

DESCRIPTIONS OF NEW GENERA AND SPECIES OF MYMARIDAE¹
(HYMENOPTERA: CHALCIDOIDEA)

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Through the courtesy of C. F. W. Muesebeck and A. B. Gahan the author has been permitted to study the rich collection of Mymaridae in the U. S. National Museum. As this collection contains many types, it was possible to straighten out some questions of synonymy and the position of several little known and rare species.

The present paper contains the descriptions of six new genera, one new subgenus, and six new species. The location of types is indicated under the description of each species.

Chaetomymar, new genus

Eyes large, lateral, and hairy. Antenna of female with nine joints, the last swollen and forming the club; scape smooth, the radícula short, the funicular joints without sensoria. Pronotum divided longitudinally, with prominent and rounded humeral angles; spiracles posterolateral and sessile. Prosternum closed anteriorly by cervicalia. Parapsidal furrows complete, each with a round fovea near anterior end. Scutellum without a transverse row of foveae; sensorial pustulae very low. Propodeum short, without medial keel or tooth and bearing four short setae. Mesonotal and axillar setae very stout and large, subcapitate apically.

Caudal margin of forewing distinctly carved out at the base of disc. Tarsi four-jointed; hind metatarsus shorter than three following segments combined. Abdomen with long, one-jointed petiolus; ovipositor slightly exerted.

Male: Unknown.

Type of genus, *Chaetomymar kusnezovi*, new species.

The genus is easily distinguished from *Bruchomymar* A. Ogl., 1939, by antennal characters as well as by the peculiar shape and chaetotaxy of the thorax.

Chaetomymar kusnezovi, new species

(Figs. 1, 2, and 3)

Female: Length 0.96 mm. General color golden yellow, the eyes red. Antennal club, trabeculae, terminal joints of all tarsi, cercoides, and tip of ovipositor black. Fifth and sixth antennal joints, as well as posterolateral angles of mesopleura, light brownish.

Head transverse, 0.146 by 0.252 mm. Eyes large, the longest diameter 0.102 mm.; sparsely haired, a hair one-half the length of the diameter of a

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single ommatidium. Ocelli in an obtuse-angled triangle; interocellar line twice as long as ocellular, slightly longer than distance from anterior ocellus to transversofrontal trabecula (ratio 10:9). Occiput short, slightly concave; 5 and 5 posterior hairs; vertex with 12 and 12 hairs. Inner orbits moderately divergent caudally; postero-orbital trabeculae distinctly curved inward; frontal trabeculae rounded; cheeks without genal sulci. Antenna (Fig. 1) slightly longer than body, 0.99 mm. long. Scape clearly bent outward, with sparse and short hairs; pilosity of funicle increasing toward middle (0.02 to 0.034 mm.), becoming shorter and denser toward club. Measurements of antennal joints in microns: 142 (34); 68 (27); 115 (14); 150 (14); 122 (14); 95 (15); 71 (22); 61 (25); 187 (57). Club slightly longer than the preceding two and one-half segments combined, with five subapical and two medial elliptic placoid sensilla. Mandible with three apical teeth.

Thorax, 0.347 mm. by 0.245 mm. Pronotum, 0.119 mm. by 0.163 mm., deeply concave posteriorly, completely divided medially. Anterior part of pronotum obliquely rugulose, its posterior half distinctly elevated, with raised and thickened humeral border. Chaetotaxy stout, 10 and 10 setae distributed as in Figure 2. Prosternum slightly transverse, 0.113 by 0.12 mm., with a low medial keel in the caudal two-thirds (Fig. 3).

Mesoscutum transverse, 0.129 by 0.245 mm.; notauli reaching the anterior third, converging from 0.116 to 0.068 mm. Tegular seta short. Scutellum 0.126 by 0.197 mm.; with two round, widely separated sensorial pustulae in the caudal third, the posterior margin gently raised at middle; axillae triangular, bearing two very strong bristles which reach caudally beyond propodeal spiracles. Mesosternopleura 0.223 by 0.242 mm., with slightly prominent, rounded posterolateral angles and with a faint longitudinal median keel. Metanotum 0.068 by 0.187 mm., only 0.017 mm. at the middle. Propodeum 0.125 by 0.207 mm., only 0.034 mm. at the middle, deeply concave anteriorly; spiracles in the anterior half; each spiracle 0.014 by 0.01 mm. Caudal border of propodeum with two toothlike tubercles directed toward the base of petiolar process; two short submedian setae close to anterior border and one below each spiracle.

Femora moderately swollen; tibiae almost straight, covered with thin, white pilosity. Spur of fore tibia with two apical teeth.

Forewing 1.04 by 0.18 mm.; width basally only 0.027 mm., dilating to 0.057 mm. under the marginal vein, thence narrowing again to 0.04 before the discal expansion. Venation extending 0.272 mm. from the base of wing, terminating with five round pustulae; hairs of dorsal surface from 0.017 to 0.027 mm. in length; longest bristle of marginal fringe 0.214 mm. Hind wing 0.806 by 0.08 mm., the venation 0.155 mm. long and with two round pustulae before hamuli; dorsal surface of disc with two submarginal hairs and the ventral surface with a single media row of short hairs; longest bristle of marginal fringe 0.153 mm.

Abdomen 0.459 mm.; petiolus 0.143 by 0.034 mm., distinctly biconstricted with maximum width at the middle; gaster 0.313 by 0.238 mm.; cercoides large, elliptical. Ovipositor 0.275 mm., extending 0.01 mm. beyond the tip of abdomen.

TABLE I.
LEG MEASUREMENTS OF *C. kusnezovi*, IN MICRONS

	Anterior		Median		Posterior	
	L.	Br.	L.	Br.	L.	Br.
Coxa.....	102	68	118	64	115	71
Trochanter.....	67	23	81	64	81	34
Femur.....	237	44	272	34	323	37
Tibia.....	299	22	408	17	423	20
Spur.....	47	.....	27	.....	34	.....
1 tars. joint.....	153	.....	180	.....	180	.....
2 tars. joint.....	91	.....	95	.....	88	.....
3 tars. joint.....	68	.....	74	.....	70	.....
4 tars. joint.....	58	.....	61	.....	68	.....
Claw.....	20	.....	20	.....	20	.....

Described from one female collected in June 1928 at Nikolsk Ussurijskij, Maritime Province, East Siberia, by N. N. Kusnezov-Ugamskij, the well-known Russian hymenopterologist to whom the species is dedicated.

Type in the author's collection.

Tetrapolynema, new genus

Male: Antenna 13-jointed, with flagellum distinctly swollen in the apical half; scape short, smooth, tapering distally, slightly curved outwardly; scrobes very close to inner orbits and to transversofrontal trabecula. Eyes bare, anterolateral. Frons without foveae; pericellar foveae subtriangular, very large.

Pronotum not divided, longitudinally carinate on the posterior half; spiracles at posterolateral angles of pronotum. Prosternum closed anteriorly by cervicalia. Mesoscutum with parapsidal grooves broad and straight, almost reaching the anterior border; posterolateral angle with velumlike expansion covering the base of alar process. Scutellum divided by a median longitudinal groove. Each axilla apparently with two setae. Propodeum without median keel or tooth, bearing four bristles. Tarsi four-jointed. Forewing moderately narrowed basally, with elongate marginal and stigmal veins. Abdomen with a long petiole.

Type of the genus, *Tetrapolynema mexicanum*, new species.

Female: Unknown.

This genus resembles *Bruchomymar* A. Ogl. but may be readily distinguished from it by the characters of the head, thorax, and wings.

Tetrapolynema mexicanum, new species

(Figs. 4, 5, and 6)

Male: Length 1.41 mm. General color brownish yellow. Forelegs (except last tarsal joint), midfemora, and proximal third of midtibiae, as well as hind trochanter and the base of hind femur, pale yellow. Antennae, eyes, transversofrontal trabecula, and apical part of gaster brown.

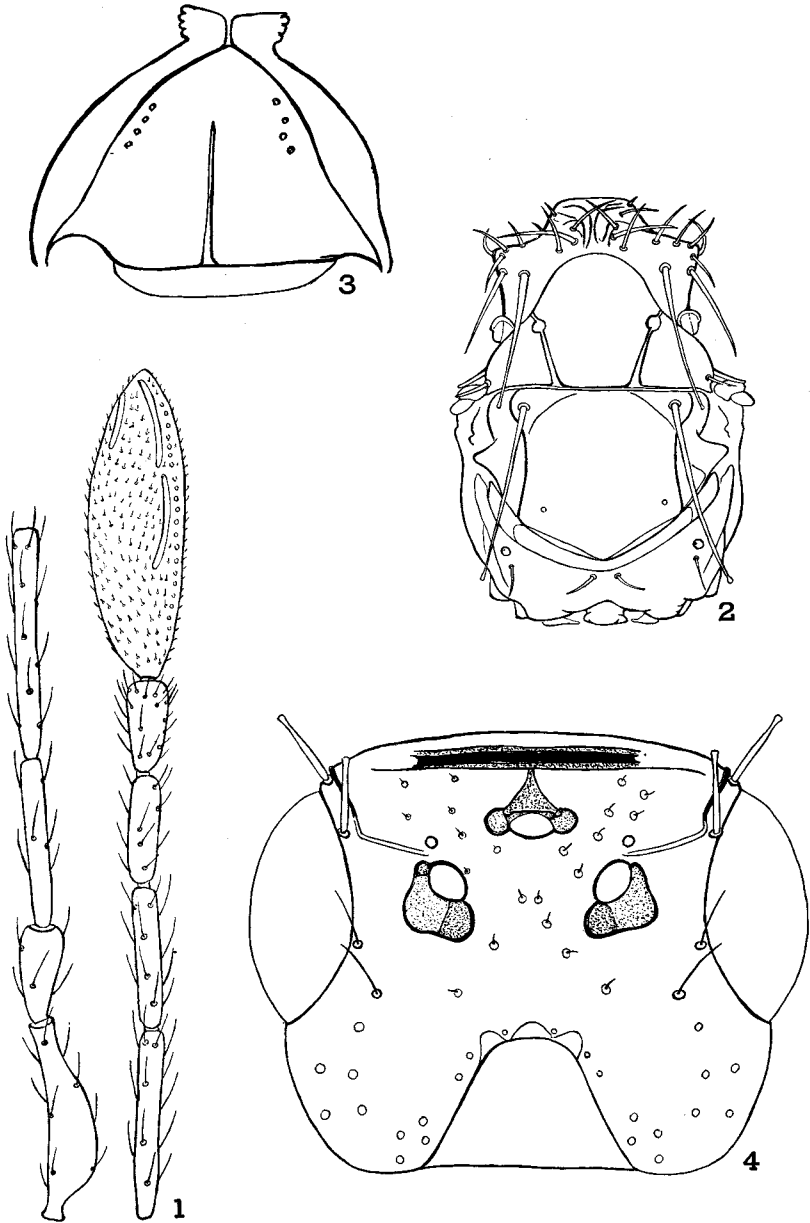


FIG. 1. *Chaetomymar kusnezovi* A. Ogl. Antenna of female.

FIG. 2. *Chaetomymar kusnezovi* A. Ogl. Thorax of female.

FIG. 3. *Chaetomymar kusnezovi* A. Ogl. Prosternum.

FIG. 4. *Tetrapolynema mexicanum* A. Ogl. Head of male viewed from above.

Fourth tergite dark brown. Teeth of mandibles, tips of hind femora, posterior tibiae (except extreme base), and their tarsi, as well as the rest of gaster and the fourth tarsal joints of fore- and midtarsi, light brown.

Head viewed from above broader than long; eyes oval, anterolateral, distinctly longer than postorbital portion of head (Fig. 4). Ocelli in an obtuse-angled triangle. The anterior periocellar fovea prolonged anteriorly so as to meet the transversofrontal trabecula, and with two small foveolae laterally. Periocellar grooves of lateral ocelli asymmetric, with posterior foveolae much larger than the anterior ones. A round sensorial pustula in front of each lateral ocellus. Small hairs of vertex symmetrically disposed; 5 and 5 anterolateral, 4 and 4 interocellar, and 2 and 2 postocellar ones; 4 and 4 larger setae on the orbital margin, of which 2 and 2 anterior are swollen and subcapitate. Antenna longer than body, 1.76 mm. (Fig. 5). Measurements of antennal joints 1-13 in microns: 133 (38); 91 (34); 141 (38); 171 (42); 171 (42); 171 (46); 160 (46); 164 (53); 157 (57); 145 (53); 145 (57); 145 (65); 171 (69). The number of placoid sensoria increases from 8 to 12; pilosity scarce on the basal half, becoming denser and longer distally. Occipital border profoundly concave, with three foveae on the articulation with thorax. Clypeus without tentorial foveae or scars.

Thorax (Fig. 6). Pronotum entirely fused at the middle; 1 and 1 bristles and some irregular rugae on its anterior third; posteriorly with a low median, longitudinal carina and with 7 and 7 subcapitate setae. Spiracle 0.013 by 0.007 mm., located on posterolateral tapering process of pronotum. Prosternum 0.156 mm. by 0.186 mm., closed anteriorly by cervicalia. Mesoscutum with parapsidal furrows converging from 0.152 to 0.023 mm., the rounded anterior end of groove removed 0.007 mm. from anteriolateral border of mesoscutum; lateral angles of mesoscutum produced in a velum-shaped thin lamellar extension which covers the base of alar and pleurolateral processes. Scutellum 0.19 by 0.287 mm., rounded apically with two axillar and a larger median groove on the cephalic border; each axilla with an irregular median ridge and with two setigerous pores (setae lost in the specimen); two round sensorial pustulae close to the median groove of scutellum; posterior part with a transverse row of minute pores. Metanotum medially divided by the apical part of scutellum. Propodeum broadly concave anteriorly, with rounded lateral margins and nearly straight caudal border. Two small, rounded excisions near the petiolar articulation. Spiracles elliptical 0.012 by 0.007 mm., situated nearly on a level with the posterior border of scutellum. Anterior border of propodeum opposite spiracles with two small elliptical grooves, medially with two short outwardly curved carinae. Two anterior subcapitate bristles at the level of lateral apodemes. The two posterior thin and shorter setae nearly dorsal from the articulation of midcoxae. Metasternal border produced medially, surpassing posterodorsal margin of propodeum. Mesophragma not reaching the posterior border of propodeum.

All tarsi longer than their tibiae; hind metatarsus longer than the three remaining joints combined (80:75); mid- and fore metatarsus shorter than the remaining joints (60:70 and 63:68). Spur of anterior

tibia 0.099 mm.; of midtibia 0.027 mm.; of posterior tibia 0.051 mm. Mid- and posterior tibiae longer than their femora (115:82 and 125:91).

Forewing approximately 1.4 by 0.35 mm. (badly shriveled distally); venation extending 0.377 mm. from the base of wing. Subcosta 0.24 mm. long. Hairs (9–23 μ) on dorsal surface consisting of a single row under marginal vein and increasing to about 14 longitudinal lines in the widest part of wing; hairs on ventral surface beginning far beyond the end of venation as a very short spine (about 4 μ long) and reaching nearly 12 longitudinal lines on the distal part of wing. Basal bristles on the anterior margin subcapitate; the longest bristle of marginal fringe 0.213 mm.

Hind wing 1.227 by 0.026 mm. with only very short submarginal hairs; longest bristle of marginal fringe 0.099 mm.

Petiolus 0.16 by 0.036 mm., distinctly constricted at extreme base and with a short tooth on each side at base. Gaster 0.383 by 0.324 (depressed by mounting). Genitalia 0.202 mm. long.

Described from a single male labeled "*Polynema* sp., on *Gardenia* from Mexico, February 8, 1941. Brownsville 45627, Williamson, coll., Lot No. 41-2669."

Holotype in U. S. National Museum, No. 56874.

***Barypolynema*, new genus**

Female antenna with 9 joints; club 1-jointed. Male antenna 13-jointed. Pronotum divided longitudinally and with the sessile spiracles at posterolateral angles. Prosternum subtriangular, closed anteriorly by cervicalia. Marginal and stigmal veins very short; forewing not narrowed basally. Tarsi 4-jointed. Propodeum with 2 bristles, without medial keel or tooth. Abdomen petiolate.

Type of genus, *Barypolynema reticulatum*, new species.

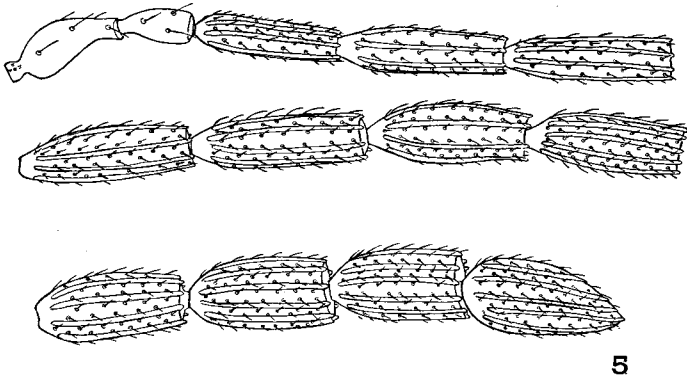
This genus is readily separated from *Polynema* Hal. by the structure of the propodeum. The external position of the prothoracic spiracles distinguishes it from *Stephanodes* Enoch, in which the spiracles are situated on the internal suture between mesoscutum and pronotum. In *Neomyrmar* Crawf. the prothoracic spiracles are stalked and the forewing is distinctly petiolate.

***Barypolynema reticulatum*, new species**

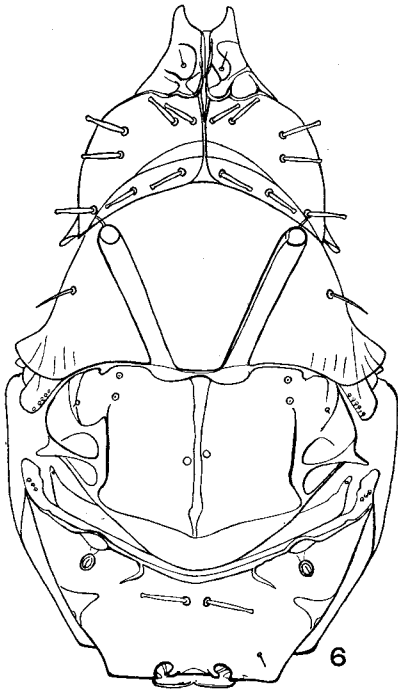
(Fig. 7)

Female: Length 0.723 mm. (average of 10 specimens with limits of 0.565 to 0.912 mm.). General color brownish black; scape, pedicellus, legs (except the dark last tarsal joints), base of petiolus, and articulation of hind coxae golden yellow, the rest of petiolus white. Eyes, cephalic trabeculae, teeth of mandibles and receptaculum of similar black color. Ocelli red-pigmented.

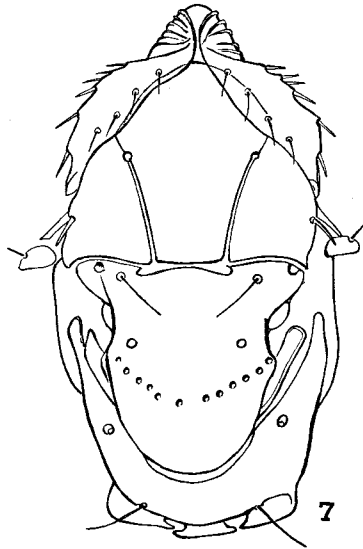
Head transverse, 0.14 by 0.22 mm. Eyes large, distinctly hairy; length of hair equal to diameter of single ommatidium. Ocelli in an obtuse triangle, with apical angles about 125°; anterior ocellus 0.03 by 0.029 mm., lateral 0.024 by 0.023 mm.; ocellular line equal to the long diameter of posterior ocellus; space between fore ocellus and transversofrontal tra-



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6



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FIG. 5. *Tetrapolynema mexicanum* A. Ogl. Antenna of male.

FIG. 6. *Tetrapolynema mexicanum* A. Ogl. Thorax.

FIG. 7. *Barypolynema reticulatum* A. Ogl. Thorax of female.

becula equal to one and one-half times short diameter of the ocellus. Occiput slightly excavated; tempora rounded; vertex slightly elevated. Lateral ocellus with large, external, pericellar groove; anterior ocellus with two lateral smaller grooves. Whole surface distinctly cellulate, the cells more transverse on occiput and medial part of forehead. The short curved hairs distributed with regularity of chaetotaxy; 12 and 12 on occipitotemporal region beyond ocellar trabeculae; 10 between ocelli; 6 and 6 or 7 and 7 on rest of vertex; 3 and 3 along the orbital margin; forehead and cheeks with 15 and 15 hairs, each hair with raised base. Frontal trabeculae feebly raised on the level of scrobes, there joining with subantennal trabeculae. Forehead with two deep round foveae, which touch the upper border of scrobes. Antenna shorter than body (5:6); scape and pedicel smooth; pilosity short, the hairs varying in length from 0.01 to 0.02 mm. Club equal to the four preceding joints combined, with five subapical and one medial placoid sensoria. Measurements of antennal joints in microns: 77 (24); 54 (27); 37 (12); 58 (14); 54 (14); 41 (14); 34 (15); 37 (14); 170 (44).

Thorax (Fig. 7) 0.363 by 0.118 mm. Pronotum completely divided medially, 0.102 by 0.146 mm.; deeply concave posteriorly, only 0.03 mm. in length at the middle; its anterior part with raised and reflexed inner margin, covered with fanlike distributed rugae; posterior part finely cellulate, with 6 and 6 hairs on the anterolateral margin and 4 and 4 on the mesonotal one. Circumspiracular membrane 0.017 mm. Prosternum a little longer than wide, with a median carina in the basal half. Mesoscutum 0.116 mm. by 0.188 mm.; parapsidal furrows diverging from 0.048 to 0.071 mm.; fovea at anterior end of each furrow united with margin of mesoscutum by a short line; one short seta above each tegula. Scutellum 0.136 by 0.142 mm.; axillae smooth, separated from scutellum by a thin line; scutellum and mesonotum finely cellulate. Metanotum 0.088 by 0.139 mm., overlapped medially by scutellum. Propodeum 0.127 by 0.165 mm.; length at middle 0.034 mm.; distance between spiracles 0.095 mm. Spiracles close to anterior border. Setae very low, with distinctly raised bases. Mesophragma 0.007 mm., not reaching the caudal margin.

Forewing 0.813 by 0.18 mm. Subcosta 0.143 mm., marginal and stigmal veins together 0.051 mm. Discal hairs on dorsal surface from 0.013 to 0.024 mm. in length, on ventral surface 0.003–0.007 mm. Longest bristle of marginal fringe 0.108 mm. Caudal margin of wing slightly concave beyond marginal vein. Wing hyaline, with a weakly infuscated transverse stripe at the middle. Hind wing 0.061 by 0.037 mm.; the venation reaching 0.204 mm. from the base; disc with only two submarginal rows of short hairs; longest bristle of marginal fringe 0.085 mm.

Legs smooth, with sparse white pilosity.

Petiolus 0.085 by 0.027 mm., constricted at both ends. Gaster 0.302 by 0.156 mm.; cercoides 0.024 by 0.019 mm. Oviposter 0.226 with the base near the petiolar articulation.

Male: Similar to female. Antenna 0.858 mm., nearly one-third longer than body. Measurements of antennal joints in microns: 47 (20); 44 (30);

54 (27); 61 (27); 64 (27); 68 (27); 64 (27); 64 (27); 64 (27); 68 (27); 68 (27); 71 (27); 75 (24). Flagellar joints with five or six placoid sensoria. Gaster 0.187 by 0.112 mm. Genitalia as long as petiolus.

TABLE II.
LEG MEASUREMENTS OF *B. reticulatum*, IN MICRONS

	Anterior		Median		Posterior	
	L.	Br.	L.	Br.	L.	Br.
Coxa.....	78	37	56	45	69	45
Trochanter.....	37	19	44	19	48	23
Femur.....	139	37	146	30	153	34
Tibia.....	170	23	211	20	272	20
Spur.....	51	.....	20	.....	34	.....
1 tars. joint.....	68	.....	78	.....	95	.....
2 tars. joint.....	41	.....	61	.....	61	.....
3 tars. joint.....	41	.....	51	.....	54	.....
4 tars. joint.....	51	.....	51	.....	54	.....
Claw.....	14	.....	14	.....	14	.....

Described from numerous specimens taken at Loreto, Misiones, Argentina throughout nearly the entire year. Holotype (female), allotype (male), and paratypes in the author's collection; paratypes also to be deposited in U. S. National Museum.

BARYPOLYNEMA ASPIDIOTI (GIRAULT), NEW COMBINATION

(Fig. 8)

Polynema aspidioti Girault, Ent. News 22: 358, 1911.

An examination of the type specimen preserved in the U. S. National Museum shows that this species belongs to *Barypolynema*, being closely related to the type of the genus but easily distinguished by the shorter scutellum and mesoscutum (Fig. 8). A comparison of this figure with Figure 7, which represents the thorax of *B. reticulatum*, shows better than the descriptions the difference between the two species.

Further specimens of both sexes were found among unnamed slides in the U. S. National Museum collection, and consequently I have designated as the allotype a female obtained from eggs of *Psallus seriatus*, taken on *Erigeron canadensis*, Port Lavaca, Tex., September 5-13, 1926, H. I. Crawford No. 8. Both male and female have the characteristic foveae near the antennal scrobae and close to the clypeal border. The antennal club is longer than the four preceding joints combined, one and a half times as long as the scapus; third antennal joint longer than eighth or seventh. Periocellar foveolae as in *reticulatum*, but lateral ones distinctly smaller than in that species.

BARYPOLYNEMA SAGA (GIRAULT), NEW COMBINATION

(Fig. 9)

Anagrus saga Girault, Amer. Ent. Soc. Trans. 37: 296, 1911.

This peculiar species, of which only females are known, fits very well the generic description, although it is quite different from the other two species referred to this genus. A comparison of Figure 9, which represents

the thorax of *B. saga*, with the figures of *B. reticulatum* and *B. aspidiote*, illustrates the difference.

Acmopolynema, new genus

Antennae of female 9-jointed, with 1-jointed club; those of male 13-jointed; scapus transversely striate; eyes bare. Pronotum completely divided medially, with the spiracles at posterolateral angles. Prosternum elongately triangular, closed anteriorly by cervicalia. Mesoscutum with complete notauli. Scutellum with a transverse row of small foveae. Propodeum with a stout flattened tooth directed caudally and with two lateral carinae. Forewing not petiolate; many of the discal cilia with greatly enlarged bases (tormae) (Fig. 10a). Tarsi 4-jointed; hind tarsi shorter than their tibiae. Abdomen with 1-jointed petiolus; ovipositor protruding beyond the apex in the type specimen.

Type of genus, *Acmopolynema bifasciatipenne* (Girault), new combination (for *Stichothrix bifasciatipennis* Girault, Psyche 15:115, 1908) (Figs. 10 and 10a).

Many other undescribed species from northern Argentina and Brazil are in the author's collection. The genus seems to be of neotropical origin.

ACMOPOLYNEMA BRASILIENSE (ASHMEAD), NEW COMBINATION

Polynema brasiliense Ashmead, Carnegie Mus. Mem. 1: 521, 1904.

A. A. Girault, in 1911 (Amer. Ent. Soc. Trans. 38:322), redescribed *P. brasiliense* correctly and observed the similarity in the structure of the propodeum (metathorax, Girault, 1911) of this species and *P. bifasciatipenne* Gir. The forewing shows characteristic linear arrangement of the discal cilia.

LYMAENON RUFESCENS (ASHMEAD), NEW COMBINATION

Polynema rufescens Ashmead, Carnegie Mus. Mem. 1: 521, 1904; Girault, Amer. Ent. Soc. Trans. 38:322-323, 1911.

Examination of the type specimen (No. 6595 in U. S. National Museum) shows that it belongs to the genus *Lymaenon* Hal. The rather poorly preserved specimen shows all the characters typical of *Lymaenon*, and it is surprising that Girault, in remounting and redescribing the species, failed to recognize Ashmead's error in the generic placement.

LYMAENON, SUBGENUS GAHANOPSIS, NEW SUBGENUS

Female: The antennae are 10-jointed, with a 1-jointed club. The base of ovipositor enclosed in a long membranous pouch which extends forward beneath the thorax to reach the anterior coxae. Tip of ovipositor distinctly curved ventrad.

Otherwise not distinguishable from *Gastrogonatocerus* A. Ogl. The male is practically indistinguishable from that subgenus. As in the case of *Gastrogonatocerus*, *Gahanopsis* is parasitic in membracid eggs.

Type of subgenus, *Lymaenon (Gahanopsis) deficiens*, new species.

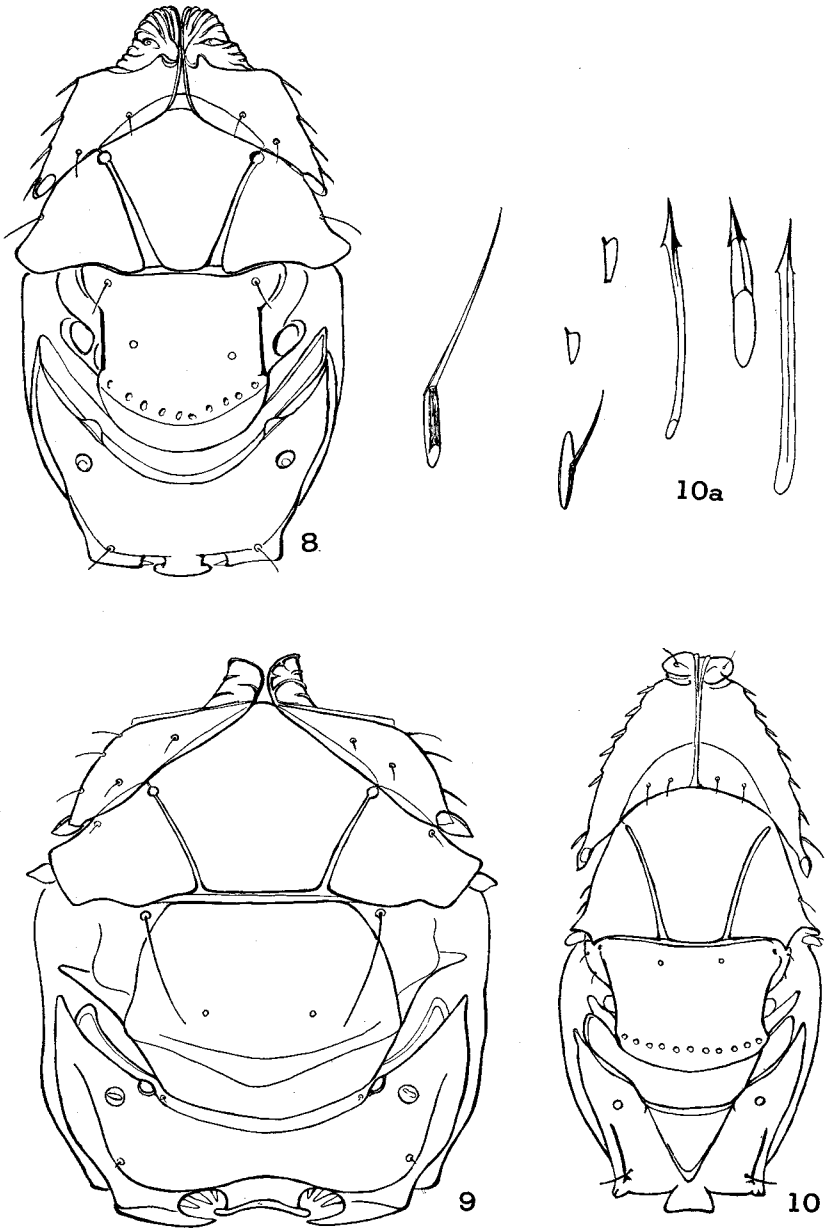


FIG. 8. *Barypolynema aspidioli* (Gir.). Thorax of male.

FIG. 9. *Barypolynema saga* (Gir.). Thorax of female.

FIG. 10. *Acmopolynema bifasciatipenne* (Gir.). Thorax of female.

FIG. 10a. *Acmopolynema bifasciatipenne* (Gir.). Discal cilia of forewing.

I have the pleasure to name this subgenus after A. B. Gahan, the distinguished hymenopterologist of the U. S. National Museum, who first recognized this interesting subgenus.

***Lymaenon (Gahanopsis) deficiens*, new species**

(Figs. 11 and 12)

Female: Length of body 0.82–0.99 mm. General color bright ocher yellow (in mounted specimen). Eyes and cephalic trabeculae black. Antenna (with exception of scale), sheath of ovipositor, and interocellar spot light brown. Anterior half of mesoscutum, axillae, tegulae, veins of wings, and the rest of head light orange yellow.

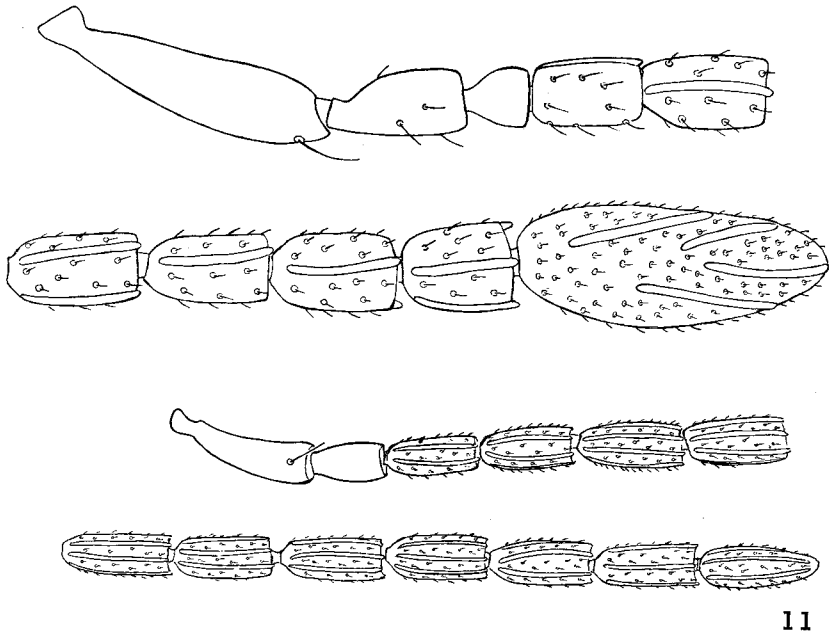
Head viewed from above nearly two times as wide as long. Eyes large, lateral; ocellular line slightly shorter than interocellar (6:7). Diameter of anterior ocellus 0.023 mm. Chaetotaxy of vertex peculiar; three bristles inside of interocellar triangle, two short hairs in front of lateral ocellus, and near latter two small round sensorial pustulae; 2 and 2 large bristles on the inner orbitae and four small hairs on the occipital slope. Interocellar triangle distinctly elevated. Antennal scrobes in the lower quarter of superior half of face, the space between them distinctly longer than diameter of each scrobe. Progenae not swollen and not separated from occiput.

Antenna 0.56 mm. long; longer than head and thorax (Fig. 11). Scape with well-defined radícula. Flagellar joints 2–7 with placoid sensoria. Club longer than two preceding joints combined. Measurements of antennal joints 1–10 in microns: 79 (34); 50 (38); 27 (21); 46 (27); 46 (28); 50 (27); 53 (27); 50 (27); 53 (30); 129 (42).

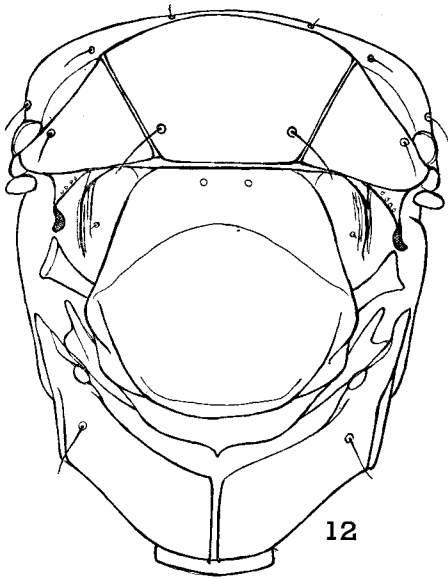
Thorax 0.335 by 0.236 mm. (Fig. 12). Pronotum very short, 0.057 mm., only 0.007 mm. in the middle; spiracle elliptical, 0.027 mm. long. Mesoscutum short, 0.072 by 0.228 mm.; with four black setae on the posterior third. Parapsidal furrows very narrow. Scutellum 0.14 mm. long, with lateral borders distinctly divergent. Axillae longitudinally rugulose laterally, each with two very short and fine hairs. Posterior border of metanotum rounded, distinctly produced at the middle so as to form a tooth. Pronotum and mesonotum distinctly cellulate, the cells becoming longitudinal on the scutellum. Propodeum 0.16 mm. long with rounded posterior margin; spiracles slightly above the level of posterior border of scutellum; two thin, parallel carinae close to the medial line; the base of setae approximately on the level of the posterior margin of metanotum.

Anterior tibia with seven small spines on its ventral surface. Hind femora distinctly swollen.

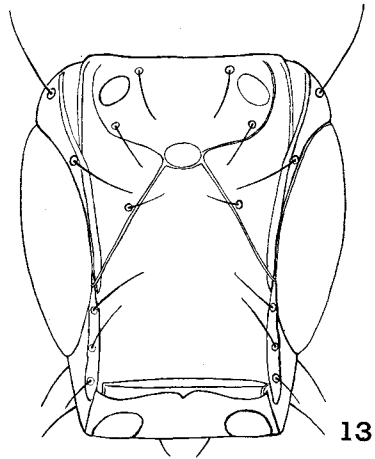
Wings very slightly and evenly infumated. Forewing 0.815 by 0.277, venation terminating at 0.314 mm. from the base; subcosta 0.277 mm.; marginal 0.08 mm.; stigmal vein 0.038 mm. The dorsal pilosity of disc beginning at base of marginal vein; anal row subdistinct, composed of approximately 22 hairs; most of discal hairs about 8 μ long. Longest bristle of marginal fringe 0.061 mm. Posterior wing 0.682 by 0.061 mm., widest part at hamuli, venation extending 0.297 mm. from base; discal pilosity consisting of 4–5 longitudinal rows besides the submarginal ones. Longest bristle of marginal fringe 0.87 mm.



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FIG. 11. *Lymaenon* (*Gahanopsis*) *deficiens* A. Ogl. Antenna of male and female.
 FIG. 12. *Lymaenon* (*Gahanopsis*) *deficiens* A. Ogl. Thorax of male.
 FIG. 13. *Platystethynium* *onomarchicidum* A. Ogl. Head of female.

Abdomen dorsally 0.476 by 0.201 mm.; ventrally 0.765 mm. Ventral process reaching base of anterior coxae. Ovipositor 0.808 mm., extending only 0.043 mm. beyond tip of abdomen. Longest cilia of cercoides 0.099 mm.

Male: Length 0.923 mm. The color of head, antennae, and legs as in female. Thorax brownish yellow with pronotum, anterior half of mesoscutum, spots on axillae, middle part of metanotum and propodeum brown. Basal three tergites of abdomen white, the remaining segments with a broad, central black stripe, the last tergite distally dark.

Antenna (Fig. 11) shorter than body, 0.873 mm. long. Measurements of antennal joints in microns: 93 (30); 46 (34); 61 (30); 61 (30); 65 (27); 69 (23); 69 (27); 69 (27); 69 (27); 69 (27); 69 (27); 69 (27); 69 (30); 80 (27). Scape short with distinct radícula, joints 3-13 with six to seven placoid sensoria.

Copulatory apparatus with aedeagus 0.114 mm. long, flattened dorsoventrally, with curved and sharply pointed distal end; phallobase 0.095 mm.; external paramera less developed, delimiting the semielliptical sexual orifice. Medial invaginated ventral plate prolonged anteriorly, 0.133 mm. long.

Described from seven females and two males mounted on a single slide labeled, "*Mymaridae* n. g. and n. sp., Gahan. St. Augustine, Trinidad, Aug. 10, 1943. E. McC. Callan coll. Ex eggs of *Tylopelta monstrosa*, host identified by Beamer as *Erechtia* sp. Lot N. 43-12051." Holotype (female), allotype (male), and seven paratypes in the collection U. S. National Museum No. 56277.

Platystethynium, new genus

Female: Antenna 11-jointed, with a 3-jointed club; segments of funiculum submoniliform; seventh antennal joint and club with placoid sensoria. Forehead distinctly divided into ventral and dorsal halves, the former with two curved trabeculae, which extend from clypeus to antennal scrobae. Mandibles small, toothless, apparently not movable (without articular processes). Gnathal aperture small, ventral, removed from occipital border. Epicranial sutures joining the posterior ones before anterior ocellus so as to form X-shaped figure. Pronotum large, completely divided longitudinally. Prosternum rounded in front, closed anteriorly by cervicalia. Axillar bristles on the sensorial part of scutellum; metanotum narrow, dorsally overlapped by posterior margin of scutellum. Wings with narrow discal blade, sharply pointed distally. Legs short and stout; fore tibiae with strong spines on the ventral surface. Hind femora distinctly swollen and compressed.

Abdomen broadly sessile, ovipositor protruding, the whole body strongly flattened dorsoventrally.

Type of genus, *Platystethynium onomarchicidum*, new species.

This genus is closely related to *Stethynium* Enock, 1909, but easily distinguished by the flattened body and the structure of antennae, mandibles, and thorax.

Platystethynium onomarchicidum, new species

(Figs. 13, 14, 15, 15a, and 16)

Female: Length of body 1.08 mm. (average of 15 specimens with extremes 0.957–1.101 mm.).

Light brownish yellow; eyes reddish brown; flagellum, frontal ridge, trabeculae, interocellar triangle, lateral parts of mesonotum and propodeum light brown. Sensorial part of scutellum, legs, the rest of head, and the ovipositor yellow.

Head almost as broad as long, 0.19 by 0.2 mm. (Fig. 13). Eyes with a few short hairs; ocelli almost in a right-angled triangle, limited laterally by posterior sutures. Epicranial sutures begin at anterior one-fifth of inner orbits and run in curved lines to meet in front of the anterior ocellus. Vertex very long, gradually narrowed anteriorly; transversofrontal trabeculae somewhat removed from the anterior border of head. Antennal scobes distodorsal and space between them proclivous, strongly sclerotized. Ventral surface of front with swollen lateral border and with outwardly curved trabeculae, which join antennal scobes with clypeal border (Fig. 14).

Antenna 0.382 mm. (Fig. 15), shorter than the thorax. Scapus with distinct but not separate radícula, slightly longer than the three-jointed club (79:78). Measurements of antennal joints in microns: 79.6 (43); 49 (23); 26 (17); 19 (17); 19 (19.7); 19 (19.7); 30 (27); 23 (19); 38 (38); 27 (38); 42 (38). Seventh antennal joint swollen, with two curved placoid sensoria. All club joints with similar sensoria; pilosity as in Figure 15a.

Thorax (Fig. 16), 0.48 by 0.2 mm. Pronotum elongate, 0.15 by 0.13 mm., with internal borders angularly divergent in the caudal third. Spiracles very small, 0.006 mm. Prosternum broadly rounded anteriorly, with two lateral bristles. Pronotum, mesoscutum, and scutellum (except smooth sensorial part) longitudinally cellulate, the cells becoming more distinct on the lateral parts of scutellum. Metanotum with two minute hairs on its internal angles.

Propodeum completely divided along the median line and with a lateral trabecula on each side along the margins of mesophragma, these ending caudally at the articulation with abdomen. Spiracle small, 7.5 μ long, situated above the level of posterior margin of scutellum.

Legs short and stout. Anterior and midtarsi longer than their tibiae (152:106 and 144:122 μ); posterior tibiae longer than their tarsi (183:163 μ). Femora swollen, especially the posterior pair, 137 (43); 118 (38); 152 (57 μ). Anterior tibia with six stout spines on its ventral surface; mid- and posterior tibiae with fine pilosity which increases distally. Coxae, femora, and tibiae finely cellulate.

Wings slightly but distinctly infumated, darker along the margin in distal part of forewing; veins brownish. Forewing 0.762 by 0.076 mm., broadest at the distal third, narrowest at the end of subcostal vein (0.034 mm.). Venation reaching 0.286 mm. from the base; subcostal vein with 4 bristles and along its caudal margin about 25 small round tubercles; combined marginal and stigmal veins with 2 longer bristles, and with 5

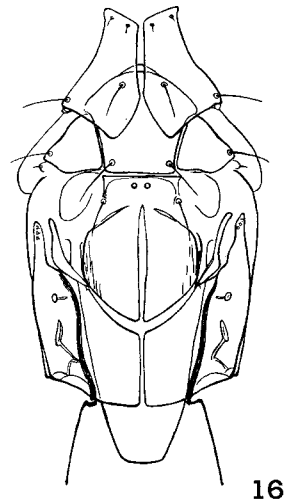
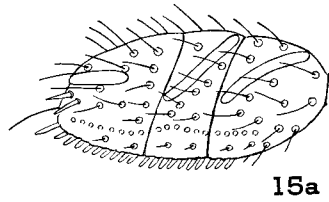
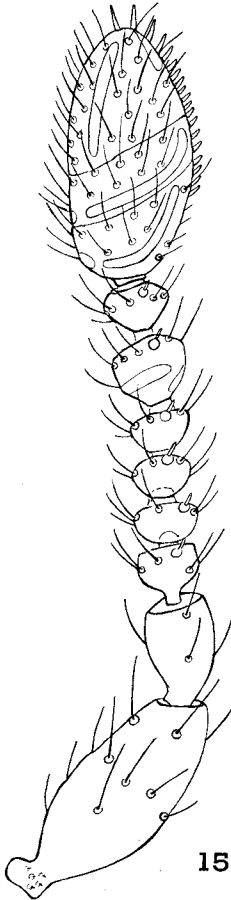
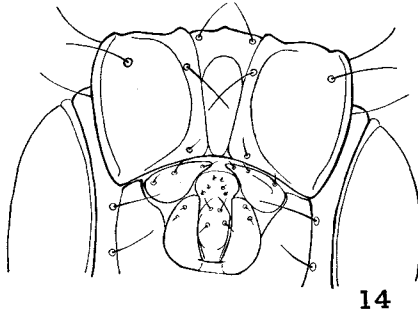


FIG. 14. *Platystethynium onomarchicidum* A. Ogl. Distal part of head ventrally.
 FIG. 15. *Platystethynium onomarchicidum* A. Ogl. Antenna of female.
 FIG. 15a. *Platystethynium onomarchicidum* A. Ogl. Club, ventral view.
 FIG. 16. *Platystethynium onomarchicidum* A. Ogl. Thorax.

round sensoria at apex. Dorsal pilosity beginning with a single row of hairs behind marginal vein and increasing to four rows in the widest part of disc, without counting submarginal hairs. Longest bristle of marginal fringe 0.175 mm., more than twice as long as the maximum width of wing. Hind wing 0.762 by 0.042 mm. Venation ends 0.2 mm. from the base; discal pilosity very sparse, composed of one to three longitudinal rows of short hairs; longest bristle of marginal fringe 0.133 m.

Abdomen longer than thorax and subequal to it in width (0.55 mm. by 0.21 mm.). Base of ovipositor located in the second segment; ovipositor 0.46 mm. long, protruding 0.122 mm. beyond the tip of abdomen. Tergites longitudinally striated at the bases of bristles. Cercoides elongate, semi-elliptical, space between them equal to one-fourth the length of one (0.046:0.011 mm.).

Described from 33 female specimens mounted on 2 slides labeled, "gen. n., sp. n. near *Stethynium* Gahan det. Ex eggs of *Onomarchus uninotatus*,* Buitenzorg, Java. May 1939. C. Franssen coll." Holotype and 32 paratypes in the collection of U. S. National Museum, No. 56875.

Platypatasson, new genus

Antenna of female 10-jointed, with 2-jointed club. Flagellar joints semimoniliform, short, without placoid sensoria. Body strongly depressed. Head with Y-shaped suture. Antennal scrobes situated very high, touching transversofrontal trabecula. Two outwardly curved trabeculae on the ventral surface of forehead joining antennal scrobes with border of clypeus. Mandibles small, toothless. Gnathal organs rudimentary. Pronotum large, completely divided medially. Axillar bristles situated on sensorial part of scutellum. Metanotum very short, without rhomboid area. Wings narrow. Legs stout, with swollen hind femora. Abdomen broadly sessile.

Type of genus, *Platypatasson fransseni*, new species.

The genus is distinguished from *Patasson* Hal. by the depressed body and especially by cephalic characters. The remarkable parallelism of characters in the two entirely different genera, *Platystethynium* and *Platypatasson*, shows the convergence caused by the adaptation to parasitic life in eggs of Tettigonoidea.

Platypatasson fransseni, new species

(Figs. 17, 18, and 19)

Female: Length of body 0.648 (average of six specimens; limits 0.579 and 0.686 mm.).

Color (of mounted specimens) pale yellow. Eyes and trabeculae brown.

Head viewed dorsally nearly as long as wide, 0.152 by 0.16 mm. (Fig. 17). Eyes large, longer than half the width of head, with some very short hairs. Ocelli in a nearly equilateral triangle. (Distortion of head in mounting prevents making more precise measurement). Occipital slope limited anteriorly by an irregular ridge which touches lateral ocelli.

* Tettigonoidea, Saltatoria.

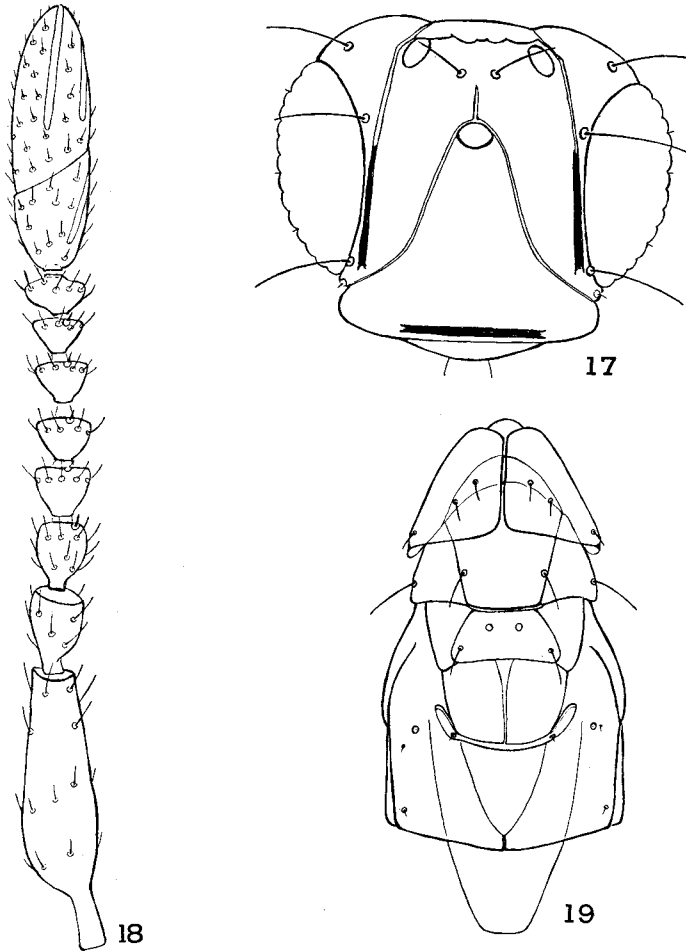


FIG. 17. *Platypatasson fransseni* A. Ogl. Head.

FIG. 18. *Platypatasson fransseni* A. Ogl. Antenna.

FIG. 19. *Platypatasson fransseni* A. Ogl. Thorax.

Epicranial suture in form of Y, with anterior ocellus in the internal angle. Chaetotaxy as in Figure 17. Curved frontoclypeal trabeculae confluent before the level of antennal scrobes and forming a broad plate.

Antenna (Fig. 18), 0.328 mm., shorter than head and thorax taken together; scape with distinct but not sharply delimited radicle. Funicular joints with trichoid sensoria on distal border. Club with a single placoid sensorium on the basal joint and with five sensoria on the distal one. Measurements of antennal joints in microns: 97 (25); 43 (19); 19 (19); 17 (19); 15 (19); 16 (19); 15 (19); 16 (20); 38 (34); 68 (38).

Thorax (Fig. 19) less than half as long as body. Pronotum slightly longer than one-fourth of entire thoracic length (20:75). Setae of meso-

scutum in its posterior third. Parapsidal furrows very narrow, slightly divergent anteriorly. Propodeum very long and broad, with a triangular area medially, and with four very short hairs somewhat irregularly distributed between spiracles and posterocoxal angles. Spiracles approximately on the level of posterior margin of scutellum. Mesophragma 0.133 mm. long, penetrating into abdominal cavity 0.05 mm.

Legs stout; posterior tarsi shorter than their tibiae; hind femora swollen, 0.095 by 0.045 mm.

Forewing 0.51 by 0.048 mm., broadest at end of venation, only 0.034 mm. on disc. Vein reaches 0.16 mm. from base of wing. Dorsal pilosity of disc consisting of two longitudinal rows of short bristles, without counting submarginal hairs; longest bristle of marginal fringe 0.114 mm. long, nearly two and a half times as long as wing's breadth. Hind wing as long as forewing, only 0.019 mm. wide; hooklets 0.158 mm. from base of wing; dorsal pilosity consisting of two longitudinal rows of short cilia, not counting submarginal hairs; longest bristle of marginal fringe 0.079 mm., more than five times as long as the greatest width of wing.

Abdomen 0.267 by 0.137 mm.; ovipositor 0.255 mm., protruded 0.027 mm. beyond tip of abdomen.

Described from six females mounted on slides and labeled, "Ex Locustid eggs. Buitenzorg, Java. Mar. 1939. C. Franssen coll. Lot 39-11815." Holotype and four paratypes in U. S. National Museum, No. 56876. One paratype in the author's collection.