

The Japanese *Actina* and *Allognosta*

(Diptera, Stratiomyidae)

Akira NAGATOMI and Akira TANAKA¹

(Entomological Laboratory)

The genera *Actina* and *Allognosta* from Japan are revised. *Actina* contains 3 species and *Allognosta* includes 5 species of which 1 is new to Japan and 2 seem to be new to science. It seems that *Hoplacantha nigripes* Enderlein, 1921 and *H. solox* Enderlein, 1921 belong to *Actina* and the latter species is a synonym of *Actina jezoensis* (Matsumura, 1916).

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Genus *Actina* Meigen

Actina Meigen, 1804, Klass. 1: 116.

Hemiberis Enderlein, 1921, Mitt. Zool. Mus. Berlin 10: 209.

Allactina Curran, 1924, Canad. Ent. 56: 24.

Body slender. Head from a direct frontal view elliptical and from a lateral view semicircular in shape; eyes distinctly separated in both sexes and pilose; front gradually broader toward vertex in ♂ but parallel sided in ♀, and with an elongate, narrow, velvety brown or black patch on each side; face gradually broader toward proboscis especially in ♂ and its lower portion concave; mid-lower face triangular in shape and not swollen, while mid-upper face not demarcated; antenna situated opposite middle of eye (in ♀) or somewhat higher place (in ♂), its segment 2 as long as wide or roughly so and about 1/2 or less as long as segment 1, and segments 1+2 over 1/2 as long as flagellum composed of 8 divisions of which 1st and 8th become longer; proboscis and palpus well developed and the latter 3-segmented; in ♂ cheeks not developed below eye; in ♂, face, front, and occiput with long, erect hairs. Scutellum with 4-6 spine-like processes. No terminal spur present in each tibia. Wing venation similar to *Allognosta*, *Beris*, and *Chorisops*; vein M₃ entirely absent or at most incomplete.

1) Present address of junior author: Kanoya Branch of Kagoshima Agricultural Experiment Station, Kanoya.

Type-species: *Beris nitens* Latreille, 1809.

The generic revision of the Beridinae is very necessary, based on the material from the world.

It is noteworthy that the number of spine-like processes on scutellum and the presence or absence of the vein M_3 vary with the individual within the same species, although these features are often used in distinguishing the genera or tribes.

Chorisops Rondani, 1856 is very similar to *Actina* Meigen, 1804 but is distinguished from the latter by having the eye bare, the antennal segment 2 over 1/2 as long as segment 1, and segments 1+2 less than 1/2 as long as flagellum, and in ♂ (as well as in ♀) face, front, and occiput without long, erect hairs, although it is uncertain whether or not these characters are significant in separating the genera.

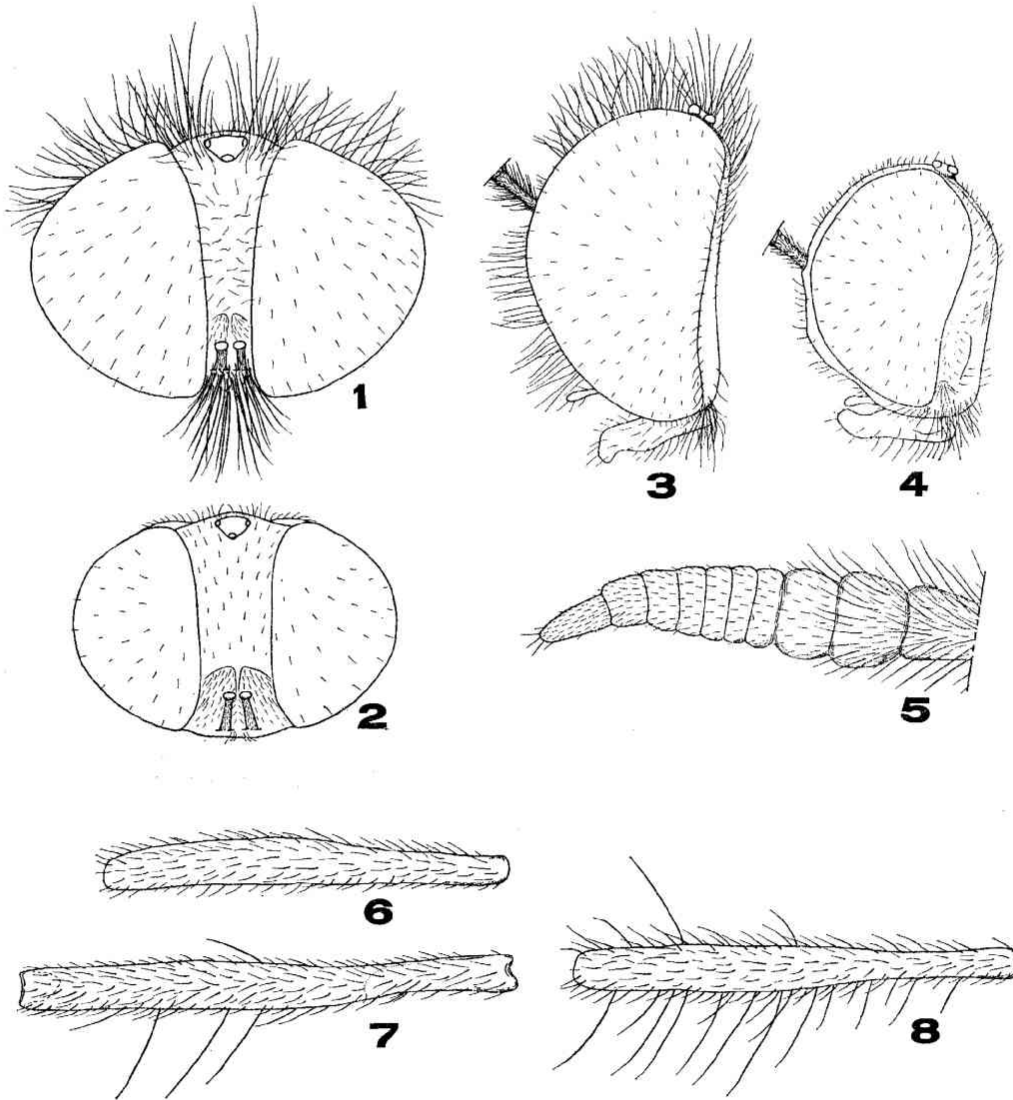
In *Hoplacantha* Rondani, 1863, the antennal flagellum short and rounded and the eyes of ♂ contiguous (after Lindner, 1936-38: 27), while in *Actina* and *Chorisops* the antennal flagellum slender and the eyes of ♂ distinctly separated.

Frey (1960) described 3 new species as *Chorisops* from Burma (Kambaiti) and considered that the species reported as *Hoplacantha* from Japan, Formosa, and Sikkim might belong to *Chorisops*. But it is certain that each of at least 2 species described by him as new is a typical *Actina*, judging from his following statement, "Hierzu kommt noch, dass, wie mein *Chorisops*-Material zeigt,.....Stirn und Gesicht beim ♂ können auch sehr lang abstehend struppig behaart sein (beim exotischem Material soll man bei diesem Merkmal jedoch vorsichtig sein, da diese Behaarung leicht zerstört wird)."

Key to species of *Actina* known from Japan

1. ♂ (width of one eye on a mid line from a direct frontal view over 2 1/2 width of front just above antenna) 2
- ♀ (width of one eye on a mid line from a direct frontal view less than twice width of front just above antenna) 4
2. Femur and tibia (excepting knee and sometimes mid tibia) dark brownish to blackish; a metallic blue or green tinge on abdomen more distinct in better preserved specimens; tibia with longer, erect hairs on posterior or ventral surface (Figs. 7-8); antenna much longer than distance from antenna to median ocellus (1.4-1.5 times) 3
- Femur and tibia (excepting hind tibia) yellowish brown; a metallic blue or green tinge on abdomen practically absent; tibia without longer, erect hairs (Fig. 6); antenna slightly longer than distance from antenna to median ocellus (1.1-1.2 times).....
.....*japonica*
3. Discal cell longer (0.4-0.5 times as long as vein M_1) and bases of veins M_1 and M_2 usually well separated from each other; hind basitarsus except apical portion yellowish brown; bristle-like hairs on *posterior* surface of mid tibia not many (not more than 10; usually 3-5) in number (Fig. 7) *jezoensis*
- Discal cell shorter (0.3 times as long as vein M_1) and bases of veins M_1 and M_2 usually connected with each other; hind basitarsus wholly dark brownish; bristle-like hairs on *ventral* surface of mid tibia numerous in number (Fig. 8) *nigripes*
4. Antenna about twice as long as distance from antenna to median ocellus (1.8-2.2 times); abdomen with a more distinct metallic blue or green tinge in better preserved

- specimens 5
- Antenna about 1 1/2 as long as distance from antenna to median ocellus (1.4-1.6 times); abdomen at least practically without a metallic blue or green tinge and sometimes with yellowish brown parts; tibia (excepting hind tibia) always yellowish brown.....*japonica*
 - 5. Discal cell longer (0.4-0.5 times as long as vein M_1) and bases of veins M_1 and M_2 usually well separated from each other; hind basitarsus except apical portion and fore- and mid tibia yellowish brown *jezoensis*
 - Discal cell shorter (0.3 times as long as vein M_1) and bases of veins M_1 and M_2 usually connected with each other; hind basitarsus and fore- and mid tibia dark brownish *nigripes*



Figs. 1-4. Head of *Actina japonica* (1-2: direct frontal view; 3-4: lateral view; 1 & 3: ♂; 2 & 4: ♀). Fig. 5. Antenna (excluding basal portion of segment 1) of *Actina japonica*, ♂, outer view. Figs. 6-8. Mid-tibia of *Actina*, ♂, dorsal view (6: *japonica*; 7: *jezoensis*; 8: *nigripes*).

Actina japonica (James)

(Figs. 1-6, 9-10)

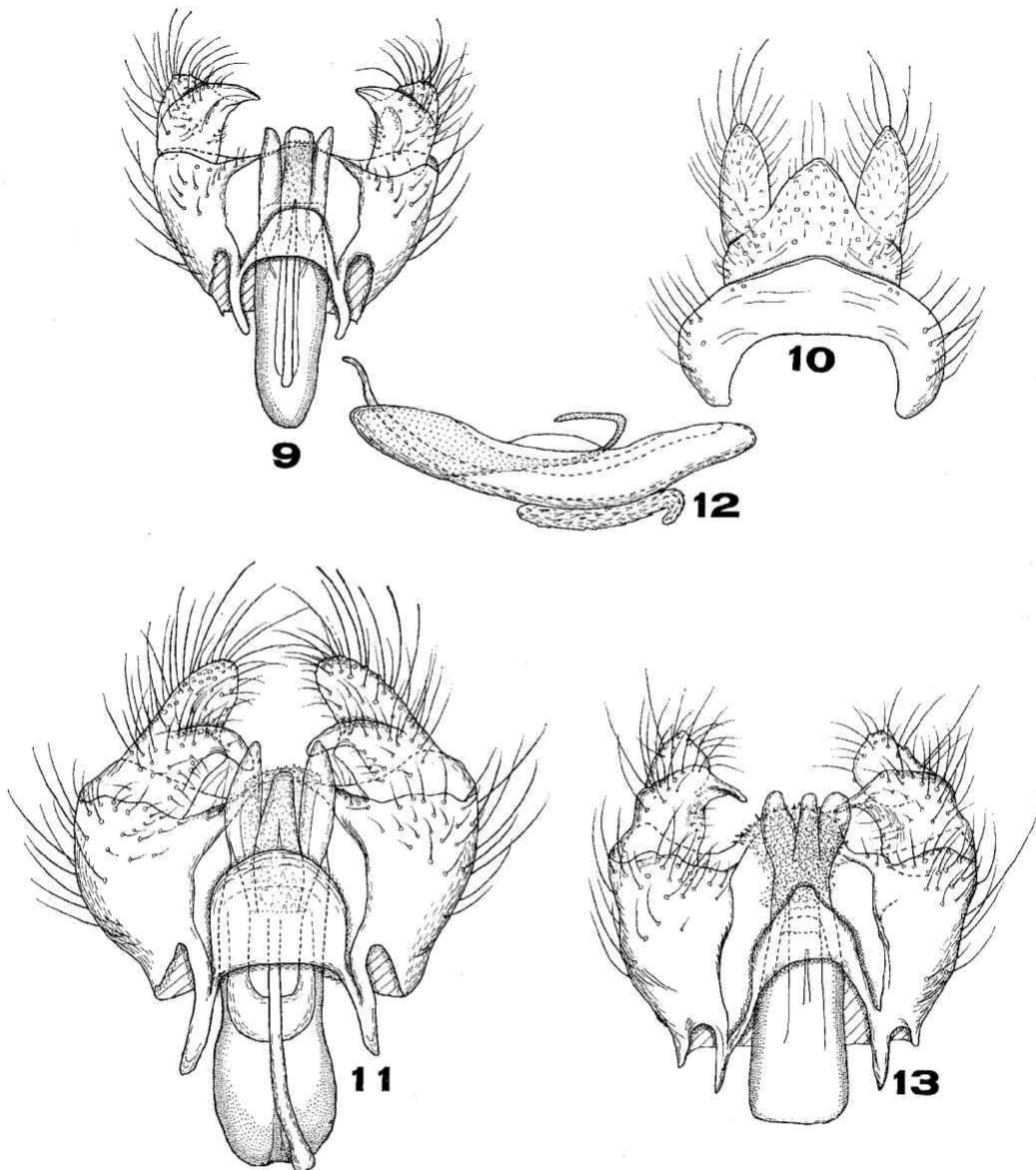
Hoplacantha japonica James, 1941, Pan-Pac. Ent. 17: 14.

This species is characterized by having the antenna shorter (1.1-1.2 times in ♂ and 1.4-1.6 times in ♀ as long as the distance from antenna to median ocellus), the abdomen at least practically without a metallic blue or green tinge, the femur and tibia (except hind tibia) always yellowish brown, and the tibia in ♂ (as well as in ♀) without longer, erect hairs (Fig. 6).

♂. Head: Dark brownish to blackish but proboscis yellowish (antenna and palpus may have a brownish tinge), and front, ocellar triangle, and cerebrale (=median occipital region) metallic purple with a blue or green tinge; front just above antenna, face, cheeks, and occiput except cerebrale, pale gray pollinose; front except lower part, face except sides and lower part, occiput, ocellar triangle, and antenna except flagellum with black hairs which are long on former 4 and short on last mentioned one; cheeks, palpus, and proboscis with pale yellowish pile; eye with pile which appears to be pale in color and shorter and sparser than in *jezoensis*; structural characters fit description of *jezoensis* with following differences: width of one eye on a mid line from a direct frontal view over 3 times width of front just above antenna (3.2-4.4 times; in *jezoensis* 2.7-3.2 times) which is about 1/2 that at median ocellus (0.4-0.5 times; in *jezoensis* 0.6-0.8 times) and is in 10 specimens measured 1-1 1/2 width of face at narrowest point (in *jezoensis* 1.0-1.1 times); width of front at median ocellus 2-2 1/2 width of ocellar triangle (in *jezoensis* 1.7-2.0 times); antenna slightly longer than distance from antenna to median ocellus (1.1-1.2 times; in *jezoensis* 1.4-1.5 times) and segment 2 about 1/2 as long as segment 1 (0.45-0.5 times; in *jezoensis* 0.4-0.45 times); in 10 specimens measured mid-upper face 0.7-0.8 times as long as distance from palpus to antenna, antennal segment 2, 0.8-1.0 times as long as wide and 1.1-1.8 times as wide as segment 1, and basal division of flagellum 0.6-1.3 times as long as its terminal division.

Thorax: Metallic blue with a green tinge; humeral- and posterior callus with a brownish tinge; pleura sometimes largely dark brownish; thorax covered with long, pale yellowish pile which on mesonotum and scutellum may be black in color and is intermixed with short pale yellowish one; mid-posterior part of sterno-, ptero- (except upper portion), hypo-, upper part of metapleura, sub- and postscutellum bare; scutellum with 4 (often 5-6) spine-like processes which are yellowish brown except for base; haltere yellowish brown.

Leg: Yellowish brown but coxa and trochanter dark brownish to blackish and fore tarsus, last 3 segments of tarsus in mid- and hind leg, hind tibia except base, and tip of hind femur darkened; coxa and femur with pale pile which is longer on former and on posterior surface of latter; tibia without longer, erect hairs; relative length of segments (excluding coxa and trochanter) of fore leg 207 (195-226): 216 (200-237): 100: 49 (45-53): 25 (23-29): 15 (14-19): 30 (27-33), of mid leg 218 (209-237): 206 (195-221): 108 (105-111): 48 (40-55): 24 (21-26): 15 (14-19): 30 (27-34), of hind leg 389 (368-416): 322 (305-340): 159 (150-167): 65 (47-80): 28 (24-35): 17 (14-21): 32 (29-37) and in hind leg from a lateral view relative width of femur, tibia and tarsal segments 1-3, 45 (41-53): 42 (36-47): 32 (27-35): 28 (24-36): 22 (19-26) (tarsal segment 1, 0.2 times, segment



Figs. 9-13. Male genitalia of *Actina* (9-10: *japonica*; 11-12: *jezoensis*; 13: *nigripes*; 9, 11, & 13: genitalia, dorsal view, in which cerci, proctiger, and epandrium are excluded; 10: cerci, proctiger, and epandrium, dorsal view; 12: aedeagus, lateral view).

2, 0.3-0.5 times, and segment 3, 0.6-1.0 times as wide as long), these were calculated from 10 specimens.

Wing: Membrane faintly tinged with brown; stigma darker; discal cell about 1/2 as long as vein M_1 (0.45-0.5 times).

Abdomen: Dark brownish; covered with pale yellowish pile which becomes long on sides of terga 1-4 and middle of sterna 1-4.

Genitalia: As in Figs. 9-10; dististyle with one dorsal lobe developed inwardly and pointed; dististyle shorter than in *jezoensis* and *nigripes* and dorsal lobe very broad at

base; aedeagus has not been examined.

Length: Body 5-6 mm; wing 4-5; fore basitarsus 0.45-0.55.

♀. Similar to ♂ except as follows: Head: Palpus and antenna very often yellowish brown to brownish but apical portion of antennal flagellum darkened; hairs on head except antenna and area alongside antenna wholly pale yellowish and those on face, front, ocellar triangle, and occiput much shorter than in ♂; structural characters as in *jezoensis* with following differences: width of one eye on a mid line from a direct frontal view 1-1 1/2 width of face at lowest portion from a direct frontal view (in *jezoensis* 0.9-1.1 times) and broader than width of front just above antenna (1.2-1.7 times; in *jezoensis* 1.0-1.3 times) which is slightly narrower than that at median ocellus (0.8-0.9 times; in *jezoensis* 0.9-1.1 times); antenna about 1 1/2 as long as distance from antenna to median ocellus (1.4-1.6 times; in *jezoensis* 1.8-2.2 times) and its segment 2, 0.8-1.0 times as long as wide as in ♂, and about 1/2 as long as (0.45-0.6 times; in *jezoensis* 0.4-0.45 times) and in 10 specimens measured 1.1-1.6 times as wide as segment 1; in 10 specimens measured width of front at median ocellus 2-2 1/2 times width of ocellar triangle.

Thorax: Hairs on thorax are shorter than in ♂ and appear to be chiefly recumbent especially on mesonotum and scutellum (pile on metapleura is erect).

Leg: Coxa and trochanter usually yellowish to yellowish brown; tarsus often not so distinctly darkened; pile on posterior surface of femur not long; relative length of segments of fore leg 197 (194-210): 215 (210-221): 100: 46 (40-50): 25 (24-29): 16 (14-21): 30 (25-33), of mid leg 219 (210-229): 206 (195-215): 108 (105-116): 45 (38-52): 23 (20-26): 16 (14-19): 31 (29-33), of hind leg 367 (347-381): 308 (295-315): 156 (150-163): 61 (53-67): 27 (25-31): 18 (14-21): 33 (29-38) and in hind leg from a lateral view relative width of femur, tibia, and tarsal segments 1-3, 48 (45-50): 36 (32-40): 26 (24-30): 21 (18-25): 20 (18-24) (tarsal segment 1, 0.15-0.2 times, segment 2, 0.3-0.4 times, and segment 3, 0.6-0.8 times as wide as long), these were calculated from 10 specimens.

Wing: Discal cell 0.4-0.45 times as long as vein M_1 .

Abdomen: Wholly dark brownish as in ♂ or with yellowish brown parts which are variable in areas as follows: (1) in extreme case almost whole surface of venter and terga 1-5 (or 2-5) except sides and posterior margins, (2) venter (sometimes excepting posterior portion) and middle parts of terga 2-4 (or 2-3 or 2-5), etc.; middle part of sternum 1 and sides of terga 1-5 with longer pile which is shorter than in ♂.

Length: Body 4-5.5 mm; wing 4-5; fore basitarsus 0.4-0.5.

Distribution: Japan (Hokkaido, Honshu, Shikoku, Kyushu).

Type-locality: Kagoshima, Kyushu. One of us (Nagatomi) examined the type deposited in California Academy of Sciences, San Francisco and found that the sex was not ♀ but ♂.

Specimens examined (73 ♂♂, 25 ♀♀): *Hokkaido* (5 ♂♂, 4 ♀♀): 1 ♀, Sapporo, 6. vii. 1958, K. Kamijo; 1 ♀, Sapporo, 15. vii. 1958, S. Takagi; 1 ♀, Sapporo, 11. vii. 1961, Takagi; 4 ♂♂, Yuni, 4. vii. 1962, Takagi; 1 ♂, 1 ♀, Toyotomi, 10. viii. 1965, K. Kusigemati. *Honshu* (39 ♂♂, 6 ♀♀): 1 ♀, Mt Chokai, 4. ix. 1966, Kusigemati; 1 ♂, Shizuoka, 27. v. 1959, Kamijo; 36 ♂♂, 3 ♀♀, Sasayama, Tamba, 6-19. vi. 1952-59, A. Nagatomi; 1 ♀, Sasayama, Tamba, 28. ix. 1951, Nagatomi; 1 ♀, Sekinomiya, Tajima, 17. vi. 1953, Nagatomi; 2 ♂♂, Okayama, 9. vi. 1957, K. Koizumi. *Shikoku* (1 ♂, 2 ♀♀): 1 ♂, Is Futagami, 28. iv. 1957, F. Takechi; 2 ♀♀, Nakadote, 10-17. x. 1952, T. Yano. *Kyushu* (28 ♂♂, 13 ♀♀):

20 ♂♂, 7 ♀♀, Kagoshima, Satsuma, 22. iii-29. iv. 1954-67, Nagatomi; 2 ♀♀, Kagoshima, Satsuma, 7-14. iv. 1968, A. Tanaka; 1 ♂, Eboshidake, Satsuma, 29. iii. 1967, Tanaka; 1 ♂, Mt Kirishima, 6. vi. 1966, Kusigemati; 1 ♀ Kaseda, Satsuma, 29. xi. 1961, Nagatomi; 3 ♂♂, 1 ♀, Kanmuridake, Satsuma, 11. iv. 1962, Nagatomi; 2 ♂♂, 1 ♀, Sata, Osumi, 5-6, iv. 1963, Nagatomi; 1 ♂, Osumi-ôgawara, Osumi, 22. iv. 1962, Nagatomi; 1 ♀, Takakuma, Osumi, 6. vi. 1968, Nagatomi.

Actina jezoensis (Matsumura)

(Figs. 7, 11-12)

Beris jezoensis Matsumura, 1916, Thous. Ins. Jap. Addit. 2: 369-370.

Hoplacantha solox Enderlein, 1921, Mitt. Zool. Mus. Berlin 10: 202. New Synonymy.

This species is very similar to *nigripes* but may be distinguished from the latter by having the discal cell longer (0.4-0.5 times as long as vein M_1), hind basitarsus except apical portion yellowish brown, and the bristle-like hairs on posterior surface of mid tibia in ♂ not many (not more than 10; usually 3-5) in number (Fig. 7).

Hoplacantha solox Enderlein, 1921 seems to be identical with *Actina jezoensis* (Matsumura, 1916), judging from the original description as follows: "1. Hintertarsenglied blass ocker-gelb mit Ausnahme der Endspitze." The type specimen of *H. solox* evidently is not ♀ but ♂.

♂. Head: Dark brownish to blackish but front, ocellar triangle, and cerebrale metallic purple with a blue or green tinge which may be present on occiput (besides cerebrale); antenna and palpus dark brownish to blackish but proboscis yellowish brown to brownish; front just above antenna, face, cheeks and occiput pale gray pollinose; front, face except sides, ocellar triangle, occiput, cheeks, and antennal segments 1-2 with black hairs which are long on former 5; palpus and proboscis with pale yellowish pile; eye densely covered with fairly long blackish pile; total width of head over twice distance from antenna to median ocellus (2.1-2.4 times) which is shorter than distance from palpus to antenna (0.7-0.8 times); width of one eye on a mid line from a direct frontal view about equal to distance from antenna to median ocellus (0.9-1.0 times) and about 3 times width of front just above antenna (2.7-3.2 times) which is less than that at median ocellus (0.6-0.8 times) and about equal to width of face at narrowest point (1.0-1.1 times); width of front at median ocellus twice or somewhat less width of ocellar triangle (1.7-2.0 times); mid-upper face over 1/2 as long as distance from palpus to antenna (0.6-0.7 times); when measured along outer surface, antenna 1 1/2 or somewhat less as long as distance from antenna to median ocellus (1.35-1.5 times), flagellum somewhat longer than segments 1+2 (1.2-1.4 times), and segment 2 about as long as wide (1.0-1.1 times), nearly 1/2 as long as (0.4-0.45 times) and wider than (1.5-1.7 times) segment 1, and as long as or longer than (1.0-1.5 times) and about as wide as (0.9-1.1 times) basal division of flagellum which is as long as or shorter than (0.7-1.0 times) and about 2-3 times as wide as its terminal division; palpus about 1/2 as long as distance from palpus to antenna (0.4-0.5 times).

Thorax: Metallic blue with a green tinge; pleura covered with pale yellowish pile which is especially long on meso- and sternopleura and often changes into partially black on

metapleura, but ptero- (except upper part), hypo-, upper part of metapleura, sub- and post-scutellum bare; mesonotum and scutellum with long black hairs some of which may become pale yellowish and with shorter pale yellowish pile which appears to be chiefly recumbent; scutellum with 4 spine-like processes whose apical portions are yellowish brown; haltere yellowish brown.

Leg: Dark brownish to blackish but knee, hind basitarsus except apical portion, and sometimes almost whole surfaces of fore- and mid tibia yellowish brown; coxa and femur with pale yellowish pile which is longer on former and on posterior surface of latter; posterior surface of tibia with longer, erect pale yellowish (often black) hairs which are bristle-like on fore- and mid tibia and not more than 10 (usually 3-5) in number on mid tibia; relative length of segments (excluding coxa and trochanter) of fore leg 227 (213-243): 240 (219-255): 100: 46 (43-48): 29 (25-33): 20 (17-24): 32 (27-38), of mid leg 244 (229-257): 234 (217-248): 113 (108-124): 45 (42-48): 28 (26-30): 19 (17-23): 30 (27-33), of hind leg 443 (418-467): 384 (363-410): 194 (182-210): 72 (67-77): 36 (32-42): 22 (18-27): 35 (33-38) and in hind leg from a lateral view relative width of femur, tibia, and tarsal segments 1-3, 56 (52-61): 48 (45-55): 40 (33-43): 28 (25-31): 23 (20-25) (tarsal segment 1, 0.2, segment 2, 0.4, segment 3, 0.5-0.7 times as wide as long), these were calculated from 10 specimens.

Wing: Very faintly tinged with brown; stigma, and area above stigma in subcostal cell darker; vein M_3 entirely lacking but rarely minutely developed; discal cell $1/2$ or nearly so as long as vein M_1 (0.4-0.5 times) and bases of veins M_1 and M_2 usually well separated from each other.

Abdomen: Dark brownish with a metallic blue or green tinge; with pale yellowish pile which is long in middle of sterna 1-5 and on sides of terga 1-5.

Genitalia: As in Figs. 11-12; dististyle with one dorsal lobe developed inwardly and pointed; dististyle longer than in *japonica*, its apical portion rounded and dorsal lobe not so thin as in *nigripes*; cerci, proctiger, and epandrium have not been examined.

Length: Body 6.5-7.5 mm; wing 5-6; fore basitarsus 0.5-0.6.

♀. Similar to ♂ except as follows: Head: Palpus yellowish brown and antenna often tinged with yellowish brown to brownish; pile on head except antenna and area alongside antenna wholly pale and that on face, front, ocellar triangle and occiput much shorter than in ♂ and that on eye shorter and sparser than in ♂; front and cerebrale rarely not metallic purple or blue but reddish brown (this may be true of ♂); width of one eye on a mid line from a direct frontal view somewhat less than distance from antenna to median ocellus (0.75-0.9 times), about equal to width of face at lowest portion from a direct frontal view (0.9-1.1 times), and equal to or somewhat broader than width of front just above antenna (1.0-1.3 times) which is about equal to that at median ocellus (0.9-1.1 times) and width of face at narrowest point (0.9-1.0 times) respectively; width of front at median ocellus over twice width of ocellar triangle (2.1-2.7 times); when measured along outer surface, antenna about twice as long as distance from antenna to median ocellus (1.8-2.2 times), and flagellum longer than segments 1+2 (1.3-1.6 times).

Thorax: Mesonotum and scutellum without long, erect hairs; pile on pleura shorter than in ♂; rarely scutellum with 5 processes of which outermost one is shorter and apparently additional (this may be seen in ♂).

Leg: Coxa, trochanter, femur and tibia yellowish brown but apical portion of hind

femur and hind tibia excepting basal portion darkened; hind basitarsus except apical portion yellowish brown as in ♂; sometimes mid basitarsus yellowish brown and fore- and mid tibia except bases slightly darkened; pile on posterior surface of femur not long; tibia without longer, erect hairs; relative length of segments of fore leg 214 (204-225): 233 (226-245): 100: 45 (43-48): 30 (26-33): 19 (14-23): 36 (29-40), of mid leg 232 (222-241): 229 (217-241): 109 (104-114): 43 (38-48): 28 (25-33): 19 (17-24): 34 (29-40), of hind leg 413 (396-425): 350 (339-364): 171 (165-178): 64 (57-71): 35 (30-43): 22 (18-25): 37 (32-40) and in hind leg from a lateral view relative width of femur, tibia, and tarsal segments 1-3, 59 (52-68): 40 (38-43): 29 (26-33): 24 (22-26): 21 (17-25) (tarsal segment 1, 0.15-0.2, segment 2, 0.3-0.4, segment 3, 0.4-0.7 times as wide as long), these were calculated from 10 specimens.

Abdomen: Sides of dorsum and middle part of sternum 1 with longer pile, which is shorter than in ♂.

Length: Body 6-7 mm; wing 5-6; fore basitarsus 0.5-0.6.

Distribution: Japan (Hokkaido, Honshu, Shikoku, Kyushu).

Type-locality: Sapporo, Hokkaido. One of us (Nagatomi) examined the type deposited in Hokkaido University, Sapporo.

Specimens examined (27 ♂♂, 15 ♀♀): *Hokkaido* (1 ♂, 3 ♀♀): 1 ♂, Sapporo, 11. v. 1961, T. Kumata; 1 ♀, Sapporo, 3. vi. 1960, K. Kamijo; 2 ♀♀, Abasiri, 7. vi. 1961, Kumata. *Honshu* (13 ♂♂, 3 ♀♀): 7 ♂♂, 2 ♀♀, Sasayama, Tamba, 16. iv. 1954, A. Nagatomi; 6 ♂♂, 1 ♀, Hiroshima, Aki, 14. iv. 1955, M. Miyatake. *Shikoku* (3 ♂♂, 3 ♀♀): 2 ♂♂, Is Hiburi, 22. iii. 1958, F. Takechi; 3 ♀♀, Is Futagami, 28. iv. 1957, Takechi; 1 ♂, Omogokei, 4. v. 1958, T. Edashige. *Kyushu* (10 ♂♂, 6 ♀♀): 9 ♂♂, 1 ♀, Nodamura, Izumi-gun, Satsuma, 14. iii. 1966, K. Hashimoto; 2 ♀♀, Kagoshima, Satsuma, 27. iii. 1954 & 14. iv. 1968, Nagatomi; 1 ♂, 2 ♀♀, Kagoshima, Satsuma, 7. iv. 1968, A. Tanaka; 1 ♀, Takakuma, Osumi, 24. iii. 1968, Tanaka.

Actina nigripes (Enderlein), new combination

(Figs. 8 & 13)

Hoplacantha nigripes Enderlein, 1921, Mitt. Zool. Mus. Berlin 10: 201.

The species described below appears to belong in *Actina nigripes* (Enderlein). The original description of *nigripes* based on 2 ♀♀ as follows: "Beine mit den Coxen hell ockergelb, Schienen ohne das Basalviertel und Tarsen braun, ebenso die Endhälfte des Hinterschensels."

This species is characterized by having the discal cell shorter (0.3 times as long as vein M_1), the hind basitarsus wholly darkened, and the mid tibia in ♂ with numerous bristle-like hairs on ventral surface (Fig. 8).

Similar to *jezoensis* with following differences. ♂ (this is the 1st description of this sex). Head: In specimens on hand, antennal flagellum 1.0-1.1 times as long as segments 1+2 and antennal segment 2, 0.3-0.4 times as long as segment 1.

Leg: Wholly dark brownish to blackish but knee yellowish brown; ventral surfaces of fore- and mid tibia with black, bristle-like hairs which are numerous in number on mid tibia; relative length of segments (excluding coxa and trochanter) of fore leg 237 (226-

250) : 244 (230-256) : 100 : 51 (48-56) : 30 (26-33) : 20 (17-22) : 36 (35-39), of mid leg 244 (230-256) : 247 (235-256) : 107 (104-111) : 50 (43-56) : 28 (25-33) : 20 (17-22) : 38 (35-44), of hind leg 442 (422-478) : 378 (348-406) : 182 (178-189) : 68 (61-72) : 31 (30-33) : 23 (20-26) : 36 (35-39) and in hind leg from a lateral view relative width of femur, tibia, and tarsal segments 1-3, 51 (48-56) : 46 (43-50) : 36 (35-39) : 26 (25-28) : 22 (20-25) (tarsal segment 1, 0.2, segment 2, 0.4, segment 3, 0.7 times as wide as long), these were calculated from 3 specimens.

Wing: Discal cell much less than 1/2 as long as vein M_1 (0.3 times) and bases of veins M_1 and M_2 usually connected with each other.

Genitalia: As in Fig. 13; apical portion of dististyle is angulate and dorsal lobe becomes very thin; cerci, proctiger, epandrium, and aedeagus have not been examined.

Length: Body 6 mm; wing 4.5-5; fore basitarsus 0.45-0.6.

♀. Head: In specimens on hand, antennal flagellum 1.2-1.3 times as long as segments 1+2 and antennal segment 2, 0.9-1.0 times as long as wide and 0.3-0.45 times as long as segment 1.

Leg: Tibia except base and tarsus dark brownish as in ♂; coxa, trochanter, and femur except apical portion of hind femur yellowish brown to reddish brown as in *jezoensis* but sometimes apical portions of fore- and mid femur darkened; relative length of segments of fore leg 226 (220-239) : 245 (235-261) : 100 : 50 (45-56) : 29 (25-33) : 21 (20-22) : 36 (35-39), of mid leg 241 (235-245) : 240 (230-256) : 112 (110-117) : 49 (45-56) : 27 (25-31) : 20 (18-22) : 38 (35-40), of hind leg 416 (400-433) : 356 (340-378) : 171 (155-189) : 64 (55-72) : 33 (30-39) : 21 (20-22) : 38 (35-40) and in hind leg from a lateral view relative width of femur, tibia, and tarsal segments 1-3, 55 (55-56) : 41 (40-44) : 28 (25-30) : 25 (23-28) : 23 (20-25) (tarsal segment 1, 0.15-0.2, segment 2, 0.4, segment 3, 0.6-0.8 times as wide as long), these were calculated from 3 specimens.

Wing: As in ♂.

Length: Body 5.5-6 mm; wing 5; fore basitarsus 0.45-0.5.

Distribution: Japan (Hokkaido).

Type-locality: Sapporo, Hokkaido.

Specimens examined (3 ♂♂, 4 ♀♀) : 1 ♂, 2 ♀♀, Sapporo, 20. v. 1959, S. Takagi; 1 ♀, Sapporo, 6. vi. 1959, Takagi; 1 ♂, Teine, 15. v. 1959, Takagi; 1 ♂, 1 ♀, Sapporo, 15-23. v. 1959, S. Momoi.

True generic position of 6 species described as *Hoplacantha* or *Chorisops* from Formosa, Burma, and Sikkim

Each species discussed below is not a member of *Hoplacantha*. It belongs to either *Actina* or *Chorisops* which may possibly be a synonym or a subgenus of *Actina*. It is a wonder that Frey (1960) overlooked *Actina* whose name was well known and older than in *Chorisops*.

Each of *Chorisops apicalis* Frey, 1960, and *C. fraterna* Frey, 1960 from Burma is a typical *Actina* (new combination) as already mentioned (see page 154, paragraph 6), but the status of *C. marginata* Frey, 1960 (based on 1 ♀) from Burma is not clear.

Hoplacantha amoena Enderlein, 1921 from Formosa must be removed to *Actina* (new

combination). The antennal segment 1 is "ca. 4 mal so lang wie breit."

Hoplacantha compta Enderlein, 1921 from Sikkim decidedly belongs to *Actina* (**new combination**) and the sex of type-specimen is not ♀ ("Stirn nach vorn sehr stark verschmälert,.....Fühler schwarz, 1. Glied 3 mal so lang wie dick;.....Kopf mit sehr langen schwarzen abstehenden Haaren"). But this species may have a diagnosis of *Chorisops* on the other side ("Augenpubescenz fast fehlend").

Hoplacantha flavicornis James, 1939 from Formosa also belongs to *Actina* (**new combination**) and the sex of type-specimen is not ♀. The original description is "the sides of the front strongly convergent, its width at the antennae being but one third that of the vertex.....Some moderately long but sparse, black hair on the vertex, front, and face..... the first [antennal] segment twice as long as the second....."

Genus *Allognosta* Osten Sacken

Allognosta Osten Sacken, 1883, Berliner Ent. Zeit. 27: 297.

Body robust or fairly so; head about as wide as thorax; abdomen wider than thorax. Head from a direct frontal view circular or elliptical (in *flavofemoralis* somewhat rhombic); face makes a nearly right angle with front; eyes contiguous in ♂ and widely separated in ♀ and with pile which is usually inconspicuous; antenna situated opposite lower portion of eye; antennal flagellum consists of 8 segments of which basal one is abruptly widened and as wide as or wider than antennal segment 2, and is 1 1/2-3 times as long as antennal segments 1+2 each of which is subequal in length to each other and roughly as long as wide; proboscis and palpus well developed, and palpus 2-segmented; cheeks well developed below eye but in ♂ of *flavimaculata* may not be so; in ♀ area behind upper margin of each eye well developed and flat. Scutellum without spine-like processes. Mid-tibia with 1 apical spur. Wing venation similar to *Beris*, *Chorisops*, and *Actina*. Abdomen depressed.

Type-species: *Beris fuscitarsis* Say, 1823.

This genus is easily distinguished from the genera *Exodontha*, *Beris*, *Actina*, and *Chorisops* by having the scutellum without spine-like processes.

The number of the described species of this genus from the entire world was 34 or 35², of which 20 or 21 were originally recorded from the Oriental region (Burma 9, Formosa 3, Philippines 3, Java 2, Sikkim 1-2, Assam 1, and Ceylon 1), 6 from the Palaearctic (Japan 2, China 2, Siberia 1, and Europe 1), 4 from the Nearctic, 2 from the Ethiopian (Spanish Guinea and South Africa), and 2 from the Neotropical region (Brazil and Paraguay). The restudy of type-specimen of each species known from the Far East and Burma (Kambaiti, 2000 m) is very necessary to this revision but it has not been done by us with the exception of *A. sapporensis* Matsumura.

In the description, the length of frontal triangle was measured from a direct frontal view (the line between antenna and median ocellus was kept horizontally).

2) It is uncertain whether or not *A. inermis* Brunetti, 1912 from Sikkim is a synonym of *A. vagans* (Loew, 1873) from Europe.

Key to species of *Allognosta* known from Japan

1. Femur yellowish brown to reddish brown or distinctly paler in color than tibia (apical portion of hind femur has a dark brownish tinge) 2
 - Femur except apex dark brownish to blackish or concolorous with tibia (in ♀ of *sapporensis*, fore femur sometimes yellowish brown to reddish brown)..... 4
2. Abdomen wholly dark brownish to blackish; face and lower front wholly pale gray pollinose..... 3
 - Abdominal segments 1-3 (or 1-4) except sides yellowish brown or at least somewhat paler; in ♀ face and lower front (as well as rest of front) shining black *japonica* (♂, ♀)
3. In palpus, segment 2, 1 1/2 or more as long as segment 1 (Fig. 49); from a direct frontal view, width of one eye on a mid line distinctly over 1/2 width of front at transverse suture (near antenna) (0.8 times) *shibuyai* n. sp. (♀)
 - In palpus, segment 2 about equal in length to segment 1 (0.8-1.2 times); from a direct frontal view, width of one eye on a mid line about 1/2 width of front at transverse suture (0.5-0.6 times)..... *flavofemoralis* (♀)
4. Pile on eye short and sparse or practically bare 5
 - Eye densely clothed with long pile (Fig. 26).....*flavofemoralis* (♂)
5. In palpus, segment 2 about equal in length to segment 1 (0.8-1.1 times) (Fig. 41)...6
 - In palpus, segment 2 more than 1 1/2 as long as segment 1 (1.6-2.4 times) (Fig. 48); abdomen wholly dark brownish to blackish *shibuyai* n. sp. (♂)
6. Abdominal segments 1-4 (in ♀ usually 1-3) except sides at least tinged with yellowish brown (Figs. 20-21); haltere wholly yellowish brown; in ♀ front at transverse suture more strongly attenuate (Fig. 19) *flavimaculata* n. sp. (♂, ♀)
 - Abdomen wholly dark brownish to blackish; haltere with knob dark brownish to blackish; in ♀ front at transverse suture more weakly attenuate (Fig. 40) *sapporensis* (♂, ♀)

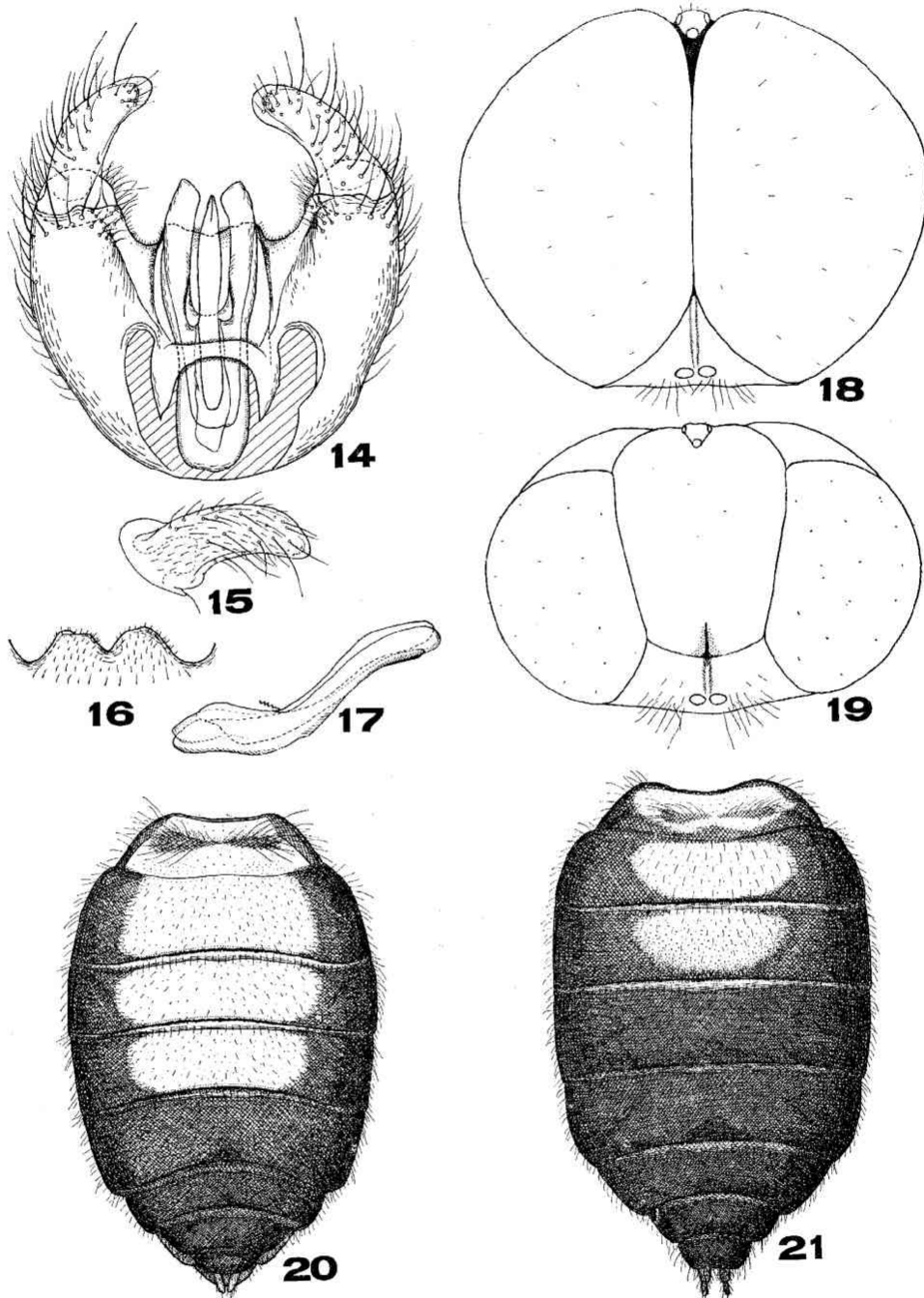
***Allognosta flavimaculata* Nagatomi and Tanaka, new species**

(Figs. 14-21)

This species is characterized by having the femur except apex dark brownish to blackish, the haltere wholly yellowish brown, and the abdomen with yellowish brown part (Figs. 20-21) which in ♀ becomes narrower and sometimes may be indistinct. In ♂ width of one eye on a mid line from a direct frontal view 2 times or nearly so width of front just above antenna, and in ♀ front at transverse suture strongly attenuate (Fig. 19).

This species is distinguished from *sapporensis* by having the characters as shown in the key (couplet 6).

♂. Head: Dark brownish to blackish, but in antenna almost whole surface (antennal segment 1 and apical portion of flagellum with a dark brownish tinge) or basal segment of flagellum (except base) usually yellowish brown (often antenna almost wholly dark brownish to blackish); often proboscis and sometimes segment 1 of palpus with a yellowish brown to brownish tinge; head with pale gray pollen which is distinct on frontal triangle and face and appears to be absent on ocellar triangle and cerebrale; mid-upper face,



Figs. 14-21. *Allognosta flavimaculata* (14: ♂ genitalia, dorsal view, in which cerci, proctiger, and epandrium are excluded; 15: dististyle, latero-outer view; 16: mid-posterior part of hypandrium, ventral view; 17: aedeagus, lateral view; 18-19: head, direct frontal view; 20-21: abdomen, dorsal view; 18 & 20: ♂; 19 & 21: ♀).

cheeks, occiput, ocellar triangle, sutural line between eyes, palpus, and proboscis with pale pile which is long on cheeks and proboscis; antenna including flagellum (at terminal segment and apical portion of basal segment) with black hairs which may be present on segment 2 of palpus; width of one eye on a mid line from a direct frontal view about equal to width of face at lowest portion from a direct frontal view (1.0-1.2 times), 2 times or somewhat less width of front just above antenna (1.7-2.0 times), and less than distance from antenna to median ocellus (0.7 times), which is about 2 times that from palpus to antenna (2.0-2.2 times); in distance from antenna to median ocellus, frontal triangle (pollinose part) (which is 0.4-0.5 times as long as wide) $1/4-1/6$ as long as rest; mid-upper face about $1/2$ as long as distance from palpus to antenna (0.4-0.5 times); in antenna, which is somewhat over $1/2$ as long as distance from antenna to median ocellus (0.6 times), flagellum about 2 times as long as segments 1+2 (1.9-2.1 times); basal segment of flagellum 2-3 times as wide as its terminal segment, about $1\ 1/2$ as wide as antennal segment 2 (1.4-1.6 times) which is wider than segment 1 (1.3-1.7 times); in palpus, which is shorter than distance from palpus to antenna (0.7-0.8 times), segment 2 about as long as segment 1 (0.9-1.1 times), $2\ 1/2-3\ 1/2$ as long as wide, and about as wide as segment 1 (0.8-1.3 times).

Thorax: Dark brownish to blackish and shining; humeral- and posterior callus, pteropleura, etc. may have a reddish brown tinge; pleura pale gray pollinose; mesonotum, scutellum, pro-, anterior margin and posterior about $1/2$ of meso-, sterno- (except mid-posterior part), upper $1/2$ of ptero-, and lower part of metapleura with pale pile; haltere yellowish brown.

Leg: Dark brownish to blackish, but knee and trochanter yellowish brown and sometimes hind basitarsus with a yellowish brown tinge; coxa and femur with pale pile which is longer and erect on posterior surface of latter; relative length of segments (excluding coxa and trochanter) of fore leg 237 (213-250): 249 (225-259): 100: 42 (38-45): 33 (29-36): 25 (21-27): 45 (41-50), of mid leg 218 (204-236): 225 (208-232): 84 (79-86): 38 (36-41): 27 (25-29): 22 (20-23): 40 (36-45), of hind leg 303 (283-323): 275 (250-300): 111 (105-118): 42 (40-45): 29 (25-32): 20 (17-23): 40 (36-45) and in hind leg from a lateral view relative width of femur, tibia, and tarsal segments 1-3, 48 (38-55): 35 (31-41): 30 (27-34): 26 (23-30): 24 (23-27) (tarsal segment 1, 0.25-0.3, segment 2, 0.6-0.7, segment 3, 0.7-0.9 times as wide as long), these were calculated from 6 specimens.

Wing: Membrane tinged with dark brown but stigma and area above stigma in subcostal cell somewhat darker and base of wing, 1st basal-, 2nd basal-, anal cell, and axillary somewhat paler (or yellowish brown); discal cell less than $1/2$ as long as vein M_1 (0.4 times).

Abdomen: Dark brownish but terga 1-4 (except sides) and sterna 1-4 (except sides) yellowish brown; abdomen more or less pale gray pollinose; abdomen with pale yellowish pile which sometimes becomes black on segments 5-7 and on sides of segments 3-4 and which is longer on sides of dorsum especially terga 1-2 and in middle part of sternum 1 and is very short and inconspicuous on dorsum except sides.

Genitalia: As in Figs. 14-17.

Length: Body (without antenna) 6-7 mm; wing 4-5; fore basitarsus 0.5-0.6.

♀. Similar to ♂ except as follows: Head: Shining and front (except area above antenna) and cerebrale without pollen; front with pale pile which is practically absent on

area just above antenna; width of one eye on a mid line from a direct frontal view less than width of face at lowest portion from a direct frontal view (0.7 times), somewhat less than width of front just above antenna (0.8–0.9 times), about 1/2 distance from antenna to median ocellus (0.6 times) (which is 1.7–2.0 times that from palpus to antenna), and more than width of front at transverse suture near antenna (1.2–1.5 times) which is 0.6–0.7 times that just above antenna and that at median ocellus respectively; mid-upper face less than 1/2 as long as distance from palpus to antenna (0.3–0.4 times); area behind uppermost corner of each eye longer than ocellar triangle (1.2–1.6 times); antenna over 1/2 as long as distance from antenna to median ocellus (0.7–0.8 times); palpus somewhat less than distance from palpus to antenna (0.8–0.9 times); segment 2 of palpus 2 times or roughly so as long as wide and wider than segment 1 (1.3–1.7 times).

Leg: Relative length of segments of fore leg 243 (232–276) : 256 (245–270) : 100 : 43 (39–48) : 34 (30–40) : 28 (22–32) : 45 (43–48), of mid leg 227 (214–238) : 226 (209–238) : 82 (76–87) : 37 (32–43) : 29 (26–32) : 22 (18–25) : 42 (40–44), of hind leg 314 (292–333) : 284 (268–300) : 108 (100–114) : 43 (39–50) : 31 (27–35) : 23 (22–26) : 42 (36–45) and in hind leg from a lateral view relative width of femur, tibia, and tarsal segments 1–3, 54 (50–57) : 37 (32–40) : 31 (26–35) : 26 (23–30) : 24 (20–30) (tarsal segment 1, 0.25–0.3, segment 2, 0.6–0.7, segment 3, 0.6–1.0 times as wide as long), these were calculated from 10 specimens.

Abdomen: Yellowish brown part on dorsum narrower in area and tergum 4 usually wholly dark brownish; yellowish brown part on venter variable in size and sometimes almost obsolete; pile on sides of terga 3–5 not longer.

Length: Body (without antenna) 5–7 mm; wing 4–6; fore basitarsus 0.4–0.6.

Distribution: Kuril Islands and Japan (Hokkaido, Honshu, Shikoku, Kyushu).

Holotype: 1 ♂, Sasayama, Tamba, Honshu, 22. vi. 1954, A. Nagatomi.

Paratypes (7 ♂♂, 23 ♀♀): *Kuril Islands* (1 ♀): 1 ♀, Kunasiri, 5–6. viii. 1940, S. Kuwamura & Y. Sugihara. *Hokkaido* (3 ♂♂, 11 ♀♀): 1 ♂, Sapporo, 16. vii. 1958, S. Takagi; 1 ♀, Sapporo, 27. viii. 1965, K. Kusigemati; 1 ♂, Sounkyo, 24. vii. 1956, M. Miyatake; 1 ♂, Sounkyo, 17. vii. 1961, J. Yukawa; 3 ♀♀, Kami-otoineppu, Teshio, 25–31. vii. 1958, M. Sasakawa; 4 ♀♀, Aizankei, 7. vii. 1964, A. Nagatomi; 1 ♀, Obihiro, 11. vii. 1953, S. Ito; 2 ♀♀, Nukabira, 21. vii. 1967, H. Shima. *Honshu* (4 ♂♂, 7 ♀♀): 1 ♀, Hatimandai, Akita-Pref., 29. vii. 1950, S. Ito; 1 ♀, Nasu, Tochigi-Pref., 28. vii. 1956, S. Hisamatsu; 1 ♀, Hakone, 4. viii. 1958, Hisamatsu; 1 ♀, Chuzenji, 23. vii. 1917, E. Gallois; 1 ♀, Haguro-san, 1. ix. 1966, Kusigemati; 1 ♂, Sarukura-Hakubaziri, Shinano, 21. vii. 1955, T. Okuno; 3 ♂♂, 1 ♀, Sasayama, Tamba, 3. vi.-9. viii. 1954, A. Nagatomi; 1 ♀, Hataganaru (Oginosen), Tajima, 19–23. vii. 1959, Nagatomi. *Shikoku* (2 ♀♀): 1 ♀, Mt Sara, 17. viii. 1950, M. Miyatake; 1 ♀, Mt Sara, 19. vi. 1955, Y. Wake. *Kyushu* (2 ♀♀): 2 ♀♀, Satsuma, Kagoshima, 8. vi. 1960 & 4. vi. 1961, Nagatomi.

Holotype in Kyushu University (Fukuoka), and paratypes in Kyushu University, Kagoshima University (Kagoshima), Ehime University (Matsuyama), Hokkaido University (Sapporo), University of Osaka Prefecture (Sakai), U.S. National Museum (Washington, D. C.), and British Museum, Natural History (London).

Allognosta flavofemoralis Pleske

(Figs. 22-27)

Allognosta flavofemoralis Pleske, 1926, Eos 2: 417.

The species described below appears to belong in *A. flavofemoralis* Pleske originally recorded from China. It is characterized by having the eye somewhat rhombic in shape, eye in ♂ densely clothed with long pile, and width of one eye in ♀ from a direct frontal view about 1/2 width of front at transverse suture (Figs. 26-27). In both sexes abdomen wholly dark brownish to blackish, and in ♂ femur except apex dark brownish to blackish but in ♀ femur yellowish brown to reddish brown.

A. foveifrons Frey, 1960 from Burma (Kambaiti) may possibly be identical with *A. flavofemoralis*.

♂ (this is the 1st description of this sex). Head: Head and its appendages dark brownish to blackish, with pale gray pollen which appear to be absent on ocellar triangle and cerebrale, and wholly covered with long black hairs which become pale on cheeks, shorter on antenna and occiput and very sparse on antennal flagellum; eye densely clothed with long black hairs; width of one eye on a mid line from a direct frontal view somewhat less than width of face at lowest portion from a direct frontal view (0.8 times), equal to width of front just above antenna, and less than distance from antenna to median ocellus (0.7-0.8 times) which is about 1 1/2 that from palpus to antenna (1.5-1.6 times); in distance from antenna to median ocellus, frontal triangle (pollinose part) (which is 0.4 times as long as wide) about 1/2 as long as rest (0.4-0.6 times); mid-upper face 1/2 as long as distance from palpus to antenna; in antenna, which is over 1/2 distance from antenna to median ocellus (0.7-0.8 times), flagellum 1 1/2-2 times as long as segments 1+2 (1.6-2.2 times); basal segment of flagellum 2 times or roughly so as wide as its terminal segment (1.6-2.2 times), and 1 1/2 or less as wide as antennal segment 2 (1.2-1.5 times) which is wider than segment 1 (1.2-1.5 times); in palpus, which is shorter than distance from palpus to antenna (0.7 times), segment 2 about equal in length to segment 1 (1.0-1.1 times), 2-3 1/2 times as long as wide, and as wide as segment 1.

Thorax: Dark brownish to blackish and covered with long pale pile; anterior part of meso- (except anterior margin), mid-posterior part of sterno-, lower part of ptero-, and upper part of metapleura without pile; mesonotum and scutellum shining and with longer, erect black hairs in addition to pale pile; pleura pale gray pollinose; haltere dark brownish but stem brownish.

Leg: Dark brownish to blackish, but knee and hind basitarsus brownish; coxa and femur with pale pile which sometimes becomes black on coxa (in femur pile is longer on posterior surface); relative length of segments (excluding coxa and trochanter) of fore leg 236 (224-248): 249 (238-264): 100: 48 (45-52): 34 (32-36): 24 (24-25): 43 (40-48), of mid leg 234 (219-252): 236 (224-256): 95 (86-100): 46 (44-48): 33 (32-35): 21 (19-24): 41 (40-43), of hind leg 318 (300-348): 279 (257-308): 122 (110-132): 51 (45-57): 37 (33-40): 24 (20-28): 42 (40-44) and in hind leg from a lateral view relative width of femur, tibia, tarsal segments 1-3, 49 (45-56): 40 (36-48): 32 (30-34): 27 (23-32): 25 (23-28) (tarsal segment 1, 0.25-0.3, segment 2, 0.5-0.6, segment 3, 0.6-0.8 times as wide as long), these were calculated from 5 specimens.

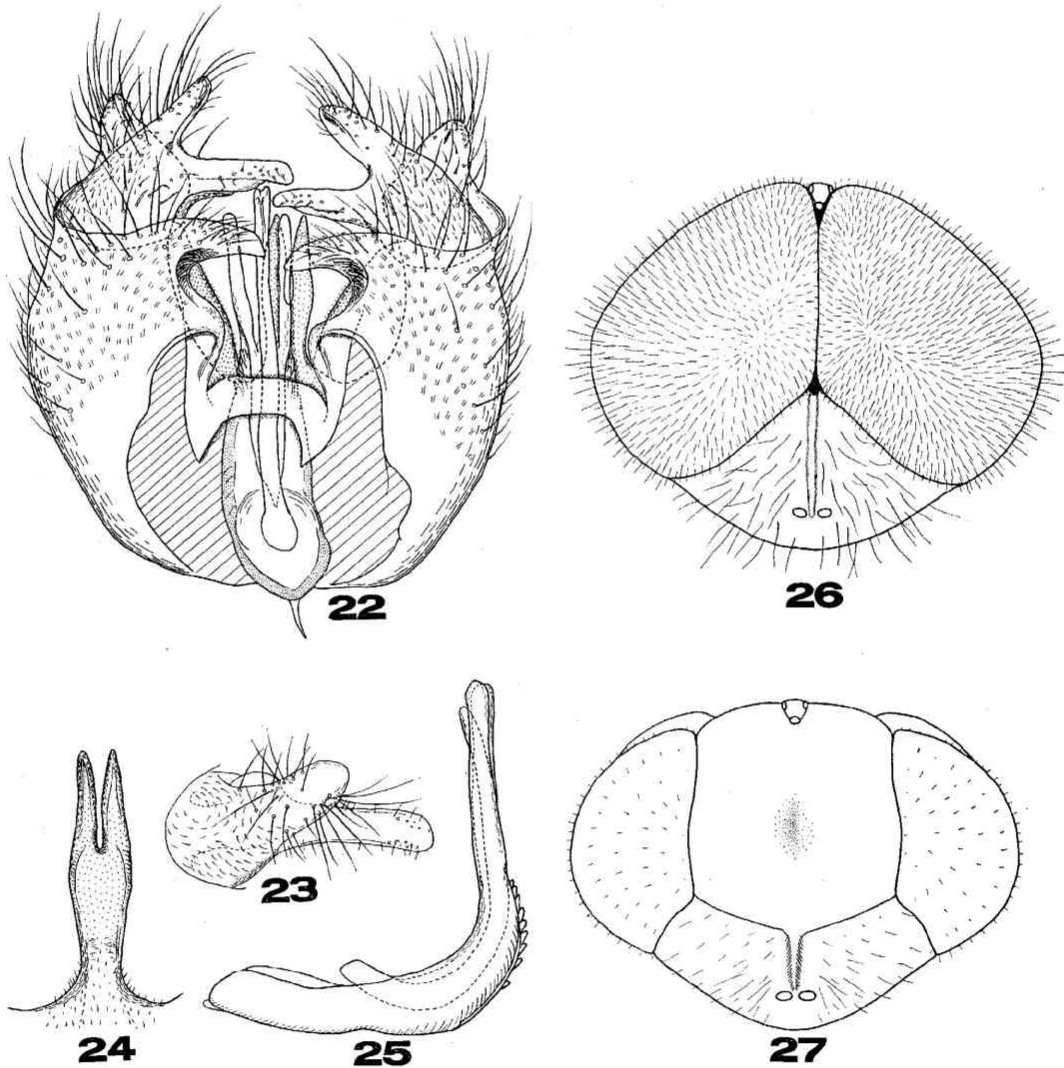
Wing: Membrane faintly tinged with dark brown; stigma darker; discal cell less than

1/2 as long as vein M_1 (0.3-0.4 times).

Abdomen: Wholly dark brownish to blackish, more or less pale gray pollinose, and covered with pale pile which becomes long in middle of sternum 1 and on sides of dorsum and very short and inconspicuous on dorsum except sides.

Genitalia: As in Figs. 22-25.

Length: Body 5.5-9 mm; wing 4.5-6; fore basitarsus 0.5-0.6.



Figs. 22-27. *Allognosta flavofemoralis* (22: ♂ genitalia, dorsal view, in which cerci, proctiger, and epandrium are excluded; 23: dististyle, latero-outer view; 24: mid-posterior part of hypandrium, ventral view; 25: aedeagus, lateral view; 26-27: head, direct frontal view; 26: ♂; 27: ♀).

♀. Similar to ♂ except as follows: Head: Shining and front (except area above antenna) and cerebrale without pollen; basal segment of antennal flagellum, segment 1 or 1+2 of palpus, and sometimes antennal segment 2 yellowish brown to reddish brown; hairs on head becomes pale yellowish and much shorter than in ♂ and those on eye are not so conspicuous as in ♂; hairs on front chiefly recumbent; hairs on antenna are black as

in ♂ and those on palpus and proboscis appear to be chiefly black; width of one eye on a mid line from a direct frontal view somewhat less than 1/2 width of face at lowest portion from a direct frontal view (0.4 times), width of front just above antenna (0.4 times), and distance from antenna to median ocellus (0.4 times) (which is 1.7–2.0 times that from palpus to antenna) respectively, and about 1/2 width of front at transverse suture near antenna (0.5–0.6 times) which is 0.8 times that just above antenna and 1.0–1.1 times that at median ocellus; mid-upper face 0.3–0.4 times as long as distance from palpus to antenna; area behind uppermost corner of each eye shorter than ocellar triangle (0.7–0.8 times); in specimens on hand palpus 0.6–1.0 times as long as distance from palpus to antenna, segment 2 of palpus 0.8–1.2 times as long as segment 1, 1.6–2.5 times as long as wide, and 0.8–1.5 times as wide as segment 1.

Thorax: Pile shorter than in ♂; mesonotum and scutellum without black hairs.

Leg: Trochanter and femur yellowish brown to reddish brown but in latter apical portion except knee dark brownish (in fore- and mid femur dark brownish part may be indistinct); relative length of segments of fore leg 244 (228–256): 267 (255–280): 100: 51 (41–60): 38 (32–44): 27 (23–30): 50 (45–55), of mid leg 258 (247–268): 254 (239–267): 96 (88–100): 49 (41–56): 37 (33–40): 24 (22–28): 47 (44–57), of hind leg 344 (318–367): 307 (276–327): 123 (117–133): 56 (45–67): 40 (36–44): 25 (22–28): 48 (44–50) and in hind leg from a lateral view relative width of femur, tibia, and tarsal segments 1–3, 59 (53–65): 43 (39–47): 35 (29–38): 30 (25–33): 27 (25–30) (tarsal segment 1, 0.25–0.3, segment 2, 0.5–0.7, segment 3, 0.6–0.8 times as wide as long), these were calculated from 9 specimens.

Abdomen: Hairs on sides of terga 3–4 (or 3–5) shorter than in other terga.

Length: Body 5–7 mm; wing 4.5–6; fore basitarsus 0.35–0.5.

Distribution: China and Japan (Hokkaido, Honshu, Shikoku, Kyushu).

Type-locality: Ta-Tsien-lu, "Szetschuan" Province, China.

Specimens examined (7 ♂♂, 10 ♀♀): *Hokkaido* (2 ♂♂, 2 ♀♀): 2 ♂♂, Sapporo, 15–20. v. 1959, S. Takagi; 1 ♀, Sapporo, 13. vi 1959, S. Ueda; 1 ♀, Sapporo, 1. vi. 1960, K. Kamiyo. *Honshu* (2 ♂♂, 2 ♀♀): 2 ♂♂, 2 ♀♀, Sasayama, Tamba, 16. iv.–10. v. 1954–59, A. Nagatomi. *Shikoku* (2 ♂♂, 3 ♀♀): 1 ♂, Omogokei, 2. v. 1954, Toshiro Yano; 1 ♂, Mt Sara, Ehime-Pref., 5. v. 1956, S. Hisamatsu; 1 ♀, Mt Sara, 3. v. 1956, T. Edashige; 2 ♀♀, Mt Takanawa, 2. v. 1954, Takeshi Yano. *Kyushu* (1 ♂, 3 ♀♀): 1 ♂, 3 ♀♀, Kagoshima, Satsuma, 3–18. iv. 1954–62, Nagatomi.

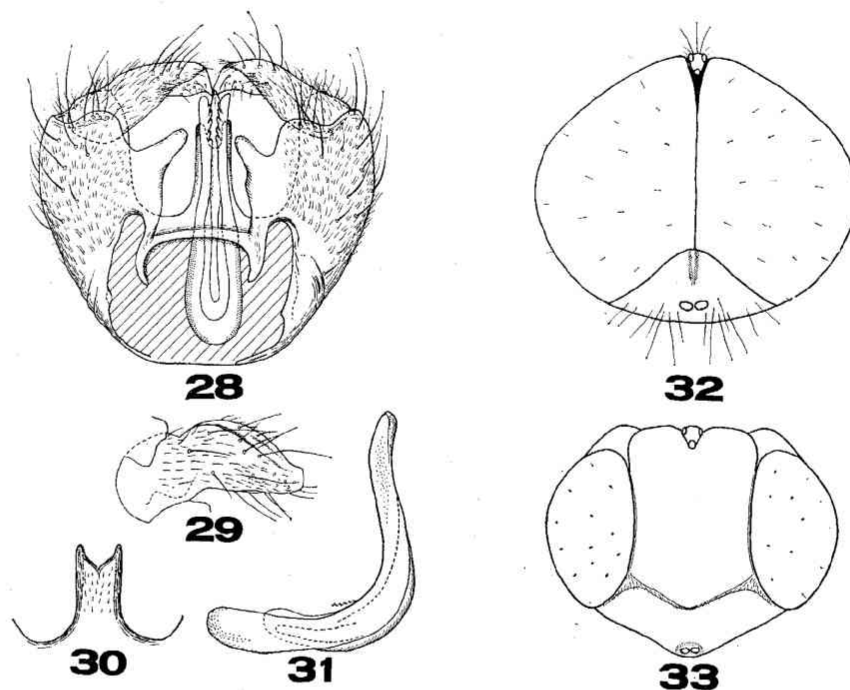
Allognosta japonica Frey

(Figs. 28–33)

Allognosta japonica Frey, 1960, Notulae Entomologicae 40: 84.

This species may possibly be a synonym of *A. fuscipennis* Enderlein, 1921 of Formosa. It is characterized by having the femur yellowish brown to reddish brown, the abdominal segments 1–3 (or 1–4) except sides yellowish brown or at least somewhat paler, and in ♀ the face and lower front (as well as rest of front) shining black.

♂. Head: Dark brownish to blackish, with pale gray pollen which may be absent on



Figs. 28-33. *Allognosta japonica* (28: ♂ genitalia, dorsal view, in which cerci, proctiger, and epandrium are excluded; 29: dististyle, latero-outer view; 30: mid-posterior part of hypandrium, ventral view; 31: aedeagus, lateral view; 32-33: head, direct frontal view; 32: ♂; 33: ♀).

ocellar triangle and cerebrale; basal portion of flagellum and sometimes antennal segments 1-2, proboscis, apical portion of palpus yellowish brown to brownish; head (except frontal triangle and sides of face), proboscis and palpus with pale yellowish pile (sometimes palpus with black hairs) and antenna with black hairs which are sparse on flagellum; width of one eye on a mid line from a direct frontal view about equal to width of face at lowest portion from a direct frontal view (0.9-1.0 times), somewhat more than width of front just above antenna (1.1-1.3 times), and less than distance from antenna to median ocellus (0.6-0.7 times) which is about 2 times or more that from palpus to antenna (2.1-2.4 times); in distance from antenna to median ocellus, frontal triangle (pollinose part) (which is 0.3-0.4 times as long as wide) less than 1/2 as long as rest (0.2-0.3 times); mid-upper face somewhat less than 1/2 as long as distance from palpus to antenna (0.4 times); in antenna, which is somewhat over 1/2 as long as distance from antenna to median ocellus (0.6 times), flagellum 1 1/2-2 times as long as segments 1+2 (1.6-2.1 times); basal segment of flagellum 2 times or nearly so as wide as its terminal segment (1.7-2.0 times), 1 1/2 or less as wide as antennal segment 2 (1.3-1.5 times) which is wider than segment 1 (1.3 times); in palpus, which is shorter than distance from palpus to antenna (0.6-0.7 times), segment 2 longer than segment 1 (1.2-1.5 times), 2-3 1/2 times as long as wide, and 1-1 1/2 times as wide as segment 1.

Thorax: Dark brownish to blackish, shining, pleura and sub- and postscutellum more or less pale gray pollinose; thorax clothed with pale yellowish pile, but anterior part of meso- (except anterior margin), sterno- (except upper- and lower part), lower 1/2 of ptero-

upper part of metapleura, and sub- and postscutellum without hairs; haltere dark brownish but stem yellowish brown.

Leg: Yellowish brown, but tibia except base and tarsus except hind basitarsus dark brownish to blackish; coxa and apical portion (except tip) of hind femur may have a dark brownish tinge; sometimes mid tibia and mid basitarsus with a yellowish brown tinge; coxa and femur with pale yellowish pile (in femur pile is longer on posterior surface); relative length of segments (excluding coxa and trochanter) of fore leg 232 (217-250): 232 (217-253): 100: 49 (44-53): 30 (26-33): 21 (16-24): 37 (33-44), of mid leg 203 (183-221): 198 (183-213): 81 (74-88): 40 (35-47): 25 (22-28): 18 (16-20): 34 (28-41), of hind leg 281 (261-307): 242 (222-262): 106 (100-117): 46 (41-48): 29 (26-33): 20 (17-24): 35 (32-38) and in hind leg from a lateral view, relative width of femur, tibia, tarsal segments 1-3, 42 (35-48): 37 (33-41): 24 (19-28): 21 (17-25): 19 (17-21) (tarsal segment 1, 0.2-0.3, segment 2, 0.4-0.5, segment 3, 0.5-0.8 times as wide as long), these were calculated from 10 specimens.

Wing: Membrane tinged with dark brown but base of wing, 2nd basal- and anal cell, base of axillary paler and stigma, subcostal cell above stigma, and apex of costal cell darker; discal cell less than 1/2 as long as vein M_1 (0.3-0.4 times).

Abdomen: Dark brownish to blackish, but terga 1-4 (or 1-3) except sides and sterna 1-4 (or 1-3) except sides yellowish brown or at least somewhat paler; above and below clothed with pale yellowish pile which becomes long in middle part of sternum 1 and on sides of dorsum.

Genitalia: As in Figs. 28-31.

Length: Body 3.5-5 mm; wing 3-4; fore basitarsus 0.35-0.5.

♀. Similar to ♂ except as follows: Head: Head except appendages is shining black and middle part of face, area just above antenna, eye margin on face and cheeks and line along transverse suture of front with pale gray pollen; width of one eye on a mid line from a direct frontal view about 1/2 width of face at lowest portion from a direct frontal view (0.4-0.5 times), about 1/2 width of front just above antenna (0.4-0.5 times), somewhat less than 1/2 distance from antenna to median ocellus (0.4 times) (which is 1.9-2.1 times that from palpus to antenna), and over 1/2 width of front at transverse suture near antenna (0.6-0.7 times) which is 0.7-0.8 times that just above antenna and 0.9-1.0 times that at median ocellus; area behind uppermost corner of each eye longer than ocellar triangle (1.1-1.3 times); antenna over 1/2 distance from antenna to median ocellus (0.7-0.8 times); palpus somewhat shorter than distance from palpus to antenna (0.8-0.9 times).

Thorax: Pro-, and anterior- and upper part of mesopleura yellowish brown; humeral- and posterior callus with a yellowish brown tinge (this may be true of ♂).

Leg: Segments 1-2 (or 1-3) of mid- and hind tarsus often yellowish brown (this may be true of ♂); relative length of segments of fore leg 217 (206-231): 225 (218-231): 100: 48 (44-53): 30 (25-33): 19 (18-20): 38 (35-40), of mid leg 200 (193-219): 196 (188-206): 78 (75-81): 38 (35-40): 25 (24-27): 18 (15-20): 32 (29-38), of hind leg 278 (265-306): 237 (225-256): 109 (106-113): 44 (41-47): 30 (25-33): 19 (18-20): 38 (35-40) and in hind leg from a lateral view relative width of femur, tibia, and tarsal segments 1-3, 44 (41-47): 33 (31-38): 24 (20-29): 21 (19-25): 20 (18-22) (tarsal segment 1, 0.2-0.3, segment 2, 0.4-0.6, segment 3, 0.6-0.8 times as wide as long), these were calculated from 5 specimens.

Length: Body 4 mm; wing 3.5; fore basitarsus 0.4.

Distribution: Japan (Hokkaido, Honshu, Shikoku, Kyushu, Amami-Oshima).

Type-locality: Takatsuki, Osaka-Pref., Honshu.

Specimens examined (112 ♂♂, 22 ♀♀): *Hokkaido* (2 ♀♀): 1 ♀, Sapporo, 25. v. 1960, S. Takagi; 1 ♀, Oshidomari, Rishiri, 10. vii. 1958, M. Miyatake. *Honshu* (10 ♂♂, 1 ♀): 9 ♂♂, 1 ♀, Sasayama, Tamba, 16. iv.-3. vi. 1954-58, A. Nagatomi; 1 ♂, Okayama-city, 9. vi. 1957, K. Koizumi. *Shikoku* (2 ♂♂, 6 ♀♀): 2 ♀♀, Minatoyama, Matsuyama, 3. v. 1953, Miyatake; 1 ♀, Is Futagami, Ehime, 28. iv. 1957, F. Takechi; 1 ♀, Mt Saragamine, Ehime, 27. vi. 1959, M. Sato; 1 ♂, Sugitate, 12. iv. 1958, M. Okada; 1 ♀, Tagamisan, Iyo, 30. iv. 1953, Y. Takaishi; 1 ♀, Kuroson, Kochi, 28. iv. 1956, S. Hisamatsu; 1 ♂, Hitsu-zan, Tosa, 24. iv. 1935, K. Oike. *Kyushu* (99 ♂♂, 11 ♀♀): 20 ♂♂, 1 ♀, Kagoshima, Satsuma, 5-15. iv. 1954-67, Nagatomi; 3 ♂♂, 3 ♀♀, Takeoka, Kagoshima-city, 14. iv. 1968, A. Tanaka; 25 ♂♂, 5 ♀♀, Onobaru, Mt Takakuma, Osumi, 28. iv. 1968, Tanaka; 51 ♂♂, 2 ♀♀, Sata, Osumi, 5-29. iv. 1962-63, Nagatomi. *Tokara Islands* (1 ♀): 1 ♀, Akuseki-jima, 17. v. 1962, M. Sato. *Amami-Oshima* (1 ♂, 1 ♀): 1 ♂, 1 ♀, 2. v. 1959, K. Kamijo.

Allognosta sapporensis Matsumura

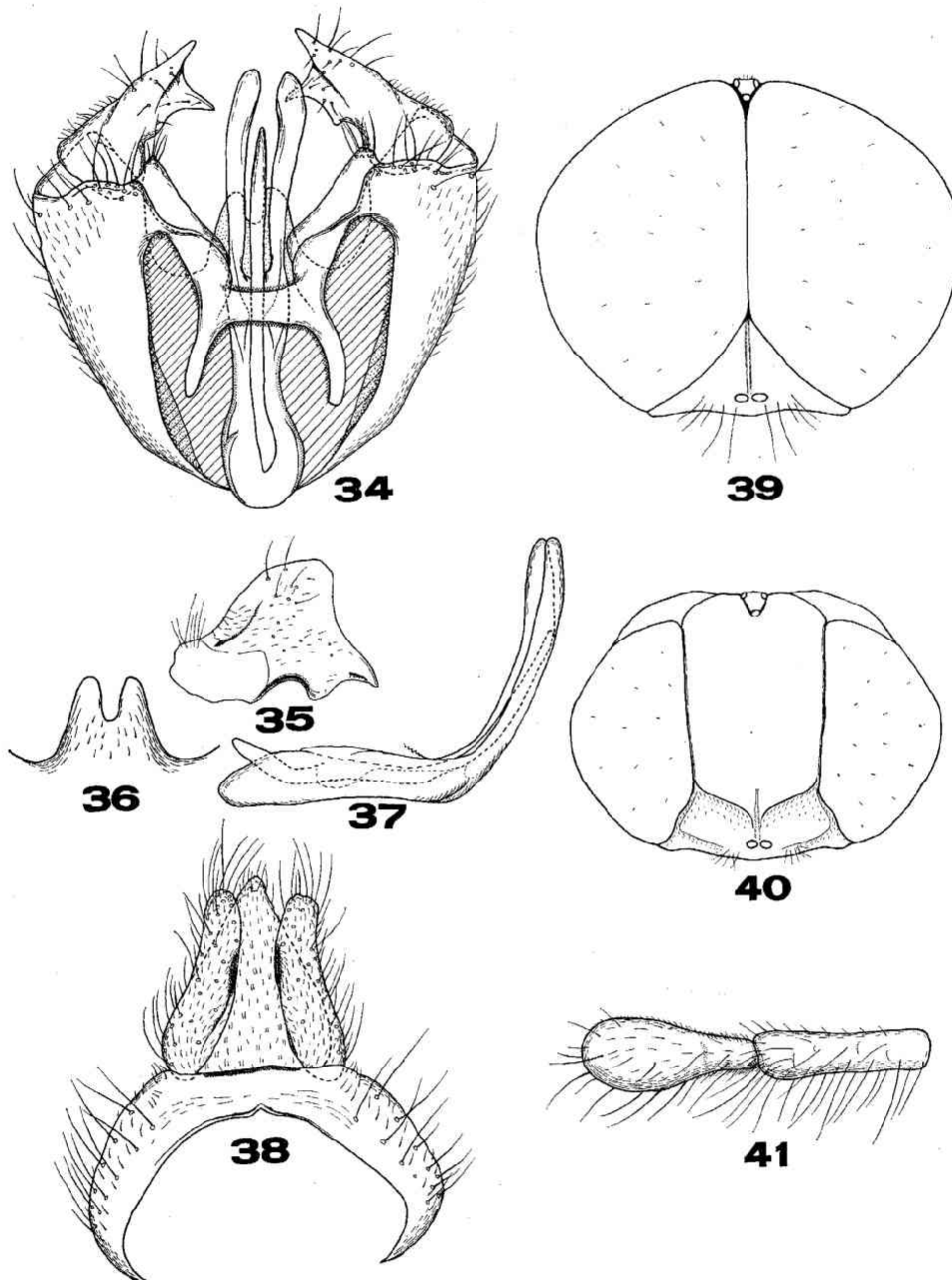
(Figs. 34-41)

Allognosta sapporensis Matsumura, 1916, Thous. Ins. Jap. Addit. 2: 370.

This species is characterized by having the femur except apex dark brownish to blackish (in ♀ fore femur sometimes yellowish brown to reddish brown), the abdomen wholly dark brownish to blackish, the eye practically bare, and the segment 2 of palpus about as long as its segment 1.

The species figured by Shiraki (1950) as *sapporensis* apparently belongs to *flavimaculata*.

♂. Head: Head and its appendages blackish, with pale gray pollen which is distinct on frontal triangle and face and appear to be absent on ocellar triangle and cerebrale; antennal segments 1-2, basal segment of flagellum, and proboscis often with a yellowish brown to reddish brown tinge; mid-upper face, antennal segments 1-2, proboscis, and palpus with black hairs which are longer on face and proboscis and appear to be pale on 1st segment of palpus; ocellar triangle, line between eyes, occiput, and cheeks with pale pile which is longer on cheeks; base and apex of antennal flagellum with a few black hairs; width of one eye on a mid line from a direct frontal view about equal to width of face at lowest portion from a direct frontal view (0.9-1.1 times), more than width of front just above antenna (1.3-1.6 times), and less than distance from antenna to median ocellus (0.7-0.8 times) which is over 1 1/2 that from palpus to antenna (1.7-1.9 times); in distance from antenna to median ocellus, frontal triangle (pollinose part) (which is 1/2-1/3 as long as wide) about 1/4 as long as rest; mid-upper face about 1/2 as long as distance from palpus to antenna (0.5-0.6 times); in antenna, which is over 1/2 distance from antenna to median ocellus (about 0.7 times), flagellum 2-3 times as long as segments 1+2; basal segment of flagellum 2 times or nearly so as wide as its terminal segment (1.7-2.0 times) and 1-1 1/2 times as wide as antennal segment 2 which is wider than segment 1 (about 1.3 times); in palpus, which is shorter than distance from palpus to antenna (0.7 times), segment 2 nearly as long as segment 1 (0.8-1.1 times), 2-3 times as long as wide, and usually 1 1/2-2 times as wide as segment 1.



Figs. 34-41. *Allognosta sapporensis* (34: ♂ genitalia, dorsal view, in which cerci, proctiger, and epandrium are excluded; 35: dististyle, latero-outer view; 36: mid-posterior part of hypandrium, ventral view; 37: aedeagus, lateral view; 38: cerci, proctiger, and epandrium, dorsal view; 39-40: head, direct frontal view; 41: palpus, lateral view; 39 & 41: ♂; 40: ♀).

Thorax: Blackish and shining; pleura and postscutellum pale gray pollinose (sternopleura largely without pollen); mesonotum, scutellum, pro-, anterior margin and posterior portion of meso-, sterno- (except mid-posterior part), upper part of ptero-, lower part of meta-, and hypopleura with pale erect pile which is short on hypopleura; haltere dark brownish with base paler.

Leg: Dark brownish to blackish; knee, mid-basitarsus (sometimes tarsal segments 1-2 or base of segment 1), and hind tarsus (except segments 4-5 or 5) yellowish brown; trochanter, apex of coxa, base of femur, apices of mid- and hind tibia may have a yellowish brown tinge; coxa and femur with pale pile which is longer on coxa and posterior surface of femur; relative length of segments (excluding coxa and trochanter) of fore leg 245 (235-256): 248 (235-261): 100: 41 (38-44): 32 (29-38): 26 (23-30): 49 (44-53), of mid leg 239 (225-250): 237 (230-244): 91 (83-94): 36 (31-40): 28 (25-30): 21 (18-24): 45 (41-50), of hind leg 302 (282-322): 269 (250-283): 109 (100-113): 41 (35-47): 30 (28-33): 24 (19-28): 42 (40-44) and in hind leg from a lateral view relative width of femur, tibia, tarsal segments 1-3, 46 (41-50): 36 (31-39): 26 (25-28): 24 (22-28): 23 (19-28) (tarsal segment 1, 0.2-0.25, segment 2, 0.5-0.7, segment 3, 0.7-0.8 times as wide as long), these were calculated from 10 specimens.

Wing: Membrane faintly tinged with dark brown; stigma and area above stigma in subcostal cell somewhat darker; discal cell less than 1/2 as long as vein M_1 (0.3-0.4 times).

Abdomen: Wholly dark brownish to blackish; more or less pale gray pollinose; venter and sides of dorsum with pale pile which is longer in middle part of sternum 1 and on terga 1-2; dorsum (except sides) with minute pile.

Genitalia: As in Figs. 34-38.

Length: Body 4.5-5.5 mm; wing 3-4; fore basitarsus 0.35-0.5.

♀. Similar to ♂ except as follows: Head: Shining, and front (except area above antenna) without pollen but with short pale pile; width of one eye on a mid line from a direct frontal view distinctly less than width of face at lowest portion from a direct frontal view (0.6-0.7 times), less than width of front just above antenna (0.7-0.8 times), about 1/2 distance from antenna to median ocellus (0.5-0.6 times) (which is 1.4-1.6 times that from palpus to antenna), and about equal to width of front at transverse suture near antenna (0.9-1.1 times) which is 0.7-0.8 times that just above antenna and 0.8-0.9 times that at median ocellus; area behind uppermost corner of each eye longer than ocellar triangle (1.2-1.5 times); in 10 specimens measured antenna 0.8-0.9 times distance from antenna to median ocellus, palpus 0.7-0.8 times as long as distance from palpus to antenna, segment 1 of palpus 0.9-1.1 times as long as segment 2 and 1.8-2.3 times as long as wide.

Leg: Sometimes fore femur yellowish brown to reddish brown rather than dark brownish; relative length of segments of fore leg 243 (231-250): 250 (244-256): 100: 43 (38-44): 31 (29-38): 25 (22-28): 49 (44-50), of mid leg 243 (238-256): 246 (238-253): 91 (88-94): 37 (35-38): 30 (28-31): 23 (18-25): 46 (44-50), of hind leg 309 (300-325): 283 (269-294): 113 (106-119): 42 (38-47): 30 (28-31): 24 (22-25): 49 (44-53) and in hind leg from a lateral view relative width of femur, tibia, and tarsal segments 1-3, 53 (47-56): 40 (35-47): 29 (25-31): 27 (22-31): 26 (22-29) (tarsal segment 1, 0.2-0.3, segment 2, 0.6-0.75, segment 3, 0.8-1.0 times as wide as long), these were calculated from 10 specimens.

Length: Body 4-6 mm; wing 3.5-4; fore basitarsus 0.35-0.45.

Distribution: Kuril Islands, Japan (Hokkaido, Honshu, Shikoku, Kyushu), and China³.

Type-locality: Sapporo, Hokkaido. One of us (Nagatomi) examined the type deposited in Hokkaido University, Sapporo.

Specimens examined (107 ♂♂, 50 ♀♀): *Kuril Islands* (1 ♂, 3 ♀♀): 1 ♂, Sikotan, 25-26. vii. 1940, S. Kuwayama & Y. Sugihara; 3 ♀♀, Kunasiri, 10-18. viii. 1940, Kuwayama & Sugihara. *Hokkaido* (45 ♂♂, 6 ♀♀): 3 ♂♂, Obihiro, Tokati, 11. vii. 1953, S. Ito; 11 ♂♂, Mitsumata, Tokati, 14. vii. 1953, Ito; 1 ♂, Akanko, Kusiro, 17. vii. 1953, Ito; 1 ♂, Nibusi, Kusiro, 19. vii. 1953, Ito; 1 ♂, Sounkyo, 21. vii. 1953, Ito; 4 ♂♂, Sounkyo, 4. vii. 1958, M. Miyatake; 1 ♀, Sapporo, 17. vii. 1959, K. Morimoto; 1 ♂, 2 ♀♀, Sapporo, 25. vi. 1958-60, S. Takagi; 1 ♀, Jozankei, 15. vii. 1953, T. Ishihara; 1 ♂, Jozankei, 25. vi. 1964, K. Kusigemati; 1 ♂, Nukabira, 22. vii. 1959, Morimoto; 1 ♂, Nukabira, 6. vii. 1966, Kusigemati; 1 ♂, Nopporo, 7. vii. 1964, Kusigemati; 1 ♂, Yubaridake, Sorachi, 15. vii. 1967, H. Shima; 2 ♀♀, Rubeshibe, 2. viii. 1959, Morimoto; 1 ♂, Ashoro, 15. vii. 1964, A. Nagatomi; 16 ♂♂, Aizankei, 7. vii. 1964, Nagatomi; 1 ♂, Aizankei, 1. viii. 1966, Kusigemati. *Honshu* (10 ♂♂, 2 ♀♀): 4 ♂♂, Ôtomura, Kii, 16. vi. 1962, J. Yukawa; 1 ♀, Shigura, Tamba, Hyogo-Pref., 23. vi. 1951, Y. M. Yamamoto; 6 ♂♂, 1 ♀, Okayama-city, 4-5. vi. 1956-58, K. Koizumi. *Shikoku* (1 ♀): 1 ♀, Matsuyama, 24. v. 1959, I. Miyagi. *Kyushu* (51 ♂♂, 38 ♀♀): 40 ♂♂, 27 ♀♀, Kagoshima, Satsuma, 19. v.-8. viii. 1961-63, Nagatomi; 1 ♂, 2 ♀♀, Kagoshima, Satsuma, 16-25. v. 1963, K. Hashimoto; 1 ♀, Eboshidake, Satsuma, 1. vi. 1963, Hashimoto; 10 ♂♂, 8 ♀♀, Kagoshima, Satsuma, 14-25. v. 1963, Kusigemati.

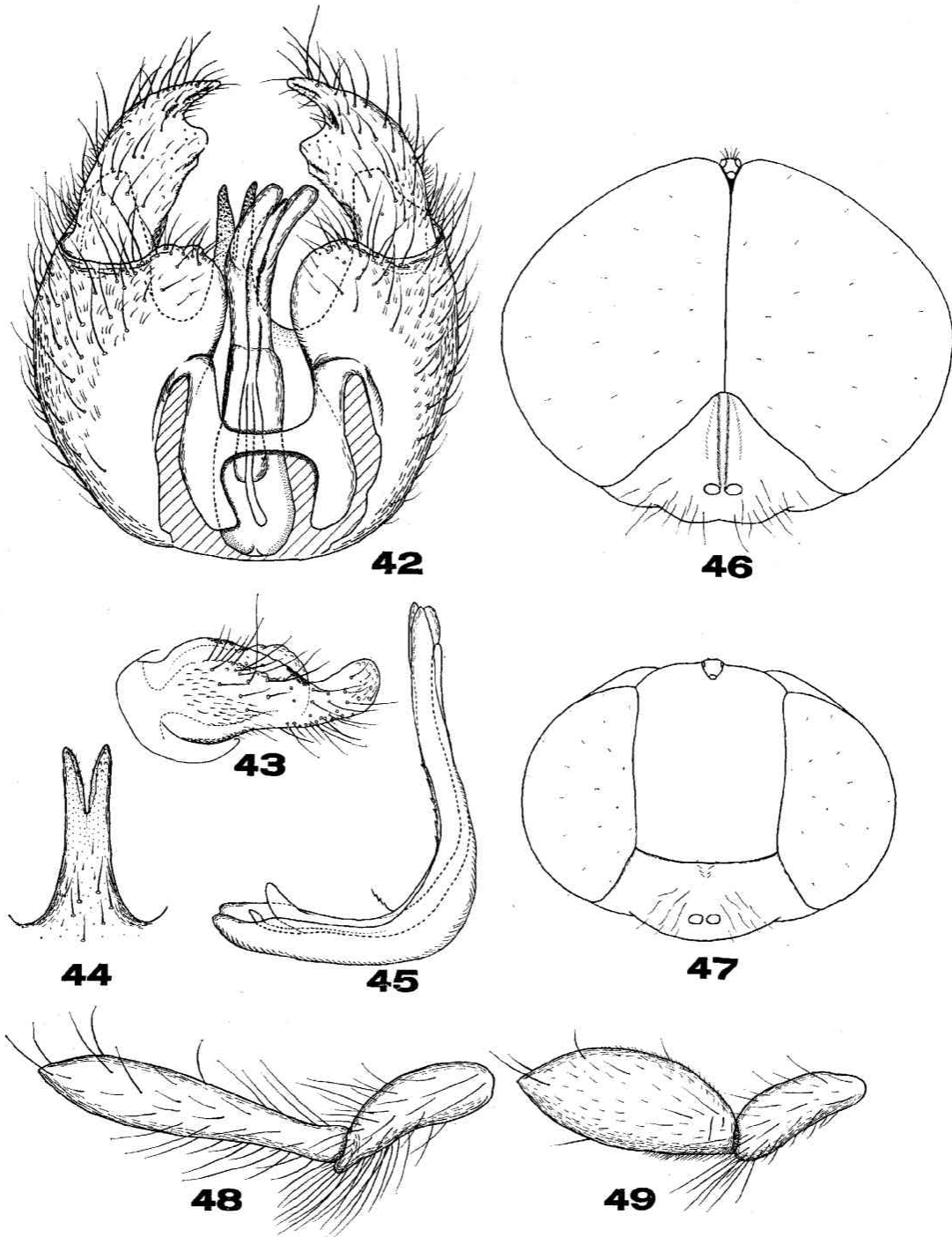
Allognosta shibuyai Nagatomi and Tanaka, new species

(Figs. 42-49)

This species is characterized by having the segment 2 of palpus 1 1/2 or more as long as its segment 1 (Figs. 48-49). In both sexes abdomen wholly dark brownish to blackish, and in ♂ femur except apex dark brownish to blackish but in ♀ femur yellowish brown to reddish brown.

♂. Head: Head and its appendages blackish and with pale gray pollen which is distinct on frontal triangle and face and may be absent on ocellar triangle and cerebrale; proboscis with a brownish tinge; antennal segments 1-2 and ocellar triangle with black hairs which are often pale yellowish on antennal segment 1 and ocellar triangle; mid-upper face, cheeks, occiput, palpus, and sutural line between eyes with pale yellowish pile which is short on upper occiput and long on cheeks; proboscis and basal- and apical portion of antennal flagellum with some hairs which appear to be at least chiefly black; width of one eye on a mid line from a direct frontal view about equal to width of face at lowest portion from a direct frontal view (0.9-1.0 times), more than width of front just above antenna (1.2-1.3 times), and less than distance from antenna to median ocellus (0.7 times) which is 2 times or somewhat more than from palpus to antenna (2.0-2.3 times); in distance from antenna to median ocellus, frontal triangle (pollinose part) (which is about 1/2 as long as wide) about 1/3 as long as rest; mid-upper face less than 1/2 as long as distance from palpus to antenna (0.3-0.4 times); in antenna, which is somewhat over 1/2 as long as distance from antenna to median ocellus (0.6 times), flagellum 2 times

3) See the note under *A. sinensis*.



Figs. 42-49. *Allognosta shibuyai* (42: ♂ genitalia, dorsal view, in which cerci, proctiger, and epandrium are excluded; 43: dististyle, latero-outer view; 44: mid-posterior part of hypandrium, ventral view; 45: aedeagus, lateral view; 46-47: head, direct frontal view; 48-49: palpus, lateral view; 46 & 48: ♂; 47 & 49: ♀).

or so as long as segments 1+2 (1.8-2.3 times); basal segment of flagellum 2 times or nearly so as wide as its terminal segment (1.7-2.0 times), less than 1 1/2 as wide as antennal segment 2 (1.2-1.3 times) which is wider than segment 1 (1.2-1.3 times); in palpus, which is about equal to distance from palpus to antenna (1.0-1.1 times), segment 2 much longer than segment 1 (1.6-2.4 times), 4-6 times as long as wide, and 1-1 1/2 times as wide as segment 1.

Thorax: Blackish, humeral- and posterior callus with a brownish tinge; pleura with pale gray pollen which is absent and shining on mid-posterior portion of sternopleura; thorax covered with pale yellowish pile which is absent on antero-lower part of meso- (except area just behind anterior margin), mid-posterior portion of sterno-, lower 1/2 of ptero-, and upper part of metapleura, and sub- and postscutellum; haltere dark brownish but base somewhat paler.

Leg: Dark brownish to blackish, but knee of each leg and hind basitarsus (except apex) reddish- or yellowish brown; coxa and trochanter may have a brownish tinge; coxa and femur with pale yellowish pile which is longer on former and on posterior surface of latter; relative length of segments (excluding coxa and trochanter) of fore leg 228 (209-245): 248 (232-264): 100: 48 (45-52): 34 (32-38): 23 (18-26): 42 (38-45), of mid leg 221 (208-236): 226 (213-241): 90 (83-96): 43 (38-48): 29 (25-33): 21 (17-23): 40 (36-43), of hind leg 304 (291-323): 281 (268-295): 111 (104-118): 48 (45-50): 33 (29-38): 22 (18-29): 39 (36-43) and in hind leg from a lateral view relative width of femur, tibia, and tarsal segments 1-3, 44 (38-48): 39 (33-43): 29 (25-32): 24 (21-27): 22 (20-24) (tarsal segments 1, 0.2-0.3, segment 2, 0.45-0.55, segment 3, 0.6-0.7 times as wide as long), these were calculated from 10 specimens.

Wing: Membrane tinged with dark brown; stigma and area above stigma in subcostal cell somewhat darker; discal cell less than 1/2 as long as vein M_1 (0.3-0.4 times).

Abdomen: Wholly dark brownish to blackish; more or less pale gray pollinose; above and below clothed with pale yellowish pile which is longer in middle part of sternum 1 and on sides of dorsum (hairs on terga 1-2 especially long) and which is very short on dorsum except sides.

Genitalia: As in Figs. 42-45.

Length: Body 5.5-7 mm; wing 4.5-5.5; fore basitarsus 0.4-0.6.

♀. Similar to ♂ except as follows: Head: Basal segment of flagellum reddish- to yellowish brown in specimens on hand; front (except lower part below transverse suture) shining black and with short, recumbent pale yellowish pile; width of one eye on a mid line from a direct frontal view 1/2 width of face at lowest portion from a direct frontal view, 0.6 times width of front just above antenna, 1/2 distance from antenna to median ocellus, and 0.8 times width of front at transverse suture which is 0.8 times that just above antenna and 0.9 times that at median ocellus; mid-upper face 0.25 times as long as distance from palpus to antenna; area behind uppermost corner of each eye longer than ocellar triangle (1.2 times); antenna 0.8 times distance from antenna to median ocellus and its segment 2, 1.5 times as wide as segment 1; palpus 0.9 times as long as distance from palpus to antenna, and its segment 2, 2.2 times as long as wide and 1.7 times as wide as segment 1. (structural characters given above are based on 1 individual)

Thorax: Hairs on thorax except propleura becomes short and chiefly recumbent.

Leg: Femur yellowish- to reddish brown; apical portion of hind femur (except tip) may

have a dark brownish to blackish tinge; relative length of segments of fore leg 239-261-100-50-39-25-44, of mid leg 233-233-94-50-28-19-44, of hind leg 322-306-122-56-33-22-44 (based on 1 individual).

Abdomen: Hairs on sides of terga 3-5 not longer.

Length: Body 6 mm; wing 5; fore basitarsus 0.45.

Distribution: Japan (Honshu, Shikoku, Kyushu).

Holotype: 1 ♂, Sata, Osumi, 6. iv. 1963, A. Nagatomi.

Paratypes (25 ♂♂, 2 ♀♀): *Honshu* (1 ♂): 1 ♂, Rokkozan, Hyogo, 13. iv. 1950, S. Ito. *Shikoku* (1 ♂): 1 ♂, Mt Sara, Ehime, 5. v. 1956, S. Hisamatsu. *Kyushu* (23 ♂♂, 2 ♀♀): 7 ♂♂, same data as holotype; 1 ♂, 1 ♀, Kagoshima, Satsuma, 1. iv. 1962, Nagatomi; 2 ♂♂, Kanmuridake, Satsuma, 11. iv. 1962, Nagatomi; 1 ♀, Kagoshima, Satsuma, 24. iii. 1967, A. Tanaka; 1 ♂, Mt Takakuma, Osumi, 24. iii. 1968, Tanaka; 6 ♂♂, Kagoshima, Satsuma, 7. iv. 1968, Nagatomi; 6 ♂♂, Kagoshima, Satsuma, 7. iv. 1968, Tanaka.

Holotype in Kyushu University (Fukuoka) and paratypes in Kyushu University, Kagoshima University (Kagoshima), University of Osaka Prefecture (Sakai), Ehime University (Matsuyama), National Institute of Agricultural Sciences (Nishigahara, Tokyo), U. S. National Museum (Washington, D. C.), and British Museum, Natural History (London).

It is with pleasure that we name this species after Dr. Masatake Shibuya, Professor Emeritus of Entomology, who has contributed over a period of many years in no small measure to the development of the Faculty of Agriculture at Kagoshima University.

Allognosta sinensis Pleske

Allognosta sinensis Pleske, 1926, Eos 2: 418.

It is uncertain whether or not this species is present in Japan. James (1941) recorded 1 ♀ from Nikko, Japan as *sinensis*. One of us (Nagatomi) examined the specimens from Foochow, China deposited in British Museum (Natural History), London and determined by Dr. Erwin Lindner as *sinensis* and found that these individuals were the same as *sapporensis*.

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