



Title	Fauna of the Thysanoptera in Japan
Author(s)	Ishida, Masato
Citation	Insecta matsumurana, 5(3), 149-155
Issue Date	1931-03
Doc URL	https://hdl.handle.net/2115/9217
Type	departmental bulletin paper
File Information	5(3)_p149-155.pdf



FAUNA OF THE THYSANOPTERA IN JAPAN

By

MASATO ISHIDA

(Part I)

Suborder TEREBRANTIA HALIDAY

Superfamily AEOLOTHRIPIDEA HOOD

Family AEOLOTHRIPIDÆ UZEL

1. *Aeolothrips fasciata* LINN.

1771. *Thrips fasciata* LINNÉ, Fauna Svecica, p. 266.
1761. (Without the scientific name) SULZER, Kennz. d. Ins. tab. 7, figs. 486.
1767. *Thrips fasciata* LINNÉ, Systema Naturae, p. 743.
1781. " " SCHRANK, Enum. Ins. Aust., p. 297.
1781. " " FABRICIUS, Spec. Ins., p. 397.
1787. " " " Mantissa Ins., p. 320.
1788. " " GMELIN, in Linn. Syst. Nat., ed. XIII, p. 2223.
1789. " " BERKENHOUT, Synops. Nat. Hist. Gr. Brit., p. 133.
1794. " " FABRICIUS, Ent. Syst., p. 229.
1802. " " STEW, Elem. of Nat. Hist., 2, p. 114.
1803. " " FABRICIUS, Systema Rhyngotorum, p. 314.
1806. " " TURTON, General Syst. of Nat. (Gmelin translated) p. 717.
1836. *Aeolothrips (Coleothrips) fasciata* HALIDAY, Ent. Mag., 3, p. 451.
1838. " *fasciata* BURMEISTER, Handbuch d. Ent., 2, p. 1417.
1843. *Coleothrips fasciata* AMYOT et SERVILL, Ins. Héempt., p. 646.
1852. *Aeolothrips (Coleothrips) fasciata* HALIDAY, WALKER, Homopt. Ins. Brit. Mus. p. 1117.
1852. " *fasciata* HEEGER, Sitzungsber. Akad. Wiss. Wien, 8, p. 135.
1852. " *vitta* " " " " " " " p. 187.
1855. *Coleothrips trifasciata* FITCH, Count. Gent., 6, p. 885.
1857. " " " " II Repot. Nox. Ins. N. 4, p. 308.
1871. *Thrips fasciata* DE MAN, Tijdschr. v. Ent., p. 147.
1879. *Aeolothrips (Coleothrips) fasciata* REUTER, Diagn. nya. Thys. Finl., p. 7.
1882. *Coleothrips fasciata* PERGANDE, Entomologist, p. 95.
1886. " " LEUNIS, Synopsis II, p. 537.
1886. " *trifasciata* WEBSTER, Rept. Dept. Agr. Exp., p. 577.
1889. " " THAXTER, Rept. Conn. Agr. Exp. Stat., p. 180.
1891. " *3-fasciata* RILEY-HOWARD, Ins. Life, 3, p. 301.
1893. " *trifasciata* TOWNSEND, Canad. Ent., 24, p. 197.
1893. " " GILLETTE, Bul. 24, Col. Exp. Stat., p. 15.
1893. " " DAVIS, Bul. 102, Mich. Agr. Exp. Stat., p. 39.
1895. *Coleothrips trifasciata* COCKERELL, Bul. 15, Mex. Agr. Exp. Stat., p. 71.

1895. *Aeolothrips fasciata* UZEL, Mon. Ord. Thys., p. 72.
 1896. *Coleothrips fasciata* DAVIS, Spec. Bul. 2, Mich. Agr. Exp. Stat., p. 13.
 1896. *Aeolothrips fasciatus* TRYBOM, Ofv. Kongl. Vetensk. Akad. Förh., 8, 625.
 1898. " *fasciata* COESFELD, Abh. Nat. Ver. Bremen, 14, p. 470.
 1899. *Coleothrips* " JABLONOWSKI, Faun. regn. Hung., p. 18.
 1899. *Aeolothrips* " REURT, Act. Soc. Faun. Flor. Fenn. 17, 2, pp. 32, 33.
 1901. " " TÜMPEL, Geradfl. Mitteleur., p. 286.
 1902. " *fasciatus* HINDS, Monogr. North America. Thys., p. 127.
 1903. " *fasciata* DEL GUERCIO, Staz. Ent. Agrar., I a, 5, Firenze.
 1906. " " BUFFA, Atti. Acad. Venet., 3, p. 4 et 5.
 1907. " " " Atti. Soc. Tas. Sci., Nat., 23, p. 57.
 1907. " " " Proc. Verb. Soc. Tosc. Sc. Nat.
 1907. " " KARNY, Berl. Ent. Zeitschr., 52, p. 45.
 1908. " *fasciatus* BUFFA, Ann. Mus. zool. Napoli, 2, p. 2.
 1908. " *fasciata* COBELLI, Verh. Zool.-bot. Ges. Wien, 59, p. 2.
 1908. " " KARNY, Mitt. Nat. Ver. Wien, 6, p. 113.
 1909. " " " " " " 7, pp. 241, 243.
 1910. " *fasciatus* BAGNALL, Ann. Mus. Hung., 8, p. 375.
 1910. " *fasciata* TRYBOM, Schultze Forschungsreise Südafr., p. 151. (partim!)
 1910. " " f. *aptera* KARNY, Mitt. Nat. Ver. Wien, 8, 2, p. 44.
 1911. " *fasciatus* MOULTEN, Synopsis etc., p. 22.
 1911. " " BAGNALL, Jour. Econ. Biol., 6, p. 10.
 1912. " *fasciata* SCHILLE, Ent. Zeitschr. Frankfurt. Sep. p. 11.
 1912. " *fasciatus* BAGNALL, Trans. 2. Ent. Congr., p. 397.
 1912. " " Trans. Nat. Hist. North. etc., p. 354.
 1913. " " MORGAN, Proc. Unit. Stat. Nat. Mus., 46, 2008, p. 42.
 1913. " " SORAUER-REH, Handb. f. Pflanzenkrkht., 3, p. 222.
 1914. " " MATSUMURA, Konchyu-bunruigaku Vol. I, pp. 90, 91.
 1914. " " KARNY, Verh. zool.-bot. Ges. Wien, p. 51.
 1914. " " PRIESNER, Wien. Ent. Ztg., 33, p. 187.
 1916. " " " Schr. Phys. ök., Ges. Königsbg, p. 51.
 1917. " " TULLGREN, Ent. Tidskr., 38, p. 35.
 1919. " " PRIESNER, Sitzgsb. Akad. Wiss. Wien, 129, p. 119.
 1919. " " " ZEITSCHR, Öst. Ent. Ver., 4, 8, p. 80.
 1919. " " TREHERNE, Canad. Ent., p. 181.
 1920. " " PRIESNER, Kranchers Ent. Jahrb., p. 171.
 1920. " " BAGNALL, Ent. Month. Mag., p. 60.
 1920. " " PRIESNER, Ent. Zeitschr. Frankfurt, 34, 3.
 1920. " " " Mus. Linz, 78, p. 51, Sep. p. 4.
 1920. " " REYNE, Tijdschr. v. Ent., p. 44.
 1921. " " JOHN, Faun. Petropol, Catal., Sep. p. 5.
 1921. " " PRIESNER, Zeitschr. Ost. Ent. Ver., 4, 5, p. 21.
 1921. (?) " " AHLVERG, Nat. Hist. Juan Fernandez, p. 271.
 1922. " *fasciata* VAN. ECKE, Nat. Verh. Holl. Maatsch. Wetensch. Haarlem, 9, p. 100 et 106.
 1923. " *fasciatus* PRIESNER, Ent. Mitteil. 12, 1, p. 63.
 1923. " " KNECHTEL, Thys. Roman. p. 67.
 1923. " " WATSON, Synopsis, pp. 25, 26.
 1924. " " BAGNALL, Ent. Month. Mag., 9, p. 114.
 1924. " " JOHN, Ent. Mitteil., 13, 1, p. 7.

1924/25.	"	"	PRINSNER, <i>Krancher Ent. Jahrb.</i> , p. 157.
1924.	"	"	<i>propinquus</i> BAGNALL, <i>Ent. Moth. Mag.</i> , 9, p. 269.
1924.	"	"	<i>fasciata</i> NESTLER, <i>Mitt. Ver. Natfr. Leichenbg.</i> , 46, p. 52.

Female. Colour: head black or blackish brown, prothorax blackish brown mesothorax shaded with deep reddish brown at the antelateral margin, mesothorax blackish brown with deep reddish brown at the anterior margin; abdomen unicolorously black or blackish brown except the segment 10 which is blood-red. Ocelli brown. Antenna: segment 1 brown, 2 paler at the outer portion, three whitish with black shadow at the outer portion, and the remaining segments all black. Legs: wholly blackish brown, paler at the outer portion of the fore-tibia and tarsus. Wings almost transparent, with two brown bands, one of which is located near the apex, and the other one in the middle of wing; fringe long, and brown.

Total length of the body: 1.658 mm.; Head, length .23 mm., width across the eyes .196 mm.; prothorax, length .17 mm.; width .213 mm., pterothorax, width .298 mm., the greatest width of abdomen .383 mm.

Segments of antenna: length (width) I, 23 (36); II, 54 (36); III, 98 (27); IV, 92 (25); V, 72 (25); VI, 30 (23); VII, 24 (18); VIII, 14 (9); IX, 14 (7); total length .421 mm. Length of spines: on the posterior margin of the abdominal segment 8, inner pair 153 mc., outer ones 170 mc., median pair 145 mc., outer pair 187 mc., on the abdominal segment 9 and the anal spines 72 mc.

Head rounded at the frons distinctly longer than the width; cheek almost straight, ocelli two, small and bright in colour. Eyes large, occupying two-thirds of the head, and almost a half of the width, facets of eyes fine.

Mouth-cone comparatively short, as long as the head, maxillary palpi geniculate, three-jointed; first joint large and thick, the second bent inwardly, its length being two-thirds of the first, the third one very short, with two fine hair at the tip. Labial palpi four-jointed; first joint very small, the second longest, the third and fourth small, the latter having five or six fine tactil hairs at the tip. Antennae about two times as long as the haed.

Prothorax smooth, one third broader than length, sides evenly and slightly rounded, mesothorax larger and broader than the metathorax. Wings reaching to the posterior margin of the abdominal segment 8. Abdomen well developed, spindle-shaped, spines are long and stout on the abdominal segments 8 and 9.

Specimens: five were taken by Mr. C. WATANABE on some flowers of meadow grasses at Konuma, Saghalin, on July 2, 1930; seven were collected on the rape-flowers in Sapporo by myself on July 6, 1930 (ISHIDA Nos. 141, 361, 426, 448, 471, 478, 482, 486).

Male. Colour: Generally paler than the female; head blackish brown, prothorax and pterothorax deep orange-brown, abdomen blackish brown except the segments 1 to 4 which are pale grayish brown. Antennal segments 1 and 2 grayish brown, the latter being lighter towards the tip, 3 pale yellowish white, with black shade anteriorly, and the remaining segments blackish brown, each with a white ring. Fore-legs, middle and hind femora brownish gray, the middle and hind tibia as well as the tarsi blackish brown, the extreme tarsi being lighter.

Wings similar with a female, but seems to be somewhat longer than the body, reaching to the abdominal segment 9.

Total length of the body: 1.088 mm.; head, length .111 mm., width .179 mm.; prothorax, length .128 mm., width .178 mm.; mesothorax, width .256 mm.; metathorax, width .23 mm.

Segments of antenna: length (width) I, 23 (35); II, 34 (31); III, 89 (27); IV, 97 (24); V, 84 (23); VI, 34 (22); VII, 16 (16); VIII, 14 (11); IX, 14 (7); total length .427 mm.

Length of spines: at the posterior angle of the abdominal segment 7. 80 mc.; at the posterior median pair of the segment 8 and the outer pair 135 mc.; anal pair 85 mc., its middle spine 71 mc.

Head nearly the same with the female in shape, but its cheek slightly arched. Facets of the eyes proportionally coarser than those of the female, and each facet rounded nearly like a raspberry. Ocelli also comparatively larger than in the female and brightened with pale orange-brown. Antennae longer than those of the female, proportionally a little more than 3.8 times the length of head. Legs much developed, especially the hind legs long and far extending beyond the abdomen (measuring 85 mc.). Abdomen cylindrical, the abdominal segment 7 the largest, the 8 and 9 small, abruptly ending at the sharp anal segment.

Specimens: two were collected in Sapporo by the author (ISHIDA Nos. 114, 422) on a flower of Dandelion on May 24, 1930.

2. *Aeolothrips albicinctus* form *flavithorax* PRIES.

1926. *Aeolothrips albicinctus* f. *flavithorax* PRIESNER, Thysanop. Eur. I, p. 102.

Female (aptera). Colour: body black in a direct light, blackish brown in an intermitted light; antennal segment 1 brownish white 2 and 3 yellowish white, except the tip of the latter which is shaded with brown. Each middle part of the prothorax and mesothorax brown; abdominal segments 1 and 2 somewhat semi-transparent, yellow, segments 3 to 7 uniformly blackish brown each with a narrow band at the posterior margin, 8 with a reddish yellow spot

at the middle of it, 9 reddish brown, connected with the red terminal. Three pair of legs uniformly deep brown, except the pale terminal segments of tarsi.

Total length of the body: 1.19 mm.; head, length .22 mm.; width across the eyes .31 mm.; prothorax, length .204 mm., width .221 mm.; pterothorax, length .323 mm., width 238 mm. Segments of antenna: length (width), I, 34 (42); II, 68 (32); III, 142 (27); IV, 131 (25); V, 89 (27); VI, 20 (20); VII, 16 (16); VIII, 20 (12); IX, 12 (8); total length .540 mm.

Length of spines: on the posterior margin of the abdominal segment 9 128 mc., curved pair on the anal segment 70 mc.

Head longer than the width, slightly angular at the vertex, facets of the eyes fine, pilose, (seen in an intermitted light) but when it seen in a direct light they seem to be a raspberry-form; cheek straight, with a numerous transverse wrinkles behind the eyes. Ocelli two, rudimental, much smaller than those of *A. fasciatus* L. Mouth-cone broad at the base, slightly constricted at the middle and drawn out to a rounded tip. Antennae very slender, 3.2 times as long as the head. Prothorax a little wider than the head and evenly, slightly arched, no bristle and hair on the lateral sides. Mesothorax small, but broader than the prothorax, metathorax as broad as the mesothorax, Legs: blackish brown: fore-femur broad and thicked with blackish hairs on the upper surface, the middle and hind legs normal, with some blackish hairs at the inner and outer sides as well as at the terminal portion of the tibia.

Abdomen oblong, segments 1 and 2 whitish, semi-transparent, very distinct, 1 to 6 with no hair, one larger seta (49 mc.) and some very fine setae at the posterior margin of the segment 7, with six long spines on the segment 8, measuring 136 mc., 9. with four spines, two of which at the dorsal part long, measuring 111 mc., and the other two on each lateral side being short measuring 85 mc., two hook-like spines measuring 77 mc., at the anal segment which is belobed.

Specimens: two females were taken by Mr. C. WATANABE on some flowers of meadow grasses and clover by the beating nets (ISHIDA Nos. 442, 443), on July 2, 1930.

Locality: Konuma in Saghalien, Japan.

Family THIRIPIDÆ

Subfamily CHIROTIRIPINÆ

3. *Chirothrips watanabei* sp. nov.

Female. Colour: head light orange-brown; prothorax and pterothorax dark brown, the latter shaded with deep orange-red; abdomen light blackish brown, with segments 1 to 7 shaded with a light orange along the lateral

margins, 8 blackish gray 9 black. Antennal segments uniformly deep brown except at the segment 3 which is slightly lighter, segment 2 deep brown at the larger part of the base, shading with a light brown at the outer portion. Legs deep brown except the fore-tarsi and a half of the outer portion of the tibia which are paler. Ocelli with deep brown crescents.

Total length of body: .816 mm.; head, length 41 mc., width 97 mc., across the eyes; prothorax, length .157 mm., width of the anterior margin .122 mm., posterior margin .216 mm.; pterothorax, width .257 mm.

Segments of antenna: length (width), I, 29 (31); II, 27 (27); III, 22 (22); IV, 27 (23); V, 23 (20); VI, 34 (18); VII, 8; VIII, 9; total length 165 mc.

Length of spines: at the posterior angle of prothorax 56 mc., at the abdominal segment 9 88 mc., and 10 47 mc.

Head very small, eyes occupying about three-fourths at each side of the head, with small spines near the basal segment of antenna. Facets of the eyes coarse, with very fine hairs. Ocelli large, posterior pair being placed closely at the anterior margin of the prothorax. Mouth-cone broadly rounded, hardly reaching to the middle of the prosternum.

Antennae about four times as long as the head, with segment 2 exceedingly broaden out up to the tip, its side and distal margins almost straight, 3 pear-shaped, 4 distinctly larger than 3 or 5, 5 small, 6 the longest; a stout sense-cone on the outer sides of 3 and 4, two long cones on each side of 6 and small one to be seen at the inner side of 5. Prothorax very large, trapezoidal in form as the typical form of the genus, two moderately stout spines at each posterior angle, a series of five or six very fine spines along each side. Mesothorax the broadest, and metathorax narrower. Legs small, especially the fore femora heart-form with many transverse wrinkles on the upper surface, tibia short, with some spines on the outer portion. Wings long, slightly bent as a sword-like, extending far beyond the abdomen, more or less broader at the base and gradually narrowed towards a pointed tip.

Abdomen short semi-oval, the segments 1 to 5 increasing gradually their breadth though very slightly, 5 broadest 6, 7, 8 and 10 decrease their breadth evenly to the blunt tip, 9 and 10 being equilateral triangle. Tergites without prominent spines except the segment 9 and 10.

Type: two females were collected on some flowers of the meadow grasses, on July 2, 1930, by Mr. C. WATANABE at Konuma, Saghalin, (ISHIDA Nos. 484, 470); the holotype is preserved in the Entomological Museum, Hokkaido Imp., Univ., and the paratype is in the author's private collection (ISHIDA No. (470)).

Type locality: Konuma in Saghalin, Japan.

摘 要

本文中記載したるものは *Thysanoptera* 總翅目中、樺太産の一新種 *Chirothrips watanabei* sp. nov. と、同島産未記録の歐洲産と同定した。 *Aeolothrips albicinctus* f. *flavithorax* Pries. 及び世界共通の *Aeolothrips fasciatus* L. の三種にして、特に歐洲産のものに就ては觸角節及刺毛の長さに就て詳細に尺度を計つたものである。但し *A. fasciatus* L. の雄は北海道産のものに就て記載したものである。

LEMA ORYZÆ SP. NOV.

By

SATORU KUWAYAMA

In the course of my study on the leaf-beetle of the rice-plant in Japan, I found that this species which has hitherto been referred to as *Lema melanopa* LINNÉ and formerly known as *L. tristis* HERBST (= *L. flavipes* SUFFRIAN), is a new and undescribed one. In order to take a priority, I give a brief description of the species in this occasion. More precise description and discussion shall be given in the near future.

General colour of body blackish, with the pronotum bright yellowish brown and the elytra metallic blue. Antennae black, with grayish pubescence densely, excepting two basal joints which are dark brown and scarcely pubescent. Legs bright brownish yellow, with blackish coxae and dark brownish tarsi, the tibia being darkened at the apex; abdominal sternites deep black with close and fine punctures, covered with dense grayish yellow pubescence.

Average length of body 4.23 mm. in the males and 4.76 mm. in the females.

In form and colouration this species has much resemblance to *L. melanopa* LINNÉ, but its dark brownish basal two joints of antennae, brownish yellow trochanters, dark brownish tarsi and apices of tibiae, blackish abdominal sternites and the conditions of punctures and pubescence separate it rather easily from that species.

Here I must express my deepest thanks to Prof. S. MATSUMURA for his kind suggestion and encouragement.

摘 要

稲作の大害蟲イネドロハムシ(泥負蟲)は精査の結果新種と認め爰に *Lema oryzae* と命名せり。

[Ins. Mats., Vol. V, No. 3, March, 1931]