SOME JAPANESE GALLMIDGES WITH THE DESCRIPTIONS
OF KNOWN AND NEW GENERA AND SPECIES (II)
(Diptera, Cecidomyidae)

Kota Monzen

日本産タマバエ科の既知種及び新属新種（II）

Onotrophiariae

Rhabdophaga rosaria H. LOEW

1850, Cecidomyia rosaria H. LOEW; Dip. Beitr. IV, S. 28, 35.
1850, C. rosaria H. Löw; HARDY, Ann. Mag. N. H. VI, p. 185;
gallmücken, B. E. Z., Bd. XXXVI, H. II.; 1891, SCHLECHTENDAL, Gallbildungen d. deutschen Gefäßpflanzen, S. 39.

Male: Head dark brown. Eyes black, confluent. Antennae dark brown. 20 segments, I, II short, flagellate seg. stemmed, enlargement subspherical, the length of the stem one-half as long as the base with white long whorl in the middle, the flagellum minifies successively toward the tip, terminal seg. small conical.

Thorax dark brown, mesonotum nearly glabrous, pleuron with white hairs. Scutellum
dark brown with sparse white hairs. Wings hyaline with brown hairs, subcosta uniting with costa at one-half of the wing and 3rd vein at the apex straightly, 5th vein (posticale) branched, upper branch slightly, lower one weakly curved, a cross vein between 2nd and 3rd veins. Legs yellowish brown, with brown hairs, claws simple, strongly curved and longer than empodium.

Abdomen: Reddish brown with short brown and long white hairs on the hinder margin of each seg. Genitalia; basal seg. thick, yellowish brown, terminal seg. short with short white hairs.

Female: Similar to the male, different points are as follows; Antennae 25 seg. yellowish brown, I cylindrical, II short, flagellate seg. short cylindrical, sessile, each segment with dark circumfilum and long brownish whorl at the base.

<table>
<thead>
<tr>
<th>Length (mm.)</th>
<th>Body</th>
<th>Antenna</th>
</tr>
</thead>
<tbody>
<tr>
<td>♀</td>
<td>3.2</td>
<td>4.0</td>
</tr>
<tr>
<td>♂</td>
<td>4.2</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Gall: Yanagi Hanafuji (= Sintome), MONZEN, Tiuei no Kenkiu, p. 364. (1929).
Bud gall, the terminal bud of willow (Salix gymnolepis and S. integra) deforms so-called rosette, with overlapping roundly leaflet. Ceasing the growth of stem by this gall is injurious for the culture of basket willow. Monothalamus, green in color, turns yellowish in Autumn. Imago emerged early in May from overwintered gall (Saito-hoonkai, Ann. Rept, no. V).

Locality: Japan (Iwate, Aomori, Akita, Niigata Prefectures). Korea, Europe.

**Rhabdophaga salicivora** SHINJI

1911, Cecidomyia salicis SCHRANK; MURAMATSU, Kontiusekai, vol. 20, no 223.
1913, C. salicis; NIJIMA, Shinrin-Kontiugaku. (Gall).
1929, Cecidomyiidae; MONZEN, Tiuei no Kenkiu, p. 362. (Gall).
1932, Rhabdophaga salicis SCHRANK; MASAKI, Kontiusekai, vol. 36, no. 417-419 (Korea).
1938, Rhabdophaga saliciwora SHINJI; Kontiusekai. no. 488, p. 2. 1944, R. salicivora SHINJI; Tiuei to Tiuei Kontiu, pp. 341, 342.

Female: Head black. Palpi 4 seg. Antennae brownish, 21 seg. I, II short, flagellate seg. oblong, nearly sessile, with 2 whorls on the base and in the middle and 2 brownish longitudinal fili, the length and width ratios of some segments as IV 13×9, V 9×9, X 8×7, XX 6×4, terminal seg. oblong.

Thorax, Mesonotum dark brown, glabrous, pleuron with white scales: Scutellum yellowish brown. Wings hyaline with rather long brown hairs, costa covered with dense brownish scales at the basal half, subcosta uniting with costa at about one- third to the apex and 3rd vein at the apex, a cross vein between subcosta and 3rd vein, 5th vein branched, upper branch rather curved, lower one weakly curved. Legs brown with scales and hairs mingled, claws simple, longer than empodium.

Abdomen: Reddish brown with brown and white hairs in the middle, and brown scales and hairs on the distal part. Ovipositor yellowish brown rather short, thinner toward the tip.
the upper lamella roundly enlarged with fine short hairs.

**Gall**: Yanagi Zuifusi. **MONZEN**. Tiaei no Kenkiu, p. 362, 1929.

Pith gall, the tip of twig of Shidare yanagi (Salix babylonica L.) swells elliptically, smooth, grayish with an exiting tube on the top and sometimes a leaf or twig in the side, length about 14mm. diameter 11mm., gall wall woody, thick. In the center there is a larval chamber (4×2.5mm.) which connecting with the exiting tube, monothalamus. So this gill differs from that of *Rhabdophaga salicis* (3–5) which is polythalamus, numerous larvae come out piercing through surface of gall. The willow gall of *R. dubia* (4) being monothalamus, resembles to Japanese one.

**Locality**: Iwate, Miyagi, Akita, Okayama, Tottori, Fukuoka Prefectures.

**Remarks**: This species was considered to be *Rhabdophaga (Cecidomyia, Dichelomyia) salicis* SCHRAK(5–12). SHINJI named *R. salicivora* as a distinct species in 1938.

**Helicomyia chidai** n. sp.

**Male**: Head black. Eyes confluent at the vertex. Palpi 4 segments, I spherical, II longest, III, IV nearly equal in length. Antennae pale, 20 seg. I large and II small spherical, sessile, the flagellate seg. stemmed, enlargement oblong, length about 1.5 times as long as its diameter, slightly constricted in the middle, stem about equal length to the base with 2 whorls near base and tip, those length about 5 times as long as the diameter of the base, the nodules of distal one-third of the flagellum spherical.

**Thorax**: Mesonotum brown with white short hairs. Scutellum yellowish with numerous hairs, postscutellum dark brown. Wings milky, the surface with white fine hairs, costal margin yellowish with white short hairs and a few scales, subcosta uniting with costa before one-half of the wing and 3rd vein at the apex, 5th simple, indistinctly curved. Legs pale with sparse white hairs, no scale, claws simple, longer than empodium.

**Abdomen**: Yellowish brown, basal clasp seg. of genitalia thick, white and sparsely haired, terminal seg. brownish, thinner toward the tip, a little curved and pointed.

**Female**: Almost similar to the male; Palpi 4 seg. Antennae 20 seg. yellowish brown enlargement oblong, slightly constricted in the middle with 2 whorls, which white, about as long as the base, stem very short, flagellum minifies toward the tip successively, nodules of the distal one-third nearly spherical, terminal seg, conical.

**Thorax**: Black, with dark hairs. Wings milky, with white fine hairs, veins as in the

---

(1) 1908, Houard, Les Zoceceidies d' Europe et de la Basine de la Mediterranee, T. 1, p. 140; (2) 1908, Greyvillius und Niessen, Zoceceidia et Cecidooza, lief, III; (3) 1927, Ross und Hedincke, Pflanzenallen Mittel-und Nordeuropas, S. 256.

(4) 1891, Kieffer, Zur Kenntnis der Weidengall nüücken, B. E. Z. Bd, 36 H. II.

(5) 1803, Tipula salicis SCHRAK; Fauna boica, III.S. 69.

(6) 1850, Cecidomyia salicis SCHRAK; H. LÖW, D. B.
male. Legs reddish brown, with sparse white hairs, claws simple, longer than empodium.

Abdomen: Reddish brown, with white and black hairs mingled. Ovipositor yellowish brown, upper lamella long and thin.

Gall: Yanagi - Edakobufusi. MONZEN, Tieu no Kenkiu, p. 363. (Saito Hoonkai, Ann. Rept, V. 5)

Branch swelling, the branch of Salix babylonica L. and S. hondoensis KOIDZ. swells elliptically or spherically, size variable, polythalamus. Larva pupates protruding a half of the body out of the side of gall. Imago emerged in May from the overwintered gall.

Locality: Iwate, Tokyo, Wakayama Prefectures. Remarks: This species relates to European Rhabdophaga saliciperda DUF. In 1915 Rubsaamen erected a new genus Helicomyia as the type R. saliciperda DUF. which having 16 segmented antennae, milky wings and cross veins. In Japan Shinji stated Rhabdophaga sali-yonai from the branch swelling of Salix brachystacys BENTH. in 1938. This species having 21 segmented ant., simple 4th vein, branched 5th vein, black scaled abdomen, toothed claws, is distinct from H. chidai. The midge was collected and reared by Mr. CHIDA in our University.

Genus Hasegawaia n. g.

A bud swelling of dwarf bamboo “Sasauwo” has been known from early age in Japan. According to Mr. TAKAHASHI, C. HASEGAWA mentioned and figured on this gall in his book “Hishusi” about 1745. Examining on it he said that it will be a pest of bamboo. Hence it was gave his name for the genus of causal gallmidge.

Characters: Head narrower than thorax. Palpi 4 segments. Antennae; Male stemmed with a long whorl, 24 segments, female sessile, cylindrical, with a whorl, 25-28 segments, rather variable. Wings with 5 longitudinal veins, densely covered with straight and pointed scales, costa not scaled, extending beyond the apex, subcosta uniting with costa at one-half of the wing and 3rd vein before the apex, 4th vein slightly curved, 5th vein simple, strongly curved, no cross vein, claws simple, rarely toothed, as long as the empodium. Abdomen with white hairs on the hinder margin of each segment. Basal clasp segment of genitalia thick with some hairs, the terminal segment thick pointed apically with white short hairs, the upper lamella incised, style longer than lower lamella. Ovipositor longer, protractile, rather thick, apical part a little constricted and vertically bilobed, pubescent.

(6) 1938, Rhabdophaga sali-yonai, SHINJI ; Kontiu- Sekai, no. 491, p. 3, 1944, SHINJI, Tieu to Tieu Kontiu, pp. 339-341. 
Genotype: *Hasegawaia sasacola* Monzen.

**Hasegawaia sasacola** Monzen

1944, *Hasegawaia sasacola* Monzen; Shinji, Tuei to Tueikontiu, pp. 344-345.

Male: Head black. Eyes black, confluent at the vertex. Face brown. Palpi 4 segments, dark brown, 4th slender. Antennae 24 seg. dark brown, 1st thicker apically, 2nd spherical, flagellate seg. stemmed, basal enlargement oblong with long whorl in the middle part, which about 6 times as long as the diameter of the base, stem slightly longer than the base, flagellum minifies toward the tipe successively, terminal seg. pointed.

Thorax: Brownish, 2 longitudinal striae with white hairs. Wings cloudy with brownish pointed scales on the surface and long brownish hairs on the hinder margin, veins yellowish, costa extending beyond the apex, subcosta (2nd vein) uniting with costa at one-half of the wing and 3rd vein before the apex. 4th vein simple, slightly curved, 5th vein (posticale) simple, strongly curved at one-third from the base. Halteres grayish, slender, enlargement with dark scales. Legs brownish, femora and tibiae with some whitish parts, claws weakly curved, simple, rarely toothed ones, length as long as empodium.

Abdomen: Yellowish brown with white long hairs at the hind margin of each segment. The basal clasp seg. of genitalia brown, rather thick, terminal seg. pointed apically with white short hairs, lamella bilobed.

Female: Larger than male. Antennae 25 seg. (24—28) variable, flagellate seg. cylindrical, sessile with long white whorl near the base, the length 2 times as long as the base, the flagellum minifies toward the tip, the ratios of length and width of some segments are as III and IV 15x7, X 7x6, XX 5x5. Thorax dark brown with long white hairs along the longitudinal striae. Wings cloudy with brown pointid scales. Femora, tibiae and tarsi brownish with dark scales. Abdomen brown with dark scales. Ovipositor whitish, long, protractile, apical part bilobed vertically with a small lobe and pubescent.

<table>
<thead>
<tr>
<th>Length (mm.)</th>
<th>Body</th>
<th>Wing</th>
<th>Antenna</th>
<th>Ovipositor</th>
</tr>
</thead>
<tbody>
<tr>
<td>♂</td>
<td>3.0</td>
<td>4.5</td>
<td>4.3</td>
<td></td>
</tr>
<tr>
<td>♀</td>
<td>5.0</td>
<td>4.0</td>
<td>2.5</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Larva: Large, Yellowish, 13 seg. Length 6mm. width 1,5mm. breast-bone broad, incised in the middle, 2 teeth. not pointed.


Bud swelling, the bud of Azumassa (Sasa ramosa) swells, fusiform, covered with barks, length 10—30cm. width 1,5cm. among stem and barks form several rooms, numeulous larvae live there, green in color, turns to yellowish in Autumn. Imago emerged in May from overwintered gall.

Locality: Iwate, Gifu prefecthres.
Psectrosema gagaimo n. sp.

Male: Small, brown. Eyes black. Face yellowish. Palpi 2 seg. Antennae 15 seg. 1st and 2nd short, yellow, flagellate seg. brown, oblong with a short stem, which is one-half as long as the basal enlargement, the base with long setae measuring about five times of it, the flagellum minifies toward the tip successively. 14th globose. 15th longer.

Thorax: Mesonotum yellowish brown, with sparse hairs along the longitudinal striae. Scutellum yellowish with long hairs. Wings hyaline with brownish hairs, veins dark brown, 2nd vein uniting with costa at a-half of the wing and 3rd vein before apex, 5th vein branched. Halteres yellow, apices swollen, nearly glabrous. Legs yellowish, tarsi dark brown, 1st shortest with brownish short hairs, claws dark, simple.

Abdomen: Yellowish red with brownish short hairs. The basal seg. of the genitalia thick, brown with white hairs, the terminal seg. yellowish, tapering, pointed apically.

Female: Almost similar to the male, the different points are as follows; Antennae 14 seg. brownish, the flagellate seg. oblong, sessile with rather long setae. Abdomen reddish, fusiform with white short hairs. Ovipositor thin, not constricted.

Male: Eyes black, larger than that of the female. Face yellowish brown with brownish long hairs. Palpi 3 seg. yellowish, 1st thick, others short with some hairs. Antennae 14 seg. brownish, 1st thicker apically, 2nd subspherical, the flagellate seg. cylindrical, sessile, each seg. nearly equal in length with numerous hairs longer than its diameter, not whorled, 13th and 14th rather slender.

Thorax: Brownish, covered with whitish short hairs and long ones along longitudinal striae. Scutellum yellowish brown, glabrous. Halteres yellowish, rounded apically. Wings fuscous with brownish short hairs, veins yellowish brown, subcosta (2nd vein) short, uniting with costa before one half of the wing and 3rd vein straight at the apex, 5th (posticale) curved, the upper branch indistinct. Legs yellowish brown, coxae and trochanters with brownish long hairs, the distal parts of femora, tibiae and tarsi fuscous, tibiae and tarsi of the hind legs pale, claws simple, strongly curved.

Abdomen: Dark brown with brownish long hairs. Genitalia dark brown, basal seg. swollen, terminal seg. thinner apically with brownish short hairs, upper lamella with 2 spherical
protuberances on the base.

Female: The different points from the male are as follows: The flagellate antennial seg. successively rather shorter, 13th very short, 14th nearly spherical. Thorax yellowish brown with white short hairs, the larger parts of front and middle legs yellowish brown, hind legs pale and femora and tarsi brownish apically. The terminal seg. of the abdomen with 2 lobes at the upper end. Ovipositor yellowish, aciculate.

Length (mm.)

<table>
<thead>
<tr>
<th></th>
<th>Body</th>
<th>Wing</th>
<th>Antenna</th>
</tr>
</thead>
<tbody>
<tr>
<td>♀</td>
<td>3.0</td>
<td>3.0</td>
<td>2.0</td>
</tr>
<tr>
<td>♂</td>
<td>3.0</td>
<td>3.2</td>
<td>2.0</td>
</tr>
</tbody>
</table>


Fruit-swelling: The fruit of Nobudo (Ampelopsis heterophylla Sieb. et Zucc.) swells, diameter about 15mm. yellowish green with purple tinge.

Locality: Iwate, Wakayama Prefectures.

Asphondyilia sphaera Monzen


Male. Head brown, modulate. Eyes black, confluent at the vertex. Palpi 3 seg. yellowish brown, 1st thick, 2nd and 3rd thin. Antennae 14 seg. 1st long, 2nd subspherical, the flagellate seg. brownish, cylindrical, sessile, each seg. nearly equal in size, with brownish hairs as long as its diameter, not whorled.

Thorax: Mesonotum and scutellum dark brown, with brownish long hairs, postscutellum and pleuron yellowish brown. Wings hyaline with brownish hairs, subcosta uniting with costa before one-half of the wing and 3rd vein straight, at the apex. Halter whitish with gray hairs. Legs rather thick with brownish scales, front and middle legs dark brown with numerous long hairs basally, hind legs yellowish brown, claws dark, simple, strongly curved and as long as empodium.

Abdomen: Dark brown with brownish hairs. Genitalia dark brown, basal and terminal clasp seg. thick with brown hairs, upper and lower lamellae bilobed.

Female. The different points from the male are as follows: Flagellate antennial seg. dark brown, successively shorter, the length ratio of the distal portion as 11th 8: 12th 6, 13th 4, 14th 2. Abdomen dark brown with gray long hairs. Ovipositor reddish, aciculate.

Length (mm.)

<table>
<thead>
<tr>
<th></th>
<th>Body</th>
<th>Wing</th>
<th>Antenna</th>
</tr>
</thead>
<tbody>
<tr>
<td>♀</td>
<td>2.5</td>
<td>2.6</td>
<td>2.2</td>
</tr>
<tr>
<td>♂</td>
<td>2.8-3.1</td>
<td>3.5-3.7</td>
<td>2.0</td>
</tr>
</tbody>
</table>


The flower bud of Ibota (Ligustrum Ibota Sieb. var. angustifolium Blume) deforms, green, globose, diameter 3mm. a larva live in it, the larva pupates protruding a-half of the body out of the gall.

Locality: Morioka (The Botanical Garden of the Iwate Univ.).
Parasphondylia sasakii MONZEN

1944, Parasphondylia sasakii MONZEN; SHINJI, Tiuei to Tiueikontiu, pp. 373–375.

Female: Head yellowish, eyes black, face and vertex with brownish hairs. Palpi 4 seg. 1st and 2nd short, 3rd and 4th longer. Antennae 14 seg. yellowish, 1st conical, 2nd spherical, the flagellate seg. oblong, rather thinner in the middle with about 3 whorls, It minifies toward the tip successively, 13th short, 14th globose.

Thorax: Brown, covered with white hairs. 2 longitudinal striae convergent distally. Scutellum convex, yellowish brown. Wings hyaline with brownish hairs, veins yellowish, costa uniting with subcosta at one-half of the wing and 3rd vein at the apex, 4th weakly developed, 5th strongly curved, not branched. Legs thick, coxae and femora yellowish brown, tibiae and tarsi brown with black scales, claws dark, weakly curved and length as long as the empodium.

Abdomen: Brown with numerous brownish long hairs. Ovipositor yellowish, basal seg. cylindrical with fine longitudinal striae, terminal seg. aciculate.

Length (mm.) ♀ Body 2.5, Wing 2.7, Antenna 1.4

Male: Smaller and darker than the female. Antennae 14 seg. with abundant brownish long hairs.

Gall: Inutuge metamafusi, MONZEN, Tiuei no Kenkiu, p. 321 (1929) Bud gall; The bud of the leaf-axile swells spherically, diameter 6–8mm. green, sappy, polythalamus. larva pupates protruding a-half of the body out of the gall.

Locality: Iwate, Tokyo, Toyama, Fukui, Wakayama, Yamaguti, Fukuoka Prefectures.

Remarks: This gall was at first described together with other galls on Nippon Jumokugaitiu Hen by Dr. SASAKI in 1902. So it was named for his memory.

Genus Pseudasphondylia n. g.

Genus Pseudasphondylia relates to genus Asphondylia. It is easily distinguished from the latter in the next characters: I, 4th vein present. II, 5th vein (Posticale) simple and curved. III, the basal seg. of ovipositor short, not cylindrical. IV, Empodium rudimentally.

Characters; Eyes confluent at the vertex. Palpi 3 seg. Antennae 14 seg. subsessile, not whorled. Wings with simple 4th vein and simple, strongly curved 5th vein. The 1st clasp seg. of genitalia subcylindrical, Terminal seg. ovoid, pointed, lamellae bilobed. The basal seg. of ovipositr short, conical with 2 roundly lobes on upper base, terminal seg. aciculate. Tarsal claws simple. Empodium not well developed.

Genotype, Pseudasphondylia rokuharensis

Pseudasphondylia rokuharensis n. sp.

Male. Eyes black, confluent at the vertex. Palpi 3 seg. yellowish, 1st and 2nd thin, 3rd fusiform. Antennae 14 seg. dark brown, 1st thick. 2nd subspherical, the flagellate seg.
cylindrical, subsessile with some short setae, not whorled.

Thorax: Dark brown with sparse, short, brownish hairs. Scutellum brown with brownish hairs. Wings hyaline with sparse brown short hairs, costa extending toward the hinder margin, subcosta uniting with costa before a-half of the wing and 3rd vein at the apex, 4th vein present, slightly curved, 5th simple, strongly curved. Legs yellowish, rather thick and with short dark hairs, claws simple, black. Empodium rudimentary.

Abdomen: Yellowish brown with darker band at the hinder margin of each seg. Genitalia brown, basal clasp seg. thick, terminal seg. ovoid, tapering, pointed, upper lobe bilobed.

Female: The different points from the male are as follows; Antennae 14 seg., yellowish brown, 3rd longest 1.3 times as long as 4th, 5-13th successively shorter, 14th small, conical. The terminal seg. of the abdomen a little prolonged at the ventral side. Ovipositor yellowish brown, basal seg. short, conical, not cylindrical, with 2 roundly protuberances upper the base.

Gall: Gamazumi mifusi; Tiuei no Kenkiu, p.305 (1929). Fruit deformation of Gamazumi (Viburnum dilatatum Thunb.), the fruit a little swells and is covered with white short hairs. The larva pupates on fruit. Imago emerged in May from the overwintered gall.

Locality: Iwate (Rokuhara, Tono), Fukusima, Wakayama, Oida Prefectures.

Cecidomyinae

Macrodiplosis nawai Monzen


Female: Eyes black, confluent at the vertex, face grayish. Palpi 4 seg. I, II thick, III slender, IV slightly curved. Antennae 14 seg. yellowish brown, I, II thick, flagellate seg. stemmed, enlargement oblong, slightly constricted in the middle with 2 whorls near the base and apical, the setae as long as or longer than the diameter of the base, stem short, one-half as long as the base, terminal seg. not pointed.

Thorax: Mesonotum brown, 2 longitudinal striae pale. pleuron brownish. Scutellum oblong, yellowish, sparsely haired. Wings hyaline, pubescent, subcosta uniting with costa at one-half of the wing and 3rd vein at the apex, slightly curved at the distal part, 5th vein branched, upper branch slightly curved at the base, lower one strongly curved. Legs yellowish, femora with brownish scales.

Abdomen: Yellowish red with white short hairs. Ovipositor yellowish brown, slender, the end of the terminal seg. bilobed, sometimes vagina protrudes from the end.

Male: Almost similar to the female; Antennae I large, spherical, II small, the flagellate seg. stemmed, binodose, basal nodule subspherical, apical one oblong which slightly constricted near the base, basal nodule with each one whorl and loop, apical one with 2 whorls and loops. Abdomen grayish, hinder margin of each seg. with short brownish hairs. Genitalia, Basal clasp seg. yellowish brown, terminal seg. brownish, short, thick, pointed apically, lamella broadly bilobed.
Gall: Medake Edafushi, Monzen, Tiuei no Kenkyu, iii, p. 25. A twig of Medake (Pleioblastus simoni A. et C. RIVIERE) swells in the node, length 30-40 mm. diameter about 4 mm. sword like, oblong in cross section with a slit on one side of the apical part of the swelling, the insides of the swelling covered with fine hairs and live numerous larvae.

Remarks: This specimen has been sent to me by Dr. Kuwana, which had been collected by Mr. SUMITA in Aichi Prefecture. The gallmidge described here was reported already by Mr. U. NAWA(1) Cecidomyia sp. So it was named for his memory.

LÖWODIPLOSSIS AUCTISSIMA MONZE


Female:

Thorax: Dark brown, sparsely haired. Scutellum yellowish brown, convex with long brownish hairs. Wings hyaline, pubescent, veins yellowish, subcosta uniting with costa at one-half of the wing and 3rd vein before the apex, fifth vein branched, under branch weakly curved. Legs yellowish, with long hairs on coxae and dense short ones on other parts, Claws simple, weakly curved.

Abdomen: Fusiform, yellowish red, distal segments rather long. Ovipositor slender, protractile, pointed with small lobe on underneath near the tip.

Male; Antennae stemmed, binodose excepting simple large rounded 5th seg. each seg. with one long whorl, stem about one-half as long as the basal node, Genitalia; Basal clasp seg. thick, brown with a protuberance on the insides of the basal part, terminal seg. rather thin, pointed with short hairs, upper lamella incised shortly and each lobe triangular.

Length (mm.)  
♀   Body  2.5   Wing  2.5
♂   Body  2.2   Wing  2.3

Gall: Kunugi himekobu-fusi, MONZEN, Tiuei no Kenkyu, iii, p. 18, 1932

The twigs and leaves of Kunugi (Quercus acutissima) irregularly swell. The galls produce in general very gregariously, each gall small, round, grayish brown, diameter about 2 mm. monothalamus, the larva pupates protruding one-half of the body out of the gall. When these galls produce on the petioles, midribs and twigs gregariously, those become thicker and twisted abnormally. So this midge is very injurious to forest.

Locality: Ishikawa, Shizuoka, Aomori Prefectures.

Remarks: According to RÜBSAAMEN LÖWODIPLOSSIS KIEFFER(2) and CYRTODIPLOSSIS KIEFFER(3) are synonym with AMETRODIPLOSSIS RÜBSAAMEN(4). As the identification of gallmidge was not easy, it was tentatively placed in genus LÖWODIPLOSSIS.

(2) 1913, LÖWODIPLOSSIS KIEFFER. G. I, Diptera Cecidomyiidae, p. 142.
(3) 1913, CYRTODIPLOSSIS KIEFFER. Ibidem, p. 143.
(4) 1917, AMETRODIPLOSSIS RÜBSAAMEN, Cecidomyiidae Studien VI (S. G. N.) S. 71.
Contarinia matusintome Haraguti et Monzen n. sp.

1936, Rhabdophaga sp. Haraguti, Goryorin, no. 92.
1936, Contarinia sp. Sinrin-byotugai Zusetu, Konti-hen, no. 1.

Female: Yellowish brown. Eyes dark brown, confluent at the vertex. Palpi 4 seg. I. II short, III, IV slender with short hairs. Antennae brown, 14 seg. I thicker apically, II hemispherical, with some hairs, flagellate seg. oblong, slightly constricted in the middle, the 1st seg. (III) longer than others, stemmed, stem short, one-half as long as the base.


Abdomen: Citrus yellow with brownish hairs. Ovipositor thin, pointed with fine hairs.

Male: Nearly similar to the female, different points are as follows; Antennae 14 seg. binodose, stemmed, basal enlargement subspherical with each a whorl and loop like circumfila, stem about as long as the base. Pasal clasp seg. thick with some hairs, terminal seg. thin and pointed.

Length (mm.) ⊙ Body 1.5-2.2 Antenna 2.0 Wing 2.0
♀ 2.5-3.0

Larva: Citrus yellow, younger one reddish, breast bone two-toothed, not pointed. Pupates in earth.


Bud gall, the terminal bud of twig of Akamatu (Pinus densiflora Sieb. et Zucc.) swells conically. 10×5mm. covered with reddish brown scales, numerous larvae live in the insides, polythalamus, damaged bud withers in Autumn.

Remarks: This gall was stated at first from Morioka in 1929. Haraguti found of and figured on the gallmidge in 1936. But he gave no specific name. Therefor the present writer named as above having studied on the specimen was sent from Mr. Haraguti. A pine bud gall resembling to this, was reported from U. S. A. by Dr. Felt. He found 2 species of gallmidges(1) (Contarinia coloradensis Felt and Dicrodiplosis gillettei Felt).

Profeltiella soya Monzen

1936, Contarinia soya Monzen, Morioka-konodosokai Gakujitu-iho, vol. III.
1937, Profeltiella soya Monzen; Barnes and Yuasa, Oyo-dobutugaku-zassi, vol. 9, no. 6.
1943, P. soya Monzen; Yuasa, Koutiusekai, vol. XL VII no. 545.
1951, P. soya Monzen; Byogaitiu-Meikan, p. 127.

(1) 1917, Felt. Key to American Insect galls. (New York State Museum, Bull. no. 220).

Thorax: Mesonotum grayish, pleuron with long hairs. Scutellum oval with sparse long hairs. Wings hyaline with hairs looking like mottled patches, subcosta uniting with costa before one-half of the wing and 3rd vein at the apex straightly, 5th vein weakly curved. Halteres yellowish, swell apically with brownish scales. Legs; coxae, trochanters brown, femora and tibiae yellowish, short with sparse long hairs and black scales. Claws small, simple. The length ratio of the hind leg as femur 42, tibia 32, tarsus I 5, II 28, III 20, IV 15, V 10.

Abdomen: Nearly cylindrical with brownish long hairs. Genitalia yellowish, basal clasp seg. thick with long hairs, terminal one slender, pointed, ventral lamella long, entire.

Female: Eyes black, face yellowish with long hairs. Palpi 4 seg. brown, slender. Antennae 14 seg. yellowish brown, I, II nearly spherical with long hairs, the flagellate seg. cylindrical, slightly constricted in the middle, 1st 2 seg. a little longer than the others, stem short about one-third of the base, each seg. with 2 whorls near basal and apical, among the basal whorl 2 setae are very long, terminal seg. conical. Legs; femora and tibiae yellowish, with black scales at the bases and tips, tarsi I with black hairs, II the same hairs at the bases and tips, III, IV at bases. Abdomen nearly cylindrical, yellowish red with some hairs. Ovipositor yellowish, slender. 2 lobed vertically at the tip.

Length (mm.)

<table>
<thead>
<tr>
<th></th>
<th>Body</th>
<th>Wing</th>
<th>Antenna</th>
</tr>
</thead>
<tbody>
<tr>
<td>♂</td>
<td>1.6</td>
<td>1.6</td>
<td>1.5</td>
</tr>
<tr>
<td>♀</td>
<td>2.4</td>
<td>2.2</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Host-plant: This midge parasitizes to the petiole of Daizu (Glycine Max Merrile). In general numerous larvae live in a petiole, sometimes 100 and more. Then numerous short brownish streaks scatter on the surface of the petiole and the leaves wither. It is very injurious to soy bean culture.

Locality: Main land and Hokkaido.

Summary

1. In this paper I redescribed 16 known species and newly described 2 genera and 10 species.
2. As far as I examined, Japanese gallmidges having cross vein and toothed claws were rare.
3. There were found comparatively numerous gallmidges on Artemisia and Salix, among them only one species Rhabdophaga rosaria H. Löw was considered to be identical with European one.
4. The type specimens are preserved in the Biological Laboratory in the Iwate University.
Explanation of plates

Plate 1.
1. The haired fusiform galls (Yomogi ketamafusi) of Artemisia vulgaris L. var. indicus was caused by Rhopalomyia cinerarius.
2. The cancer galls (Yomogi kobafusi) of A. v. L. v. i. was caused by R. struma
3. The cottony galls (Yomogi watafusi) of A. v. L. v. i. was caused by R. gossypii.
4. The pot-like galls (Yomogi tubofusi) of A. v. L. v. i. was caused by Pseudomyia ampulla.
5. The bud galls (Tanintugi mefusi) of Diervilla japonica Do. was caused by Oligotrophus japonicus.
6. The shell-like galls (Buna kaigarafnsi) of Fagus was caused by Oligotrophus japonicus.
7. The pith gall (Yanagi zufusi) of Salix babylonica was caused by Rhodophaga soliciora.
8. The twig swelling (Yanagi edafnsi) of S. hondoensis Koidz. was caused by Helicomyia chidai.
9. The bud swelling (Sasa -uro) of Sasa yamada was caused by Hasegawaia sasakii.
10. The bud galls (Tanintugi mefusi) of R. eranatus was caused by Paraphysomyia sasakii.
11. The cortex swelling (Kunngi himekobufusi) of Quercus acutissima was caused by Lioediplois acutissima.
12. The bud swelling (Matu sintome) of Pinus densiflora was caused by Cantariina matusintome.

Plate 2.
1. (a) antenna, (b) wing, and (c) hind tarsus of Lestremia osmans (Hiiragi mitamabae).
2. (a) male genitalia and (b) ovipositor of L. iwatei (Iwate tamabae).
3. (a) wing and (b) ovipositor of Neolasioptera rubiolo (Itigo kobutamabae).
4. (a) antenna (basal 7 seg.) and (b) male genitalia (c) ovipositor of Rhopalomyia chrysanthemum (Kikunihem tamabae).
5. (a) male genitalia and (b) ovipositor of R. arteria (Yomogi himetubo tamabae.)
6. (a) male genitalia and (b) ovipositor of R. cinerarius (Yomogi ketamabae).
7. The ovipositor of R. struma (Yomogi kobutamabae).
8. (a) ovipositor and (b) antenna (basal 7 seg.) of Pantetiota ampulla (Yomogi tubo tamabae).
10. (a) ovipositor and (b) male genitalia of R. gossypii (Yomogi wata tamabae).
11. (a) antenna (b) ovipositor (c) maxillary palpus of Oligotrophus japonicus (Tanintugi metatamabae).
12. (a) wing and (b) ovipositor of O. faggalli (Buna kaigara-tamabae).

Plate 3.
13. (a) antenna (basal 10 seg.), (b) ? antenna, (c) male genitalia, and (d) ovipositor of Janetilla infroafal (Buna haurakobu-tamabae).
14. (a) ovipositor dorsal-and side view, (b) ? antenna (5 seg.), (c) ? antenna (basal 7 seg.) of Rhodophaga rosaria (Yanagi sintome tamabae).
15. (a) ovipositor (dorsal-and ventral view), (b) wing of R. soliciora (Yanagi zufusi tamabae).
16. (a) ? antenna 5 seg., (b) wing, (c) ovipositor of Hasegawaia sasakii (Sasamao tamabae).
17. (a) wing, (b) ? antenna, (c) ? antenna, (basal 7 seg.), (d) maxillary palpus of Helicomyia chidu (Yanagi eda tamabae).
18. (a) male genitalia, (b) ovipositor of Aephododylia herv (Nabudo mitamabae).
19. (a) male genitalia, (b) ovipositor, (c) tarsal claws of Pseudosaphodylia robukarensis (Gamazumi mitamabae).
20. (a) ? Antenna (distal 4 seg.), (b) ? antenna (distal 5 seg), (c) male genitalia, (d) ovipositor of Micrcoediplosis karui (Makake eda tamabae).
21. (a) ? antenna (basal 8 seg.), (b) ovipositor of Lioediplois acutissima (Kunagi himekobu tamabae).
22. (a) ? Antenna, (b) ? antenna (2 seg.) of Cantariina mutanitome (Matu sintome tamabae).
23 (a) ? antenna (basal 7 seg.), (b) ovipositor of Profettiera soya (Daizu kuki tamabae).
K. Monzen: Some Japanese Gallmidges

---

13a
13b
13c
13d
14a
14b
14c
15a
15b
16a
16b
16c
17a
17b
17c
17d
18a
18b
19a
19b
19c
20a
20b
20c
20d
21a
21b
22a
22b
23a
23b

---

43