

SOME JAPANESE GALLMIDGES WITH THE DESCRIPTIONS
OF KNOWN AND NEW GENERA AND SPECIES (I)

(Diptera, Cecidomyiidae)

Kota MONZEN

日本産タマバエ科の既知種及び新属新種(I)

門 前 弘 多

Historical sketch

In Japan a cecidomyid gall⁽¹⁾ was reported at first by C. HASEGAWA about 1745. Dr. SASAKI mentioned 13 gallmidges injurious to forest trees on his book⁽²⁾ in 1901-2. There-after were reported some gallmidges by several authors intermittently; the mulberry budmidge by FUKUSIMA⁽³⁾ in 1904, by NISIKAWA⁽⁴⁾ in 1905, by TUTIDA⁽⁵⁾ in 1909, Bamboo twigmidge by U. NAWA⁽⁶⁾ in 1909.

Dr. KIEFFER⁽⁷⁾ described 2 new cecidomyid flies from the group of mulberry scale (*Pseudaulacepis pentagona* TARG.), *Tricontarinia ciliatipennis* and *T. japonica* in 1910. In the same year NIWA⁽⁸⁾ mentioned on the midge injurious to mulberry tree and named it *Diplosis 4-fasciata*. Dr. Nijima⁽⁹⁾ stated on some willow midges in 1913. It was reported another injurious midges; the grape midge by MUKAIGAWA in 1917, the pear blossom midge and citrus midge by OKADA in 1918, the willow rosette midge⁽¹⁰⁾ by KURATA in 1918, the soy bean midge⁽¹¹⁾ by KANZAWA in 1918, mulberry black midge⁽¹²⁾ (*Diplosis morivorella*) by NAITO in 1919, the soy bean stem midge⁽¹³⁾ by Dr. KUWAYAMA in 1926, Dr. YOKOYAMA mentioned on the mulberry budmidge⁽¹⁴⁾, *Diplosis mori* in 1929. In the same year the present writer⁽¹⁵⁾ reported 36 cecidomyid galls and there-after 44 until 1932⁽¹⁶⁾ (total 80).

Dr. SASAKI⁽¹⁷⁾ having studied on the mulberry budmidge described 2 Species *Urosema mori* and *Trishormomyia maculata* (*Diplosis mori* YOKOYAMA) in 1931, and Dr. MATS-

(1) C. HASEGAWA, Hisinsi (about 1745).

(2) SASAKI, Nippon Jamoku Gaitiuhon, (1901-2).

(3) FUKUSIMA, Dainippon Sansikaiho, No. 147. (1904).

(4) NISIKAWA, Kontiu Sekai, Vol. 9, No. 90. (1905).

(5) TUTIDA, Nippon Kontiugakkaiho, Vol. 2, No. 10. (1909).

(6) U. NAWA, Kontiu Sekai, Vol. 13, no. 144. (1909).

(7) KIEFFER, Boll. Laborat. Zool. Portici, Vol. 4. p. 71. p. 129. (19.1910).

(8) NIWA, Sanji Hokoku, No. 39. (1910).

(9) NIJIMA, Sinrin Kontiugaku, (1913).

(10) KURATA, Byotiugai Zassi, Vol. 5, No. 4. (1918).

(11) KANZAWA, Byotiugai Zassi, Vol. 5, No. 4. (1918).

(12) NAITO, Sangyo Sinpo, Vol. 27, No. 310. (1919).

(13) KUWAYAMA, Daizgaitiu to Sono Bojioho, (1925).

(14) YOKOYAMA, Nippon Sangyogaitiu Zensyo. (1929).

(15) MONZEN, Saito Hoonkai Jigyo Nenpo, Vol. V (1929). Vol. VI. (1930).

(16) MONZEN, Morioka Konodosokai Gakujitu I ho; Vol. VII. (1932).

(17) SASAKI, Kuwasintometamabai no Kenkyu (Tan-kohon) (1931).

UMURA⁽¹⁸⁾ mentioned *Asynapta yomogicola* from Artemisia. In the same year TANABE and SEKIYA⁽¹⁹⁾ reported the study on *Diplosis mori* YOKOYAMA. MASAKI⁽²⁾ reported on the willow pith midge having identified to be *Rhabdophaga salicis* SCHRANK in 1932. FUJIMATSU⁽²¹⁾ published a study on *R. rosaria* from Japan in 1935. In 1936 HARAGUTI⁽²²⁾ described on the pine budmidge *Contarinia* sp? . Late Dr. YUASA⁽²³⁾ reported 2 injurious wheatmidges, *Sitodiplosis mosellana* GEHIN and *Contarinia tritici* KIRBY from our country. The present writer⁽²⁴⁾ stated on the soy bean stem midge and another one species in the same year. In 1937 the auther⁽²⁵⁾ described on 11 new gallmidges from Japan, and almost all species of these I redescribed on this paper with another new genus and species, Dr. YUASA and KUROSAWA⁽²⁶⁾ mentioned the midge reared from the fruit of *Actinidia polygama* aub named it *Asphondylia matatabi* Y. et K. in 1938. In the next year Dr. BARNES⁽²⁷⁾ described on the apple blossom midge, *Contarinia mali* which was reared from apple blossom in Nagano Prefecture by TANABE.

Dr. SHINJI⁽⁸⁾ published a book "Tiuei to Tiueikontiu" in 1944. In that book he described on new species 18, known foreign one 8, japanese one 26 which have been already mentioned by him on periodicals during 1938-1940.

In 1954⁽⁹⁾ MANI⁽²⁹⁾ described on 2 new species injurious to forest trees, *Contarinia inouyei* and *Aschistonyx abietis* which were collected and sent by Dr. INOUE in Japan. In the same year TSUJITA and KOYAMA⁽³⁾ reported the gallmidge of Fagus, *Phegomyia tokunagai*.

Thus Cecidomyid flies are reported as far as I know newly named 51 species, known 11, total 62 from our country until now. There are more un-and recorded Cecidomyid galls and injurious midges to crops for study.

Acknowledgment; In this opportunity I express my cordial thanks to Messrs. TANABE, TERABE, KIKUCHI and KASIYAMA, who collected and sent me some valuable specimens. I am much, indebted also late Dr. FELT, Dr. HEDICKE, late Dr. YUASA, Dr. INOUE, Dr. TAMURA and Mr. SUGAWARA who gave me separates or advices.

Subfam. *Lestremiinae*

Lestremia osmanthus MONZEN

1937 *Lestremia osmanthus* MONZENI Kontyu, Vol. 11, nos. 1-2.

Female: Small, brownish, Eyes black, rounded. Face brownish, with short hairs. Palpi 3

- | | |
|---|---|
| (18) MATSUMURA, Nippon Kontiu Daizukan (1931). | (25) MONZEN, Kontyu, Vol. 11, Nos. 1-2. (1937). |
| (19) TANABE and SEKIYA, Naganoken Nojisikenjyo, Report, No. 2. (1931). | (26) YUASA and KUROSAWA, Jour. Pharmaceut. Soc. Japan, Vol. 58. (1938). |
| (20) MASAKI, Kontiusekai, Vol. 35, No. 5. (1932). | (27) BARNES, Kontyu, Vol. 13, No. 3, pp. 125-132. (1939). |
| (21) FUJIMATSU, Taiwan Hakubutugakukai kaiho, Vol. 23, No. 145. (1935). | (28) SHINJI, Tiuei to Tiueikontiu. (1944). |
| (22) HARAGUTI, Goryorin, No. 92. (1935). | (29) MANI, Agra University, Jour. of Research (Science) Vol. 3, Part 1. (1954). |
| (23) YUASA, Oyodobutugakuzassi, Vol. 8, No. 3. (1936). | (30) TSUJITA and KOYAMA, Kontiu, Vol. 20, Nos. 3-4. (1954). |
| (24) MONZEN, Morioka Konodosokai Gakujitu Iho, Vol. 12. (1936). | |

segments, yellowish, 1st thick, with a brown patch of the upper surface, 2nd shortest, 3rd thin, with short hairs. Antennae 16 segments, brownish, with whitish short hairs, 1st conical, 2nd subspherical, the flagellate segments short cylindrical, sessile, each seg. about equal in length, and rather thinner towards the apex, the length of 15th 2 times as long as its diameter, the terminal seg. longer than the penultimate.

Thorax; Mesonotum dark brown, convex with brownish short hairs. Scutellum concolor with sparse, long, brownish hairs. Wings hyaline with brownish short hairs, veins brownish, 2nd vein (Subcosta) uniting with costa at a half of the wing, and 3rd vein before the apex straightly, and with a cross vein between 2nd and 3rd veins, 4th vein twice branching, the uppermost branch reaches to the apex, the upper branch of the secondary branch curved, reaches to the hindmargin, 5th vein weakly curved. Halteres rounded apically with brownish hairs. Legs comparatively short, coxae, trochanters and femora yellowish brown, tibiae brownish, tarsi dark brown, all over them covered with short hairs, tarsi 5 seg. 1st (Metatarsus) longest as long as the following 3 segments combined, claws brown, curved without tooth.

Abdomen; Brownish with short hairs. Ovipositor short, thin, near apex constricted and rounded, pubescent.

Length (mm.) Body 1.5 Wing 1.3 Antenna 1.1

Gall (Hiiragi mifusi) The fruit of *Osmanthus ilicifolius* (Hiiragi) swollen, color turns not to the purplish black on maturing. Larva pupates protruding out of the fruit. The gallmidges (♀♀5) have emerged in August from the galls collected at Hamasaki, Tottori Prefecture.

Lestremia iwatensis MONZEN

1936, *Catocha iwatensis* MONZEN' Morioka Kono-Dosokai, Gakujitu-Iho, vol. 12.

Male: Eyes black. Face yellowish. Palpi 4 seg. yellowish, terminal seg. slender. Antennae 16 seg. 1st dark brown, 2nd yellowish, 3rd and 4th yellowish brown, 5th-16th dark brown, flagellate seg. short cylindrical with short stem and short whitish hairs, shorter towards the tip successively.

Thorax; Mesonotum dark brown with sparse, brownish, long hairs. Scutellum elliptical, sparsely haired. Postscutellum dark brown. Wings hyaline, veins brown. costa uniting with 2nd vein in the middle, and with 3rd before the tip and a cross vein between 2nd and 3rd veins. the primary branching of 3rd vein at one-third from the base, the under branch again branching at two-third, 4th vein branching near the base, its under branch is like fusing with fifth vein. Halteres yellowish, swollen apically with sparse hairs. Legs rather short, yellowish, coxae long with long hairs, tibiae and tarsi grayish, the ratio of the length of tibia and each seg. of tarsus are as follows;

Tibia 50, tarsus I 22, t. II 10, t. III 7, t. IV 5, t. V 5.

Abdomen; Dark brown, nearly cylindrical with short hairs. Genitalia dark brown, basal segment thick, terminal one with 2 spines on its tip, lamella yellowish, haired, incised, style pointed.

Female: Almost similar to the male, the differing points are as follows; Legs yellowish brown, tarsi darker. Abdomen yellowish brown, fusiform. Ovipositor short, with a constriction at the apex, rounded, bilobed and pubescent.

	♂	1.6	(with genitalia)	2.0	1.8
Length (mm.)		Body		Wing	Antenna
	♀	2.2	(with ovipositor)	2.2	1.2

Remarks: This small midge reared together with another injurious borer *Profeltilla soya*⁽¹⁾ from the petiole of soy bean at Morioka. The larva pupates in the soil and emerging in July and August of the next year. Probably this species will be an inquiline.

Subfam. Cecidomyiinae, Lasiopteriaridae

Neolasioptera rubicola n. sp.

Male: Dark brown, small. Eyes black, confluent at the vertex. Palpi 4 seg. dark brown, 1st and 2nd thick, 3rd and 4th thin and pointed. Antennae 22 seg. variable from 20 to 25, dark brown, moniliform, sessile.

Thorax clothed with the patches of whitish and dark hairs. Scutellum yellowish, haired, postscutellum, dark brown. Wings hyaline with thickly brown hairs, costa clothed with dark scale like hairs and a whitish patch in the middle of it, third vein uniting with the costa at two-third from the base, fourth obliquely reaches to the outer margin, fifth simple, curved towards the hind margin. Legs whitish in ground color with dark brownish scales, claws brown, simple, as long as the empodium.

Abdomen yellowish brown with thick dark scales. Genitalia yellowish brown, basal clasp. seg. thick and short, terminal seg. thinner apically.

Female: The differing points from the male are as follows; Antennae 19 or 20 segs. light brown, subspherical, sessile, rather minify towards the apices. Legs whitish, covered with dark brownish scales on most parts of femora, tibiae and tarsi, the empodium long about 2 times as long as the claws. Ovipositor pale, slender, bilobed apically with microscopical hairs.

Gall (Ichigo-kobufusi) The stem of *Rubus phoenicolasius* MAXIM. (Urashiro-ichigo) swells generally on one side. The size variable. The larva pupates protruding out of the gall. This gall was collected at Simohei, Iwate Prefec. by Mr. M. KIKUTI in 1950.

Remarks: This gallmidge resembles to European *Lasioptera rubi* HEEGER^{(1) (2) (3) (4) (5)} on appearance, but differs from it having simple fifth^{(7) (8)} vein and claws. SHINJI'S *L. ichigo*⁽⁶⁾

(0) MONZEN, Morioka Kono-Dosokai, Gakujitu-Iho, Vol. XII. (1935).

(1) WINNERTZ, Beitrag zu einer Monographie der Gallmücken, S. 196. (1853).

(2) BERGENSTAMM and P. Löw, Synopsis Cecidomyi darum, S. 68 (1876).

(3) HOUARD, Les Zoocécid. d. plant. d'Europ. e. d. Bas. d. I. Mediter. T.I. p. 517. (1908).

(4) RÜBSAAMEN, Die Gallmücken des Königl. Mus-

eums für Naturkunde zu Berlin, S. 345. (1892).

(5) RÜBSAMEN, Cecidomyidenstudien IV, Revision der deutschen Oligotropharien und Lasiopterarien nebst Beschreibung neuer Arten, S. 558-560. (1915).

(6) SHINJI, Tinei to Tineikontiu, pp. 325, 327. (1944).

(7) FELT, Bull. New York State Museum, Vol. 124, p. 330. (1908)

(8) KIEFFER, Genera Insec torum, Diptera, Fam. Cecidomyiidae, p. 22. (1913).

is also a different species having 3 segmented palpi, 18 segmented antennae and toothed claws.

Oligotrophiariae

Rhopalomyia chrysanthemum MONZEN

1937, *Rhopalomyia chrysanthemum* MONZEN, Kontyu, Vol. XI, nos. 1-2, pp. 183-185.

Male: Eyes black, confluent at the vertex with some brownish hairs. Face yellowish. Palpi 2 seg. small, yellowish, Antennae 15 seg. yellowish brown, 1st thick, 2nd subspherical, flagellate seg. stemmed. The basal enlargement elliptical, the stem a little shorter than the base, on which with 2 whorls, some long setae on the basal part and shorter ones on apical, the flagellum rather minify towards the tip successively.

Thorax; Mesonotum convex, yellowish with 3 brownish longitudinal striae. Scutellum, postscutellum and pleurae brownish. Halteres yellowish, dilated at the apex with brownish hairs. Wings hyaline with brownish hairs, subcosta uniting with costa at a half to the apex, and third vein at the apex, fifth vein curved towards the hind margin. Legs yellowish brown with short brown hairs, claws black, about as long as the empodium.

Abdomen; Each segment with pale long hairs on the hinder margin. Genitalia dark brown. the basal seg. rather long, haired, the terminal seg. thick, pointed apically, the lamella deeply incised.

Female: Almost similar to the male. Antennae stemmed, the basal enlargement subspherical, the stem one-third as long as the base. Abdomen yellowish red. Ovipositor rather thick, thinner apically, near the apex constricted with a small lobe.

Length (mm.)	♂	Body	1.6	1.7	1.5
		Wing			Antenna
	♀	Body	1.75	1.8	1.5

Gall: (Kiku Himefusi) MONZEN, Tisei no Kenkiu III, p. 2 (1931).

This is small, oblong, yellowish protuberance on the leaf and stem of kiku (*Chrysanthemum japonicum* THUNB.), length 2 mm. diameter 0.7mm. the gall wall thin, monotharamus, larva pupates protruding a half of the body out of the gall.

Locality: Nagano and Fukuoka prefectures.

Remarks: This gallmidge will be similar to the *Chrysanthemum* Midge (*Diarthronomyia hypogaea* F. Löw,^{(1) (2)} was described and figured by FELT, METCALF and FLINT. SORAUER mentioned *Cecidomyia (Diarthronomyia) hypogaea* Lw.⁽³⁾ producing gall on the leaf and stem of *Chrysanthemum* and hibernating in the root gall in his book. HOUARD⁽⁴⁾ stated that *R. hypogaea* F. Löw was deformed bud and stem conically. KIEFFER⁽⁵⁾ removed to *Misopatha* from *Rhopalomyia hypogaea*. ROSS und HEDICKE⁽⁶⁾ reported *Rhopalomyia hypogaea*

(1) FELT, New York State Museum, Bull. No. 202. (1917).

(2) METCALF and FLINT, Destructive and Useful Insects, p. 718.

(3) SORAUER, Handbuch der Pflanzenkrankheiten. Band V, S. 60.

(4) HOUARD, L. Zoocécid. d. plant. d. Europe e. d. Bas. d. l. Mediter. T. I, (1908).

(5) KIEFFER, Genera Insectorum, Diptera, Fam. Cecidomyiidae. (1913).

(6) ROSS und HEDICKE, Pflanzengallen Mittel und Nordeuropas. (1927).

F. Löw producing a swelling and rosette on the stem of *Chrysanthemum*.

Cecidomyia (*Diarthronomyia*, *Rhopalomyia Misospatha*) *hypogaea* F. Löw⁽⁷⁾ was originally described on the gallmidge got from the gall in earth of *Chrysanthemum atratum* by FRANZ LÖW in 1885. According to him *C. hypogaea* reared from a pea-like, rounded, polythalamus gall of *C. atratum* having 16 segmented antennae, milky wings and whitish halters and legs. Thus *Cecidomyia* (*Diarthronomyia*, *Rhopalomyia*) *hypogaea* F. Löw differs from the above mentioned *Rhopalomyia chrysanthemum*.

***Rhopalomyia caterva* MONZEN**

1937, *Rhopalomyia Caterva* MONZEN. Kontyu, vol. XI, nos. 1-2, pp. 186-187.

Male: Body light brown with rather stout setae. Head disklike. Eyes black, confluent at the vertex. Palpi 2 seg. 1st short, 2nd longer with long hairs. Antennae 18 seg. brownish gray, 1st thick, 2nd subspherical, the flagellate seg. stemmed, the basal enlargement fusiform, the stem a half as long as the base the flagella rather minifies towards the tip successively, 17th elliptical, 18th pointed, the basal enlargement with 2 whorls, black long setae near the base and whitish long ones in the middle.

Thorax: Brownish gray with long brownish hairs along the longitudinal striae. Scutellum elliptical with long brownish hairs. Wings cloudy with brownish short hairs, subcosta uniting with costa at a half of the wing and third vein at the apex, fifth vein curved, the upper branch indistinct. Legs light brown, femora darker with sparse hairs, tibiae and tarsi with whitish short hairs, claws brown, weakly curved.

Abdomen: Light brown, subcylindrical with thick hairs. Genitalia yellowish brown, the basal seg. thick, terminal seg. thick pointed apically with some hairs, the lamella short rounded, style pointed.

Length (mm.) ♂ Body 2.5, wing 3.2 Antenna 1.0

Gall: (Otokoyomogi himetubofusi) MONZEN, Tisei no Kenkiu, 1, (1929).

The gall produce on the tip or side of the stem of *Artemisia japonica* THUNB., green, bud like, monothalamus. gregarious. 5×3mm., larva yellowish. Collected at Morioka and koiwai, Iwate Prefecture.

***Rhopalomyia japonica* Monzen**

1937, *Rhopalomyia japonica* MONZEN, Kontyu, vol. XI, nos. 1-2 pp. 185-186.

Male: Eyes black, confluent at the vertex. Face yellowish. Palpi 2 seg. 1st thick 2nd short. Antennae 17 seg. 1st and 2nd yellowish brown, the flagellate seg. light brown, stemmed, basal enlargement oblong, stem about two-third as long as the base, the subbasal whorl strong setae as long as its diameter and subapical whorl thinner and scattered, the flagella minifies towards the tip successively, the terminal seg. fusiform.

Thorax: Mesonotum yellowish brown with long hairs. Scutellum and postscutellum darker. wings hyaline with short hairs, subcosta uniting with costa at the basal half and third vein

(7) FRANZ LÖW, Verhandl. d. k. k. Zool. Bot. Ges., Band XXXV, S. 488. (1885).

at the apex of the wing, fifth vein branched, but weakly developed. Halteres pale, rounded apically. Legs yellowish, tibiae and tarsi with black hairs, claws black, strongly curved, simple, longer than the empodium.

Abdomen; cylindrical, dark yellowish with long hairs. Genitalia yellowish, basal and terminal seg. rather thick, the lamella incised,

Female: Almost similar to the male, differing points are as follows; The flagellate seg. stemmed but distal part without stem. Abdomen reddish, fusiform with long brownish hairs at the hind margin of the each segment. Ovipositor slender with a constriction near its tip.

Length(mm.)	♂	Body	1.7	2.2	1.2
	♀	Body	2.1	1.9	1.1
		Wing		Antenna	

Gall: (Yomogi Ibofusi) MONZEN, Tiuei no kenkiu III, p. 3. (1931).

This gall produces on the leaf of *Artemisia japonica* and *A. vulgaris* var. *indica* wart-like swelling or protuberance, yellowish with reddish tinge, length 3-4mm. width 1.5mm., the gall wall thick, monothalamus. The larva pupates protruding a half of the body out of the gall.

Locality: Morioka, Iwate Prefecture.

Remarks: This species relates to the European *Cecidomyia* (*Rhopalomyia*, *Misospatha*) *foliorum* H. Löw.^{(1) (2) (3) (4) (5) (6)} According to FRANZ LÖW⁽²⁾ *C. foliorum* H. Löw. has ♂ 15. ♀ 14 segmented antennae and ♀ without stem, brownish black genitalia and ovipositor, it pupates in the soil. RÜBSAAMEN⁽³⁾ mentioned that *Rhopalomyia* (*Cecidomyia*) *foliorum* H. Löw was palpus 1 seg., with a cross vein between 2nd and 3rd veins, ovipositor long, bilobed at the apex and pupated in the gall. KIEFFER⁽⁵⁾ removed the species to genus *Misospatha* from *Rhopalomyia*.

Thus *Cecidomyia foliorum* H. Löw is rather complex species, and differs from the above mentioned *Rhopalomyia japonica* on the important characters.

Rhopalomyia cinerarius MONZEN

1937, *Rhopalomyia cinerarius* MONZEN, kontyu, Vol. II. nos. 1-2, p. 187.

Male: Eyes black, confluent at the vertex, Face yellowish with brownish hairs. Palpi 2seg. 1st thick, 2nd small, yellowish with long hairs. Antennae 18 seg. Yellowish brown, 1st thick, 2nd spherical, the flagellate seg. stemmed, the basal enlargement elliptical. the stem rather shorter than the base, it minify towards the tip successively with 2 whorls, near the base brownish short setae and long thin ones in the middle, which measuring about five times of

(1) H. Löw, Dipterologischen Beiträgen, IV Theil, S. 36. (1850).

(2) F. Löw, Die in d. Taschenförmigen Gall. d. Prunus Blätter leb. Gallm. u. d. *Cecidomyia foliorum* H. Löw. (1889).

(3) RÜBSAAMEN, Die Gallm. d. Königl. Museums f. Naturkunde zu Berlin. S. 372-373. (1892).

(4) HOUARD, Les Zoocecid. d. Plant. d'Europe e. d. Bas. d. I. Mediter. T. II. p. 1002. (1907)

(5) KIEFFER, Genera Insectorum, Diptera, Fam. Cecidomyiidae. p. 45.

(6) ROSS UND HEDICKE, Pflanzengallen Mittel und Nordeuropas. S. 93. (1927).

the diameter of the base.

Thorax; Mesonotum dark yellow with a few hairs on the outer sides of 2 longitudinal striae. Scutellum brownish with sparse hairs. Wings hyaline with sparse hairs, veins brown, subcosta uniting with costa before a half of it and third vein at the apex fifth branched. Legs dark brown, tibiae and tarsi yellowish with some hairs, claws brownish as long as the empodium. Abdomen; Brownish thickly haired. Genitalia brownish with rather long hairs, the terminal seg. darker apically and pointed

Female: Almost similar to the male, differing points are as follows; Antennae 17-19 segments, the stem short about one-fourth of the base. Abdomen reddish with some long hairs, especially on the hinder margin of the each segments. Ovipositor short, not thick with a little constriction and a lobe near the tip.

Length(mm.)	♂	Body	1.7	2.7	1.3
			Wing	Antenna	
	♀	Body	2.5	2.2	1.3

Gall: (Yomogi ketamafusi) MONZEN, Tiuei no Kenkiu, I. p. 298.

The gall produce on the underside of the leaf of *Artemisia vulgaris* L. var. *indica*, ovoid, 8.-9.×6mm. , monothalamus, brownish covered with white short hairs, Imago emerged in the middle of May from overwintered gall.

Locality : Iwate, Yamagata, Akita, Kanagawa, Wakayama. Okayama prefectures.

Remarks : SHINJI⁽¹⁾ named with *Rhopalomyia baccarum* WACHTL for the gallmidge got from the above mentioned Yomogi ketamafusi. But the gall of European *R. baccarum* WACHTL^{(2) (3) (4) (5)} being subspherical, not pointed, green, sparsely haired, and producing on leaf axyle or stem differs from this gall. His species being wings with 2 simple longitudinal veins. not braunched and long chitinized ovipositor, is different from *R. cinerarius*.

Rhopalomyia struma MONZEN

1937, *Rhopalomyia struma*, MONZEN, kontyu. vol. xl, nos. 1-2, pp. 188-189.

Male: Eyes black. Face light brown with long hairs. Palpi 2 seg. Antennae 17 seg. 1st and 2nd short, sessile, the flagellate seg. stemmed, basal enlargement elliptical. stem a little shorter than the base, rather minifies towards the tip successively, the each seg. with 2 whorls, numelous straight setae near the base and longer ones in the middle.

Thorax; Mesonotum light brown, convex with brownish long hairs. Scutellum pale. elliptical with some hairs. Wings hyaline, with short hairs, third vein uniting with costa straightly at the apex, fifth curved at the basal half of wing. Halteres covered with brownish short hairs. Legs light yellow with brownish short hairs and some long ones on coxae and trochanters, claws curved, shorter than the empodium.

(1) SHINJI. Tiuei to Tiueikontiu, pp. 188 and 354.

(1944).

(2) HOARD. Les Zoocecid. d. plant. d'Europe e. d.

Bas. d. l. Mediter. I, II, pp. 994, 996 (1909).

(3) D. Gall. d. Königl. Museums f. Naturkunde z.

Berlin. (1892).

(4) KIEFFER, Genera Insectorum, Diptera, Fam. Cecidomyiidae. p. 45. (1913). "

(5) ROSS und HEDICKE, Pflanzengallen Mittel und Nordeuropas. S. 91.(1927).

Abdomen; Subcylindrical, yellowish with a many whitish hairs. Genitalia brownish, basal seg, thick with short hairs, terminal seg, darker, pointed apically.

Female; Nearly similar to the male, the differing points are as follows; Antennae 18seg. the basal enlargement elliptical, a little constricting in the middle, stem short, the flagellate seg. rather minifies towards the tip, the distal part without stem. Abdomen fusiform with whitish hairs. Ovipositor rather thin, with a small lobe on the underside near the tip.

Length(mm.)	♂	1.8	1.6	1.0
		Body	Wing	Antenna
	♀	2.5	2.0	1.0

Gall: (Yamayomogi kobufusi) MONZEN, Tiuei no kenkiu, 1, p. 301 (1937).

The cancer-like swelling on the side of the stem of *Artemisia montana* PAMPAN, hemispherical, greenish brown, smooth. Polythalamus, width about 10mm. similar gall produces also on the stem of *Artemisia vulgaris*, var, *indica*. The midges emerged 2 times a year, in May from the overwintered gall and Sept. from summer one.

Locality: Aomori, Iwate, Tokyo, Toyama, Wakayama, Okayama prefectures.

Remarks: *Rhopalomyia yomogi* SHINJI⁽¹⁾ (2) was described on the midge reard from Yomogi Kobufushi of *Artemisia vulgaris*, var, *indica* in 1938. His species very similar to *R. struma* reard from the gall of *Artemisia montana*. I have also reard the midges from the caucer-like stem galls of *A. vulgaris* var *indica*. Comparing with the both midges very similar expepting the latter having less antennal seg. In general the number of antennal seg. of gallmidge is variable. The latter species may be a subspecies of the former on different host plant.

Rhopalomyia gossypii n. sp.

Male: Eyes black, confluent at the vertex. Palpi 2 seg. browuish, hairy. Antennae 16-19 seg. rather variable, stemmed, the basal enlargement elliptical, the stem a half as long as the base, the flagellate seg. minifies towards the tip successively, the base with brownish long setae, rather scattered.

Thorax; Mesonotum, scutellum, and pleurae yellowish brown with some long hairs. Wings hyaline with brownish short hairs, subcosta normal, third vein rather near to the costa, a little curved, uniting with costa at the apex. fifth branching about the middle of it. Legs light brown with brownish hairs and sparse dark scales, claws dark, simple, longer than the empodium.

Abdomen; Brownish with some whitish long hairs and dark scales. Genitalia yellowish, basal seg. thick with short hairs, terminal seg, brownish, flat and pointed, the lamella incised, lobes rounded.

Female: Almost similar to the male expepting the next points; Antennae 16 or 17seg. , the flagellate seg. oblong about 2 times as long as its diameter, with some setae and circumfila on some segments. Abdomen reddish with a brownish band and some bristles on the hinder

(1) SHINJI, Kontiu sekai, Vol. 42, No. 495. p. 4.(1938).

(2) SHINJI, Tiuei to Tiuei kontiu, pp. 360-362.(1944).

margin of each segment. Ovipositor pale, rather thinner apically with a small lobe near the tip.

Length(mm.)	♂	Body	2.0	Wing	2.5	Antenna	1.5
	♀	Body	2.5	Wing	2.2	Antenna	1.3

Gall: (Yomogi watafusi) MONZEN, Tinei no kenkiu, I, The appearance is like a small mass of cotton, whitish, soft fibre, size variable, roundish, under it one or more, spherical, yellowish, small galls attach to the stem of *Artemisia vulgaris*, var. *indica*. Each gall measuring 2-3mm., wall thin, monothalamus. It is covered with numerous long whitish hairs.

Locality: Aomori, Iwate, Shizuoka Wakayama, Okayama, Fukuoka Prefectures.

Remarks: Dr. SHINJI⁽³⁾ identified with the European *Rhopalomyia Lütke-mülleri* THOMAS,⁽¹⁾ the gallmidge got from shiragafusi similar to the above mentioned cottony gall. But the gall of *R. Lütke-mülleri* THOMAS^{(1) (2) (4) (5)} is an ovoid, greenish, smooth, without long hair, producing the upperside of the leaf of *Artemisia pontica* and etc., hight 1.5-3mm. with a hole on the top. It resembles to the gall of *Asynapta yomogicola*.

His *R. Lütke-mülleri* has 3 segmented palpi and wings with straight, simple fourth vein and curved simple fifth. such characters differ from *R. gossypii*.

***Panteliola*^{(1) (2)} *ampulla* n. sp.**

Female: Eyes black, confluent at the vertex. Face brownish with long black hairs. Palpi 2 seg. 1st long, 2nd short. Antennae 23 seg. dark brown, 1st short cylindrical, 2nd globose, the flagellate seg. oblong, sessile with 2 whorls on the base and apical part of the each seg, twice as long as its diameter mingling a few long hairs, and dark brownish circumfila, the flagellum minify towards the tip. (Ratio, 5th 10×5, 22nd 6×4.)

Thorax; dark brown with numerous hairs along the longitudinal striae and on the pleurae. Scutellum and postscutellum dark brown with a few white long hairs. Wings grayish with brownish short hairs, costa strong, extending towards hinder margin, subcosta uniting with costa at a half of the wing. subcostal cell opaque, third vein straight uniting with costa at a little before the apex, fifth branching, the upper branch obscure, the under one weakly curved, Legs dark brown with black scales and bristles, claws black, simple. as long as the empodium,

Adbomen; reddish brown with white and black hairs mingled and thickly black hairs on its sides. Ovipositor yellowish brown, short, constricting near its tip with microscopical hairs,

Length (mm.) ♀ Body 3.5 Wing 3.2 Antenna 2.0.

(1) THOMAS, Verh. Zool.-bot. Ges. Wien. Vol. 43, p.306 (1893).

(2) Schlechtendal Gallbildungen der deutschen Gefässpflanzen. II, S. 52. (1896).

(3) SHINJI, Tinei to Tineikonchu. p. 306-307. (1944).

(4) HOUARD, Les Zoocecid. d. Plant. d'Europe e. d. Bas. d. l. Mediter. T. II, P. 1000 (1909).

(5) ROSS und HEDICKE, Pflanzengallen Mittel und Nordeuropas. S. 93. (1927).

(1) PANTELIOLA, KIEFFER, Bull. Soc. Hist. Nat. Metz. Vol. 6, p. 162. (1893).

(2) PANTELIOLA, KIEFFER, Genera Insectorum, Dip-
tepa, Fam. Cecidomyidae.

Gall: (Yomogi tubofusi) MONZEN, Tinei no kenkiu, I, p. 299 (1929), Bud gall, bottle like, green, surface coarse with some small scales, the upper end holed, covered with white hairs, monothalamus, hight 10-12mm. diameter 3-6mm. It is a deformed bud on the leaf axile of *Artemisia vulgaris* var. *indica*.

The imago emerged in May from overwintered gall. ♀♀ 5.

Locality: Aomori, Iwate, Fukushima, Wakayama, Okayama Prefectures.

Remarks: SHINJI described 2 species got from gall similar to the above mentioned one, *Rhopalomyia tubifex* BOUCHE⁽¹⁾ and *Misospatha longitubifex*.^{(1) (2)} According to RÜB-SAAMEN *R. tubifex* BOUCHE^{(3) (4) (5) (6)} having palpus one seg. wing with a cross vein and genitalia of the male with large protuberances on the innersides of 1st claspers, differs from SHINJI'S species which have palpus 2 seg., antennae ♀16, ♂18 segs., the base of fourth vein obscure and distal part indistinct. *M. longitubifex* having palpus 2 seg., antenna 21seg., fourth vein base obscure and distal part indistinct in the description and 4th, 5th each separate long veins on the fig. 20, the both of the former species are different from *Panteliola ampulla*.

Oligotrophus japonicus n. sp.

Female: Eyes black, Face grayish yellow with brownish hairs. Palpi 3 seg. hairy. Antennae 22 seg. yellowish brown, 1st thicker distally, 2nd subspherical, the flagellate seg. oblong, a little constricted in the middle without stem, it rather minify towards the tip Successively, 21 st 1.5 times as long as its diameter, the terminal seg. fusiform, each seg. with 2 whorls, short brownish setae at its base and longer ones at the distal part.

Thorax; Mesonotum dark brown, convex, glabrous. scutellum and pleurae concolor. Wings hyaline with brownish hairs, subcosta uniting with costa at a half of the wing and third vein at the apex straightly, fifth branched but weakly developed, Halteres whitish, rounded apically with short brownish hairs. Legs grayish with brown hairs, claws brownish, simple, curved.

Abdomen: Fusiform, grayish with brown hairs. Ovipositor grayish, rather thick, a little constricted near the tip.

Length (mm.) Body 4.5 Wing 3.0 Antenna 1.7

Gall: (Taniutugi mefusi) MONZEN, Tinei no Kenkiu, I, p. 304 (1929) Bud gall, the bud of *Diervilla japonica* DC. deformed large and subspherically, green, smooth, diameter about 12mm., wall thick and sappy.

Locality: Aomori, Iwate, Tochigi Niigata, Wakayama, Tottori Prefectures.

(1) SHINJI, Tinei to Tinei Kontiu, pp. 362-363, 359-360 (1944).

(2) SHINJI, Shiokubutsu oyobi Dobutsu, VII, 2, 382 (1939).

(3) RÜBSAAMEN, D. Gallmüc. d. Museums f. Naturkunde z. Berlin.(1893).

(4) BERGENSTAMM und P. Löw, Synopsis Cecidomyidarum, S. 80(1876).

(5) HOUARD, Les Zoocecid. d. Plant. d' Europe e. d. Bas. d. I. Mediter. VI.(1908).

(6) KIEFFER, Genera Insectorum, Diptera, Fam. Cecidomyiidae. p. 46 (1913).

Remarks : Dr. SHINJI⁽¹⁾ identified with an American species *Asphondylia diervillae* FELT,⁽²⁾ the gallmidge reared from the above mentioned gall. But *Oligotrophus japonicus* distinctly differs from his *A. diervillae* having 2 seg. palpi. ♂11, ♀15 segmented antennae, long cylindrical flagellate seg. each simple fourth and fifth veins and aciculate ovipositor.

Oligotrophus faggalli n. sp.

Male: Head black. Eyes confluent at the vertex, palpi 3seg. 1st and 2nd short, about equal length, 3rd longer. Antennae 19 seg. light yellow, 1st large, 2nd subspherical, the flagellate seg. stemmed, the basal enlargement nearly spherical with long brownish setae near the base and thin ones distally, the stem about equal as long as its base, the flagellum minify towards the tip successively.

Thorax yellowish brown with sparse long hairs. scutellum grayish yellow without hairs. Wings hyaline, rather broad, veins light yellow, subcosta uniting with costa before a half of the wing and third vein a little before the apex, fifth branched, but weakly developed. Costa extends to hind margin. Legs yellowish white, coxae and femora with a few white long hairs and sparsely scaled, claws black, simple, weakly curved and as long as the empodium.

Abdomen subcylindrical, yellowish with numerous brownish long hairs. Genitalia yellowish, the basal seg. long with short hairs, the terminal seg. shorter, length about a half of the base, thinner apically, the lamella deeply incised, the style rather slender.

Female: Almost similar to the male, the differing points are as follows; Antennae not stemmed, sessile, the each seg. with sparse white and brownish hairs. Abdomen yellowish with brownish hairs excepting the terminal seg. Ovipositor whitish, slender, not constricted, bilobed apically.

Length(mm.)	♂	1.7	2.0	1.7
	Body	Wing	Antenna	
	♀	2.0	2.3	1.5

Gall: (*Buna kaigara fusi*) MONZEN, *Tsuei no kenkiu*, 1, p. 349 (1929) Leaf gall, it produces along the mid and sideribs on the upperside of the leaf of *Fagus Sieboldii* ENDL. hemispherical, yellowish, smooth, wall thin and hard, it opens by two lobes. monothalamus, hight 1.5-2.2mm.

The imago emerged early in May from overwintered gall.

Locality: Aomori, Iwate, Tochigi, Wakayama, Tottori Prefectures.

Janetiella infrafoli n. sp.

Male: Eyes black, confluent at the vertex. Face yellowish brown. Palpi 4seg. with whitish long hairs. Antennae 15 seg. light yellow, 1st thick, 2nd spherical, the flagellate seg. stemmed, the basal enlargement subspherical with long setae, 3times as long as its diameter near the base and white short ones on its apical parts and two dark circumfila basally and

(1) SHINJI, *Kontyusekai*, 493, p. 1 (1938).

60. (1907).

(2) SHINJI, *Tsuei to Tsueikontiu*, p. 369. (1944).

(4) FELT, *Ibid.* Vol. 200, p. 187. (1917).

(3) FELT, *Bull. New York State Mus.* Vol. 110, p. 1

apically,

Thorax; Mesonotum brown, glabrous, scutellum sparsely haired. Wings hyaline with short hairs, costa extends towards the hind margin, subcosta uniting with costa before a half of the wing and third vein before the apex, fifth strong, curved, no branch. Legs pale with whitish hairs, femora brown, haired, claws black, simple, curved and as long as the empobium, tarsi with scales.

Abdomen; yellowish gray with gray hairs. Genitalia yellowish brown, thick with short hairs, the terminal seg. thinner apically.

Female: Nearly similar with the male excepting the next points; Antennae without stem, the flagellate seg. elliptical, length 1.3 times as long as its width. Wings with short, white hairs and hinder margin white long ones. Ovipositor thin, pale, near the tip with a little constriction and a small hole.

Length(mm.)	♂	1.7	2.2	1.5
	♀	2.0	2.0	1.0
		Body	Wing	Antenna

Gall: (*Buna haurakobufusi*) MONZEN, Tiuei no kenkiu, I, p. 345 (1929) Leaf gall, it produces along the midrib on the underside of leaf of *Fagus Sieboldii* ENDL., subconical, smooth, yellowish green. wall thin, monothalamus, length 4mm. height 2mm. Gall midge emerged in May from overwintered gall.

Locality; Aomori, Iwate, Yamagata Prefectures.