana (Psel)
fasciata Coquillet = pictipennis fasciata (Dict)
fasciata semifasciata Alexander = pictipennis pictipennis (Dict)
fasciipennis Enderlein (Psel)
fastuosa Loew (Cten)
femurrubra Alexander = tricolor (Cten)
fenestrella Alexander = praefica fenestrella (Psel)
festiva Meigen (Cten)
flammipes Edwards (Psel)
flaveolata Fabricius (Cten)

flavibasis Edwards (Psel)
flavicornis Meigen = atrata atrata (Tan)
flavifemur Enderlein (Psel)
flavofasciata flavofasciata Brunetti (Psel)
flavofasciata gracilicornis Edwards (Psel)
flavoposticata Alexander = parva (Tan)
flavoscutellaris Alexander = stigmatica flavoscutellaris (Psel)
flavostigma Alexander (Psel)
formosana Alexander (Dict)
formosana Enderlein (Psel)
frontalis Osten-Sacken (Tan)
fulvida Bigot = bimaculata fulvida (Dict), pectinicornis Linnaeus (Cten)
fumibasis Alexander = nigricornis fumibasis (Tan)
fumicosta Savchenko = pictipennis fumicosta (Dict)
fumipennis Osten-Sacken = dorsalis (Tan)
fumiplena Walker (Psel)
fuscipennis Macquart (Psel)
fuscolimbata Alexander (Psel)
galatea Alexander (Psel)
gaudens Walker (Psel)
glabrata Alexander (Dict)
gloria Alexander (Psel)
gracilicornis Edwards = flavofasciata gracilicornis (Psel)
gracilis Portschinsky (Tan)
guttata Meigen (Cten)
harmandi Alexander (Psel)
henryi Edwards (Psel)
hilaris Bezzi = suspirans hilaris (Psel)
hilgendorfi Enderlein = nohirae (Cten)

hoffmanni Alexander (Psel)
hoppo Matsumura (Psel)
horikawae Matsumura = bifascipennis (Psel)
ichneumonea de Geer = atrata atrata (Tan)
idalia Osten-Sacken (Psel)
idriensis Scopoldi = bimaculata bimaculata (Dict)
igorota Alexander (Psel)
immaculata Becker & Schnabl = vittata vittata (Phor)
immaculipennis Brunetti (Psel)
inaequipectinata Alexander (Dict)
incunctans Walker (Psel)
indica Brunetti (Tan)
insignes de Meijere (Psel)
invenustipes Alexander (Psel)
ishiharai Alexander (Cten)
isshikii Matsumura (Psel)
javanica Doleschal = fuscipennis (Psel)
jozana Matsumura = atrata portschinsky (Tan)
jozana unileata Alexander = atrata unileata (Tan)
jubilata Alexander (Psel)
kanganensis Alexander (Psel)
kershawi Alexander (Psel)
koreana Masaki (Psel)
kotan Takahashi = nigricornis kotan (Tan)
ladelli Edwards (Psel)
laeta Fabricius (Psel)
lancipes Edwards (Psel)
latifascipennis Brunetti (Psel)
lauta Alexander (Psel)

longicornis de Meijere (Psel)
longisector Alexander = luteicostalis longisector (Dict)
luctuosa de Meijere (Psel)
luteicostalis luteicostalis Alexander (Dict)
luteicostalis longisector Alexander (Dict)
macra Loew = gracilis (Tan)
macraeformis Matsumura = gracilis (Tan)
magnifica Loew (Cten)
manipurana Alexander (Dict)
margarita Alexander (Psel)
mcgregori Alexander (Psel)
mecocera Alexander (Psel)
mesamericana Alexander (Psel)
minuta Portschinsky = atrata portschinskyi (Tan)
miyamotoi Takahashi (Cten)
miyamotoi claripennis Mannheims (Cten)
miyatakei Alexander (Dict)
nigribasis Edwards (Psel)
nigricornis nigricornis Meigen (Tan)
nigricornis fumibasis Alexander (Tan)
nigricornis kotan Takahashi (Tan)
nigricoxa Lundström = vittata vittata (Phor)
nigrithorax van der Wulp (Psel)
nigrobasalis Alexander = yezoana nigrobasalis = fastuosa (Cten)
nigrocrocea de Geer = pectinicornis (Cten)
nigrofasciata Brullé = atrata atrata (Tan)
nigrorum Alexander (Psel)
nikkoensis Takahashi (Cten)
nohirae Matsumura (Cten)
nubecula Osten-Sacken (Cten)
ochrifemur Enderlein = incunctans (Psel)

ophionea Edwards (Psel)
orbitalis Alexander = tinctipennis orbitalis (Psel)
ornata Meigen (Cten)
pachyrhinoidea Edwards (Psel)
paludosa Fabricius = bimaculata bimaculata (Dict)
parva Portschecksky (Tan)
pectinata Gmelin = bimaculata bimaculata (Dict)
pecticornis Linnaeus (Cten)
pecticornis Fabricius = elegans (Cten)
pendleburyi Edwards (Psel)
penicillata Edwards (Psel)
perangusta Alexander (Tan)
perdecora Alexander (Psel)
perjocosa Alexander (Cten)
pictipennis fasciata Coquillett (Dict)
pictipennis fumicosta Savchenko (Dict)
pictipennis pictipennis Portschecksky (Dict)
pilosa Pierre = elegans (Cten)
plagiata Edwards (Psel)
portscheckskyi Enderlein = atrata portscheckskyi (Tan)
praefica fenestrella Alexander (Psel)
praefica praefica Bezzi (Psel)
przewalskii Savchenko = atrata przewalskii (Tan)
pselliophoroidea Alexander (Cten)
pumila Alexander (Psel)
quadrivittata Edwards = xanthopimpla (Psel)
reversa Edwards (Psel)
rhadinoclada Alexander (Dict)
rubella Edwards (Psel)

rubra Osten-Sacken (Psel)
ruficornis Meigen = atrata atrata (Tan)
sacceni Edwards = bifascipennis (Psel)
sauteri Enderlein (Dict)
scalator Alexander (Psel)
scurra Alexander (Psel)
semifasciata Alexander = fasciata semifasciata = pictipennis (Dict)
semirufa Edwards = hoppo (Psel)
septentrionalis Alexander (Psel)
sibirica Portschinsky (Cten)
sikkimensis Enderlein (Psel)
similis Williston = vittata angustipennis (Phor)
speciosa Edwards (Psel)
splendor Harris = pectinicornis (Cten)
stabilis Alexander (Psel)
stackelbergiana Savchenko (Tan)
stalactitica Alexander (Dict)
sternobola Alexander (Psel)
stigmatica flavoscutellaris Alexander (Psel)
stigmatica stigmatica van der Wulp (Psel)
stigmata Edwards = chrysophila (Psel)
strigidorsum Enderlein = laeta (Psel)
strigipennis de Meijere (Psel)
subcognata Alexander (Tan)
succedens Walker = dorsalis (Tan)
suspirans hilaris Bezzi (Psel)
suspirans suspirans Osten-Sacken (Psel)
taprobanes Walker (Psel)
terminalis Brunetti (Psel)
tigriventris Alexander (Psel)
tinctipennis orbitalis Alexander (Psel)

tinctipennis tinctipennis Edwards (Psel)
topazina Osten-Sacken = dorsalis (Tan)
tricolor Loew (Cten)
trilineata Brunetti = laeta (Psel)
tripudans Bezzi (Psel)
tsurugiana Takahashi (Tan)
unilineata Alexander atrata unilineata (Tan)
uniplagiata Alexander yezoana (Cten)
upsilon Alexander (Psel)
variabilis var. a & var. b Enderlein = atrata portschinskyi (Tan)
variegata Fabricius = pectinicornis (Cten)
velutina van der Wulp = incunctans (Psel)
venezueleinsis Alexander (Psel)
villaretiana Brullé = atrata atrata (Tan)
vittata Meigen, sensu Portschinsky = atrata portschinskyi (Tan)
vittata angustipennis Loew (Phor)
vittata vittata Meigen (Phor)
vulcan Alexander (Psel)
yezoana Matsumura (Cten)
yezoana nigrobasalis Alexander = fastuosa (Cten)
xanthopimpla Enderlein (Psel)

Map 1: Faunal regions and subregions (after Oosterbroek & Schuckard, 1976).

1. Canadian subregion of the nearctic region
2. Alleghanian subregion of the nearctic region
3. Sonorian subregion of the nearctic region
4. Californian subregion of the nearctic region

5. Mexican subregion of the neotropical region
6. Antillian subregion of the neotropical region
7. Brazilian subregion of the neotropical region
8. Chilian subregion of the neotropical region

9. European subregion of the palaeartic region
10. Siberian subregion of the palaeartic region
11. Mediterranean subregion of the palaeartic region
12. Turkmenian subregion of the palaeartic region
13. Manchurian subregion of the palaeartic region

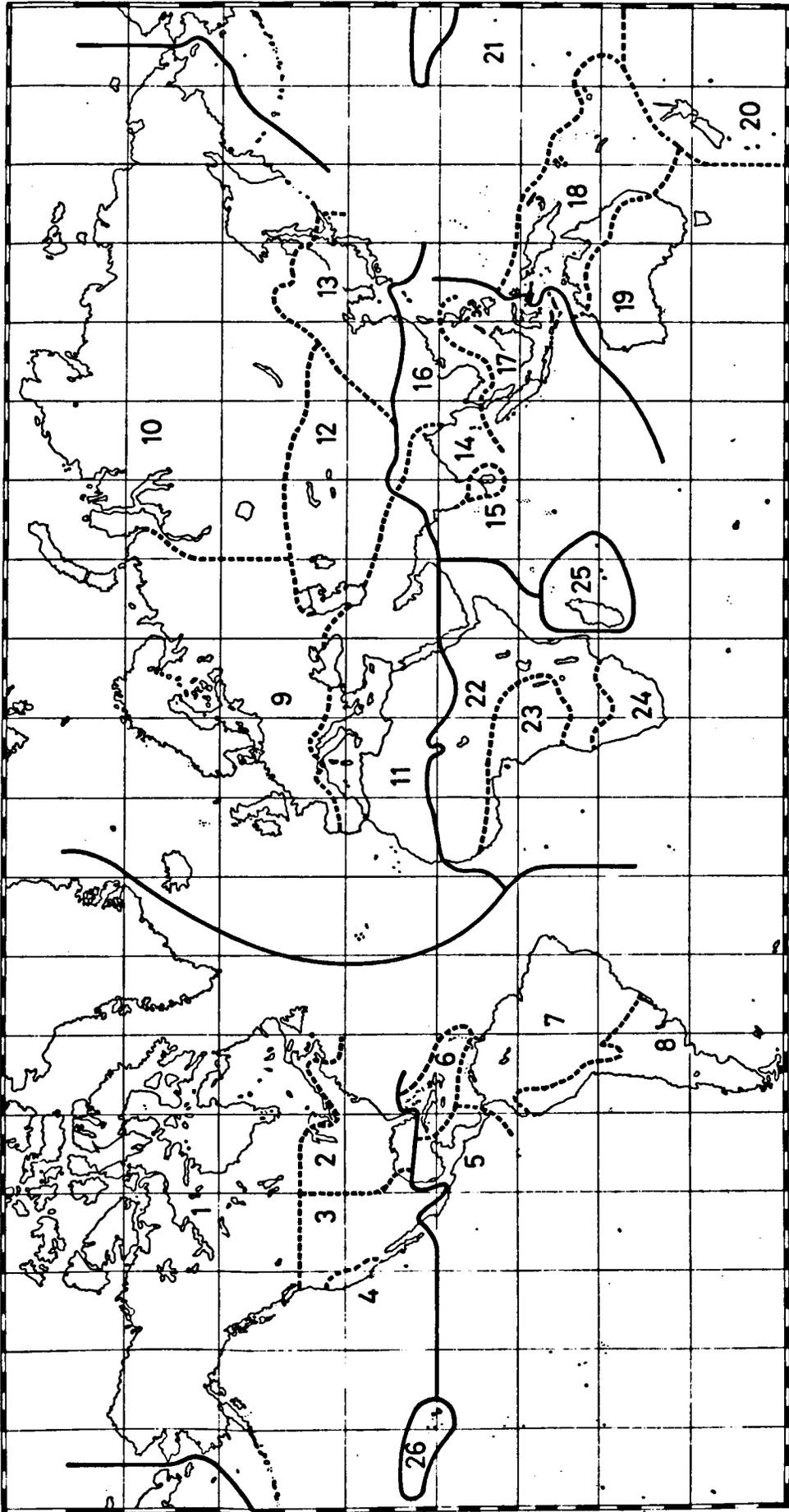
14. Indian subregion of the oriental region
15. Ceylonian subregion of the oriental region
16. Chinese subregion of the oriental region
17. Malayan subregion of the oriental region

18. Melanesian subregion of the australian region
19. Austrotasmanian subregion of the australian region
20. New Zealand subregion of the australian region
21. Polynesian subregion of the australian region

22. East-african subregion of the ethiopian region
23. West-african subregion of the ethiopian region
24. South-african subregion of the ethiopian region

25. Madagaskar region

26. Hawaiian region



Map 1: Faunal regions and subregions

Table 1: Number of species and subspecies per region or subregion.

genus	region	subregion	number of species	number of species limited to the (sub)region	
<u>Ctenophora</u>	nearctic		2	2	
		1. canadian	2	0	
		2. alleghanian	1	0	
		3. sonorian	1	0	
		1+2	1		
		1+3	1		
	palaeartic			18	18
		9. european		8	1
		10. siberian		5	1
		11. mediterranean		8	1
		12. turkmenian		1	0
		13. manchurian		9	6
		9+10+11		1	
		9+10+11+12+13		1	
		9+11		5	
		10+13		2	
oriental			1	1	
	16. chinese		1	1	
<u>Pselliophora</u>	neotropic		3	3	
		5. mexican	2	2	
		7. brazilian	1	1	
	palaeartic			10	9
		13. manchurian		10	9
	palaeartic + oriental	pal 13 + or 16		1	

genus	region	subregion	number of species	number of species limited to the (sub)region
	oriental		86	85
		14. indian	2	1
		15. ceylonian	4	3
		16. chinese	33	28
		17. malayan	52	48
		14+15	1	
		16+17	4	
<u>Phoroctenia</u>	nearctic		1	1
		3. sonorian	1	0
		4. californian	1	0
		3+4	1	
	palaeartic		1	1
		9. european	1	0
		10. siberian	1	0
		13. manchurian	1	0
		9+10+13	1	
<u>Dictenidia</u>	palaeartic		10	8
		9. european	2	0
		10. siberian	3	0
		11. mediterranean	2	0
		12. turkmenian	2	0
		13. manchurian	9	4
		9+10+11+12+13	1	
		9+11	1	
		10+12+13	1	
		10+13	1	
	palaeartic + oriental	pal 13 + or 16	2	
	oriental		7	5
		16. chinese	7	5

genus	region	subregion	number of species	number of species limited to the (sub)region
<u>Tanyptera</u>	nearctic		1	1
		1. canadian	1	0
		2. alleghanian	1	0
		1+2	1	
	palaeartic		17	17
		9. european	2	0
		10. siberian	9	2
		11. mediterranean	2	0
		12. turkmenian	1	0
		13. manchurian	13	8
		9+10+11	1	
		9+10+11+12	1	
	10+13	5		
	oriental		3	3
		16. chinese	3	3

Distribution of the genera of Ctenophorinae

(number of species in areas of 5° by 5°)

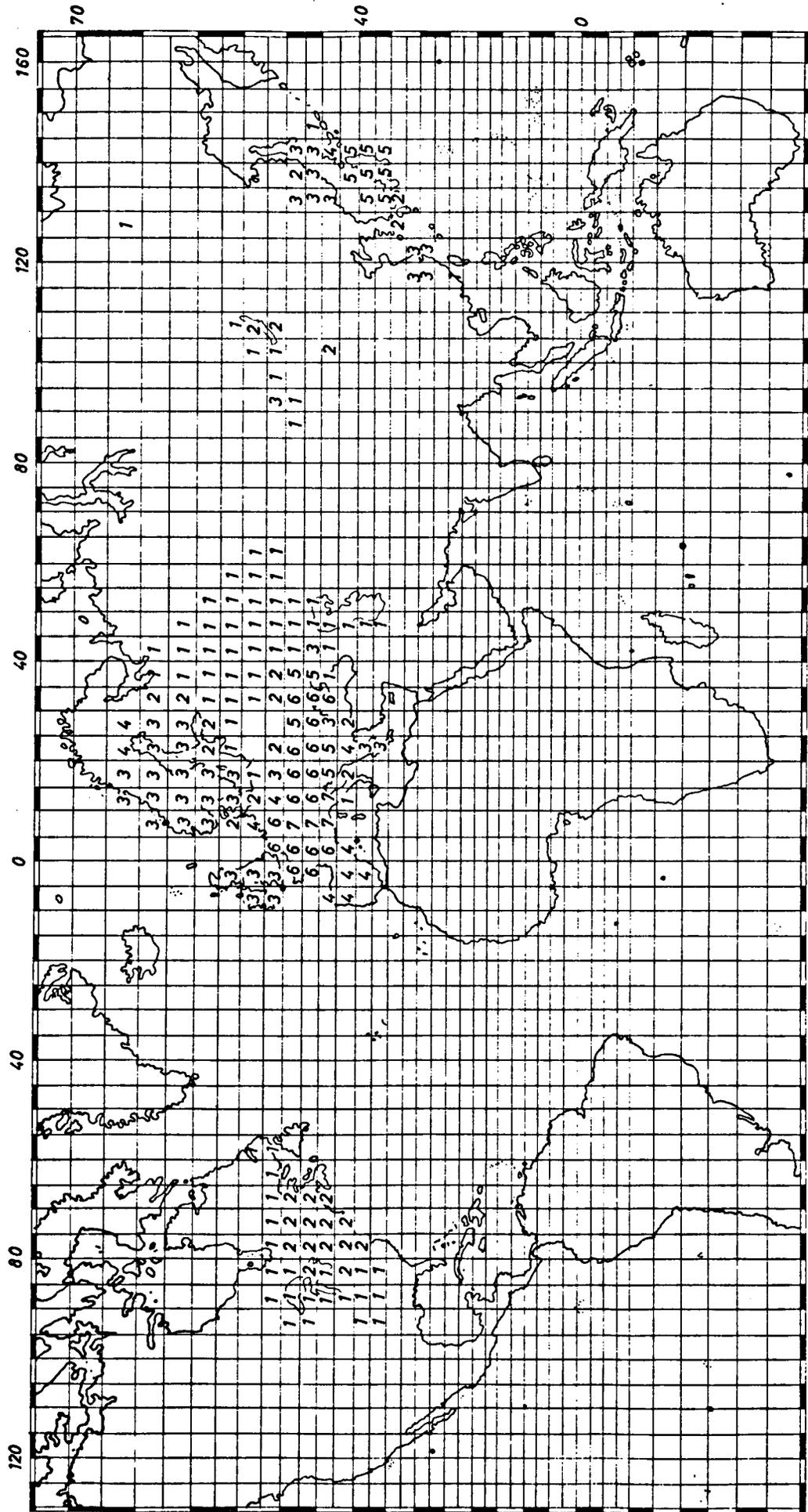
Map 2: Distribution of the genus *Ctenophora* Meigen

Map 3: Distribution of the genus *Pselliophora* Osten-Sacken

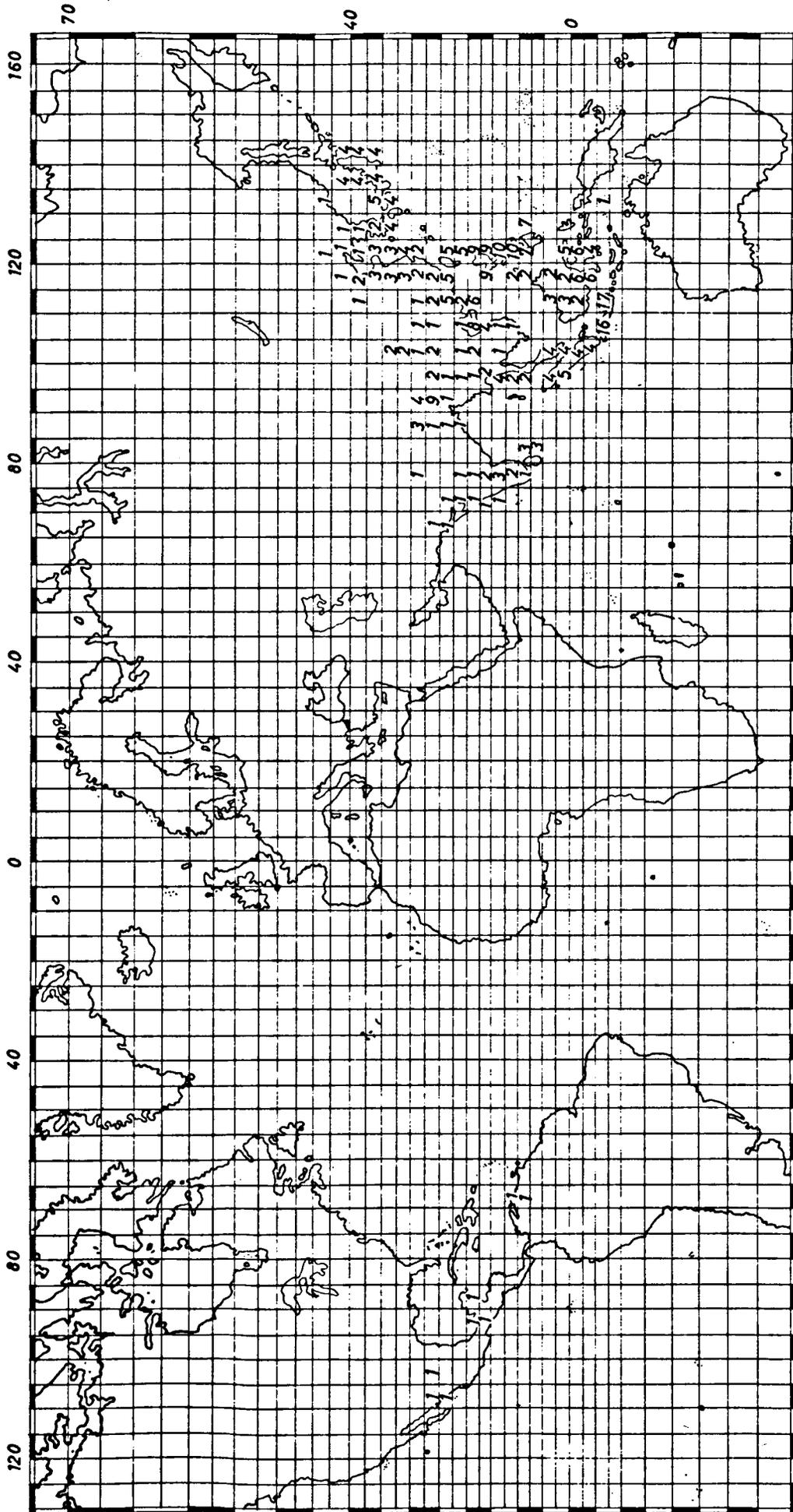
Map 4: Distribution of the genus *Phoroctenia* Coquillet

Map 5: Distribution of the genus *Dictenidia* Brullé

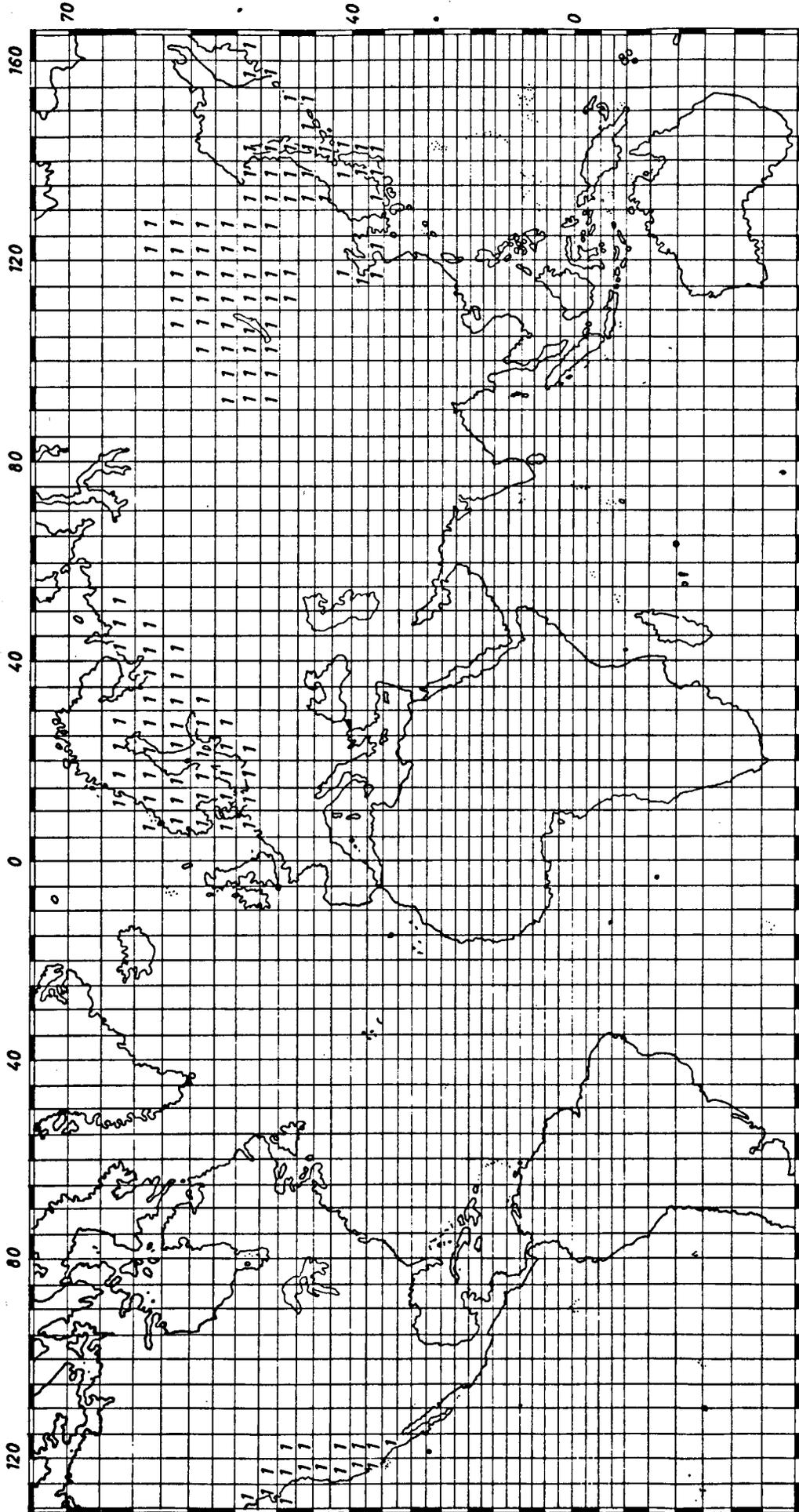
Map 6: Distribution of the genus *Tanyptera* Latreille



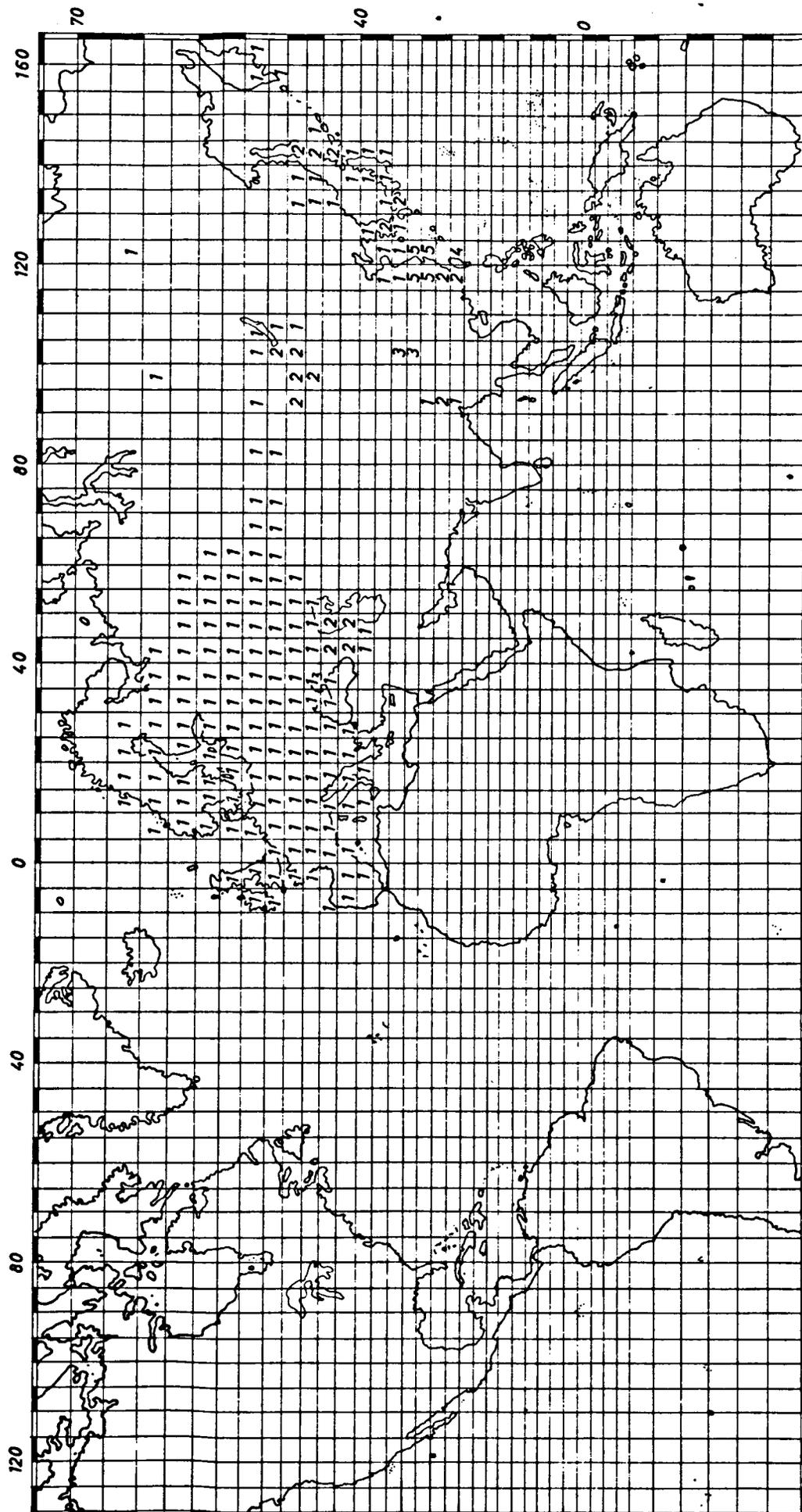
Map 2: Distribution of Ctenophora Meigen



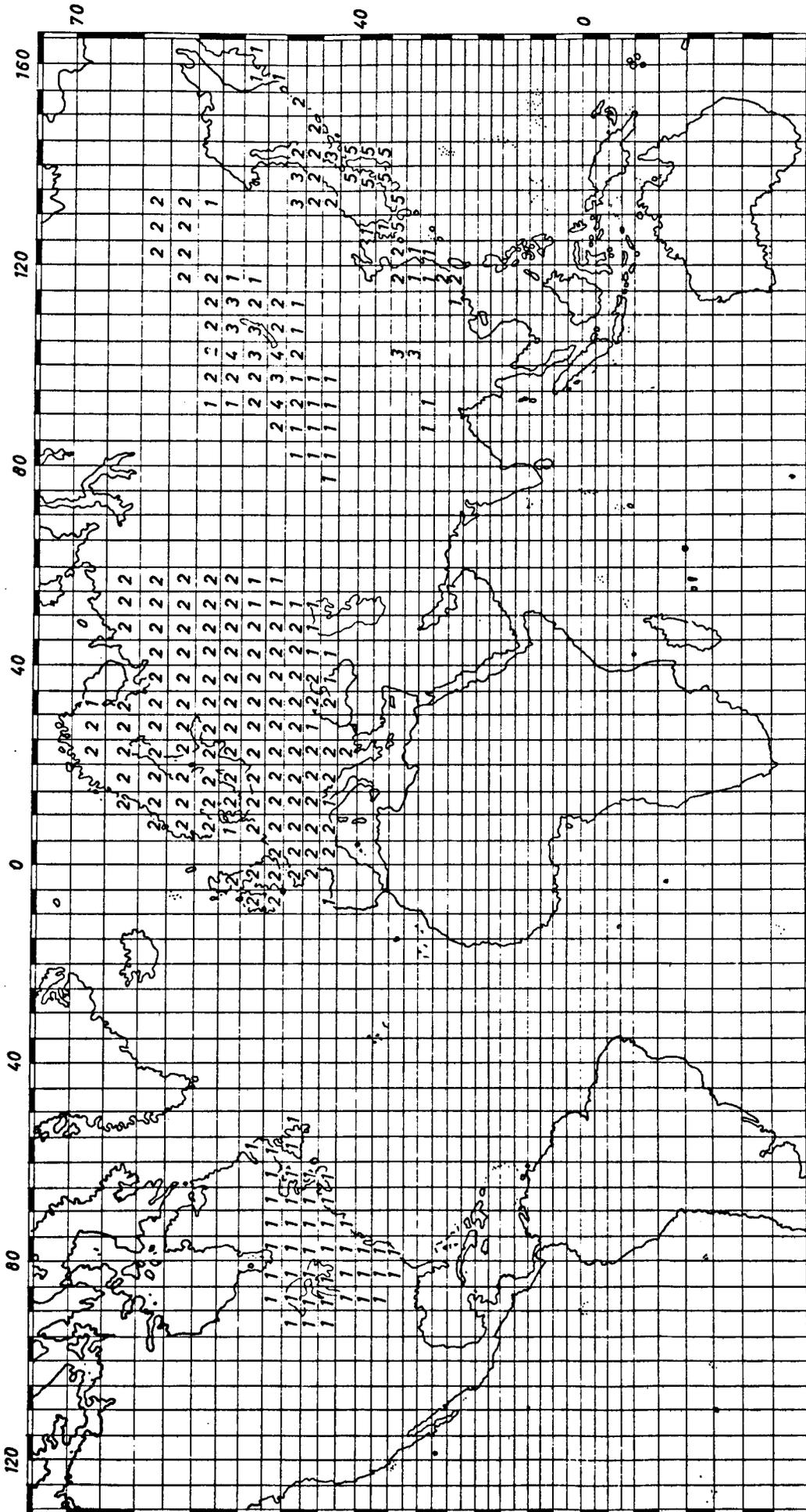
Map 3: Distribution of *Pselliophora Osten-Sacken*



Map 4: Distribution of *Phoroctenia Coquillet*



Map 5: Distribution of *Dictenidia* Brullé



Map 6: Distribution of *Tanyptera Latreille*

LITERATURE

Alexander, C.P.

- 1918 Records of Japanese crane-flies (Diptera).
Ann. ent. Soc. Am., 11: 443-449
- 1919 The crane-flies of New York. Part 1. Distribution and taxonomy
of the adult flies.
Mem. Cornell Univ. agric. Exp. Stn., 25: 767-993
- 1920a New or little-known crane-flies from Formosa (Tipulidae, Diptera)
Ann. ent. Soc. Am., 13: 249-270
- 1920b Diptera of the superfamily Tipuloidea found in the District of
Columbia.
Proc. U.S. natn. Mus., 58: 385-435
- 1921a The crane-flies of New York. Part 2. Biology and phylogeny.
Mem. Cornell Univ. agric. Exp. Stn., 38: 691-1133
- 1921b New species of Japanese crane-flies. Part 3. (Diptera, Tipulidae)
Insecutor Inscit. menstr., 9: 179-186
- 1922a The crane-flies of New York: first supplementary list.
Bull. Brooklyn ent. Soc., 17: 58-62
- 1922b New or little-known Tipulidae from the Philippines (Diptera).
Philipp. J. Sci., 21: 373-384

- 1922c Undescribed crane-flies in the Paris National Museum (Tipulidae, Diptera). Part 4. Asiatic species.
Bull. Mus. natn. Hist. nat. Paris, 28: 295-299
- 1923a Undescribed crane-flies in the Paris National Museum (Tipulidae, Diptera). Part 4. Asiatic species.
Bull. Mus. natn. Hist. nat. Paris, 29: 97-102
- 1923b Undescribed species of Japanese crane-flies (Tipulidae, Diptera) Part 3.
Ann. ent. Soc. Am., 16: 57-76
- 1923c Undescribed crane-flies from Formosa and Luzon (Tipulidae, Diptera).
Philipp. J. Sci., 22: 467-481
- 1923d Undescribed species of Australasian and Oriental crane-flies (Tipulidae, Diptera).
Proc. Hawaii. ent. Soc., 5: 252-258
- 1924a New or little-known crane-flies from northern Japan (Tipulidae, Diptera).
Philipp. J. Sci., 24: 531-611
- 1924b Undescribed species of Japanese crane-flies. Part 5.
Ann. ent. Soc. Am., 17: 431-448
- 1925a New or little-known Tipulidae (Diptera). Part 27. Pal. species
Ann. Mag. nat. Hist., (9) 15: 385-408

- 1925b New or little-known Tipulidae from the Philippines (Diptera).
Part 2.
Philipp. J. Sci., 27: 71-81
- 1925c Crane-flies from the Maritime Province of Siberia.
Proc. U. S. natn. Mus., 68: 1-21
- 1925d New or little-known Tipulidae from the Philippines (Diptera).
Part 3.
Philipp. J. Sci., 28: 369-377
- 1927a Entomologische Ergebnisse der Swedischen Kamchatka-Expedition.
1920-1922. Part 12. Tipulidae.
Ark. Zool., 19A (9): 1-10
- 1927b Fauna Sumatrensis (Beitrag Nr. 39). Superfamily Tipuloidea (Dipt)
Teil 1.
Supplta ent., 15: 90-102
- 1928 Records of crane-flies (Tipulidae) from Ontario (Diptera). Part 2.
Can. ent., 60: 54-60
- 1929a New or little-known Tipulidae from the Philippines (Diptera).
Part 5.
Philipp. J. Sci., 40: 239 - 273
- 1929b A list of the crane-flies of Quebec (Diptera). Part 1.
Can. ent., 61: 231-236, 247-251

- 1930 The crane-flies (Tipulidae) of New England: third supplementary list.
Occ. Pap. Boston Soc. nat. Hist., 5: 267-278
- 1932a New or little-known Tipulidae from the Philippines (Diptera).
Part 15.
Philipp. J. Sci., 48: 597-638
- 1932b Studies on the Tipulidae of China (Diptera). Part 1.
Lingnan Sci. J., 11: 505-508
- 1934a New or little-known Tipulidae from eastern Asia (Diptera). Part 20.
Philipp. J. Sci., 54: 433-471
- 1934b New or little-known Tipulidae from eastern Asia (Diptera). Part 21.
Philipp. J. Sci., 55: 19-60
- 1936a New or little-known Tipulidae from eastern Asia (Diptera). Part 29.
Philipp. J. Sci., 59: 225-257
- 1936b New or little-known Tipulidae from eastern Asia (Diptera). Part 30.
Philipp. J. Sci., 60: 165-204
- 1936c New or little-known Tipulidae from eastern Asia (Diptera). Part 33.
Philipp. J. Sci., 61: 169-203
- 1938a New or little-known Tipulidae from eastern China (Order Diptera).
Ark. Zool., 30 (6): 1-5
- 1938b New or little-known Tipulidae from eastern Asia (Diptera). Part 36.
Philipp. J. Sci., 66: 93-134

- 1938c New or little-known Tipulidae from eastern Asia (Diptera). Part 37.
Philipp. J. Sci., 66: 221-259
- 1938d New or little-known Tipulidae from eastern Asia (Diptera). Part 38.
Philipp. J. Sci., 66: 309-342
- 1938e Studies on the Tipulidae of China (Diptera). Part 2.
Lingnan Sci. J., 17: 337-356
- 1938f New or little-known Tipulidae from eastern Asia (Diptera). Part 40.
Philipp. J. Sci., 67: 129-166
- 1940a Studies on the Tipulidae of China (Diptera). Part 4.
Lingnan Sci. J., 19: 121-132
- 1940b New or little-known Tipulidae from eastern China. Part 3.
Notes Ent. chin., 8: 1-28
- 1940c New or little-known Tipulidae from eastern Asia (Diptera). Part 43.
Philipp. J. Sci., 73: 375-420
- 1941a Records and descriptions of North American crane-flies (Diptera).
Part 2.
Am. Midl. Nat., 26: 281-319
- 1941b New or little-known Tipulidae from eastern Asia (Diptera). Part 44.
Philipp. J. Sci., 76: 27-66
- 1942 Tipulidae. In: Guide to the insects of Connecticut. Part 4.
The Diptera or true flies of Connecticut. First fascicle.

- Bull. Conn. St. geol. nat. Hist. Surv., 64: 196-292
(Reprinted in 1966)
- 1944a New or little-known Tipulidae from Venezuela (Diptera). Part 3.
Boln Ent. venez., 3: 35-50
- 1944b New or little-known Tipulidae from Venezuela (Diptera). Part 4.
Boln Ent. venez., 3: 143-160
- 1949 Records and descriptions of North American crane-flies (Diptera).
Part 7.
Am. Midl. Nat., 42: 257-333
- 1953a The insect fauna of Mt. Ishizuchi and Omogo Valley, Iyo, Japan.
The Tipulidae (Diptera).
Trans. Shikoku ent. Soc., 3: 71-83
- 1953b Records and descriptions of Japanese Tipulidae (Diptera) Part 1.
Philipp. J. Sci., 82: 21-75
- 1954a The Tipulidae of Mount Ishizuchi and the Omogo Valley, Iyo, Shikoku,
Japan. First supplementary list.
Trans. Shikoku ent. Soc., 4: 23-31
- 1954b Records and descriptions of Japanese Tipulidae (Diptera). Part 4.
Philipp. J. Sci., 83: 263-306
- 1955 Undescribed species of Japanese crane-flies (Diptera, Tipulidae).
Part 8.
Ann. ent. Soc. Am., 48: 364-374

- 1962 The crane-flies of Maine.
Bull. Me. agric. Exp. Stn., T4: 1-24
- 1963 Classification and synonymy of the crane-flies described by Enrico Brunetti (Diptera).
Rec. Indian Mus., 59: 19-34
- 1965a Tipulidae. In: A catalog of the Diptera of America north of Mexico.
Agriculture Handb. Agric. Res. Serv., 276: 16-90
- 1965b New species of crane-flies from tropical America (Diptera, Tipulidae). Part 1.
J. Kans. ent. Soc., 38: 401-407
- 1966 The crane-fly fauna of the southern Kuriles (Tipulidae, Diptera).
Mushi, 39 (11): 119-126
- 1967 The crane-flies of California.
Bull. Calif. Insect Surv., 8: 5-269
- 1970 New or little-known species of Asiatic Tipulidae (Diptera). Part 3.
Trans. Am. ent. Soc., 96: 307-352
- 1973 A Catalog of the Diptera of the Oriental Region.
The University Press of Hawaii. Vol. 1: 10-224
- Audcent, H.
1932 British Tipulinae.
Trans. ent. Soc. S. Engl., 8: 1-34

Becker, T. & J.A. Schnabl

1926 Dipteren von W.W. Sowinsky an den Ufern des Baikal-Sees im Jahre
1903 gesammelt.

Ent. Mitt., 15: 33-46

Bergroth, E.

1888 Osterreichische Tipuliden gesammelt von Prof. J.A. Palmén im Jahre
1870.

Verh. Zool.-bot. Ges. Wien, 38: 645-656

Bezzi, M.

1916 Studies on Philippine Diptera. Part 2.

Publications of the Bureau of Science. Government Laboratories

Manila. Publ., 10: 3-59

Bigot, J.M.F.

1860 Faune entomologique de Sicile. Dipteres.

Annls. Soc. ent. Fr., 3 (8): 769-784

1891 Catalogue of the Diptera of the Oriental Region. Vol. 1.

J. Asiat. Soc. Beng., 40: 250-282

Brullé, A.

1832 Mémoire sur un genre nouveau de Diptères, de la famille des Tipulaires

Annls. Soc. ent. Fr., (1) 1: 205-209

1833 Note sur genre Xyphura, tormé aux dépens de ce lui de Ctenophora

Meigen. Annls Soc. ent. Fr., 2: 398-402

Brunetti, E.

1911 Revision of the oriental Tipulidae with descriptions of new species.

Rec. Indian Mus., 6: 231-314

1918 Revision of the oriental Tipulidae with descriptions of new species. Part 2.

Rec. Indian Mus., 15: 255-340

Byers, G.W.

1963 Type specimens of North American Tipulidae (Diptera) described by Francis Walker.

J. Kans. ent. Soc., 36 (3): 145-161

Coe, R.L.

1950 Family Tipulidae.

Handbk. Ident. Br. Insects, 9, 2: 1-66

Coquillett, D.W.

1898 Report on a collection of Japanese Diptera, presented to the U.S. National Museum by the Imperial University of Tokyo.

Proc. U.S. natn. Mus., 21: 301-340

1910 The type-species of the North American genera of Diptera.

Proc. U.S. natn. Mus., 37: 499-647

Curtis, J.

1825 British entomology: Being illustrations and descriptions of the genera found in Great Britain and Ireland. Vol. 2: 51-98

Czižek, K.

- 1911 Tipulidae Moravicae (Die Mährischen Schnaken).
Z. mähr. Landesmus., 11: 1-282

Doleschall, C.L.

- 1856 Eerste bijdrage tot de kennis der Dipterologische fauna van
Nederlandsch Indië.
Natuurk. Tijdschr. Ned.-Indië, 10: 403-414

Edwards, F.W.

- 1916 New and little-known Tipulidae, chiefly from Formosa.
Ann. Mag. nat. Hist., (8) 18: 245-269
- 1921 Seven new Species of Pselliophora (Diptera, Tipulidae).
Ann. Mag. nat. Hist., (9) 7: 373-378
- 1923 New and little-known Nematoceros Diptera from Java.
Treubia, 3: 180-183
- 1924 Notes on the types of Diptera Nematocera (Mycetophilidae and
Tipulidae) described by Mr. E. Brunetti.
Rec. Indian Mus., 26: 291-307
- 1925 Diptertera Nematocera from the Dutch East Indies.
Treubia, 6: 154-172
- 1926 Philippine Nematoceros Diptera. Part 1. Tipulidae.
Notul. ent., 6: 33-44

- 1927 Some Nematoceros Diptera from Ceylon.
Spolia zeylan., 14: 117-128
- 1928 Diptera Nematocera from the Federated Malay States Museum.
J. fed. Malay St. Mus., 14: 1-139
- 1932 Malayan Nematoceros Diptera.
Bull. Raffles Mus., 7: 52-70

Enderlein, G.

- 1912 Studien über die Tipuliden, Limoniiden, Cylindrotomiden und Ptychoptheriden.
Zool. Jb., 32: 1-88
- 1921 Dipterologische Studien. Teil 17.
Zool. Anz., 52: 219-232

Engel, E.

- 1884 Über einige individuelle Färbungsdifferenzen der Tipulidae:
Ctenophora pectinicornis L.
Entom. Nachr., 10: 259-260

Esaki, T.

- 1932 Diptera, In: Iconographia Insectorum Japonicorum.
Vol. 1: 7-249 (Hokuryukan, Tokyo)
- 1950 Diptera. In: Iconographia Insectorum Japonicorum.
Vol. 2: 1531 (Hokuryukan, Tokyo)

Fabricius, J.C.

- 1775 Systema entomologiae, sistens insectorum classes, ordines, genera, species adiectis synonymis, locis, descriptionibus, observationibus.: 1-749 (Flensburgi et Lipsiae)
- 1781 Species insectorum exhibentes eorum differentias specificas, synonyma, auctorum, loca natalia, metamorphosin.
Vol. 2: 1-57 (Hamburgi et Kilonii)
- 1787 Mantisa insectorum sistens species nuper detectas.
Vol. 2: 1-382 (Hafniae)
- 1794 Entomologia systematica emendata et aucta.
Vol. 4: 1-472 (Hafniae)
- 1805 Systema antliatorum secundum ordines, genera, species.:
1-373 (Brunsvigae)

Geer, C. de

- 1776 Memoires pour servir à l'histoire des Insectes.
Vol. 6: 1-523 (Stockholm)

Gmelin, J.F.

- 1792 Caroli a Linné, Systema Naturae per regna tria naturae, 13th ed.
Vol. 1: Regnum Animale, Part 5: 2225-3020 (Lipsiae)

Harris, M.

- 1776 An exposition of English insects with curious observations and remarks.:
1-166 (London)

Huguenin, G.

- 1888 Fauna insectorum Helvetiae. Diptera, Familie Tipulidae Schiner.
Mitt. schweiz. ent. Ges., 8: 1-73

Joseph, A.N.T.

- 1973 The Brunetti types of Tipulidae (Diptera) in the collection of
the Zoological Survey of India. Part 2.
J. ent. London (B) 42 (1): 59-70

Kertész, K.

- 1902 Catalogus dipterorum hucusque descriptorum.
Vol. 2: 1-339 (Lipsiae, Budapestini)

Lackschewitz, P.

- 1935 Zur kenntnis der Polyneuren Nematoceren (Dipt.) des nördlichen
Norwegens.
Tromsø Mus. Aarsh., 53: 1-27

Latreille, P.A.

- 1804 Tableau méthodique des Insects. In: Société de Naturalistes et
d'Agriculteurs, Nouveau dictionnaire d'histoire naturelle, appli-
que aux arts. Principalement à l'agriculture et l'economie rurale
et domestique. Tableaux méthodiques d'histoire naturelle.
Vol. 24: 129-200
- 1805 Histoire naturelle, générale et particulière, des Crustacés et
des Insectes.
Vol. 14: 1-432

Linnaeus, C.

- 1758 Systema naturae per regna tria naturae. 10th ed.
Vol. 1: 1-824 (Holmiae)
- 1761 Fauna svecica sistens animalia Sveciae regni. second ed.:
1-578 (Stockholmiae)
- 1767 Systema naturae per regna tria naturae. 12th ed.
Vol. 1, Part 2: 533-1327 (Holmiae)

Lioy, P.

- 1863 I ditteri distribuiti secondo un nuovo metodo di classificazione
naturale.
Atti Ist. veneto Sci., (3) 9: 187-236

Loew, H.

- 1869 Beschreibung europäischer Dipteren. Systematische Beschreibung
der bekannten europäischen zweiflügeligen Insecten, von Johan
Wilhelm Meigen.
Vol. 1: 1-311 (H.W. Schmidt Verlag, Halle)
- 1871 Beschreibung europäischer Dipteren. Systematische Beschreibung
der bekannten europäischen zweiflügeligen Insecten, von Johan
Wilhelm Meigen.
Vol. 2: 1-320 (H.W. Schmidt Verlag, Halle)
- 1872 Diptera Americae septentrionalis indigena, Centuria decima.
Berl. ent. Z., 16: 49-115

- 1873 Beschreibung europäischer Dipteren. Systematische Beschreibung der bekannten europäischer zweiflügeligen Insecten, von Johan Wilhelm Meigen.
Vol. 3: 1-320 (H. W. Schmidt Verlag, Halle)

Lundström C.

- 1907 Beiträge zur Kenntnis der Dipteren Finlands, 7, Suppl. 2: Mycetophilidae, Tipulidae, Cylindrotomidae and Limnobiidae.
Acta Soc. Fauna fenn., 29: 1-27

Macquart, J.

- 1826 Insectes Diptères du nord de la France. Tipulaires.
Recl. Trav. Soc. Sci. Agric. Lille, 1823/1824: 59-224
- 1834 Histoire naturelle des Insectes. Tome premier. Diptera
Vol. 1: 1-578 (Collection des suites à Buffon, Roret, Paris)
- 1846 Diptères exotiques nouveaux ou peu connus. Supplement 1.
Mem. Soc. Sci. Agric. Lille, (1845) 1844: 133-364

Mannheims, B.

- 1951 Tipulidae, A: Westpalaearktische Arten.
Fliegen palaearkt. Reg., 167: 1-64
- 1953 Zur synonymie der europäischen Tipuliden (Dip.). Teil 3.
Bonn. zool. Beitr., 4: 344
- 1954a Die Tipuliden Griechenlands (Dipt.).
Bonn. zool. Beitr., Sonderband 1: 149-182
- 1954b Die Tipuliden Ostfennoskandiens (Dipt.).
Notul. ent., 34: 24-50

- 1967 Eine für Europa neue Ctenophora-Art (Diptera, Tipulidae) mit faunistischen Angaben über Tipuliden und Limoniden Fennoskandiens
Bonn. Zool. Beitr., 18: 199-206
- Mannheims, B. & E. Pechlaner
1963 Die Tipuliden Nordtirols (Dipt.).
Stuttg. Beitr. Naturk., 102: 1-29
- Mannheims, B. & E.N. Savtshenko
1967 105. Tipulidae. Ergebnisse der zoologischen Forschungen von Dr. Z. Kaszab in der Mongolei (Diptera).
Reichenbachia, 9: 147-156
- Mannheims, B. & Br. Theowald
1959 Die Tipuliden Italiens (Dipt., Tipulidae).
Memorie Soc. ent. ital., 38: 15-54
- Masaki, J.
1933 On the Tipulinae of the Japanese-Empire.
Mushi, 6: 74-95
- 1939 A new species of the genus *Pseliophora* Osten-Sacken from Korea (Diptera, Tipulidae).
Mushi, 12: 90-91
- Matsumura, S.
1916 Thousand insects of Japan. Addidamenta.
Vol. 2: 185-474 (Tokyo)

1931 6000 Illustrated Insects of the Japanese-Empire.: 1-392

Meigen, J.W.

1800 Nouvelle classification des mouches à deux ailes (Diptera L.).
d'après un plan tout nouveau.:
1-40 (Paris)

1803 Versuch einer neuen Gattungseintheilung der europäischen zwei-
flügeligen Insekten.
Magazin Insektenk. (Illiger), 2: 259-281

1804 Klassifikation und Beschreibung der europäischen zweiflügeligen
Insekten.
Erster Band. Abt. 1: i-xxvii, 1-152; Abt. 2: i-iv, 153-314
(K. Reichard, Braunschweig)

1818 Systematische Beschreibung der bekannten europäischen zweiflügeligen
Insekten. Vol. 1: i-xxxvi, 1-333 (F.W. Forstmann, Aachen)

1830 Systematische Beschreibung der bekannten europäischen zweiflügeligen
Insekten.
Vol. 6: 1-iv, 1-401 (Hamm)

Meijere, J.C.H. de

1904 Neue und bekannte Süd-Asiatische Dipteren.
Bijdr. Dierk., 18: 83-115

1913 Studien über südostasiatische Dipteren. Teil 8.
Tijdschr. Ent., 56: 1-99

1916 Studien über südostasiatische Dipteren. Teil 8. Zur Biologie einiger javanischen Dipteren nebst Beschreibung einiger neuen javanischen Arten.
Tijdschr. Ent., 59: 184-213

1924 Studien über südostasiatische Dipteren. Teil 15. Dritter Beitrag zur Kenntnis der sumatranischen Dipteren.
Tijdschr. Ent., 67: 1-64

Nielsen, P.

1925 Stankelben.
Damm. Fauna, 28: 1-165

Oosterbroek, P. & R. Schuckard

1976 A world check-list of *Nephrotoma* Meigen, 1803 (Diptera, Tipulidae)
Versl. techn. Gegevens Inst. tax. Zool., Univ. Amsterdam, 9: 1-36

Osten-Sacken, C.R.

1864 Descriptions of several new North American Ctenophorae.
Proc. ent. Z., 26: 45-49

1882 Diptera from the Philippine Islands.
Berl. ent. Z., 26: 83-120

1886 Studies on Tipulidae. Part 1. Review of the published genera of the Tipulidae longipalpi.
Berl. ent. Z., 30: 153-188

Perris, E.

- 1840 Observations sur quelques Larves xylophages.
Annls Sci. nat., (2) 14: 81-96

Pierre, C.

- 1924a Diptères: Tipulidae.
Faune Fr., 8: 1-159

- 1924b Tipulidae nouveaux.
Encycl. ent., Diptera (B) 1: 73-93

Portschinsky, J.

- 1872 Descriptions de quelques Diptères nouveaux de la Sibérie orientale.
Horae Soc. ent. Ross., 9 (1/4): 287-293

- 1887 Diptera europaea et asiatica nova aut minus cognita.
Horae Soc. ent. ross., 21: 3-20

Riedel, M.P.

- 1913 Nematocera polyneura (Dipt.).
Ent. Mitt., 2: 272-276

Rondani, C.

- 1856 Genera Italica ordines dipterorum ordinatim disposita et distincta
et in familias et stirpes aggregata.
Dipterologiae Italicae prodromus. Vol. 1: 1-228 (Parmae)

Ruthe, J.F. von

- 1831 Einige Bemerkungen und Nachträge zu Meigen's "Systematischer Beschreibung der europäischen zweiflügeligen Insekten".
Isis, 11: 1203-1222

Savchenko, E.N.

1964 Crane-flies (Diptera, Tipulidae) new for the fauna of the far-east of the SSSR.

Pratsi Inst. Zoo. Kyiv. 20: 180-192

1966 Tipulidae.

Fauna Ukraini, 14 (1): 1-548

1973 Tipulidae: Tipulinae and Flabelliferinae.

Fauna SSSR, Noviiia Seriiia no. 105, Diptera, Vol. 2 (5): 1-281

Savchenko, E.N. & N.A. Violovich

1967 Review of the crane-flies (Diptera, Tipulidae) of the Tuva.

Annls zool. Warsz., 25: 317-365

Savchenko, E.N., N.A. Violovich & E.P. Narchuk

1972 Ent. Obozr., 51: 74-95

Schiner, I.R.

1864 Fauna Austriaca. Die Fliegen (Diptera).

Teil. 2: iii-xxxii, 1-658 (Carl Gerold's Sohn, Wien)

Schrank, F. von P.

1781 Enumeratio insectorum Austria indigenorum:

1-548 (Eberhardi Klell et Frank, Augustae Vindelicorum)

1803 Fauna Boica. Durchgedachte Geschichte der in Baiern enheimischen Zahmen Tiere.

Vol. 3, Teil 1: i-viii, 1-372 (Philip Krüll, Landshut)

Scopoli, J.A.

- 1763 Entomologia carniolica exhibens insecta carnioliae indigene et
distributa in ordines, genera, species, varietates methodo Linnaeana:
1-421 (Vindobanae)

Staeger, C.

- 1840 Systematik Fortegnelse over de hidtil i Danmark fundne Diptera.
Tipulidae terricolae.
Naturh. Tidsskr., 3: 1-58

Takahashi, M.

- 1960a New species of Japanese Ctenophorini with the notes and key to
the already known species (Diptera, Tipulidae). Part 1.
Mushi, 33 (3): 9-20
- 1960b New species of Japanese Ctenophorini with the notes and key to
the already known species (Diptera, Tipulidae). Part 2.
Mushi, 33 (4): 101-115

Theowald, Br.

- 1957 Tweevleugelige insecten. Diptera 4: de Nederlandse langpootmuggen
(Tipulidae).
Wet. Meded. K. ned. natuurh. Veren., 24: 1-28

Verrall, G.H.

- 1888 List of British Tipulidae, etc. (Daddy-longlegs), with notes.
Entomologist's man. Mag., 25: 20-27, 97-99

Wu, C.

- 1940 *Catalogus Insectorum Sinesium.*
Vol. 5: 1-524

Wulp, F.M. van der

- 1877 *Diptera Neerlandica. De tweevleugelige insecten van Nederland.*
Eerste deel: i-xviii, 1-497 (M. Nijhoff, 's-Gravenhage)
- 1881 *Amerikaansche Diptera.*
Tijdschr. Ent., 24: 141-168
- 1884 *On exotic Diptera. Part 1.*
Notes Leyd. Mus., 6: 248-256
- 1896 *Catalogue of described Diptera from South Asia.*
Nederlandse entomologische vereniging.: 1-219 (Den Haag)
- 1904 *In de Meijere, Bijdr. Dierk.*, 18: 83-115

Zetterstedt, J.W.

- 1838 *Diptera. In: Insecta Lapponica.*: 477-868 (L. Voss, Lipsiae)
- 1851 *Diptera Scandinaviae. Disposita et descripta.*
Vol. 10: 3711-4090 (Lundae)
- 1852 *Diptera Scandinaviae et descripta.*
Vol. 11: v-xii, 4091-4546 (Lundae)
- 1853 *Diptera Scandinaviae. Disposita et descripta.*
Vol. 12: v-xx, 4547-4942 (Lundae)

Available on request at the Library of the Institute of
Taxonomic Zoology (Zoölogisch Museum), University of Amsterdam,
P.O.Box 20125, 1000 HC AMSTERDAM, the Netherlands.