



Title	Eumyzus, Paramyzus, Macromyzus, Sitomyzus, Micromyzus, and Micromyzodium of Japan (Homoptera : Aphididae)
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**EUMYZUS, PARAMYZUS, MACROMYZUS,
SITOMYZUS, MICROMYZUS, AND
MICROMYZODIUM OF JAPAN
(HOMOPTERA : APHIDIDAE)**

By RYOICHI TAKAHASHI

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***Eumyzus gallicola*, n. sp.**

Apterous viviparous female: Different from the genotype, *E. impatiensae* (Shinji) as follows: Head covered with prominent granules on dorsum and venter, which are mostly in rows and wanting around each posterior spinal seta; with 2 pairs of ventral setae; setae shorter, 1.2-1.4 times as long as diameter of constricted base of 3rd antennal segment. Antennal tubercles with 3 or 4 ventral setae, frontal tubercles (anterior ends of antennal tubercles) less developed, diverging. Antennae shorter, slightly longer than half body length, 1st segment shorter, with 4 setae, 2nd with 3; 3rd imbricated throughout, not swollen near basal part, with about 6 setae which are shorter than basal diameter of segment and about half as long as middle diameter of it; 4th sometimes fused with 3rd, relative length of segments about as follows: III-17, IV-8, V-7, VI-5+13. Ultimate segment of rostrum shorter, slightly longer than basal part of 6th antennal segment, subequal in length to 2nd segment of hind tarsus, over twice as long as wide at middle, without secondary setae. Cornicles pale, dark at apex, shorter, subequal to or a little shorter than cauda, as long as, or shorter than, distance between 6th and 7th abdominal spiracles, 2.5-2.7 times as long as middle diameter, not broadened basally, with smaller flange. Cauda distinctly longer than wide, with 4 or 5 setae. Femora stouter, tarsi with 3, 2, 2 setae on 1st segments, 2nd segment with a pair of secondary setae on upper side. Abdomen with about 16-19 dorsal setae including marginal ones on anterior 5 segments, 8 dorsal setae on 6th, 6 on 7th, 2 on 8th; these setae shorter, twice as long as diameter of constricted base of 3rd antennal segment on anterior part of abdomen, but about 2.5-2.7 times as that diameter on 8th tergite; marginal sclerites absent on 6th, very small and fused with spiracular plates on 7th; 8th faintly sclerotized on dorsum; tubercles at bases of dorsal setae less developed, slightly sclerotic, much smaller in diameter than base of cornicle, present only at bases of 4 or 5 setae on median area of each abdominal segment, with a seta. Distance between 6th and 7th abdominal spiracles nearly as long as that between 5th and 6th. Mesosternal furca longer, separated. Body 1.9 mm. in length.

[Insecta Matsumurana, Vol. 26, No. 1, August, 1963]

Host plant: *Impatiens noli-tangere*, causing galls on the leaves, which are similar to those of *E. impatiensae* (Shinji).

Some apterae (syntypes) collected at Hirayu near Mt. Norikura, Hida (12. VIII. 1959, R. Takahashi).

Eumyzus Shinji was synonymized with *Myzus* Passerini in previous papers, but is here recognized as a valid genus, differing from the latter in the longer setae on the body and antennae, the frontal tubercles never converging, and in the presence of tubercles at bases of dorsal setae. Tibiae are lacking spinules in the immature stage.

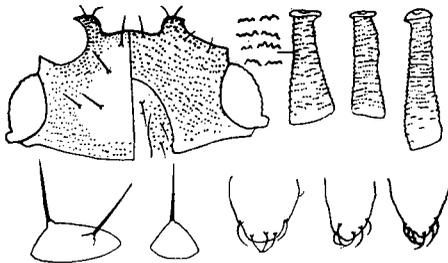


Fig. 1. *Eumyzus impatiensae* (Shinji). Aptera: Head, cornicles, tubercles at bases of dorsal setae, and cauda.

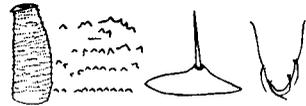


Fig. 2. *Eumyzus gallicola*, n. sp. Aptera: Cornicle, spinules on cornicle, dorsal seta, and cauda.

***Paramyzus heraclei similis*, n. subsp.**

Apterous viviparous female: Different from *Paramyzus heraclei* Börner of Europe in slightly shorter ultimate segment of rostrum as compared with 3rd antennal segment. In European specimens 3rd antennal segment 3.08–4.12 times as long as ultimate segment of rostrum (after Dr. V. F. Eastop), while in Japanese ones the former 4–5.3 (usually 4–4.5) times as long as the latter.

Host plants: *Heracleum lanatum*, *Angelica pubescens*.

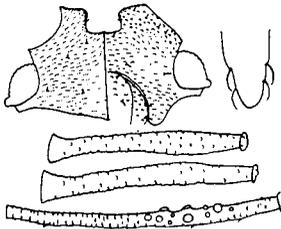


Fig. 3. *Paramyzus heraclei similis*, n. subsp. Aptera: Head, cauda, cornicles, and 3rd antennal segment.

Some apterae (syntypes) collected on *Angelica* near Mt. Iwawaki, Osaka Prefecture (29. V. 1960, R. Takahashi). Many apterae were taken also near Mt. Kongo, Osaka Prefecture (2. IX. 1956, M. Sorin; 22. V. and 23. X. 1960, R. Takahashi).

***Macromyzus polypodicola* (Takahashi)**

Myzus polypodicola Takahashi, Agric. Expt. St. Formosa, Rept. no. 20 (Aphididae of Formosa, pt. 1), p. 21 (1921); Dept. Agric., Govt. Research Inst. Formosa, Rept. no. 16 (Aphididae of Formosa, pt. IV), p. 18 (1925); Rept. no. 53 (Ibid., pt. VI), p. 65 (1931).

Macrosiphum polypodicola Takahashi, Deli Experiment St. Medan, Sumatra, Rept. no. 24, p. 1 (1925).

Apterous viviparous female: Body yellow, not sclerotized on dorsum, reticulated on thorax and abdomen. Head slightly convex at middle of front, without spinules on wide median area of dorsum excepting anterior part, with dorsal setae 0.7 times as long as, or subequal to, middle diameter of 3rd antennal segment; venter with longer usual setae. Antennal tubercles with 2 short ventral setae; frontal tubercles with 2 similar setae. Antennae imbricated, 1st segment with about 8 setae, 2nd with 4, 3rd with a few setae which are shorter than half middle diameter of segment; processus terminalis a little longer than 3rd, about 6 times as long as basal part. Clypeus smooth, with 2 pairs of long anterior setae, mandibular laminae with spinules and 3 or 4 setae; ultimate segment of rostrum reaching beyond middle coxae, about 1.7 times as long as 2nd segment of hind tarsus, equal in length to basal part of 6th antennal segment, with a pair of secondary setae on each surface. Cornicles over 7 times as long as wide at middle, with 4 or 5 rows of distinct reticulations at apex. Cauda black, with 4 setae. Femora with imbrications, longest seta nearly as long as, or a little longer than, half middle diameter of femur; tibiae smooth, with setae shorter than middle diameter of hind tibia; hind tibiae without spinules in larvae; tarsi a little striated, 1st segment with 3 or 4 setae in fore and middle legs, but 2 or 3 in hind pair; 2nd with 2 secondary setae on upper side, lower pair of apical primary setae much removed from apex. Abdomen with a rather large brown marginal sclerite on 6th segment behind each cornicle; dorsal setae subequal in length to half middle diameter of 3rd antennal segment on anterior segments, but a little longer than that diameter on 8th, 4 including marginal ones on 7th, 4 on 8th. Body 2 mm. in length. Other characters are given in previous descriptions.

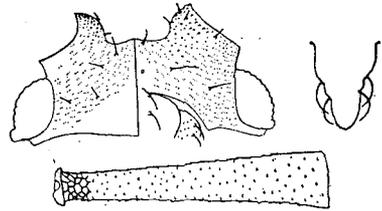


Fig. 4. *Macrosiphum polypodicola* (Takahashi). Aptera: Head, cauda, and cornicle.

Alate viviparous female: Setae on 3rd antennal segment about half as long as middle diameter of segment, sensoria scattered, about 40 on 3rd, 20 on 4th, 3 on 5th. Tibial setae as long as, or shorter than, middle diameter of hind tibia. Abdomen without dorsal sclerites between large marginal ones on 6th segment, marginal sclerites especially smaller on 5th, dorsal dark bands of 3rd-5th fused, forming a large patch, which is also connected with a pair of dorsal sclerites on 2nd; dorsal setae 2 or 3 between marginal sclerites on 3rd and 4th, 2 on 6th, 4 on 7th and 8th, about two-thirds of middle diameter of 3rd antennal segment on anterior part, but about 1.5 times as that diameter on 7th and 8th. Wings narrowly infuscated along veins. Body about 2.1 mm. in length. Other characters are described in previous papers.

Host plants: Ferns.

A few specimens were collected at Kawachi-Nagano (4. XI. 1961) and Taishi (26. VI. 1960) near Osaka, and at Naze, Amami-Oshima (7. IV. 1960) (R. Takahashi). Hitherto recorded from Formosa and Sumatra.

This species is the second of the genus and different from *Macromyzus woodwardiae* (Takahashi) in the absence of sclerotized low tubercles at bases of setae on the dorsum in aptera, and in the shorter setae on the body and antennae, but seems to be included here rather than in other proposed genera.

***Sitomyzus japonicus*, n. name.**

Myzus rhois Takahashi, Dept. Agric., Govt. Research Inst. Formosa, Rept. no. 10 (Aphididae of Formosa, pt. III), p. 102 (1924); Shinji, Monogr. Japan. Aphid., p. 977 (1941).

Apterous viviparous female: Yellowish brown, cornicles and cauda black, femora black over distal half, tibiae black at base and apical part. Head smooth on dorsum, roughly imbricated along anterior margin, with minute spinules on venter; dorsal setae minute, blunt; venter with 2 or 3 longer setae on each side besides one or 2 minute ones on antennal tubercle which is roughly imbricated. Frontal tubercles low, diverging, with none or one minute seta. Antennae nearly as long as, or slightly shorter than, body, imbricated; 1st segment broader than long, with 5 setae; 2nd with 3 setae, 3rd shorter than width of head across eyes, a little narrowed gradually at base, with a sensorium near base, and

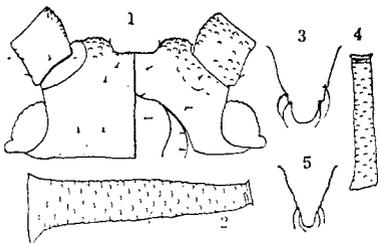


Fig. 5. *Sitomyzus japonicus*, n. name. Aptera: (1) Head, (2) cornicle, (3) cauda; alata: (4) cornicle, (5) cauda.

minute setae which are about one-fifth as long as middle diameter of segment; relative length of segments as follows: III-25, IV-18, V-14, VI-10+30. Mandibular laminae smooth, with 2 setae; ultimate segment of rostrum about 1.2 times as long as 2nd segment of hind tarsus, shorter than basal part of 6th antennal segment, reaching hind coxae, with a pair of secondary setae. Cornicles rather stout, 5 or 6 times as long as middle diameter, nearly as long as 3rd antennal segment and fore femur, gradually narrowed apically below flange, or slightly swollen on distal half, imbricated, with a few striates at tip, less than thrice as long as cauda, at apex excluding flange slightly wider than, or nearly as wide as, middle part of hind tibia. Cauda conical, blunt at apex, a little longer than wide, with 4-6 setae. Genital plate with about 10 setae along hind margin. Femora imbricated on distal part, with a few setae, longest one about one-third or one-fourth of middle diameter of femur; tibiae smooth, with setae shorter than diameter of tibia; tarsi with 3 setae on 1st segment in all legs, 2nd segment of hind tarsus with 2 secondary setae on upper side and one on lower side. Abdomen membranous, with pale brown marginal sclerites on 6th segment behind cornicles, 8th sclerotic, other markings wanting; dorsal setae minute, 3 between cornicles, 4 on 7th; 2 on 8th longer, but shorter than middle diameter of 3rd antennal segment. Distance between 6th and 7th abdominal spiracles a little longer than that between 5th and 6th. Mesosternal furca with a broad base. Body 1.9 mm. in length.

Fundatrix: Body sclerotized and dark on dorsum, dorsal sclerites of abdominal segments partly fused together, broken on 5th and 6th segments; marginal sclerites small on 5th, but large on 6th. Frontal tubercles not developed. Sensoria wanting on 3rd antennal

segment.

Alate viviparous female: Head with spinules on venter and on small frontal tubercles. Antennae black, a little shorter than body, 3rd segment with 7 or 8 rather large flat sensoria well spaced and arranged in a row except on both ends of segment, 4th without them; relative length of segments: III-23, IV-13, V-12.5, VI-9+26. Cornicles twice as long as cauda, shorter than 3rd antennal segment. Abdomen without dorsal bands, with intersegmental sclerites; marginal sclerites larger, well developed, small on 5th; those of 6th large, narrowed posteriorly, extending to 7th abdominal spiracles; 8th with a sclerite or a pair of sclerites, and 2 short setae. Wings a little infuscated along veins. Mesosternum with prominent granules. Body about 2 mm. in length.

Host plant: *Rhus trichocarpa*.

Described from a few specimens collected at Hirao near Tondabayashi, Osaka Prefecture (23. IV. 1961, M. Sorin).

Sitomyzus rhois (Monell) is known in N. America, and a new name is given.

***Micromyzus osmundae*, n. sp.**

Apterous viviparous female: Yellow. Antennae black, but dusky on 2nd segment, paler on 1st. Cornicles, cauda and anal plate pale. Femora pale, slightly brownish at apex, tibiae and tarsi entirely black. Body 1.7 or 1.8 times as long as wide in specimens mounted in balsam. Head not convex at middle of front, imbricated on anterior and lateral parts of dorsum and over venter, corrugated on posterior part of dorsum; setae minute, at most about one-fifth of middle diameter of 3rd antennal segment, venter with 2 or 3 setae on each side besides those on antennal tubercles. Antennal tubercles well developed, with one or 2 minute setae on venter, frontal tubercles converging, sometimes a little pointed at anterior end of mesal side, with 2 or 3 setae. Antennae about three-fourths of body length, roughly imbricated; 1st segment a little broader than long, with about 7 minute setae; 2nd with 4, 3rd shorter than width of head across eyes, somewhat narrowed basally, not paler basally, with a few minute setae, and one-3 flat sensoria near base, which are not discernible in some individuals; relative length of segments about as follows: III-20, IV-10, V-9, VI-6+18. Clypeus smooth, with 2 minute anterior setae, mandibular laminae with a few spinules and 2 or 3 short setae, ultimate segment of rostrum reaching beyond middle coxae, longer than basal part of 6th antennal segment, 1.5 times as long as 2nd segment of hind tarsus, with one or 2 pairs of secondary setae. Cornicles cylindrical, long, slightly shorter than width of head across eyes, slightly over 10 times as long as wide at middle, 1.5 times to twice as cauda, roughly imbricated, with a few apical striates, without spinules, at apex excluding flange nearly as wide as middle part of hind tibia. Cauda slightly over twice as long as wide at base, not distinctly constricted, with 4 or 5 setae. Genital plate with 3-5

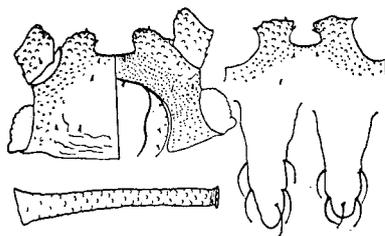


Fig. 6. *Micromyzus osmundae*, n. sp.
Aptera: Head, frontal tubercles of a specimen, cornicle, and cauda.

small setae along hind margin on each side, and an anterior pair. Femora imbricated, with a few minute setae, hind tibiae a little imbricated at apex, without spinules in larvae, tibial setae distinctly shorter than middle diameter of hind tibia; tarsi with 3 setae on 1st segment in all legs, 2nd segment of hind tarsus with 2 secondary setae on each surface. Thorax and abdomen not sclerotized; abdomen with reticulations on dorsum, with a pair of minute spinal setae and a marginal seta on each segment (1st-5th), 4 similar setae on 7th; 8th pale, with 4 much longer setae which are at most about half as long as middle diameter of 3rd antennal segment. Basal 2 abdominal spiracles a little apart, distance between 5th and 6th spiracles nearly equal to that between 6th and 7th. Mesosternal furca with a short basal stem. Body 2 mm. in length.

Host plant: *Osmunda claytoniana*.

A few apterae (syntypes) were collected at Karuizawa (31. VII. 1961, R. Takahashi).

This species is distinguished from other species of the genus by the colouration and by the frontal tubercles distinctly converging.

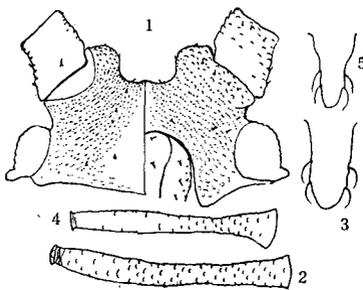


Fig. 7. *Micromyzus montanus* (Takahashi). Aptera: (1) Head, (2) cornicle, (3) cauda; alata: (4) cornicle, (5) cauda.

Micromyzus montanus (Takahashi)

Myzus montanus Takahashi, Dept. Agr., Govt. Research Inst. Formosa, Rept. 16 (Aphididae of Formosa, pt. IV), p. 17 (1925).

Apterous viviparous female: Yellow, blackish along anterior margin of head and over dorsum of thorax and abdomen. Antennae black, a little paler at base of 3rd segment. Cornicles and cauda black. Legs black on distal halves of femora and at apical parts of tibiae. Head slightly convex at middle of front, with spinules except on small median area of posterior half of dorsum; dorsal setae minute, venter with 5 or 6 setae on each side besides 2-4 on antennal tubercle. Frontal tubercles

almost parallel or converging on mesal sides, with minute setae. Antennae almost as long as body, imbricated; 1st segment as long as wide, with 7 or 8 minute setae, 2nd with 4, 3rd subequal in length to width of head across eyes, slightly narrowed gradually at base, with about 23 rather small sensoria mostly in an irregular row along whole length, with minute setae which are curved or narrowed basally and blunt at tip, 4th with none or 1-3 sensoria; relative length of segments about as follows: III-37, IV-25, V-22, VI-10+30-35. Clypeus almost smooth, with 4 anterior setae, mandibular laminae with spinules and 3 or 4 setae; ultimate segment of rostrum reaching hind coxae, 1.5 or 1.6 times as long as 2nd segment of hind tarsus, subequal in length to basal part of 6th antennal segment, with 4 secondary setae on lower side. Cornicles long, longer than width of head including eyes, as long as fore femur, swollen on distal half, about 2.6-3 times as long as cauda, well imbricated, at apex excluding flange as wide as middle part of hind tibia. Cauda slightly or scarcely constricted, with 4 or 5 setae. Genital plate with 5 or 6 setae on each side of posterior margin and a longer anterior pair. Femora imbricated on distal part, with some minute setae; tibiae smooth in all stages, with setae shorter than middle diameter of tibia;

tarsi short, with 3 setae on 1st segment in all legs; 2nd segment of hind tarsus a little imbricated, with 2 setae on each surface. Metanotum and basal 6 abdominal segments fused, smooth; thorax and abdomen sclerotized over dorsum, but pale on marginal area on 5th abdominal segment in front of each cornicle; marginal sclerites fused with dorsal plate, but rather small marginal ones isolated, with a seta, on 5th; submarginal intersegmental clusters of areolations present on abdomen. Dorsal setae minute, 4-6 besides a marginal one on basal 4 abdominal segments; 2 between cornicles, 4 on 7th and 8th. Basal 2 abdominal spiracles closely placed, distance between 5th and 6th nearly as long as that between 6th and 7th, Mesosternal furca with basal stem which is as wide as, or wider than, long. Body 2.3 mm. in length.

Alate viviparous female: Abdomen without dorsal bands, but with marginal sclerites and with submarginal intersegmental sclerites which are larger anteriorly. Wings narrowly infuscated along veins, pterostigma pale. Head slightly imbricated on anterior half of dorsum and over venter. Frontal tubercles diverging, with 4 or 5 minute setae. Antennae a little longer than body, with minute setae, 3rd segment with about 30 sensoria not in a row along whole length, 4th with 18, 5th with 10; relative length of segments about as follows: III-37, IV-28, V-22, VI-12+38. Cornicles scarcely imbricated on distal half, slightly longer than width of head across eyes, a little shorter than 3rd antennal segment. Mesosternum with many prominent granules on midregion. Abdomen with well-developed marginal sclerites, which are with 3 or 4 setae, but are smaller and narrow, with a seta on 5th segment; those on 6th large, fused with those on 7th; 8th tergite pale, with 4 setae which are longer than anterior ones and about one-third of middle diameter of 3rd antennal segment. Distance between 6th and 7th abdominal spiracles much longer than that between 5th and 6th. Radial sector rather strongly curved. Body 2.3 mm. in length.

Host plant: *Astilbe*.

Many apterae and an alata were collected in Mt. Kongo (1. VI. 1958), and near Mt. Iwasaki (29. V. 1960), Osaka Prefecture (R. Takahashi). Hitherto known from Formosa alone.

***Micromyzodium polypodii*, n. sp.**

Apterous viviparous female: Yellow, antennae black on apex of 3rd segment and on 4th-6th; cornicles blackish on apical and basal parts, paler on middle when cleared, cauda black; legs black on apices of femora and tibiae and on tarsi. Body broadly oval, faintly reticulated on dorsum of thorax and abdomen, not sclerotized, with long blunt setae, some of which are flattened and a little expanded at tip. Head slightly convex at middle of front, covered with spinules, with dorsal setae at most about 1.5 times as long as middle diameter of 3rd antennal segment, venter with usual setae. Antennal tubercles with one or 2 long setae on venter; frontal tubercles somewhat convex and diverging on mesal sides, with 2 long setae. Antennae about 1.3 or 1.5 times as long as body, imbricated; 1st segment as long as, or longer than, wide, with 6-10 setae, 2nd with 4; 3rd a little longer than cornicle, expanded at tip, wanting sensoria, with setae which are 0.7 times as long as middle diameter of segment; primary sensoria rather small, relative length of segments

about as follows: III-34, IV-26, V-20, VI-7+46. Clypeus and mandibular laminae with spinules and long setae; ultimate segment of rostrum reaching hind coxae, over thrice as long as middle width, about 2.3-2.5 times as long as 2nd segment of hind tarsus, a little longer than cauda, and than penultimate, longer than basal part of 6th antennal segment, with 3 pairs of secondary setae. Cornicles long, cylindrical, expanded basally, rather sparsely with rows of spinules, sometimes with a few rows of large cells at apex, not reticulated, somewhat longer than width of head across eyes, over thrice as long as cauda, at flange about twice as wide as middle part of hind tibia. Cauda longer than wide, with 4 setae. Genital plate large, with 4-6 setae along hind margin on each side, and 5 or 6 anterior ones. Legs long, femora long, a little imbricated at apex, with some setae, longest one a little shorter than middle diameter of femur; tibiae smooth, but hind tibiae sometimes with a few or some spinules in larvae; tibial setae subequal in length to middle width of tibia; tarsi short, with 3 setae on 1st segment, median seta longer; 2nd segment of hind tarsus nearly, or slightly less than, twice as long as apical diameter of hind tibia, a little

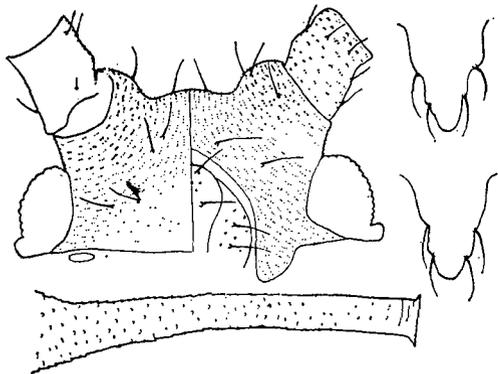


Fig. 8. *Micromyzodium polypodii*, n. sp.
Aptera: Head, cornicle and caudas.

imbricated, sometimes with a short secondary seta on upper side, apical primary setae distinctly removed from apex. Pronotum with 6 setae, mesonotum with 10; abdomen with a rather large brown marginal sclerite on 6th segment behind each cornicle, and one or 2 small irregular dorsal sclerites and a small marginal one on 7th, marginal one reaching spiracle; 8th with a narrow sclerite, which is sometimes divided into 4 small plates; about 10-15 setae including marginal ones present in a row on basal 5 segments, 4 setae between cornicles and on 7th and 8th; these setae about 1.5 times as long as middle diameter of 3rd antennal segment on anterior part, but twice as that diameter on 8th. Distance between 6th and 7th abdominal spiracles somewhat longer than that between 5th and 6th. Mesosternal furca with a very broad base. Body 2 mm. in length.

Alate viviparous female: Head, antennae, thorax, cornicles and cauda black; abdomen with black patches. Wings broadly infuscated along veins. Head smooth on dorsum, with spinules on frontal tubercles and venter. Antennae a little longer than body, 3rd segment with 8-10 rather large or small circular sensoria almost in a row along whole length; 4th with 4 or 5 sensoria, these sensoria broadly rounded at apex; relative length of segments about as follows: III-33, IV-28, V-25, VI-8+47. Cornicles with large cells in 3 rows at apex. Hind tarsi with 2 setae on 1st segment. Abdomen with a pair of transverse dark sclerites on basal 2 segments, which sclerites are much apart from each other on each segment; a large quadrangular sclerite extending from 3rd segment to base of 6th; rather faintly sclerotized on dorsum of 7th; a narrow sclerite on 8th; marginal sclerites rather small, and with a seta on basal 5 segments, but very large on 6th behind cornicles, those

of 6th extending to and fused with marginal part of sclerite of 7th, with 2 setae; 6 long blunt setae present between marginal sclerites on 4th, 4 or 5 on 5th, 3 or 4 arising from small sclerites on 6th between cornicles; 4 on 7th and 8th; anterior dorsal setae as long as, or a little longer than, middle diameter of 3rd antennal segment, but those on 7th and 8th about twice as that diameter. Distance between 6th and 7th abdominal spiracles about 1.5 as long as that between 5th and 6th. Body 2 mm. in length.

Host plants: Ferns.

Described from some specimens (syntypes) taken at Hirao near Tondabayashi, Osaka Prefecture (30. V. 1954); collected also in Mt. Kongo near Osaka (1. VI. 1958), Mt. Takao, Tokyo District (24. VII. 1959), Mt. Tanzawa, Kanagawa Prefecture (9. VIII. 1961), and Mt. Mitake, Tokyo District (25. VII. 1962) (R. Takahashi).

This species is readily distinguished from *Micromyzodium filicium* Kanakaraj David by the pale body. The genus *Micromyzodium* Kanakaraj David resembles *Eomyzus* Takahashi, differing, however, in the following points:

Aptera: Antennae much longer than body, with very long processus terminalis. Abdomen with large marginal sclerites on 6th segment behind cornicles, but without them on 5th. Alata: Abdomen with a large central sclerite, and large marginal ones on 6th segment.

I am much indebted to Dr. V. F. Eastop for informations and specimens sent for comparison. The specimens upon which this paper is based are preserved now in my collection.

DISCOVERY OF APANTELES PLUTELLAE IN JAPAN. *Apanteles plutellae* Kurdjumov has been known to occur in Europe, Africa, India and Saghalien, being parasites of *Plutella maculipennis* Curtis, *Aglais urticae* Linné and others. This information is the first record of the species from Japan.

Apanteles plutellae Kurdjumov

Apanteles plutellae Kurdjumov, Rev. Russe d'Entom. 12: 226, 1912; Wilkinson, Bull. Entom. Res. 30: 80, 1939; Watanabe, Ins. Mats. 13: 130, 1939.

Specimens examined: 1♀ & 1♂, 26-xi-62, Tsu-shi, Mie-ken, Japan, S. Yamashita leg., bred from the larva of *Plutella maculipennis*.

The specimens examined agree well enough with descriptions of *plutellae* as well as the Saghalien specimens determined by myself (1939). It should be, however, noted that in the Japanese specimens the four anterior coxae are not almost entirely black but rather yellowish brown.

CHIHISA WATANABE

A NEW HOST-RECORD OF MACROCENTRUS MARGINATOR IN JAPAN. *Macrocentrus marginator* (Nees, 1811) has been known to be widely distributed in Japan, and yet no host of this parasite has been ascertained. On the basis of the present material *Rhacyonia duplana* Hübner, one of the important pine shoot moths in Japan, is informed as a host of this Braconid.

Specimens examined: 2♀ & 4♂, 5-vii-62, Koma, Kanagawa-ken, Honshu, Japan, bred from larvae of *Rhacyonia duplana*, K. Kato leg.

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