

THE INSECT FAUNA OF MT. ISHIZUCHI AND
OMOGO VALLEY, IYO, JAPAN

THE TIPULIDAE (DIPTERA)

By Charles P. Alexander

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Through the kind invitation of Professor Tamotsu Ishihara I am privileged to prepare the list of species of crane-flies (Tipulidae, Diptera) at present known from the Omogo Valley and Mount Ishizuchi. The accompanying record includes 108 species at present known to me from this area, or slightly more than one-half of those so far discovered in Shikoku. From its great diversity of habitats suitable to the life histories of members of this family of flies, it is evident that very many further species will be discovered here and it seems certain that the area will be found to be one of the richest in Japan, or, indeed, anywheres in comparable latitudes in the World. It is greatly to be desired and hoped that this prolific region may be set aside as a conserved area wherein the rich fauna and flora will be continued in an undisturbed condition.

Our present satisfactory knowledge of the Tipulidae of Shikoku results from the very intensive efforts of a relatively small number of most capable Japanese entomologists. Those who have collected in the Omogo-Ishizuchi region include primarily Professors Syuti Issiki and Syusiro Ito who were there between June 7 and 11, 1951, and Professor Tamotsu Ishihara and Mr. Mutsuo Miyatake, with Mr. Toshiro Yano, who have visited the area many times in the past and whose extensive collections, made particularly in 1952, have first demonstrated the richness of the Omogo Valley. Other members of the Shikoku Entomological Society, including Messrs. Tadao Edashige, Takashi Kobayashi, Hiroyuki Kusunoki, Terunori Mohri and Isao Tomari; have participated in this survey. It appears from my records that the earliest specimens taken in this region were by Professor C. Harukawa in August 1925, with further materials being collected by Issiki a few years later. The major proportion of the species have been added since 1950. I am greatly indebted to all of my entomological friends and co-workers who have added so much to our knowledge of the Tipulidae of Omogo Valley and Mount Ishizuchi.

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At the present time I am preparing a series of papers entitled "Records and Descriptions of Japanese Tipulidae", being published in the *Philippine Journal of Science*, of which the initial three parts relate to Shikoku. Descriptions and figures of various species indicated in the present paper as being "in press" are contained in this series of reports and these should be consulted by interested persons.

TIPULINAE

1. **Longurio (Longurio) pulverosa (Matsumura, 1916)**
 Nom. Jap.: *Kigoshi-gaganobo*
 Omogo Valley V-6, VI-5~18, 1952 (Ishihara and Yano); VII-25, 1947 (Kobayashi).
 Distr. Japan (Honshu, Shikoku, Kyushu).
2. **Longurio (Longurio) yanoi Alexander, 1952, in press.**
 Omogo Val. VII-24, 1947 (Ishimaru).
 Distr. Japan (Shikoku).
3. **Ctenacroscelis mikado (Westwood, 1876)** Nom. Jap.: *Mikado-gaganobo*
 Ishizuchi, 800 meters, VIII-10, 1925 (Harukawa).
 Distr. Japan (Honshu, Shikoku, Kyushu).
4. **Ctenophora ishiharai Alexander, 1952, in press.**
 Ishizuchi, VII-25~26, 1947 (Ishihara-Miyatake).
 Distr. Japan (Shikoku).
5. **Dictenidia miyatakei Alexander, 1952, in press.**
 Ishizuchi, VII-23, 1951 (Miyatake).
 Distr. Japan (Shikoku).
6. **Tanyptera jozana jozana (Matsumura, 1916)**
 Nom. Jap.: *Haranaga-kushi-hige-gaganobo*
 Omogo Val. 700 meters, V-10 & 11, 1952 (Ishihara).
 Distr. Japan (Hokkaido, Honshu, Shikoku).
7. **Dolichozeza (Nesopeza) albitibia (Alexander, 1922)**
 Nom. Jap.: *Yurei-gaganobo*
 Omogo Val. VI-5, 1952 (Yano).
 Distr. Japan (Honshu, Shikoku).
8. **Dolichozeza (Nesopeza) circulans Alexander, 1953, in press.**
 Omogo Val. VII-22, 1949 (Miyatake), type; VII-14, 1952 (Yano).
 Distr. Japan (Shikoku).
9. **Dolichozeza (Nesopeza) tarsalis (Alexander, 1919)**
 Omogo Val. VII-14, 1952 (Yano).
 Distr. Japan (Honshu, Shikoku).
10. **Dolichozeza (Oropeza) candidipes (Alexander, 1921)**
 Nom. Jap.: *Oo-yurei-gaganobo*
 Omogo Val. VI-6, 1952 (Yano).
 Distr. Japan (Honshu, Shikoku, Kyushu).

11. **Dolichozepeza (Orozepeza) inomatai Alexander, 1933**
Omogo Val. VI-6, 1952 (Yano).
Distr. Japan (Honshu, Shikoku, Kyushu).
12. **Macgregoromyia shikokuana Alexander, 1953, in press.**
Omogo Val. VII-14, 1952 (Yano), type.
Distr. Japan (Shikoku).
13. **Nephrotoma pullata (Alexander, 1914)**
Omogo Val. 700 meters, V-10, 1952 (Edashige).
Distr. Japan (Hokkaido, Honshu, Shikoku, Kyushu).
14. **Nephrotoma sinensis (Edwards, 1916)** Nom. Jap.: *Maegurohoso-gaganbo*
Ishizuchi, 1000 meters, VIII-10, 1925 (Harukawa).
Distr. Japan (Shikoku), Formosa, China.
15. **Tipula (Schummelia) acifera Alexander, 1926**
Ishizuchi, 1000 meters, VIII-10, 1925 (Harukawa), type.
Distr. Japan (Shikoku).
16. **Tipula (Schummelia) ecaudata Alexander, 1924**
Omogo Val. V-11, 1952 (Ishihara), VI-5~6, 1952 (Yano).
Distr. Japan (Honshu, Shikoku, Kyushu).
17. **Tipula (Schummelia) ishizuchiana Alexander, 1953, in press.**
Ishizuchi, summit, 1931 meters, VII-27, 1952 (Ishihara), type.
Distr. Japan (Shikoku).
18. **Tipula (Schummelia) jocosipennis Alexander, 1933**
Omogo Val. 700 meters, V-10~11, 1952 (Ishihara), VI-5~6, 1952 (Yano). Kōguchi to
Ishizuchi, 1400 meters, VI-8, 1950 (Issiki-Ito). Ishizuchi, 1400-1930 meters, VI-9~10, 1950
(Issiki Ito).
Distr. Japan (Honshu, Shikoku, Kyushu).
19. **Tipula (Schummelia) macrotrichiata Alexander, 1924**
Omogo Val. VI-6, 1952 (Yano). Kōguchi to Ishizuchi, 1400 meters, VI-8, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku, Kyushu).
20. **Tipula (Schummelia) nipponensis Alexander, 1914** Nom. Jap.: *Nippon-gaganbo*
Omogo Val. IX-7, 1951 (Miyatake).
Distr. Japan (Honshu, Shikoku).
21. **Tipula (Yamatotipula) patagiata Alexander, 1924**
Omogo Val. 800 meters, V-11, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku).
22. **Tipula (Indotipula) tetracantha Alexander, 1928**
Omogo Val. VI-6, 1952 (Yano).
Japan (Honshu, Shikoku, Kyushu).
23. **Tipula (Acutipula) kuzuensis Alexander, 1918** Nom. Jap.: *Kuzu-gaganbo*
Ishizuchi, 1900 meters, VII-27, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku).

24. *Tipula* (*Acutipula*) *tokionis* Alexander, 1920
Ishizuchi, 1000 meters, VIII-10, 1925 (Harukawa).
Distr. Japan (Honshu, Shikoku).
25. *Tipula* (*Vestiplex*) *serridens* Alexander, 1920
Ishizuchi, VI-9, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku).
26. *Tipula* (*Oreomyza*) *dichroistigma* Alexander, 1920
Ishizuchi, 1400 meters, VI-9, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku).
27. *Tipula* (*Oreomyza*) *flavocostalis* Alexander, 1921
Ishizuchi, summit, 1931 meters, VII-27, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku, Kyushu).
28. *Tipula* (*Oreomyza*) *ishiharana* sp. nov.

Size large (wing, female, 15 mm.); general coloration gray, the vertex and thoracic dorsum with a nearly continuous capillary median brown vitta; antennae with proximal eight or nine segments yellow; mesonotal praescutum with a trifold darkened pattern, additional to numerous confluent setigerous punctures on the interspaces; knobs of halteres dark brown; legs black; wings whitish, with four conspicuous brown crossbands, cell S_c and the posterior prearcular field yellow; squama with sparse setae; vein R_{1+2} atrophied; abdominal tergites two and three yellow, the remainder darker, with a conspicuous median brown stripe; cerci long and straight.

Female.— Length about 17 mm.; with 15 mm.; antenna about 2.5 mm.

Frontal prolongation of head subequal to the remainder of head, light gray above, dark brown on sides and beneath; nasus small and slender; palpi black. Antennae relatively short; basal eight or nine segments yellow, the outer ones weakly bicolored, the weak basal enlargements being a trifle darker. Head very light gray, with a capillary brown line; vertical tubercle small and compact, subglobular, apparently weakly emarginate by a darkened line; conspicuous darkened setigerous punctures on posterior vertex, the sides of the latter darkened.

Pronotum very light gray, with three brown spots. Mesonotal praescutum light gray, conspicuously patterned with dark brown, including a trifold central area, the median spur a capillary central vitta subtended by broader lateral arms, beyond midlength the stripes narrow and confluent; lateral stripes narrow and reduced to subobsolete; interspaces with large and conspicuous brown setigerous punctures, becoming confluent in front; posterior sclerites of notum light gray, with a nearly continuous capillary brown stripe; scutal lobes each with two brown areas, the posterior one very large. Pleura and pleurotergite whitish gray, the dorsopleural membrane more yellowed. Halteres with stem yellow, knob dark brown. Legs with the coxae whitish gray; trochanters yellow; remainder of legs black. Wings with the ground color whitish, conspicuously crossbanded with brown, the first band just beyond the arculus, the

second at origin of R_s , third over the anterior cord in outer end of cell M and involving all of cell M_4 ; outer dark band including the broad wing tip; stigma and cell C dark brown, cell Sc and prearcular field conspicuously yellow; the white ground areas include the posterior prearcular field in bases of the anal cells, two narrow interrupted bands before cord, alternating with the darkened ones, and a virtually complete crossband beyond the cord, reaching the posterior border in cell M_3 but being narrowly interrupted by a dark seam over M_{1+2} ; veins beyond cord brown, Sc and the veins in the pale interspaces basad of cord yellow. Squama with two strong black setae. Venation: R_{1+2} atrophied or virtually so; R_s long, nearly three times $m-cu$, the latter only a little longer than M_{3+4} ; $m-cu$ just beyond the base of M_4 .

Abdominal tergites two and three obscure yellow, the outer segments more infuscated; a conspicuous median brown stripe, narrowly interrupted at the posterior borders of the segments, broader and more evident on the sternites; genital shield horn-colored; cerci long and straight.

Holotype, female, Jōjusha, Mt. Ishizuchi, 1400 meters, July 26, 1952 (Ishihara).

I take unusual pleasure in dedicating this handsome crane-fly to the collector, Professor Tamotsu Ishihara, distinguished Hemipterist. The most similar regional species is *Tipula (Oreomyza) quadrifasciata* Matsumura, 1916, which differs in many details of coloration of the body, antenna and wings. A re-description of the latter species has been given by the present writer in another report (Rec. Indian Mus., 44: 49; 1942).

29. *Tipula (Oreomyza) ligulalata* Alexander, 1953, in press.

Ishizuchi, summit, 1931 meters, VII-27, 1952 (Ishihara), type.

Distr. Japan (Shikoku).

30. *Tipula (Oreomyza) melanotalis* Alexander, 1953, in press.

Ishizuchi, summit, 1931 meters, VII-27, 1952 (Ishihara), type.

Distr. Japan (Shikoku).

31. *Tipula (Oreomyza) yusou* Alexander, 1914

Omogo Val. V-11, 1952 (Kusunoki).

Distr. Japan (Honshu, Shikoku, Kyushu).

32. *Tipula (Lunatipula) naviculifer breviscapa* Alexander, 1952, in press.

Omogo Val. 600 meters, V-10, 1952 (Ishihara).

Distr. Japan (Shikoku).

33. *Tipula yanoana* sp. nov.

General coloration light gray; mesonotum with a nearly continuous darkened median stripe, narrow on the praescutum, widened posteriorly; halteres yellow; legs black, the femoral bases broadly yellow; claws simple; wings yellow, particularly the prearcular and costal fields, the cells beyond the cord darker; stigma dark brown; tip of vein R_{1+2} atrophied; cell 1st M_2 elongate; male hypopygium with the posterior border of the tergite emarginate; outer dististyle elongate; inner dististyle unusually simple, the beak slender, the

outer basal lobe produced caudad into a pale horn; aedeagus short and stout, subtended by setiferous lobes.

Male.— Length about 13 mm.; wing 16.5 mm.; antenna about 5 mm.

Frontal prolongation of head light gray, relatively short, a little more than one-half as long as the remainder of head; nasus long and conspicuous; palpi brown, paler at the incisures, the first segment yellow. Antennae moderately long, as shown by the measurements; scape and pedicel yellow, flagellum black, the base of the first segment narrowly yellowed; segments moderately incised, longer than their verticils; terminal segment very reduced in size. Head light gray, with a capillary darkened median line on vertex; anterior vertex behind the antennal bases raised into low tubercles.

Pronotum gray, with a capillary darkened central line. Mesonotal praescutum light gray, with three very pale brownish gray stripes, the median one split by a darker brown capillary vitta that expands behind, the lateral stripes pale; scutum gray, each lobe with two very pale brownish gray areas, the median region darker brown; scutellum dark brown, the color continued even more extensively onto the mediotergite, the lateral borders of the latter, with the pleurotergite, clear light gray. Pleura light gray; dorsopleural membrane pale yellow. Halteres yellow. Legs with the coxae light gray; trochanters yellow; femora broadly yellow basally, the tips blackened, more extensively so on the fore legs where more than the outer half is included, more narrowly so on the other legs, on the posterior pair including about the outer third or fourth; tibiae brown, the tips more blackened; tarsi brownish black; claws (male) simple. Wings with the cells before the cord brownish yellow, the prearcular and costal fields clear light yellow; cells beyond the cord more infuscated; stigma dark brown; broad brown seams on *m-cu* and distal section of *Cu*; vague darkenings along vein *Cu* in cell *M* and over the Anal veins; a prestigmal oblitative spot; oblitative band at cord extending from cell *R* into the base of *M*₃, including more than half of cell *1st M*₂; veins brown, yellow in the brightened fields. No squamal trichia. Venation: *R*₁₊₂ chiefly atrophied, the basal spur subequal to vein *R*₂ or a little longer; *R*_s a little less than *m-cu*; cell *1st M*₂ long, narrowed outwardly; petiole of cell *M*₁ subequal to *m*; *m-cu* relatively long, nearly two-thirds the distal section of *Cu*₁.

First abdominal tergite dark brown, pruinose; succeeding segments yellow, with a median brown tergal stripe and narrower, scarcely indicated, sublateral ones, the lateral tergal borders broadly pale; basal sternites clear yellow; outer segments, including the hypopygium, blackened. Male hypopygium with the ninth tergite separated from the sternite by a virtually complete suture. Ninth tergite with the posterior border deeply emarginate, the lobes rounded. Outer dististyle elongate, approximately five or six times as long as the greatest diameter. Inner dististyle unusually simple, the main body slender, extended into a beak, the posterior end, representing the outer basal lobe, drawn out into a conical pale horn. Aedeagus short and

stout, black, subtended basally by flattened setiferous lobes. Eighth sternite unarmed.

Holotype, male, Omogo Valley, altitude 700 meters, May 11, 1952 (Ishihara).

This distinct fly is named for Mr. Toshiro Yano, in appreciation of his efforts to make known the insect fauna of Shikoku. I am uncertain as to the subgeneric position of the species. In some details of the venation, as the long *m-cu*, and the male hypopygium, it suggests the subgenus *Schummelia* Edwards but in other features of the venation, as the atrophied R_{1+2} and elongate cell *1st M*₂, it more closely resembles species of the subgenus *Oreomyza* Pokorny. There are no very close relatives known to me though superficially the fly somewhat suggests species such as *Tipula* (*Schummelia*) *jocosipennis* Alexander and others.

CYLINDROTOMINAE

34. ***Liogma serraticornia* Alexander, 1919** Nom. Jap.: *Hige-shiributogaganbo*
Omogo Val. VI-6, 1952 (Yano). Ishizuchi, 1400-1931 meters, VI-9, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku, Kyushu).

LIMONIINAE

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35. ***Limonia* (*Limonia*) *anthracina* (Alexander, 1922)**
Omogo Val. 600-800 meters, V-10~11, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku).
36. ***Limonia* (*Limonia*) *basispina* Alexander, 1924**
Omogo Val. V-10, 1952 (Kusunoki).
Distr. Japan (Hokkaido, Honshu, Shikoku).
37. ***Limonia* (*Limonia*) *esakii* (Alexander, 1922)**
Ishizuchi, Jōjusha, 1400 meters, VII-26, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku), Formosa.
38. ***Limonia* (*Limonia*) *euphileta* Alexander, 1924**
Omogo Val. 800 meters, V-10, 1952 (Edashige), VII-14 & 29, 1952 (Ishihara-Yano).
Distr. Japan (Honshu, Shikoku, Kyushu).
39. ***Limonia* (*Limonia*) *fusciceps* Alexander, 1924**
Omogo Val. 700 meters, V-10, 1952 (Edashige-Kusunoki). Ishizuchi, 1400-1931 meters, VI-9, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku, Kyushu).
40. ***Limonia* (*Limonia*) *machidai* (Alexander, 1921)**
Omogo Val. 800 meters, VII-14, 1952 (Ishihara).
Distr. Japan (Hokkaido, Honshu, Shikoku), Asia, westward to Central Europe.

41. **Limonia (Limonia) monacantha Alexander, 1924**
Omogo Val. VI-18, 1952 (Ishihara), VII-14, 1952 (Yano).
Distr. Japan (Hokkaido, Honshu, Shikoku), to western China.
42. **Limonia (Limonia) nubeculosa Meigen, 1804**
Ishizuchi, 1400-1931 meters, VI-9, 1950 (Issiki-Ito).
Distr. Japan (Hokkaido, Honshu, Shikoku); Europe, western North America.
43. **Limonia (Limonia) omogoensis Alexander, 1953, in press.**
Omogo Val. 800 meters, VII-14, 1952 (Ishihara), type.
Distr. Japan (Shikoku).
44. **Limonia (Limonia) plutonis Alexander, 1924**
Ishizuchi, 1400-1931 meters, VI-9, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku, Kyushu).
45. **Limonia (Limonia) tanakai (Alexander, 1921)**
Nom. Jap.: *Usukibane-hime-gaganbo*
Omogo Val. VI-6, 1952 (Yano).
Distr. Japan (Honshu, Shikoku).
46. **Limonia (Limonia) tristina Alexander, 1930**
Omogo Val. VI-5~6, 1952 (Yano).
Distr. Japan (Shikoku, Kyushu, to Yakushima).
47. **Limonia (Discobola) margarita (Alexander, 1924)**
Omogo Val. VI-6, 1952 (Yano); 800 meters, VII-14, 1952 (Ishihara).
Distr. Japan (Hokkaido, Honshu, Shikoku, Kyushu), Formosa.
48. **Limonia (Rhipidia) lecontei Alexander, 1940, var.**
Ishizuchi, Kōguchi, 1400 meters, VI-8, 1950 (Issiki-Ito); Jōjusha, 1400 meters, VII-26, 1952 (Ishihara).
Distr. Japan (Hokkaido, Honshu, Shikoku); Palaearctic, Nearctic.
49. **Limonia (Rhipidia) pulchra (de Meijere, 1904)**
Omogo Val. VII-14, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku, Kyushu), Eastern Asia.
50. **Limonia (Dicranomyia) basifusca (Alexander, 1919)**
Omogo Val. 800 meters, VII-14, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku),
51. **Limonia (Dicranomyia) depauperata (Alexander, 1919)**
Omogo Val. 900 meters, V-11, 1952 (Ishihara).
Distr. Japan (Hokkaido, Honshu, Shikoku), Formosa, to western China.
52. **Limonia (Dicranomia) immodestoides (Alexander, 1919)**
Nom. Jap.: *Usuki-hoso-himegaganbo*
Omogo Val. 800 meters, VII-14, 1952 (Ishihara). Jōjusha, Ishizuchi, 1400 meters, VII-26, 1952 (Ishihara).
Distr. Japan (Hokkaido, Honshu, Shikoku, Kyushu), Eastern Asia; North America.

53. **Limonia (Dicranomyia) nankaidoensis Alexander, 1953, in press.**
Omogo Val. 700-800 meters, V-10 & 11, 1952 (Ishihara).
Distr. Japan (Shikoku).
54. **Limonia (Dicranomyia) pseudomorio (Alexander, 1920)**
Ishizuchi, 1200 meters, VIII-10, 1925 (Harukawa).
Distr. Japan (Shikoku, Kyushu).
55. **Limonia (Dicranomyia) shinanoensis Alexander, 1933**
Omogo Val. 800 meters, VI-18, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku).
56. **Limonia (Dicranomyia) takeuchii (Alexander, 1922)**
Nom. Jap.: *Takeuchi-madara-himegaganbo*
Kōguchi, 300 meters, to Ishizuchi, 1400 meters, VI-11, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku).
57. **Limnorimarga limonioides (Alexander, 1945)**
Omogo Val. VI-6, 1952 (Yano), 800 meters, VII-14, 1952 (Ishihara).
Distr. Japan (Shikoku, Kyushu), Northern Korea.
58. **Helius (Helius) tenuirostris Alexander, 1924** Nom. Jap.: *Kuchibashi-gaganbo*
Omogo Val. 800 meters, VI-5, 1952, VII-14 & 23, 1952 (Ishihara). Ishizuchi, 1000 meters, VIII-10, 1925 (Harukawa), Jōjusha, Ishizuchi, 1400 meters. VII-26, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku, Kyushu).
59. **Antocha (Proantocha) serricauda Alexander, 1924** Nom. Jap.: *Usuba-gaganbo*
Omogo Val. 800 meters, VI-6, 1952, VII-14, 1952 (Ishihara-Yano).
Distr. Japan (Honshu, Shikoku).
60. **Antocha (Antocha) bidigitata Alexander, 1953, in press.**
Omogo Val. V-10, 1952 (Kusunoki), type.
Distr. Japan (Shikoku).
61. **Antocha (Antocha) bifida Alexander, 1924**
Omogo Val. 700 meters, V-10 & 18, 1952 (Ishihara-Edashige-Kusunoki).
Distr. Japan (Hokkaido, Honshu, Shikoku, Kyushu).
62. **Antocha (Antocha) gracillima Alexander, 1925**
Omogo Val. 800 meters, VII-23, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku, Kyushu).
63. **Antocha (Antocha) spicata Alexander, 1936**
Omogo Val. 800 meters, V-14, 1952 (Ishihara), VII-14, 1952 (Yano).
Distr. Japan (Hokkaido, Honshu, Shikoku, Kyushu).
64. **Dicranoptycha yamata Alexander, 1919**
Omogo Val. V-10, 1952 (Kusunoki).
Distr. Japan (Honshu, Shikoku, Kyushu).

PEDICIINI

65. **Pedicia (Pedicia) issikiella Alexander, 1952, in press.**
Ishizuchi, VII-26, 1947 (Kobayashi).
Distr. Japan (Shikoku).

66. **Pedicia (Tricyphona) insulana** (Alexander, 1913)
Omogo Val. V-10, 1952 (Kusunoki).
Distr. Japan (Honshu, Shikoku, Kyushu).
67. **Pedicia (Tricyphona) kirishimensis** (Alexander, 1928)
Omogo Val. VI-5~6, 1952 (Yano).
Distr. Japan (Shikoku, Kyushu).
68. **Pedicia (Tricyphona) pectinata** (Alexander, 1931)
Ishizuchi, 1400 meters, VI-10, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku).
69. **Pedicia (Tricyphona) seticauda** (Alexander, 1925)
Omogo Val. VII-26, 1947 (Ishimaru).
Distr. Japan (Honshu, Shikoku).
70. **Pedicia (Tricyphona) yakushimana** (Alexander, 1930)
Omogo Val. VII-14, 1952 (Yano).
Distr. Japan (Shikoku, Kyushu-Yakushima).
71. **Heterangaeus japonicus** (Alexander, 1919)
Omogo Val. 700 meters, V-11, 1952 (Ishihara), VI-6, 1952 (Yano), VII-22, 1949 (Miyatake).
Ishizuchi, 1400-1981 meters, VI-9, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku, Kyushu).
72. **Dicranota (Eudicranota) dicranotoides** (Alexander, 1924)
Ishizuchi, Kōguchi, 300 meters, to 1400 meters, VI-11, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku).
73. **Dicranota (Rhaphidolabis) consors** (Alexander, 1923)
Omogo Val. VI-6, 1952 (Yano).
Distr. Japan (Honshu, Shikoku, Kyushu).
74. **Dicranota (Rhaphidolabis) gibbera** (Alexander, 1921)
Omogo Val. VII-14, 1952 (Yano). Ishizuchi, 1400 meters, VI-10, 1950 (Issiki-Ito).
Distr. Japan (Hokkaido, Honshu, Shikoku), Karafuto.

HEXATOMINI

75. **Austrolimnophila (Austrolimnophila) horii** (Alexander, 1925)
Omogo Val. 800 meters, V-10, 1952 (Ishihara-Kusunoki). Ishizuchi, VI-9, 1950 (Issiki-Ito).
Distr. Japan (Shikoku, Kyushu).
76. **Epiphragma (Epiphragma) evanescens** Alexander, 1940
Omogo Val. VII-21, 1949 (Miyatake). Ishizuchi, 1400-1981 meters, VI-9, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku), Eastern China.
77. **Epiphragma (Epiphragma) subfascipennis** Alexander, 1920
Nom. Jap.: *Oo-kimadara-himegaganbo*
Ishizuchi, 1400meters, VI-10, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku, Kyushu).

78. **Epiphragma (Epiphragma) subinsignis Alexander, 1920**
 Nom. Jap.: *Kimadara-himegaganbo*
 Omogo Val. VI-5 & 18, 1952 (Yano). Ishizuchi, 1400-1931 meters, VI-9, 1950 (Issiki-Ito).
 Distr. Japan (Honshu, Shikoku, Kyushu).
79. **Dactylolabis (Dactylolabis) diluta Alexander, 1922**
 Omogo Val. 700-800 meters, V-10~12, 1952 (Ishihara).
 Distr. Japan (Honshu, Shikoku).
80. **Dactylolabis (Dactylolabis) longicauda Alexander, 1922**
 Omogo Val. 600-800 meters, V-10~11, 1952 (Ishihara-Kusunoki). Ishizuchi, VI-8, 1950 (Issiki-Ito).
 Distr. Japan (Honshu, Shikoku, Kyushu).
81. **Limnophila (Adelphomyia) biacus Alexander, 1953, in press.**
 Omogo Val. VI-6, 1952 (Yano). Ishizuchi, VI-10, 1952 (Issiki-Ito), types.
 Distr. Japan (Shikoku).
82. **Limnophila (Adelphomyia) brevirama Alexander, 1925**
 Ishizuchi, VI-9, 1950 (Issiki-Ito).
 Distr. Japan (Honshu, Shikoku, Kyushu).
83. **Limnophila (Adelphomyia) caesiella Alexander, 1929**
 Omogo Val. 800 meters, V-10, 1952 (Edashige).
 Distr. Japan (Shikoku, Kyushu).
84. **Limnophila (Prionolabis) odai Alexander, 1933**
 Ishizuchi, 1400-1931 meters, VI-9, 1950 (Issiki-Ito).
 Distr. Japan (Honshu, Shikoku).
85. **Limnophila (Prionolabis) shikokuana Alexander, 1952, in press.**
 Omogo Val. 700 meters, V-10, 1952 (Ishihara).
 Distr. Japan (Shikoku).
86. **Limnophila (Prionolabis) submunda Alexander, 1918**
 Ishizuchi, 1400-1931 meters, VI-9, 1950 (Issiki-Ito).
 Distr. Japan (Honshu, Shikoku).
87. **Limnophila (Prionolabis) uncinata Alexander, 1953, in press.**
 Omogo Val. 700 meters, V-12, 1952 (Ishihara), types.
 Distr. Japan (Shikoku).
88. **Limnophila (Dicranophragma) microspila Alexander, 1953, in press.**
 Ishizuchi-Koguchi, 1400 meters, VI-8, 1950 (Issiki-Ito), type.
 Distr. Japan (Shikoku).
89. **Limnophila subnemoralis Alexander, 1925**
 Ishizuchi, 1400-1931 meters, VI-9, 1950 (Issiki-Ito); Jōjusha, 1400 meters, VI-26, 1952 (Ishihara).
 Distr. Japan (Honshu, Shikoku, Kyushu).
90. **Pilaria tokionis melanota Alexander, 1922**
 Ishizuchi, 1400-1931 meters, VI-9, 1950 (Issiki-Ito).
 Distr. Japan (Honshu, Shikoku).

91. **Ulomorpha nigricolor Alexander, 1925**
Ishizuchi, 1400 meters, to Koguchi, 300 meters, VI-11, 1950 (Issiki-Ito); Yuyama, V-9, 1948 (Miyatake).
Distr. Japan (Honshu, Shikoku Kyushu).
92. **Hexatoma (Hexatoma) japonica Alexander, 1922**
Omogo Val. VII-26, 1948 (Tomari).
Distr. Japan (Honshu, Shikoku).
93. **Hexatoma (Eriocera) cerberus Alexander, 1953, in press.**
Omogo Val. VII-17, 1950 (Ishihara), type.
Distr. Japan (Shikoku).
94. **Hexatoma (Eriocera) imperator Alexander, 1953, in press.**
Omogo Val. VII-125, 1951 (Miyatake), type.
Distr. Japan (Shikoku).
95. **Hexatoma (Eriocera) longifurca (Alexander, 1920)**
Nom. Jap.: *Hoshikuro-gaganbo*
Omogo Val. 800 meters, V-11, 1952 (Ishihara) "Flies close to surface of water over mountain torrents" Ishihara.
Distr. Japan (Honshu, Shikoku).
96. **Hexatoma (Eriocera) stricklandi pallidibasis Alexander, 1952, in press.**
Ishizuchi, VII-30, 1948 (Kobayashi).
Distr. Japan (Shikoku).
97. **Elephantomyia (Elephantomyia) dietziana Alexander, 1930**
Omogo Val. VI-6, 1952 (Yano).
Distr. Japan (Honshu, Shikoku, Kyushu).

ERIOPTERINI

98. **Conosia irrorata (Wiedemann, 1828)** Nom. Jap.: *Sedaka-gaganbo*
Omogo Val. V-11, 1952 (Kusunoki).
Distr. Japan (Honshu, Shikoku, Kyushu), Formosa; Palaeo-tropical: Australasia, Oriental, Ethiopian.
99. **Gymnastes (Paragymnastes) flavitibia (Alexander, 1919)** Nom. Jap.: *Misuji-gaganbo*
Omogo Val. 800 meters, VI-18, 1952 (Ishihara), VII-21, 1949 (Miyatake).
Distr. Japan (Honshu, Shikoku, Kyushu).
100. **Lipsothrix yamamotoana omogoensis Alexander, 1953, in press.**
Omogo Val. 700 meters, V-11, 1952 (Ishihara), type.
Distr. Japan (Shikoku).
101. **Erioptera (Empeda) nigroapicalis Alexander, 1920**
Omogo Val. 800 meters, VII-14, 1952 (Ishihara).
Distr. Japan (Shikoku), Formosa.

- 102. Erioptera (Erioptera) horii Alexander, 1924**
Ishizuchi, Jōjusha, 1400 meters, VII-26, 1952 (Ishihara).
Distr. Japan (Hokkaido, Honshu, Shikoku), Karafuto, North Korea.
- 103. Ormosia (Ormosia) nantaisana Alexander, 1921**
Omogo Val. 700 meters, V-10~11, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku).
- 104. Ormosia (Ormosia) takeuchii Alexander, 1921**
Nom. Jap.: *Hanebiro-himegaganbo*
Omogo Val. 700 meters, V-10, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku).
- 105. Molophilus (Molophilus) ishizuchianus Alexander, 1953, in press.**
Ishizuchi, Jōjusha, 1400 meters, VII-26, 1952 (Ishihara), type.
Distr. Japan (Shikoku).
- 106. Molophilus (Molophilus) nocticolor Alexander, 1953, in press.**
Omogo Val. 700-900 meters, V-11, 1952 (Ishihara), types.
Distr. Japan (Shikoku).
- 107. Molophilus (Molophilus) pegasus Alexander, 1913**
Ishizuchi, 1400-1931 meters, VI-9, 1950 (Issiki-Ito).
Distr. Japan (Honshu, Shikoku).
- 108. Styringomyia nipponensis Alexander, 1929**
Omogo Val. 700-800 meters, VII-14 & 28, 1952 (Ishihara).
Distr. Japan (Honshu, Shikoku), Formosa.