

A LIST OF THE KNOWN SPECIES AND THEIR HOST-PLANTS OF THE PSYLLIDAE OF JAPAN (HOMOPTERA)

By Kōta SASAKI

Entomological Laboratory, Matsuyama Agricultural College

This is a check-list of the Psyllidae of Japan (including Ryukyus). In the first place I thank Dr. Tamotsu Ishihara for his kind leading in making this list. My gratitude is also due to Dr. Satoru Kuwayama of the Hokkaido Agricultural Experiment Station, Sapporo, who gave some valuable papers to me, Mr. Toshiro Yano who allowed me to make contain in this list some information ascertained on the host-plants by him and all my friends who helped me in getting specimens.

The host plants marked with * are those ascertained also by me.

Subfamily APHALARINAE

Genus APHALARA Förster, 1848

Logotype: *Chermes calthae* Linné, 1761

1. *artemisiae* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 96.
= *malachitica* (Dahlbom, 1850), Kgl. Vet. Akad. Handl., 1: 177 (*Psylla*).
Distribution: Japan (Hokkaido), Europe, Siberia, N. America.
Host-plants: Compositae- *Artemisia* spp. * (larva and imago).
2. *calthae* (Linné, 1761), Fauna Suecica, Nr. 1005 (*Chermes*).
= *polygoni* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 90.
= *ulicis* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 96.
= *polygoni* (Shinji, 1938, nec Förster, 1948), Kontyu, 12: 146 (*Psylla*) (hom. et syn. nov.).
Distr.: Japan (Hokkaido, Honshu, Shikoku-*hab. nov.*), Europe, Siberia, N. America.
Host-plant: Polygonaceae- *Polygonum aviculare* * (larva and imago, Shinji, 1938, p. 146, etc.).
3. *fasciata* Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 153, pl. 3, fig. 9 a-b.
= *tadeana* (Shinji, 1938), Kontyu, 12: 148, (*Psylla*) (syn. nov.).
= *polygonifoliae* (Shinji, 1942), Ins. World, 46: 4 (*Psylla*) (syn. nov.).
Distr.: Japan (Hokkaido, Honshu, Shikoku-*hab. nov.*)
Host-plants: Polygonaceae- *Polygonum Hydropiper* (larva and imago, confirmed in Matsuyama by me); *Polygonum minus* var. *interruptum* (larva and imago, Shinji, 1938, p. 148); *Polygonum japonicum* (larva and imago, Shinji, 1942, p. 4, etc.).

4. **flava** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 154, pl. 3, figs. 4, 10 a-b.
Distr.: Japan (Hokkaido, Honshu, Shikoku).
Host-plants: Compositae- *Artemisia* spp. (larva and imago, confirmed in Mt. Ishizuchi and Jozankei by me).
5. **multipunctata** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 152, pl. 3, fig. 2.
Distr.: Japan (Hokkaido, Honshu).
Host-plant: Ranunculaceae- *Clematis stans* (larva and imago, Shinji, 1942, p. 355, etc.).
6. **nebulosa** (Zetterstedt, 1828), F. Ins. Lapp., 1: 551 (*Chermes*).
= **radiata** Scott, 1876, Trans. Ent. Soc. Lond., 156, pl. 9, fig. 12.
= **graminis** Thomson, 1877, Opusc. Ent. Fasc., 8: 841.
= **itadori** (Shinji, 1938), Kontyu, 12: 149 (*Psylla*) (syn. nov.).
Distr.: Japan (Hokkaido, Honshu, Shikoku, Kyushu, Amami-Oshima-*hab. nov.*).
Host-plants: Polygonaceae- *Polygonum Reynoutria* * (larva and imago, Shinji, 1938, p. 149, etc.); Rosaceae- *Malus pumila* (Matsumura, 1917, p. 374, etc.).

Genus **DIRAPHIA** Illiger, 1802

Haplotype: *Chermes juncorum* Latreille, 1798

7. **jesoensis** (Kuwayama, 1908), Trans. Sapporo Nat. Hist. Soc., 2: 150. pl. 3, figs. 6, 7 a-b (*Livia*).
Distr.: Japan (Hokkaido, Honshu, Shikoku-*hab. nov.*, Kyushu).
Host-plant: Juncaceae- *Juncus prismatocarpus* var. *Leschenaultii* * (larva and imago, Kuwayama, 1932, p. 1809, Uye, 1936, p. 351, etc.).

Genus **SYNTOMOZA** Enderlein, 1921

Orthotype: *Euphyllura magna* Kuwayama, 1908

8. **magna** (Kuwayama, 1908), Trans. Sapporo Nat. Hist. Soc., 2: 151, pl. 3, figs. 1, 8 (*Euphyllura*).
Distr.: Japan (Shikoku-*hab. nov.*, Kyushu).
Host-plant: Flacourtiaceae- *Myroxylon japonicum* * (larva and imago, Uye, 1922, p. 403, etc.), (*Idesia polycarpa*error?).

Subfamily **PAUROPSYLLINAE**

Genus **CALOPHYA** F. Löw, 1878

Haplotype: *Psylla rhois* F. Löw, 1877

9. **nigra** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 160.
Distr.: Japan (Hokkaido).
Host-plant: Unknown.

10. **nigridorsalis** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 159.
Distr.: Japan (Hokkaido, Honshu, Shikoku-hab. nov., Kyushu).
Host-plants: Fagaceae- *Quercus acuta* * (imago, Uye, 1937, p. 33); *Shiia cuspidata* * (imago, Uye, 1937, p. 33).
11. **shinjii** K. Sasaki (nov.)
= **sorbii** (Shinji, 1944, nec Linné, 1767), Gall and Gall-insects, 448, fig. 44 (*Psylla*) (comb. nov., nom. praeocc.).
Distr.: Japan (Honshu).
Host-plant: Rosaceae- *Sorbus commixta* (Shihji, 1944, p. 449).
12. **viridis** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 159.
Distr.: Japan (Hokkaido, Shikoku-hab. nov.).
Host-plant: Simarubaceae- *Picrasma quassloides* (larva and imago, confirmed in Sugitate near Matsuyama by me).
13. **viridiscutellata** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 159.
Distr.: Japan (Hokkaido).
Host-plant: Unknown.

Genus **PAUROCEPHALA** Crawford, 1913

Orthotype: *Paurocephala psylloptera* Crawford, 1913

14. **chonchaiensis** Boselli, 1929, Boll. Lab. Zool. Gen. Agr. Portici., 21: 251-264, figs. I, II, III, IV, V.
= **conchaiensis** Boselli, 1929, Boll. Lab. Zool. Gen. Agr., Portici., 21: 259, [error for *chonchaiensis*].
= **bifasciata** Kuwayama, 1931, Ins. Mats., 5: 119.
Distr.: Japan (Kyushu), Formosa, China.
Host-plants: Moraceae- *Ficus* sp. (larva and imago, Boselli, 1930, p. 186); *Ficus Beecheyana* (larva and imago, Kuwayama, 1931, p. 120; Takahashi, 1936, p. 291, etc.); *Ficus pumila* (larva and imago, Takahashi 1936, p. 291); *Ficus foveolata* (larva and, imago, Uye 1937, p. 607).
15. **psylloptera** Crawford, 1913, Phil. Jour. Sci., 8: 294, fig. 1.
Distr.: Japan (Amami-Oshima), Formosa, Philippines, Tenimber Is., Moluccas, Borneo, Ceylon, S. India.
Host-plants: Moraceae- *Morus* spp. (larva and imago, Kuwayama, 1931, p. 120, etc.), Ulmaceae- *Trema orientalis* (larva and imago, Takahashi, 1936, p. 291).

Subfamily **CARSIDARINAE**

Genus **HOMOTOMA** Guérin, 1844

Haplotype: *Chermes ficus* Linné, 1758

16. **radiatum** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 181, pl. 3, fig. 14.
Distr.: Japan (Honshu, Shikoku-hab. nov., Kyushu), Formosa.
Host-plants: Moraceae- *Ficus erecta* * (larva and imago, Kuwayama, 1931, p. 124; Uye, 1936, p. 13, etc.).

Genus **MESOHOMOTOMA** Kuwayama, 1908Orthotype: *Mesohomotoma camphorae* Kuwayama, 1908

17. **camphorae** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 181, pl. 3, figs. 15, 20.
 Distr.: Japan (Amami-Oshima), Formosa, Bonins, S. China, Philippines, Samoan Is., Fiji Is.
 Host-plant: Malvaceae- *Paritium tiliaefolium* (larva and imago, Kuwayama, 1931, p. 123; Takahashi, 1936, p. 292; Miwa, 1943, p. 80). (Lauraceae- *Cinnamomum camphora* ... error).

Genus **TOGEPSYLLA** Kuwayama, 1931Orthotype: *Togepssylla takahashii* Kuwayama, 1931

18. **matsumurana** Kuwayama, 1949, Ins. Mats. 17: 48-49.
 Distr.: Japan (Honshu, Shikoku-*hab. nov.*).
 Host-plants: Lauraceae- *Litsea glauca* (Kuwayama, 1949, p. 49); Mochilus Japonica (larva and imago, confirmed in Omogo Valley by me).

Subfamily **PHACOSEMINAE**Genus **ANOMONEURA** Schwarz, 1896Haplotype: *Anomoneura mori* Schwarz, 1896

19. **mori** Schwarz, 1896, Proc. U. S. Mus., 19: 296
 Distr.: Japan (Hokkaido, Honshu, Shikoku, Kyushu).
 Host-plant: Moraceae- *Morus bombycis* * (larva and imago, Matsumura, 1906, p. 13, etc.).

Subfamily **PSYLLINAE**Genus **DIAPHORINA** F. Löw, 1879Haplotype: *Diaphora putoni* F. Löw, 1878

20. **citri** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 160, pl. 3, fig. 16
 Distr.: Japan (Amami-Oshima), Formosa, S. China, Philippines, Moluccas, Java, India, Hawaii.
 Host-plants: Rutaceae- *Citrus* spp. (Kuwayama, 1908, p. 161, etc.); *Murraya paniculata* (Kuwayama, 1931, p. 126, etc.).

Genus **METAPSYLLA** Kuwayama, 1908Orthotype: *Metapsylla nigra* Kuwayama, 1908

21. **nigra** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 157, pl. 3, figs. 12, 18.

Distr.: Japan (Shikoku-*hab. nov.*, Kyushu).

Host-plant: Borraginaceae- *Ehretia acuminata* (larva? and imago, confirmed in Matsuyama by me).

22. *robinae* Shinji, 1938, Kontyu, 12: 147, fig. A.

Distr.: Japan (Honshu).

Host-plant: Leguminosae- *Gleditschia japonica* (Shinji, 1938, p. 148).

Genus PSYLLA Geoffroy, 1762

Logotype: *Chermes alni* Linné, 1758

23. *abieti* Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 175

Distr.: Japan (Hokkaido, Honshu, Shikoku).

Host-plants: Pinaceae- *Abies* spp. * (larva and imago, Matsumura, 1917, p. 373; Kuwayama, 1932, p. 1816, etc.)

24. *akebiae* (Shinji, 1942), Ins. World., 46: 354 (*Aphalara*) (com. nov.).

Distr.: Japan (Honshu).

Host-plant: Lardizabalaceae: *Akebia quinata* (Shinji, 1942, p. 355, etc.).

25. *albopontis* Kuwayama, 1908, Trans. Spporo Nat. Hist. Soc., 2: 164.

Distr.: Japan (Hokkaido).

Host-plant: Unknown.

26. *albovenosa* Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 176.

Distr.: Japan (Honshu, Shikoku, Kyushu).

Host-plant: Unknown.

27. *alni* (Linné, 1761), Fauna Suecica, Nr. 1008 (*Chermes*).

= *fuscinervis* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 70.

= *heydeni* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 81.

Distr.: Japan (Hokkaido, Honshu), Europe, N. America (Subsp. *americana* Crawford).

Host-plant: Betulaceae- *Alnus japonica* (Matsumura, 1917, p. 373; Kuwayama, 1932, p. 1818, etc.).

28. *amakusensis* Kuwayama, 1939, Zool. Mag., 51: 536, fig. 1-5.

Distr.: Japan (Kyushu-Amakusa).

Host-plant: Unknown.

29. *ambigua* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 74.

= *insignis* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 74.

= *abdominalis* Meyer-Dür, 1871, Psyll., 394.

= *stenolabis* F. Löw, 1876, Pet. Nouv. Ent., 2: 64.

= *annellata* (Thomson, 1877), Opusc. Ent. Fasc., 8: 836 (*Chermes*).

Distr.: Japan (Hokkaido), Europe.

Host-plants: Salicaceae- *Salix* spp. (Watanabe, 1937, p. 118).

30. *artemisifoliae* Shinji, 1938, Kontyu, 12: 150.

Distr.: Japan (Honshu).

Host-plant: Compositae- *Artemisia vulgaris* (Shinji, 1938, p. 150).

31. *betulae* (Linné, 1861), Fauna Suecica, Nr. 1007 (*Chermes*).

= *zetterstedti* (Thomson, 1877), Opusc. Ent. Fasc., 8: 832 (*Chermes*).

- Distr.: Japan (Hokkaido, Honshu), Europe.
Host-plant: Betulaceae- *Betula Tauschii* (Matsumura, 1917, p. 373, etc.).
32. **corcinea** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 171.
Distr.: Japan (Hokkaido, Honshu, Shikoku-*hab. nov.*, Kyushu), Formosa.
Host-plants: Lardizabalaceae- *Akebia quinata* * (larva and imago, Kuwayama, 1931, p. 127, etc.); Rutaceae- *Citrus* spp. (Watanabe, 1931, p. 118, etc.).
33. **elaeagni** Kuwayama, 1908, Trans. sapporo Nat. Hist. Soc., 2: 164.
Distr.: Japan (Hokkaido, Honshu, Shikoku, Kyushu, Yakushima).
Host-plants: Elaeagnaceae- *Elaeagnus* spp. * (larva and imago) (Kuwayama, 1908, p. 164, etc.).
34. **foersteri** Flor, 1861, Rhyn. Livl., 2: 458.
= **alni** Serville, 1825, nec Linné, 1761, Encycl. Meth., 10: 229.
= **alni** Förster, 1848, nec Linné, 1761, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 70.
Distr.: Japan (Hokkaido, Honshu), Europe, Saghalien.
Host-plant: Betulaceae- *Alnus japonica* (Matsumura, 1917, p. 373, etc.).
35. **fulguralis** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 177, pl. 3, fig. 17.
Distr.: Japan (Honshu, Shikoku-*hab. nov.*, Yakushima).
Host-plants: Elaeagnaceae- *Elaeagnus* spp. (larva and imago, confirmed in Matsuyama by me).
36. **fulvicola** Shinji, 1942, Ins. World, 46:4 fig. B.
Distr.: Japan (Honshu).
Host-plant: Polygonaceae- *Polygonum lapathifolium* (Shinji, 1942, p. 4, etc.).
37. **hakonensis** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 176.
Distr.: Japan (Honshu, Shikoku).
Host-plant: Pinaceae- *Abies firma* (imago, confirmed in Mt. Sara by me).
38. **hexastigma** Horváth, 1899, Termes. Füzetek., 22: 373.
Distr.: Japan (Hokkaido, Shikoku-*hab. nov.*), Siberia.
Host-plants: Saxifragaceae- *Hydrangea* spp. (Kuwayama, 1932, p. 1815; Watanabe, 1937, p. 118).
39. **horii** Kuwayama, 1943, Trans. Nat. Hist. Soc. Taiwan, 33: 507, fig. 2.
Distr.: Japan (Yakushima).
Host-plant: Unknown.
40. **jamatonica** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 167.
Distr.: Japan (Hokkaido, Honshu, Shikoku-*hab. nov.*, Kyushu)
Host-plant: Leguminosae- *Albizia julibrissin* * (larva and imago, Kuwayama, 1932, p. 1817; Uye, 1936, p. 12, etc.).
41. **kiushuensis** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 174.
Distr.: Japan (Kyushu), Formosa.
Host-plant: Unknown.
42. **magnifera** Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 170.
Distr.: Japan (Hokkaido, Honshu).
Host-plant: Betulaceae- *Alnus japonica* (Matsumura, 1917, p. 372; Watanabe, 1937, p. 119, etc.).
43. **mali** (Schmidberger, 1836), Beitr. z. Nat. Schadl. Ins., 4: 186-199 (*Chermes*).

- = *crataegicola* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 72.
 = *dubia* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 73.
 = *aeruginosa* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 97.
 = *occulta* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 98.
 = *rubida* Meyer-Dür, 1871, Psyll., 393.
 = *claripennis* Meyer-Dür, 1871, Psyll., 400.
 = *viridissima* Scott, 1876, Trans. Ent. Soc. Lond., 543.
 Distr.: Japan (Hokkaido, Honshu), Europe, N. America.
 Host-plant: Rosaceae- *Malus pumila* (larva and imago, Matsumura, 1917, p. 373, etc.).
44. *malivorella* Matsumura, 1915, Byo-tyugai Zasshi, 2: 301- 304.
 Distr.: Japan (Honshu).
 Host-plant: Rosaceae- *Malus pumila* (larva and imago, Nagano Agr. Exp. 1915, P. 301, etc.).
45. *melina* Flor, 1861, Rhyn. Livl., 2: 477.
 Distr.: Japan (Hokkaido, Honshu), Europe.
 Host-plant: Unknown.
46. *moiwasana* Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 175.
 Distr.: Japan (Hokkaido).
 Host-plant: Unknown.
47. *nigriantennata* Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 168.
 Distr.: Japan (Honshu, Shikoku).
 Host-plant: Unknown.
48. *nigrita* (Zetterstedt, 1828), F. Ins. Lapp., 1: 556 (*Chermes*).
 = *pulchra* (Zetterstedt, 1840), Ins. Lapp., 309 (*Chermes*).
 = *pineti* Flor, 1861, Rhyn. Livl., 2: 471.
 = *similis* Meyer-Dür, 1871, Psyll., 393.
 Distr.: Japan (Hokkaido), Europe.
 Host-plants: Pinaceae- *Pinus* spp. (Watanabe, 1937, p. 119, etc.).
49. *peregrina* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 74.
 = *carpini* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 72.
 = *crataegicola* Flor, 1861, Rhyn. Livl., 2: 474.
 Distr.: Japan (Hokkaido, Honshu), Europe.
 Host-plant: Unknown.
50. *pyricola* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 77.
 = *apiophila* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 78.
 = *notata* Flor, 1861, K. d. Rhyn., 365.
 = *pyri* Curtis, 1842, Gard. Chron., 156.
 Distr.: Japan (Hokkaido, Honshu), Europe, N. America.
 Host-plant: Rosaceae- *Pyrus Simonii* (Matsumura, 1917, p. 372, etc.).
51. *pyrisuga* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 78.
 = *pyri* (Schmidberger, 1827), Beitr. z. Nat. Schäd. Ins., 1: 179-195. (*Chermes*).
 = *austriaca* Flor, 1861, K. d. Rhyn., 372.
 = *aurantiaca* Goureaux, 1862, Ins. Nuis., 34.
 = *rutila* Meyer-Dür, 1871, Psyll., 394.
 = *rufitarsis* Meyer-Dür, 1871, Psyll., 394.

- Distr.: Japan (Hokkaido, Honshu, Shikoku, Kyushu), Europe, Korea.
 Host-plants: Rosaceae- *Pyrus Simonii* * (larva and imago, Matsumura, 1906, p. 13, etc.); *Malus pumila* (Matsumura, 1917, p. 371, etc.).
52. *salicicola* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 72.
 = *rufula* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 76.
 = *subgranulata* Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 94.
 Distr.: Japan (Hokkaido, Honshu), Europe.
 Host-plants: Salicaceae- *Salix* spp. (Matsumura, 1917, p. 373, etc.).
53. *sapporensis* Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 166.
 Distr.: Japan (Hokkaido).
 Host-plant: Unknown.
54. *satsumensis* Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 177.
 Distr.: Japan (Shikoku-*hab. nov.*, Kyushu).
 Host-plant: Unknown.
55. *viburnii* F. Löw, (1876) Verh. zool. - bot. Ges. Wien., 26: 194, pl. 1, figs. 1 - 3.
 = *viburni* (Shinji, nec F. Löw, 1876,) 1942, Ins. World, 46: 2, fig. A. (nom. praeocc.).
 Distr.: Japan (Honshu, Shikoku-*hab. nov.*), Europe.
 Host-plant: Caprifoliaceae- *Viburnum dilatatum* * (larva and imago, Shinji, 1942, p. 3, etc.).
56. *ziozankeana* Kuwayama, 1908, Trans. Sapporo Nat. Hist. Soc., 2: 173.
 Distr.: Japan (Hokkaido).
 Host-plant: Unknown.

Subfamily TRIOZINAE

Genus EPITRIOZA Kuwayama, 1910

Orthotype: *Epitrioza mizuhonica* Kuwayama, 1910

57. *mizuhonica* Kuwayama, 1910, Trans. Sapporo Nat. Hist. Soc., 3: 56, pl. 2, figs. 4, 11.
 Distr.: Japan (Hokkaido, Honshu, Shikoku-*hab. nov.*).
 Host-plants: Elaeagnaceae- *Elaeagnus* spp. (larva and imago, confirmed in Matsuyama by me).

Genus STENOPSYLLA Kuwayama, 1910

Orthotype: *Stenopsylla nigricornis* Kuwayama, 1910

58. *nigricornis* Kuwayama, 1910, Trans. Sapporo Nat. Hist. Soc., 3: 54, pl. 2, figs. 3, 10.
 Distr.: Japan (Honshu, Kyushu), Formosa.
 Host-plants: Symplocaceae- *Symplocos glauca* (larva and imago, Takahashi, 1936, p. 294, etc.), Verbenaceae: *Clerodendron trichotomum* (error?).

Genus **TRICHOCHERMES** Kirkaldy, 1904Haplotype: *Trioza walkeri* Förster, 1848

59. **bicolor** Kuwayama, Trans. Sapporo Nat. Hist. Soc., 3: 54, pl. 2, figs. 2, 8.
Distr.: Japan (Honshu, Shikoku-hab. nov., Kyushu), Formosa.
Host-plant: Aquifoliaceae- *Ilex integra* * (larva and imago, Kuwayama, 1932, p. 1813, etc.).

Genus **TRIOZA** Förster, 1848Logotype: *Chermes urticae* Linné, 1758

60. **amami-osimensis** Kuwayama, 1943, Trans. Nat. Hist. Soc. Formosa, 33: 506, fig. 1.
Distr.: Japan (Amami-Oshima).
Host-plant: Unknown.
61. **berchemiae** Shinji, 1938, Ins. World, 42: 366.
Distr.: Japan (Honshu).
Host-plant: Rhamnaceae- *Berchemia racemosa* (larva and imago, Shinji, 1938, p. 367, etc.).
62. **camphorae** Sasaki, 1910, Jour. Coll. Agr., Imp. Univ. Tokyo, 2: 273, pls. 15-16.
Distr.: Japan (Honshu, Shikoku, Kyushu), Formosa, S. China.
Host-plant: Lauraceae- *Cinnamomum Camphora* * (larva and imago, Sasaki, C. 1905, etc.).
63. **chenopodii** Reitter, 1876, Med. Soc. Pro. Fet. Fl. Kenn., 1: 76
= **chenopodi** (Shinji, 1949, nec Reuter, 1876), Kontyu, 17: 18 (*Psylla*) (comb. nov., nom. praeocc.).
Distr.: Japan (Honshu, Shikoku-hab. nov.), Europe.
Host-plant: Chenopodiaceae- *Chenopodium album* * (larva and imago, Shinji, 1949, p. 19).
64. **curvatinervis** Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 83.
= **pallipes** Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 84.
= **unifasciata** F. Löw, 1878, Ent. M. Mag., 14: 229.
Distr.: Japan (Honshu), Europe.
Host-plant: Unknown.
65. **euphorbiae** Shinji, 1942, Ins. World, 46: 34.
Distr.: Japan (Honshu).
Host-plant: Euphorbiaceae- *Euphorbia pekinensis* (larva and imago, Shinji, 1942, p. 35, etc.).
66. **galii** Förster, 148, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 87.
Distr.: Japan (Hokkaido, Honshu, Shikoku-hab. nov.), Europe, Siberia, Transcaucasia.
Host-plant: Unknown.
67. **magna** Kuwayama, 1910, Trans. Sapporo Nat. Hist. Soc., 3: 59, pl. 2, fig. 5.
Distr.: Japan (Honshu, Shikoku-hab. nov.), Philippines.
Host-plant: Unknown.

68. **nigra** Kuwayama, 1910, Trans. Sapporo Nat. Hist. Soc., 3: 57. pl. 2, figs. 13, 14.
Distr.: Japan (Hokkaido, Honshu, Shikoku-*hab. nov.*, Kyushu).
Host-plant: Styracaceae- *Styrax japonica* * (larva and imago, Kuwayama, 1930, p. 361, etc.); *Styrax Obassia* (larva and imago, Kuwayama, 1931, p. 361, etc.).
69. **nigriceps** Kuwayama, 1910, Trans. Sapporo Nat. Hist. Soc., 3: 60. pl. 2, fig. 12.
Distr.: Japan (Honshu).
Host-plant: Unknown.
70. **quercicola** Shinji, 1942, Ins. World, 46: 2.
Distr.: Japan (Honshu).
Host-plants: Fagaceae- *Costanea pubinervis*, *Quercus acutissima*, *Quercus serrata* (Shinji, 1942, p. 3).
71. **remota** Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 83.
= **cinnabarina** Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 85.
= **drysobia** Flor, 1861, Livl., 2: 522.
Distr.: Japan (Honshu, Shikoku-*hab. nov.*), Europe.
Host-plants: Fagaceae- *Quercus* spp. (Watanabe, 1937, p. 119, etc.).
72. **salicivora** Reuter, 1876, Med. Soc. Pro. Fet. Fl. Kenn., 1: 75.
Distr.: Japan (Hokkaido, Shikoku-*hab. nov.*), Europe.
Host-plants: Salicaceae- *Salix* spp. (Watanabe, 1937, p. 119, etc.); *Salix babylonica* (larva and imago, confirmed in Matsuyama by me).
73. **salacea** Meyer-Dür, 1871, Psyll., 389.
= **munda** Flor, 1861, Rhyn. Livl., 2: 515.
Distr.: Japan (Hokkaido, Honshu), Europe.
Host-plant: Unknown.
74. **striola** Flor, 1861, Rhyn. Livl., 2: 508.
Distr.: Japan (Hokkaido, Honshu-*hab. nov.*), Europe.
Host-plant: Unknown.
75. **ukogi** Shinji, 1940, Ins. World, 44: 66.
Distr.: Japan (Honshu).
Host-plant; Araliaceae- *Acanthopanax Sieboldianum* (larva and imago, Shinji, 1940, p. 67, etc.).
76. **viridula** Zetterstedt, 1828, Fauna Ins. Lapp., 1: 555.
= **apicalis** Förster, 1848, Psyll. Verh. Nat. Ver. Preuss. Rheinl., 3: 82.
Distr.: Japan (Hokkaido-*hab. nov.*, Honshu), Europe.
Host-plants; Pinaceae- *Abies* spp. (Watanabe, 1937, p. 119, etc.).
77. **yakusimensis** Kuwayama, 1943, Trans. Nat. Hist. Soc. Taiwan, 33: 509, fig. 3.
Distr.: Japan (Yakushima).
Host-plant: Unknown.

LITERATURE CITED

- Boselli, F. B. (1930) Studii Sugli Psyllidi; Boll. Lab. Zool. Gen. Agr., Portici, 24: 175 - 209.
- Kuwayama, Sh. (1908) Die Psylliden Japanes, I; Trans. Sapporo Nat. Hist. Soc. 2: 149 - 190.
- (1910) Die Psylliden Japanes, II; Trans. Sapporo Nat. Hist. Soc. 3: 53 - 67.
- Kuwayama, Sa. (1930) Kijirami no Seitai ni kansuru nisan no Kansatsu (Several observations on the ecology of the Psyllidae); Zool. Mag.; 42: 360 - 362.
- (1931) A revision of the Psyllidae of Taiwan; Ins. Mats., 5: 117 - 133.
- (1932) Iconographia Insectorum Japonicorum, 1808 - 1818, fs. 3573 - 3592.
- (1936) Nashi-kijirami Gaisetsu (Outline of the Pear-sucker); Kudamono Geppo, 286: 120 - 123.
- (1939) On some species of Psyllidae from Amakusa; Zool. Mag., 51: 535 - 537.
- (1943) On some species of Psyllidae from Amami-Osima and Yakushima; Trans. Nat. Hist. Soc. Taiwan; 33: 504 - 511.
- (1949) On a new species of the Genus *Togepssylla* from Japan; Ins. Mats., 17: 48 - 49.
- (1950) Iconographia Insectorum Japonicorum; rev. and addit. ed. 325 - 331. fs. 876 - 896.
- Matsumura, S. (1906) Nippon Gaiyū Mokuroku (Catalogue of injurious insects in Japan), 13.
- (1907) Kontyū Bunrui-gaku (Systematic Entomology); 100 - 102.
- (1917) Oyo Kontyū-gaku (Applied Entomology), 368 - 376.
- (1931) 6000 illustrated insects of Japan, 1274 - 1276.
- (1932) Conspectus of Japanese injurious insects, 210 - 221.
- Miwa, Y. (1943) Taiwan Gaiyū-Mei (The list of injurious insects of Formosa), 80 - 81.
- Nagano Agr. Exp. (1915), Ringo-kijirami ni tsuite (On *Psylla malivosella* Matsumura); Byō-tyūgai Zasshi, 2: 301 - 304.
- Shinji, O. (1938) Five new species of Psyllidae from north-eastern Japan; Kontyū, 12: 146 - 151.
- (1938) A new species of Psyllidae from Japan; Ins. World, 42: 366 - 367.
- (1940) A new species of Japanese Psyllidae; Ins. World, 44: 66 - 67.
- (1942) Three new species of Psyllidae from Tokyo; Ins. World, 46: 2 - 5.
- (1942) A new species of *Psylla* from Tokyo; Ins. World, 46: 34 - 35.
- (1942) A new jumping louse infesting the chestnut tree; Ins. World, 46: 66 - 67.
- (1942) A new species of *Aphalara* and the host plant of *Anther* sp.; Ins. World, 46: 354 - 356.
- (1944) Chuei to chuei-konchu (Galls and Gall-Insects); 440 - 456.
- (1949) Psyllid-fauna of Tokyo with the description of one new species; Kontyū, 17: 75 - 77.
- Shiraki, T. (1952); Catalogue of injurious insects in Japan; 2: 123 - 126.
- Takahashi, R. (1936); Food habits and new habitats of Formosan Psyllidae, with notes on the peculiar food habits of Formosan phytophagous insects; Kontyū, 10: 291 - 296.
- Uye, T. (1922) Hisui-kijirami ni tsuite (On *Euphyllura magna* Kuwayama); Ins. World, 26: 403 - 406.
- (1936) Some jumping plant-lice of Kyushu, I; Ent. World, 4: 8 - 15.
- (1936) Some jumping plant-lice from Kyushu, II; Ent. World, 4: 849 - 852.
- (1937) Some jumping plant-lice of Kyushu, III; Ent. World, 5: 33 - 34.
- (1937) Some jumping plant-lice of Kyushu, IV; Ent. World, 5: 605 - 608.
- Watanabe, F. (1937) Nippon Jumoku-gaiyū Somokuroku (A catalogue of injurious insects of Japan), 118 - 119.