TWO NEW GENERA OF MYRIDAE FROM SOUTH AFRICA
(Chalcidoidea, Hymenoptera)

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The new genera described in this paper are of interest in that they are the first to have been described in the Mymaridae from South Africa. The writer has a large collection of South African mymarids, the majority of which belong to well-known and often widely distributed European and American genera. Specimens of the new genera are apparently rather rare and the male sex is not yet known.

DECAMYMAR *new genus.*

Female antenna with ten antennal segments, the fourth abbreviated, the radicle distinct and well developed; tarsi five-segmented; mesophragma projecting into the abdominal cavity, the abdominal attachment to the thorax about one half the width of the propodeum apically, or a little more; eyes rather small, lateral, with a few minute setae; antennae inserted high on the head, above the lower level of the eyes, close to the orbits; occiput with a median coronal suture commencing at the postfrontal suture, the latter well developed; prothorax scarcely visible dorsally except laterally, with sessile spiracles at the posterolateral angles; parapsides clearly distinguishable from the mesoscutum by strong internal thickenings of the body-wall corresponding to the parapsidal grooves of other genera; mesoscutum with 1 and 1 setae; scutellum divided transversely as in species of *Anaphes* Haliday and *Patasson* Walker by internal thickenings of the body-wall; propodeum without keels, with 1 and 1 setae; ovipositor normal, placed on the venter of the abdomen. Wings normal for the family, the forewings with venation as in Fig. 3, the proximal and distal macrochaetae well separated, the proximal placoid sensillum about midway between them, and the hypochaeta closer to the proximal macrochaeta.

Type of the genus DECAMYMAR MAGNICLAVAE *new species.*

The present new genus is assigned to the Mymarinae since it lacks the broad abdominal attachment to the thorax typical of the alaptine genera. Like some other mymarine genera, namely *Parallelaptera* Enock and others,

the mesophragma penetrates the abdomen for a short distance, thus rendering its subfamily position somewhat problematical. In this respect I have followed the usage of Annecke & Doutt (in press). In the Mymarinae *Decamymar* runs to the ooctonine genus *Gahanopsis* Ogloblin (originally described as a subgenus of *Lymaenon* Walker by Ogloblin, 1946) in the generic table given by Annecke & Doutt (l.c.). From this genus and from its synonym, *Decarthrius* Debauche, *Decamymar* may be distinguished by its bluntly acuminate radial process (Fig. 3) and in the position of the proximal placoid sensillum of the forewing (Fig. 3), and in lacking propodeal carinae. *Decamymar* agrees well with the description of *Eomymar* Perkins, but obviously differs from that genus in lacking a well-defined petiole, and in having a distinct, slender radicle; in *Eomymar* the radicle appears as a "more or less bulbous enlargement of the scape" according to Dr. Fred Bianchi, Principal Entomologist at the Experiment Station of the Hawaiian Sugar Planters Association, to whom I am indebted for carefully comparing the accompanying description and drawings of *Decamymar* with the type material of *Eomymar muiri* Perkins.

DECAMYMAR MAGNICLAVAE *new species.*

(Figures 1-5, Table 1.)

Female. Colour dark brown to black with radicle, fourth antennal segment, and legs, especially the tarsi, lighter. Length of body 769 — 923 (all measurements in microns). Head medially about 128 in length, width 248-255; ocelli (Fig. 1) small, in a flat triangle, each one about 16 in greatest diameter, about one and one half times the size of an ommatidium; lateral ocellar interval about 95; transversofrontal trabecula entire, orbital trabecula dorsally divided into about six short pieces; postfrontal suture entire, coronal suture distinct; ocellar region with 3 and 3 setae placed as in Fig. 1; frontally the face with 6 and 6 setae; head without sculpture dorsally, occiput, face and cheeks reticulate, the sculpture on the face and cheeks becoming stronger towards the mouth; antennae (Fig. 4) with measurements as follows: radicle 49-53(20); scape 180-203(32-45); pedicel 65-71(34); funicle I 56-68(19-20); II 18-20(16); III 61-67(18-23); IV 52-53(20-24); V 51-53(20-24); VI 47-49(21-26); VII 51-54(24-32); club 211-243(40-61); club provided with two basal and two apical longitudinal sensoriae, each about one half as long as the club; scape with coarse and irregular longitudinal striations, pedicel and all funicle segments except the abbreviated second, very finely and more regularly striate.

Thorax, dorsally, (Fig. 2) measuring 351-375 in length including the mesophragma, and 227-248 in greatest width, with prothorax medially divided, prosternum broadly truncate anteriorly, not closed by the cervicalia, without a median groove or carina, produced posteriorly between the oblique fore coxal insertions; mesonotum with parapsides well demarcated as described in the generic diagnosis, mesoscutum with two setae placed as in Fig. 2; parapsides each with an externally placed seta; axillae slightly advanced, with 2

and 2 small setae comprising an outer pair about on a line with the scutoscutellar suture, and a more mesal pair slightly caudad of this line; scutellum without visible placoid sensilla, divided transversely as described above (interrupted lines in Fig. 2); metanotum an extremely narrow transverse band, almost obscured in dorsal view, with lateral arms bending strongly cephalad with 1 and 1 minute setae near the rounded posterolateral angles of the scutellum; propodeum without keels, with 1 and 1 setae caudad of the spiracles, with faint hind margin about halfway along the length of the mesophragma which projects into the abdomen (Fig. 2); sculpture of thorax as in Fig. 2, strongly reticulate except the caudal part of mesoscutum, the scutellum and the propodeum; this sculpture extends onto the ventral parts of the thorax and onto the fore coxae; the mesopleura are particularly strongly sculptured with the reticulations elongate and parallel on the posterodorsal part.

Legs with all first tarsal segments, particularly those of the middle and hind legs, elongate; fore tibia with about six strong spines on the inner surface; measurements as in Table 1.

TABLE I.

Measurements of leg segments in microns of DECAMYMAR MAGNICLAVAE *n.g. & n.sp.*

	Fore	*Middle*	*Hind*
Femur	170	153-158	154-158
Tibia	162-173	235-251	251-268
Tarsus 1	81	105-112	118-122
2	41-48	40-43	42-44
3	41	32	34-37
4	28	34-37	28-29
5	45	45	37-38

Forewings (Fig. 5) long and narrow, measuring 769-775 (60-61), the blade increasing only slightly in width distally, curving very slightly caudad on the distal one-third; venation (Fig. 3) as described under the generic diagnosis, reaching 225-231 into the wing; longest marginal cilia on the distal part of the hind margin, the longest measuring 187-199; entire wing faintly infumated, with irregular, transverse, pale streaks, and with each marginal cilium on the caudal margin arising from a pale area in the wing; infumation similar to that found in the hind wings of species of *Alaptus* Westwood; discal setae arranged as in Fig. 5, the row along the caudal margin interrupted for some distance; hind wing (Fig. 5) measuring 749-754(34), the hamuli located 169-173 from the wing-base, the longest marginal cilia on the caudal margin near the wing-tip, measuring 187-191 in length; disc faintly infumated and with irregular, pale transverse bands as in the forewing.

Gaster measuring 350-468(333), with abdominal tergites IV-VIII each with two pairs of setae, each pair on either side of the midline, these setae converging caudad as the abdomen narrows apically; spiracle-bearing eighth tergum with a sinuate hind margin, slightly produced medially between the cercal plates; the latter each with four slender setae; ovipositor 269-283 in length, exserted with the gonostyli for about one-sixth of its length.

Described from 3 female specimens (holotype and paratypes) collected at Skukuza, Kruger National Park, in a suction trap by D. P. Annecke in December, 1959, and January and February, 1960. Holotype and paratypes in the collection of the Division of Entomology, Pretoria.

DOUTTIELLA *new genus.*

Eyes lateral, bare; head, like the remainder of the body, dorsoventrally compressed, its longest axis (Fig. 10) being about from the antennal insertions anteriorly to the ocellar region which is transverse and placed far back on the head (Fig. 8); ocelli in a flat triangle, the ocellar area clearly demarcated from the rest of the head by a suture (Fig. 8); antenna with nine segments in the female, the funicle segments short, the club well-developed, simple; prothorax clearly divided medially, with sessile spiracles at the posterolateral angles; mesonotum with distinct parapsidal sutures, with scutoscutellar suture transverse, the axillae not advanced, distinctly separated from the scutellum which is divided transversely by internal thickenings of the body-wall, and which has a slightly emarginate hind margin overlapping the anterior part of the metanotum in dorsal view; mesoscutum and parapsides each with 1 and 1 setae, axillae with 2 and 2, scutellum with 1 and 1, and the propodeum with 2 and 2 setae; the latter sclerite devoid of keels and teeth; mesophragma reaching to the base of the petiole; the latter segment short but distinct, wider than long, slightly more than one-third of the caudal width of the propodeum; abdomen rather elongate, flattened dorsoventrally, the ovipositor placed along the venter, not enclosed in a hypogynium; tarsi with four segments; forewings with the venation unusual in that the stigmal vein is swollen on the distal caudal margin (Fig. 6); proximal placoid sensillum placed beneath the microchaeta, between the proximal and distal macrochaetae and closer to the latter; hypochaeta strong, placed just beyond the proximal macrochaeta; hind wing well-developed, narrow, with marginal cilia (Fig. 7).

Type of the genus DOUTTIELLA DEPRESSA *new species.*

The present new genus may be distinguished from other genera in the Anaphini (*sensu* Annecke & Doutt, in press) by the caudally expanded stigmal vein, the medially emarginate hind margin of the scutellum, the short funicle segments of the female antenna, and other characters mentioned above. Two

other genera of the Mymaridae, namely *Platystethynium* Ogloblin and *Platypatasson* Ogloblin, are immediately associated with *Douttiella* by their dorsoventrally compressed bodies, but these are in a different subfamily and are readily distinguishable on antennal and other important characters.

It is a great pleasure to name this new genus for my friend Professor Richard L. Doutt, Department of Biological Control, University of California, as a mark of appreciation for much help and encouragement which he has given me.

DOUTTIELLA DEPRESSA *new species.*
(Figures 6-12, table 2.)

Female. Colour rather variable, the head and thorax dusky to black, scape except the tip blackish, remainder of antenna dark brown except the pedicel which is lighter; club usually very dark brown; legs dusky except the joints and tarsi which are lighter; abdomen usually with the first two segments only slightly dusky dorsally, pale below, the remaining tergites dusky to blackish except narrowly between the sclerites; forewings very faintly infumated particularly basally, hind wings faintly maculate with narrow, rather irregular pale cross-bands as in species of *Alaptus* Westwood.

Length of body about 700 (all measurements in microns).

Head (Figs. 8, 9 & 10) 136-193 in length (measured in the position of Fig. 9), with divided orbital and entire transversofrontal trabeculae; with ocelli in an obtuse-angled triangle, the ocellar area clearly separated anteriorly and laterally from the frontovertex by a distinct pale suture; lateral ocellar interval 65-93; each ocellus about twice the diameter of an ommatidium, the anterior one removed from the transversofrontal trabecula by about two-thirds of the lateral ocellar interval, the lateral pair close to the eye-margins; ocellar region (Fig. 8) with 2 and 2 setae; frontovertex with 1 and 1 setae, and with 1 and 1 well-spaced minute pori placed on the anterior margin of the ocellar region; antennal insertions far apart, placed on a forward prolongation of the head resulting from its dorsoventral compression, removed from the transversofrontal trabecula by rather less than the diameter of an insertion, and from the mouth by a little less than the greatest diameter of an orbit; mouthparts small, the mandibles becoming slender apically, apparently bidentate; face between and beneath the antennal insertions with about 7 and 7 setae. Antenna (Fig. 11) with slender and distinct radicle; measurements of antennal segments: scape + radicle 103-140(26-34); pedicel 40-52 (20-27); funicle I 16-24(15-17); II 14-24(14-18); III 13-24(14-18); IV 16-28(16-19); V 19-27(17-21); VI 21-28(20-25); club 89-134(30-42); funicle segments IV-VI each with a subapical sense-cone, the club with three apical and one median longitudinal sensoriae; all segments moderately setose, particularly the club.

Thorax, dorsally (Fig. 8), with medially divided pronotum, measuring

225-319 in length from the anterior margin of the mesoscutum to the apex of the propodeum, and 137-174 in greatest width; mesoscutum with entire parapsidal sutures, with 1 and 1 setae near the posterolateral angles; parapsides each with a strong seta laterally; axillae not advanced, clearly separated from the scutellum, each with a single seta; scutellum transversely divided by strong internal thickenings of the body-wall into an anterior sensorial part and a wider posterior part the hind margin of which overlaps the anterior part of the metanotum and is slightly emarginate medially; scutellum with 1 and 1 minute setae near the rounded posterolateral angles; metanotum a crescentic band with 1 and 1 minute setae on its lateral arms; propodeum very well developed, not strongly sloping posteriorly, without keels or teeth, with small, widely separated spiracles, and with 2 and 2 small setae as in Fig. 8; thorax without discernible sculpture except for a few faint and irregular lines on the pronotum.

TABLE 2.

Measurements of leg segments in microns of DOUTTIELLA DEPRESSA *n.g. & n.sp.*

	Fore	*Middle*	*Hind*
Femur	93-110	85-104	99-136
Tibia	89-93	114-130	156-190
Tarsus 1	37-42	41-45	42-45
2	23-28	32-33	41-43
3	22-24	28-30	39
4	25-26	28-29	28-31

Legs with measurements as in Table 2.

Forewings (Fig. 7) narrow, measuring 522-702 in length, the blade beyond the venation becoming only slightly wider, its greatest width 39-57; venation as described in the generic diagnosis, reaching 170-219 into the wing; longest marginal cilia measuring 176-208; hind wings (Fig. 7) long and narrow, measuring 510-677(21-30), the hamuli removed from the wing-base by 139-178; marginal cilia long, the longest measuring 138-154.

Gaster, including petiole, 391-482 in length, 162-191 in greatest width at about the third (morphological fifth) segment; first to fifth gastral tergites and sternites all with more or less distinctly sinuolate hind margins (Fig. 12), and with fairly regular, longitudinal, linear sculptural impressions; second to fifth gastral tergites each with 3 and 3 setae arranged transversely; ovipositor and associated structures small, 112-126 in length, the gonostyli only slightly extruded apically.

Described from 7 females (holotype and paratypes) collected by D. P.

Annecke in a suction trap at Rosebank, Cape Province, during June, August and September, 1960, these specimens all mounted in Canada Balsam after treatment in caustic soda.

Additional specimens before me consist of a single female from each of the following widely separated localities: Pretoria, Transvaal; Louis Trichardt, Transvaal, and Plettenberg Bay, Cape Province; the first two of these were taken in suction traps and the third on a window by D. P. Annecke. These specimens present certain small differences from the foregoing described material, particularly in size and colour, and I therefore limit the type series to the Rosebank material, although there is no satisfactory evidence that all the specimens are not conspecific.

All materials studied are deposited in the collection of the Division of Entomology, Pretoria.

REFERENCES.

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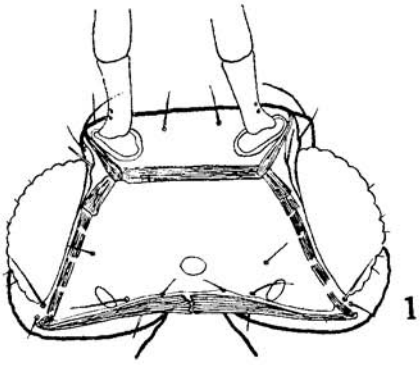
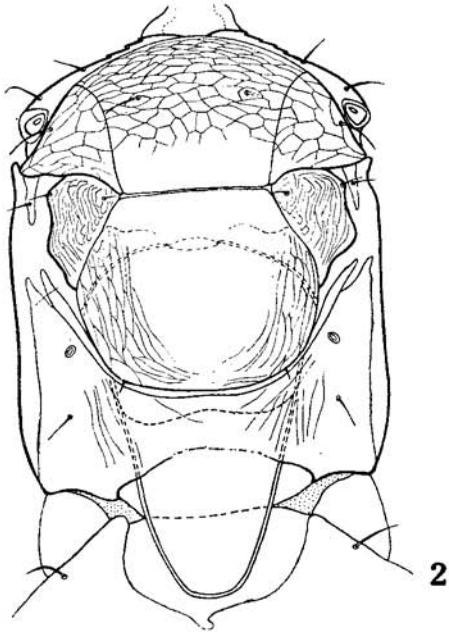
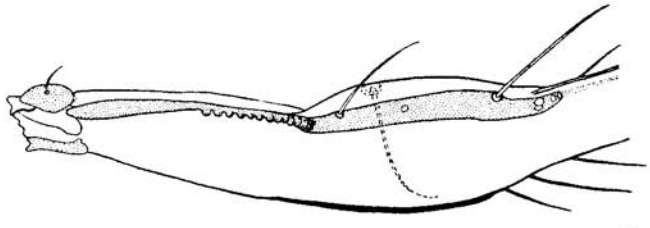
2. Ogloblin, A. A., 1946, Descriptions of new genera and species of Mymaridae. Iowa St. Coll. J. Sci. 20(3): 277-95.







Figs. 1—4. *Decamymar magniclavae* new genus and new species, female. 1. Head, dorsal (paratype T 16-3); 2. Thorax, dorsal (holotype); 3. Forewing venation (paratype T 16-3); 4. Left antenna, lateral (holotype).

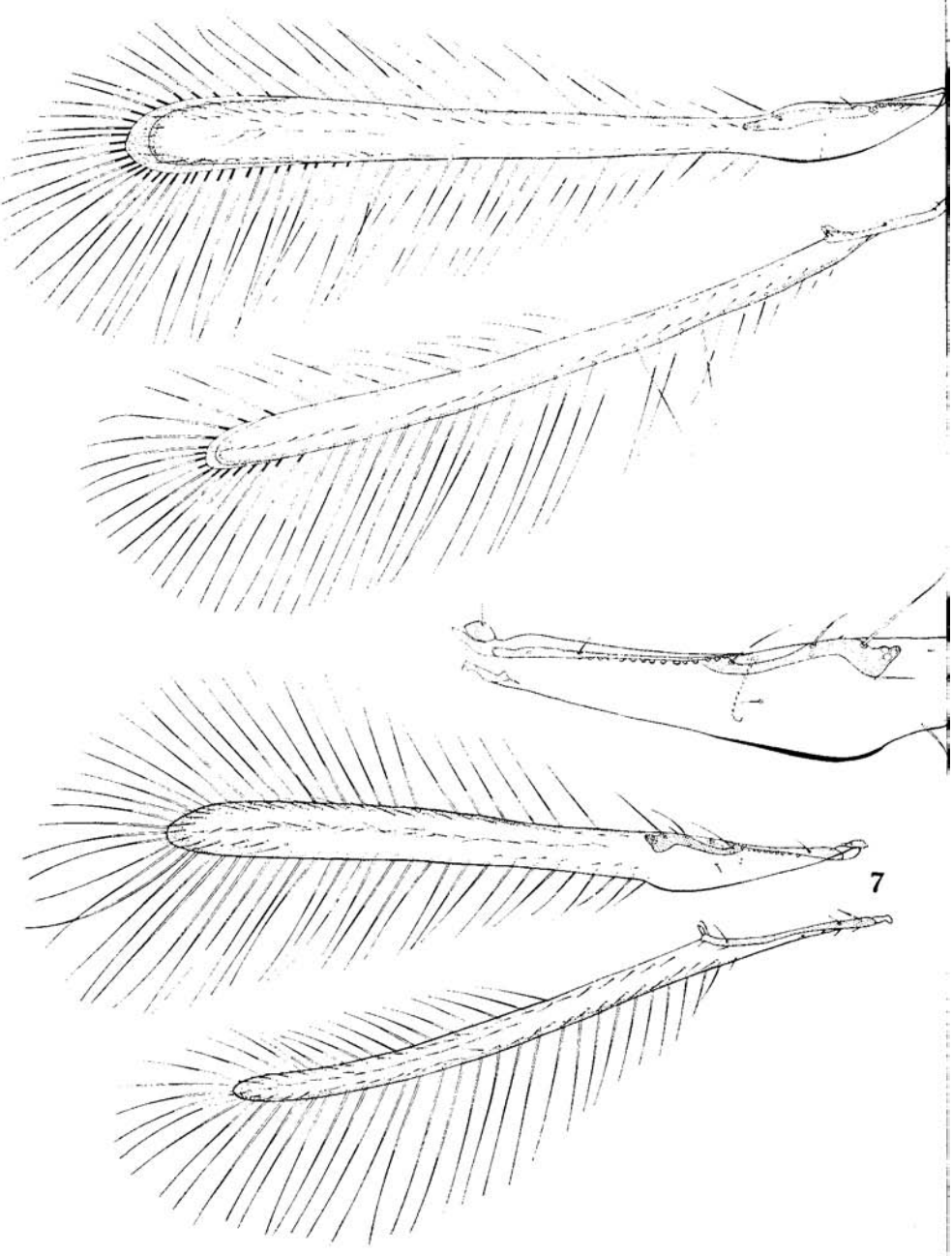
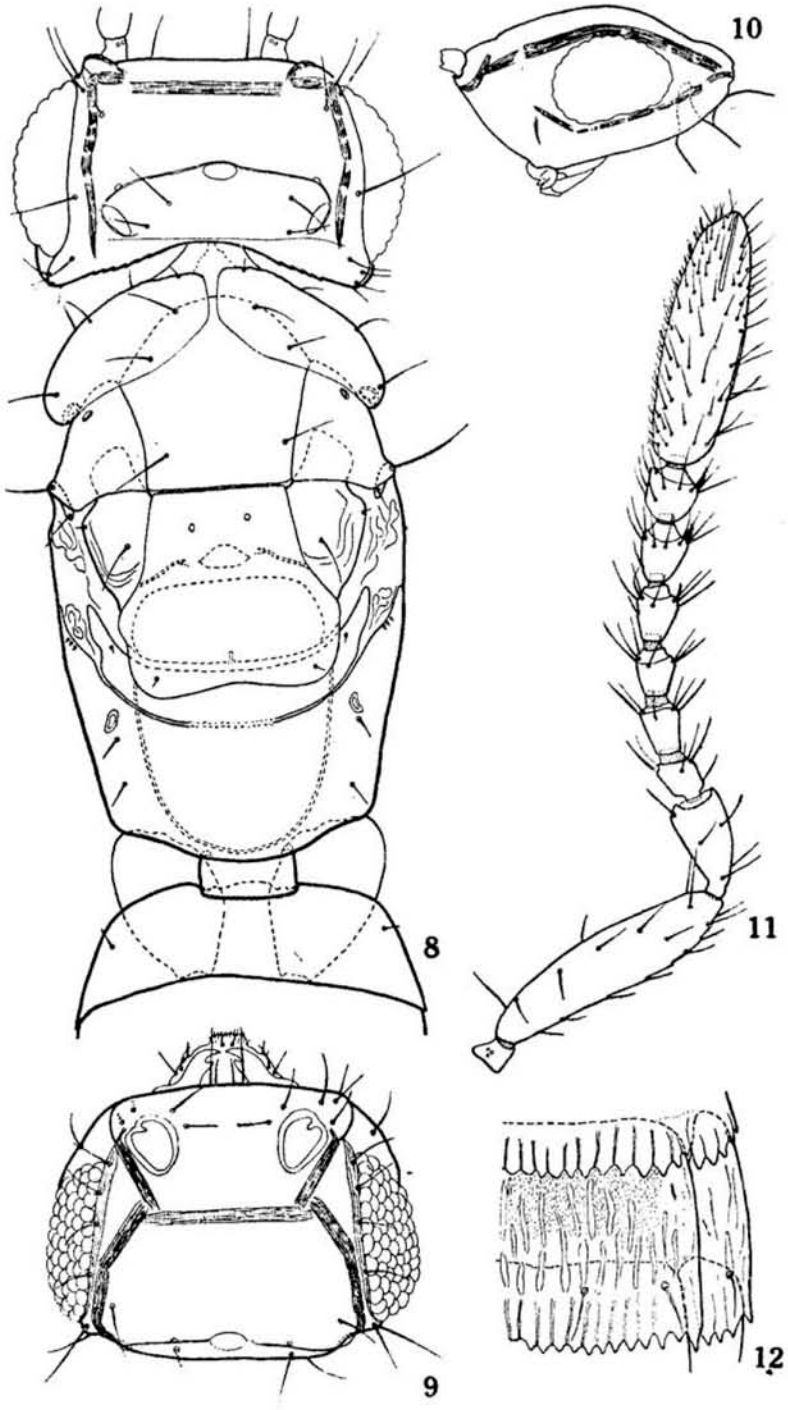


Fig. 5. *Decamymar magniclavae* new genus and new species, female, left fore and hind wings (paratype T 16-2).

Figs. 6-7. *Douttiella depressa* new genus and new species, female. 6. Forewing venation (paratype T 35-1); 7. Left fore and hind wings (holotype).



Figs. 8-12. *Douttiella depressa* new genus and new species, female. 8. Thorax, dorsal (holotype); 9. Head, anterodorsal (paratype T 35-1); 10. Head, lateral (paratype T 35-2); 11. Right antenna, lateral (holotype); 12. Fifth abdominal tergite, right half, to show sculpture and sinuolate hind margin (paratype T 35-3). Figs. 1-12 del. Mrs. J. Meyer.