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A Review of the Spider Genus *Mysmenopsis* (Araneae, Mysmenidae)

NORMAN I. PLATNICK¹ AND MOHAMMAD U. SHADAB²

ABSTRACT

Mysmenopsis is redefined to include those mysmenids with cusps on the male palpal tibia, and a key to the New World genera of Mysmenidae is presented. The genus *Lucarachne* Bryant is newly synonymized with *Mysmenopsis*. A key, diagnoses, supplementary illustrations, and a cladogram are provided for the 17 known species, found from Mexico, Florida, and the West Indies south to Peru and Brazil. Five species are reported to be kleptoparasites

living on the webs of diplurid spiders. Eight new species are described: *M. ischnamigo* from Panama and Trinidad, *M. dipluramigo* and *M. gamboa* from Panama, *M. kochalkai* from Colombia, *M. penai* from Ecuador, *M. archeri* from Brazil, and *M. wygodzinskyi* and *M. schlingeri* from Peru. The females of *M. cidrelicola* (Simon) and *M. beebei* (Gertsch) are described for the first time.

INTRODUCTION

This is the second paper in a series on the spiders placed in the family Symphytognathidae prior to its relimitation by Forster and Platnick (1977), and reviews the species previously assigned to the genera *Mysmenopsis* Simon and *Lucarachne* Bryant. It is prompted by the need of spider behaviorists for names for several undescribed species currently being studied because of their kleptoparasitic (food stealing) habits. As most of the published work on this group is relatively recent, available descriptions are generally adequate and accompanied by satisfactory illustrations. We therefore present here only a review designed to allow rapid identifications. A key and diagnoses for all known forms are provided, but descriptions are

given only for new species and previously unknown females of two described species.

The genus *Lucarachne* was established by Bryant (1940) for a Cuban species (*L. tibialis*) remarkable for the swollen tibia of the male palp (figs. 59, 60) and the curiously modified front legs (figs. 61, 62). Bryant was uncertain of its familial position but placed the genus in the Metinae (Araneidae) and pointed out its close relationship to *Theridion cidrelicola* Simon (Theridiidae), described from Venezuela (although she did not transfer that species to *Lucarachne*). A second species (*L. palpalis* from Honduras) was added by Kraus (1955), who transferred the genus to the Theridiosomatinae without explanation. Forster (1959)

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noted that *L. palpalis* lacks lungbooks and transferred the genus to the Symphytognathidae, a placement accepted by Gertsch (1960), who transferred *T. cidrelicola* to *Lucarachne* and described a fourth species (*L. beebei*) from Trinidad. Gertsch placed the genus within the subfamily Mysmeninae and argued that it is closely related to *Mysmenopsis*, a genus described by Simon (1897) on the basis of two species (*M. femoralis* and *M. funebris*) from St. Vincent, British West Indies, that had been ignored by all subsequent workers. Gertsch also transferred two species described by Levi (1956), *Mysmena ixlitla* from Mexico and *Mysmena cymbia* from Florida, to *Mysmenopsis*, and described an additional species (*M. mexcala*) from Mexico. Brignoli (1970) pointed out that the presence of clasping spurs on the male front legs (fig. 6) and similarities of the palpal tibia between *Lucarachne* and *Mysmenopsis* support Gertsch's association of the two genera and his placement of them in the Mysmeninae (elevated to the family level by Forster and Platnick, 1977).

The type species of *Mysmenopsis*, *M. femoralis*, has a large ventral tubercle on the female femur I (fig. 7) of a sort found only in a small group of species including *L. cidrelicola* and *L. beebei*. Since females of the latter two species were unknown to Gertsch, and since he had examined no specimens of Simon's two St. Vincent species but only illustrations of them prepared by H. W. Levi, Gertsch was unaware that *L. cidrelicola* and *L. beebei* are more closely related to *M. femoralis* than to the type species of *Lucarachne*.

The three additional North American species placed in *Mysmenopsis* by Gertsch differ markedly from all others of either genus in male palpal structure and in the presence of sclerotized spots on the venter of the female femur I like those found in *Mysmena* (Kraus, 1967, figs. 10, 24, 25), *Trogloneta* (Thaler, 1975, fig. 15), and also (although apparently not previously reported) in *Maymena*. However, there is a character that supports the association of the three North American *Mysmenopsis* species with the others and with *Lucarachne*: all of these species bear a distal ledge on the male palpal tibia that carries from one to several cusps. These cusps are often conspicuous (as in

fig. 54), but are sometimes reduced in size and hence have been overlooked in some published illustrations (such as Levi, 1956, figs. 43-47). Such cusps are apparently not found in any other mysmenids, and Gertsch's concept of the genus *Mysmenopsis*, when modified by the inclusion of *Lucarachne*, seems defensible on the basis of this synapomorphy in spite of the great variation in palpal morphology shown by the included species. We therefore synonymize *Lucarachne* with *Mysmenopsis* below.

A hypothesis of interrelationships of the 17 known species of *Mysmenopsis* is presented in figure 1. The numbers beside the branches refer to the following characters that appear to be unique to (i.e., synapomorphic for) each branch:

- 1: the presence of one or more cusps distally on the male palpal tibia (the males of *M. femoralis*, *M. wygodzinskyi*, and *M. schlingeri* are unknown but are here predicted to have such cusps);
- 2: restriction of the embolus to the face of the male palpal bulb (in *M. cymbia* and other genera such as *Mysmena* and *Maymena* the embolus encircles the palpal bulb and/or cymbium); this branch may also be defined by the presence of a subapical clasping spur on the male tibia I as well as metatarsus I (lacking in *M. cymbia*), but similar (although apical) tibial spurs occur in a few *Mysmena* and *Maymena*;
- 3: the embolus has six or more coils on the face of the male palpal bulb (Gertsch, 1960, figs. 45, 46);
- 4: the male palpal tibia is elongated and originates from a proximal pedicel (as in fig. 11); predictions analogous to those of character 1 are implied;
- 5: the female femora I and II lack a sclerotized subdistal ventral spot (females of *M. mexcala* are unknown but are here predicted to have such spots, whereas the unknown females of *M. penai* are predicted to lack them);
- 6: the female spermathecae have conspicuous anterior ducts (figs. 58, 64, 66, 70);
- 7: the female metatarsus I has a series of sharp spines (figs. 62, 67, 71);
- 8: the male embolus is shorter than the

- tegulum (in the branch defined by character 6 the embolus is somewhat longer than the tegulum; in *M. cymbia*, *M. mexcala*, *M. ixlitla*, and most *Mysmena* and *Maymena* it is much longer than the tegulum);
- 9: the male palpal tibia is globose (as in fig. 5);
- 10: the male palpal tibia is incrassate and larger than the tarsus (figs. 41, 47, 50);
- 11: the female epigynum has a median arch on its posterior plate (figs. 45, 53; females of *M. penai* are unknown but are here predicted to have such an arch);
- 12: the dorsal ledge of the male palpal tibia is modified into a sharp spur (figs. 46, 49);
- 13: the female femur I has a large median ventral tubercle (as in fig. 7; the female of *M. schlingeri* also has a femoral tubercle but it is small, apical, and prolaterally situated);
- 14: the female spermathecae are fused to the posterior epigynal plate (figs. 33, 39);

- 15: the female epigynum is heart-shaped (as in fig. 8);
- 16: the female spermathecae are nearly contiguous (figs. 9, 15);
- 17: the male palpal tegulum is narrowed distally (figs. 16, 22);
- 18: the male tibia I has two clasping spurs (figs. 18, 24).

The unresolved trichotomy (involving *M. tibialis*, *M. wygodzinskyi*, and *M. schlingeri*) is due not to character contradictions but simply to lack of information; only females of the last two species are known (they are more similar to each other in epigynal features than either is to *M. tibialis*). Of interest is the presence of species previously assigned to *Mysmenopsis* in four separate clades and of those previously assigned to *Lucarachne* in two separate clades.

The geographical distribution of these species is summarized in figures 2 and 3. If these species originated allopatrically, the possible sympatric occurrence of two species on St.

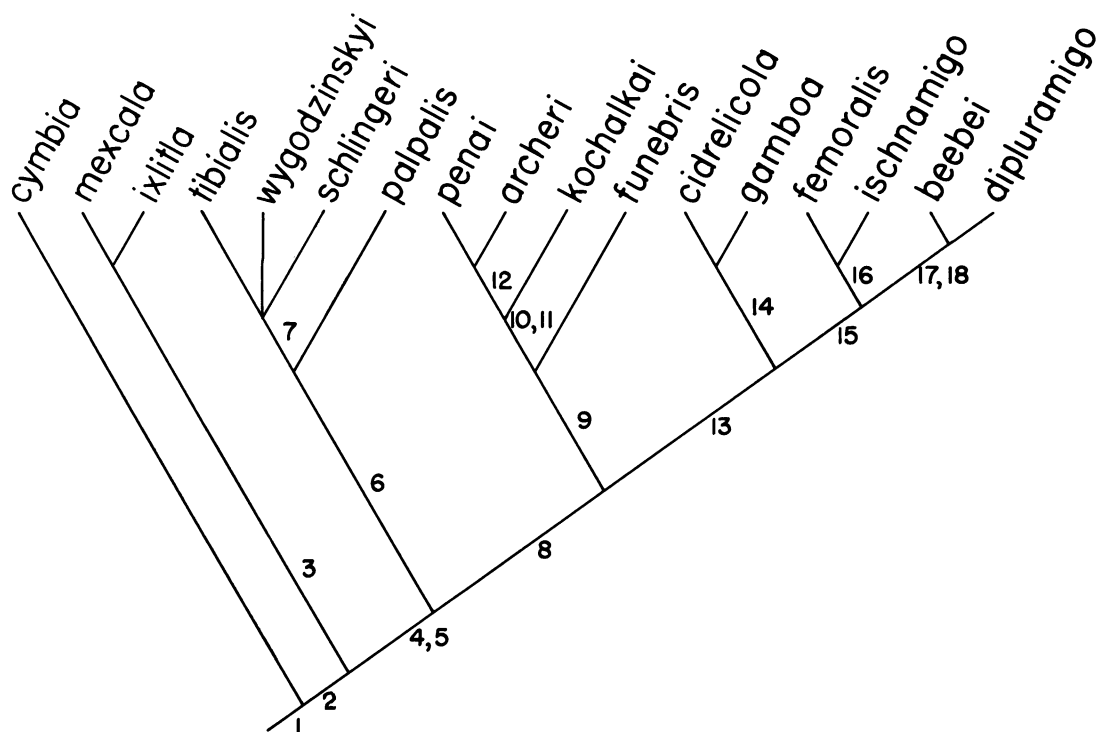


FIG. 1. Cladogram of *Mysmenopsis*. See text for explanation.



FIG. 2. Middle America, showing known records of *Mysmenopsis cymbia* (1), *M. ixtitla* (2), *M. mexicana* (3), *M. palpalis* (4), and *M. tibialis* (5).

Vincent, three species in central Panama, and three species on Trinidad indicates that five dispersal events may have occurred in the history of the group. The presence of *M. ischnamigo*, new species, in both Panama and Trinidad is suspicious but we have found no characters suitable for distinguishing the small samples of the two populations available. The branch defined by character 13 is geographically compact, occurring from Panama across northern Venezuela to Trinidad and St. Vincent. Surprisingly, however, the closest relatives of *L. kochalkai*, a new species from the Sierra Nevada de Santa Marta, northern Colombia, are not the members of that northern South American clade, but species found in northern Ecuador and southeastern Brazil.

Five species (*M. cidrelicola*, *M. palpalis*, *M. ischnamigo*, *M. dipluramigo*, and *M. gamboa*) are now known to occur on the webs of diplurid spiders. This phenomenon was first reported by H. M. Peters (in Kraus, 1955), who found specimens of *M. palpalis* (including females with egg sacs) moving about on the webs of *Ischnothele digitata* (O. P.-Cambridge) at Copán, Honduras. Specimens of *M. cidrelicola* were found living on webs of *Diplura* sp. in a cloud forest at Rancho Grande, Venezuela, by W. B. Peck in 1970. Three species with similar habits are currently being studied by F. Vollrath and L. Kirkendall in and around the Panama Canal Zone. As Kirkendall reported (*in litt.*) that the *Mysmenopsis* "attempt to climb

undetected onto the diplurid bolus while the diplurid is actually feeding on it," the relationship must be considered kleptoparasitic. This is also the case for the tiny Panamanian symphytognathid *Curimagua bayano*, which can apparently wander over the body of its diplurid host with impunity (F. Vollrath, personal commun.).

Of interest is that four of the five known kleptoparasitic species of *Mysmenopsis* belong to a single clade, from which one might predict that the other members of that clade (*M. femoralis* and *M. beebei*) will eventually be found to have similar habits. It is possible that the fifth species, *M. palpalis*, is misplaced in our cladogram (if the anterior epigynal ducts, character 6, are not all homologous to each other); the genitalia of both sexes of *M. palpalis* are highly autapomorphic, but the long embolus and lack of a ventral tubercle on the female femur I seem to preclude the species from being a member of (or the sister group to) the clade containing the other kleptoparasites. Little can be said as yet about possible co-

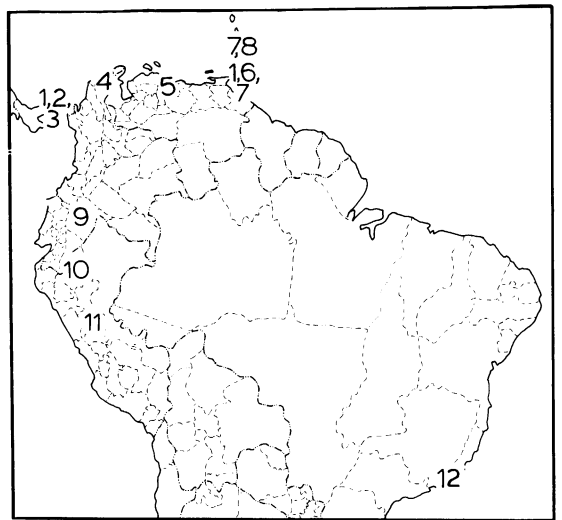


FIG. 3. South America, showing known records of *Mysmenopsis ischnamigo* (1), *M. dipluramigo* (2), *M. gamboa* (3), *M. kochalkai* (4), *M. cidrelicola* (5), *M. beebei* (6), *M. funebris* (7), *M. femoralis* (8), *M. penai* (9), *M. wygodzinskyi* (10), *M. schlingerii* (11), and *M. archeri* (12).

evolution between the parasite and host species; the primitive state of diplurid taxonomy precludes anything more than tentative identifications. From the specimens made available by Kirkendall, it appears that both *M. dipluramigo* and *M. gamboa* occur on the webs of *Diplura* sp. in central Panama (although *Diplura* has not previously been recorded from Panama) and that *M. ischnamigo* occurs in that area on the webs of the Panamanian spiders identified as *Ischnothele guianensis* (Walckenaer) by Petrunkevitch (1925), which may not actually belong to that species.

We are indebted to the following colleagues for the loan and gift of specimens: Mr. L. Kirkendall, University of Michigan (LK); Mr. J. A. Kochalka, University of Vermont (JAK); Dr. H. W. Levi, Museum of Comparative Zoology, Harvard University (MCZ); Dr. W. B. Peck, Central Missouri State University; Mr. F. R. Wanless, British Museum (Natural History), (BMNH); and Dr. T. J. Zavortink, formerly of the California Academy of Sciences (CAS).

All measurements cited below are in millimeters.

MYSMENIDAE SIMON

Mysmeneae Simon, 1922, p. 200; 1926, p. 311.

Mysmeninae: Petrunkevitch, 1928, p. 45. Gertsch, 1960, p. 9.

Mysmenidae: Forster and Platnick, 1977, p. 2.

DIAGNOSIS: The following diagnosis is tentative and based only on the genera occurring in the New World; at present, the Old World genera assigned to this group (*Cepheia*, *Synaphris*, *Taphiassa*, and *Phricotelus*; see Levi, 1972, p. 534, for this last genus and three others there informally assigned to the "Symphytognathidae" but overlooked by Forster and Platnick, 1977) are too poorly known to be included. The family (erroneously attributed to Petrunkevitch, 1928, by Forster and Platnick, 1977) is most easily recognized by the clasping spurs on the male metatarsus I (and occasionally tibia I as well). Among the other tiny lungless araneoids that might be confused with mysmenids, many species of Anapidae have similar structures (usually called "thorns"), but the thorns are simple extensions of the cuticle, whereas the clasping spurs are separate struc-

tures covered with cuticle for no more than half their length (fig. 42). In addition, the cymbium of the male palp seems in mysmenids always to be provided with lobes or apophyses (see, for example, Kraus, 1967, figs. 6, 19). Female mysmenids usually have a ventral sclerotized spot subdistally on femur I (and often femur II as well), but this has been lost in most *Mysmenopsis* species. Thaler (1975, p. 289) suggested that the femoral spot is present in *M. femoralis* but was misled by a sketch (Gertsch, 1960, fig. 39); the femoral tubercle found in that and related species is a different structure entirely from the femoral spot. Finally, the tiny denticles scattered between the cheliceral teeth previously reported in *Mysmena* (Forster, 1959, fig. 163), *Maymena* (Brignoli, 1974, fig. 9E), and *Trogloneta* (Thaler, 1975, fig. 12) also occur in *Mysmenopsis* and are probably diagnostic of the family.

KEY TO NEW WORLD GENERA OF MYSMENIDAE

1. Anterior median eyes smaller than anterior laterals *Trogloneta*
Anterior median eyes equal to or larger than anterior laterals 2
2. Anterior median eyes well separated from anterior laterals *Maymena*
Anterior median eyes approximate to anterior laterals 3
3. Male palpal tibia with one or more distal cusps (as in fig. 16). Female epigynum with distinct posterior plate (as in fig. 9) ... *Mysmenopsis*
Male palpal tibia without distal cusps. Female epigynum without posterior plate .. *Mysmena*

MYSMENOPSIS SIMON

Mysmenopsis Simon, 1897, p. 865 (type species, designated by Simon, 1903, p. 991, *Mysmenopsis femoralis* Simon).

Lucarachne Bryant, 1940, p. 349 (type species by original designation *Lucarachne tibialis* Bryant).
NEW SYNONYMY.

DIAGNOSIS: *Mysmenopsis* may be distinguished from the other New World mysmenid genera by the characters listed in the key above. Specimens are unlikely to be confused with *Trogloneta* or *Maymena* because of their eye pattern, and can generally be distinguished

from *Mysmena* by the abdominal color pattern, which typically involves a lattice of white lines on a dark background (Levi, 1956, fig. 36; Kraus, 1955, fig. 79), as well as by the diagnostic genitalic features listed in the key.

DESCRIPTION: Total length 0.8-2.6. Carapace typically olive brown, pars cephalica darkest, with lighter bands spreading from thoracic groove. Sternum and labium olive brown, endites and chelicerae light brown. Abdomen typically brown with lattice of three longitudinal and five transverse white bands outlining four pairs of dark rectangles. Legs yellow, typically with proximal, median, and distal dark rings on femora and distal dark rings on patellae, tibiae, and metatarsi. Carapace length and width subequal, moderately elevated in both sexes, smooth, with scattered weak hairs; pars thoracica depressed medially; ocular area on anterior protuberance (larger in males than females); clypeal height three to four times the anterior median eye diameter. Ratio of eyes, anterior lateral:anterior median:posterior lateral:posterior median, 4:6:4:5. Anterior medians separated by slightly more than their diameter, almost touching anterior laterals; eyes of posterior row separated by diameter of posterior medians; lateral eyes of each side touching. Median ocular quadrangle wider in front than in back (18/14), wider than long (18/15). From above, both eye rows recurved. Chelicerae with three large promarginal teeth, one or two small retromarginal teeth, and numerous scattered tiny denticles. Endites wider distally than proximally; labium fused to sternum, rebordered, constricted behind middle; sternum with semicircular anterior depression, triangular, extending between posterior coxae. Abdomen with long setae; spinnerets with triangular colulus; respiratory system illustrated by Forster (1959, fig. 149). Leg formula 1243. Patellae with distal, tibiae with proximal bristles. Femur I expanded. Male tibia I (except in *M. cymbia*) and metatarsus I with clasping spurs. Female femur I sometimes with ventral or prolateral tubercle and ventral subdistal sclerotized spots. Female metatarsus I sometimes with series of sharp spines. Male palpal tibia bulbous, bearing distal ledge (often subdivided into ventral and dorsal portions) carrying one or

more cusps. Cymbium with one or more lobes. Female epigynum with posterior plate (presumably exposed during mating).

SYNONYMY: The synonymy of *Lucarachne* is justified in the Introduction.

KEY TO SPECIES OF *MYSMENOPSIS*

1. Males 2
Females 15
2. Embolus longer than cymbium, coiled 3
Embolus shorter than cymbium, not coiled ... 5
3. Embolus coiling around tegulum (Levi, 1956, figs. 43-47); Florida *cymbia*
Embolus coils restricted to face of palpal bulb; Mexico 4
4. Embolus with six coils; palpal tibia with seven cusps (Gertsch, 1960, fig. 45); San Luis Potosí *ixlitla*
Embolus with eight coils; palpal tibia with four cusps (Gertsch, 1960, fig. 46); Guerrero *mexcala*
5. Tibia I with two clasping spurs (figs. 18, 24) .. 6
Tibia I with one clasping spur 7
6. Embolus relatively narrow at base (fig. 16); Trinidad *beebei*
Embolus relatively wide at base (fig. 22); Panama *dipluramigo*
7. Embolus longer than tegulum (figs. 54, 59) .. 8
Embolus shorter than tegulum 9
8. Palpal tibia with six large cusps (fig. 54); Mexico and Honduras *palpalis*
Palpal tibia with two small cusps (fig. 59); Cuba *tibialis*
9. Palpal tibia globose (figs. 5, 41, 47, 50) .. 10
Palpal tibia elongate (figs. 11, 29, 35) 13
10. Palpal tibia smaller than tarsus (figs. 4, 5); St. Vincent and Trinidad *funnebris*
Palpal tibia larger than tarsus (figs. 41, 47, 50) 11
11. Dorsal ledge of palpal tibia spurlike (figs. 46, 49) 12
Dorsal ledge of palpal tibia square (fig. 40); Colombia *kochalkai*
12. Dorsal ledge of palpal tibia relatively small (fig. 46); Ecuador *penai*
Dorsal ledge of palpal tibia relatively large (fig. 49); Brazil *archeri*
13. Embolus relatively narrow (fig. 10); Panama and Trinidad *ischnamigo*
Embolus relatively wide (figs. 28, 34) 14
14. Embolus bifid; palpal tibia with four cusps (fig. 34); Panama *gamboa*
Embolus entire; palpal tibia with two cusps (fig.

- 28); Venezuela *cidrelicola*
15. Femur I with a tubercle (as in figs. 7, 37, 68) 16
Femur I without a tubercle, with at most a slight swelling (fig. 43) 22
16. Metatarsus I with a row of sharp spines (fig. 71); Peru *schlingeri*
Metatarsus I without a row of sharp spines... 17
17. Spermathecae fused to posterior epigynal plate (figs. 33, 39) 18
Spermathecae not fused to posterior epigynal plate 19
18. Epigynum with a hood (fig. 38); Panama *gamboa*
Epigynum without a hood (fig. 32); Venezuela *cidrelicola*
19. Spermathecae approximate (figs. 9, 15) 20
Spermathecae widely separated (figs. 21, 27) 21
20. Spermathecae produced anteriorly at sides (fig. 15); Panama and Trinidad *ischnamigo*
Spermathecae not produced anteriorly at sides (fig. 9); St. Vincent *femoralis*
21. Epigynum with distinct anterior margin (fig. 26); Panama *dipluramigo*
Epigynum without distinct anterior margin (fig. 20); Trinidad *beebei*
22. Metatarsus I with a row of sharp spines (figs. 62, 67) 23
Metatarsus I without a row of sharp spines. 24
23. Epigynum on long lobe (figs. 63, 64); Cuba *tibialis*
Epigynum not on long lobe (figs. 65, 66); Peru *wygodzinskyi*
24. Femora I and II with ventral subdistal sclerotized spot 25
Femora I and II without sclerotized spot... 26
25. Posterior epigynal plate with oblique anterior extensions laterally; Florida *cymbia*
Posterior epigynal plate without anterior extensions, with simple transverse anterior border (as in fig. 15); Mexico *ixtlita*
26. Posterior epigynal plate with median arch (figs. 45, 53) 27
Posterior epigynal plate without median arch. 28
27. Posterior epigynal margin invaginated at middle (figs. 44, 45); Colombia *kochalkai*
Posterior epigynal margin not invaginated at middle (figs. 52, 53); Brazil *archeri*
28. Spermathecae with convoluted anterior ducts (fig. 58); Mexico and Honduras... *palpalis*
Spermathecae without convoluted anterior ducts (Gertsch, 1960, fig. 40); St. Vincent. *funebri*

Mysmenopsis femoralis Simon
Figures 7-9

Mysmenopsis femoralis Simon, 1897, p. 865 (two female syntypes from St. Vincent, British West Indies, in BMNH, examined); 1903, p. 991. Gertsch, 1960, p. 24, figs. 37-39.

DIAGNOSIS: *Mysmenopsis femoralis* seems closest to *M. ischnamigo* but may be distinguished by the anteriorly unexpanded spermathecae (fig. 9).

MALE: Unknown.

FEMALE: Described by Simon (1897) and Gertsch (1960).

MATERIAL EXAMINED: Only the syntypes; Levi (in Gertsch, 1960) reported that additional specimens from the type locality are in the Muséum National d'Histoire Naturelle, Paris.

Mysmenopsis ischnamigo, new species
Figures 10-15

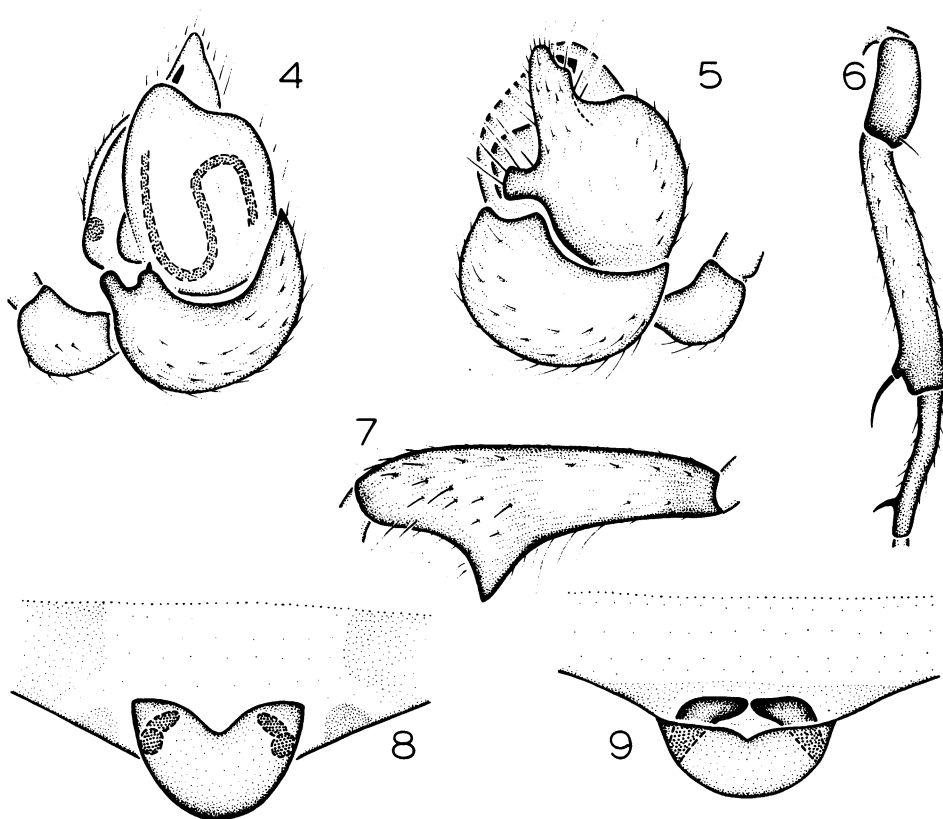
TYPES: Male holotype and female paratype from web of Dipluridae, probably *Ischnothele guianensis* (Walckenaer), amid palm fronds at Cerro Galera, Canal Zone, Panama (August 12, 1976; L. Kirkendall), deposited in AMNH courtesy of Mr. Kirkendall.

ETYMOLOGY: The specific name is from the stem of the genus *Ischnothele* and the Spanish *amigo* (friend), referring to the occurrence of the species in diplurid webs.

DIAGNOSIS: *Mysmenopsis ischnamigo* seems closest to *M. femoralis* but may be distinguished by the anteriorly expanded spermathecae (fig. 15); males of the latter species are unknown but males of the former can be easily recognized by the single large cusp on the palpal tibia.

MALE: Total length 1.01. Carapace 0.54 long, 0.52 wide, 0.20 high. Abdomen 0.50 long, 0.54 wide, 0.52 high. Tibiae I and II with additional median dark ring.

	I	II	III	IV
Femur	0.65	0.54	0.47	0.52
Patella	0.18	0.18	0.16	0.17
Tibia	0.54	0.40	0.27	0.43
Metatarsus	0.25	0.25	0.25	0.32
Tarsus	0.25	0.36	0.29	0.32
Total	1.87	1.73	1.44	1.76



FIGS. 4-9. 4-6. *Mysmenopsis funebris* Simon. 4. Palp, retrolateral view. 5. Palp, prolateral view. 6. Male tibia and metatarsus I, anterior view. 7-9. *M. femoralis* Simon. 7. Female femur I, prolateral view. 8. Epigynum, ventral view. 9. Vulva, dorsal view.

Clasping spur on tibia I apically curved (fig. 12). Palpal tibia with long ventral ledge bearing single large cusp retrolaterally (fig. 10). Cymbium with single dorsal lobe (fig. 11).

FEMALE: Total length 1.06. Carapace 0.56 long, 0.58 wide, 0.27 high. Abdomen 0.58 long, 0.50 wide, 0.52 high. All tibiae with additional median dark ring.

	I	II	III	IV
Femur	0.66	0.54	0.47	0.54
Patella	0.17	0.18	0.16	0.14
Tibia	0.46	0.38	0.32	0.43
Metatarsus	0.29	0.29	0.29	0.34
Tarsus	0.32	0.32	0.27	0.31
Total	1.90	1.71	1.51	1.76

Femur I incrassate distally, with median tuber-

cle pointing distally (fig. 13). Epigynum heart-shaped (fig. 14). Spermathecae approximate, expanded anteriorly at sides (fig. 15).

MATERIAL EXAMINED: **Trinidad:** Arima Valley, elevation 800-1200 ft., Feb. 10-22, 1964 (P. Wygodzinsky and J. G. Rozen, Jr.; AMNH), 1♂; Simla, Arima Valley, Apr. 17, 1964 (A. M. Chickering, MCZ), 1♂; 10 mi. N of Simla on road to Blanchisseuse, Apr. 22, 1964 (A. M. Chickering, MCZ), 1♂.

Mysmenopsis beebei (Gertsch),
new combination
Figures 16-21

Lucarachne beebei Gertsch, 1960, p. 29, figs. 47, 48 (male holotype from Piarco, Trinidad, in AMNH, examined).

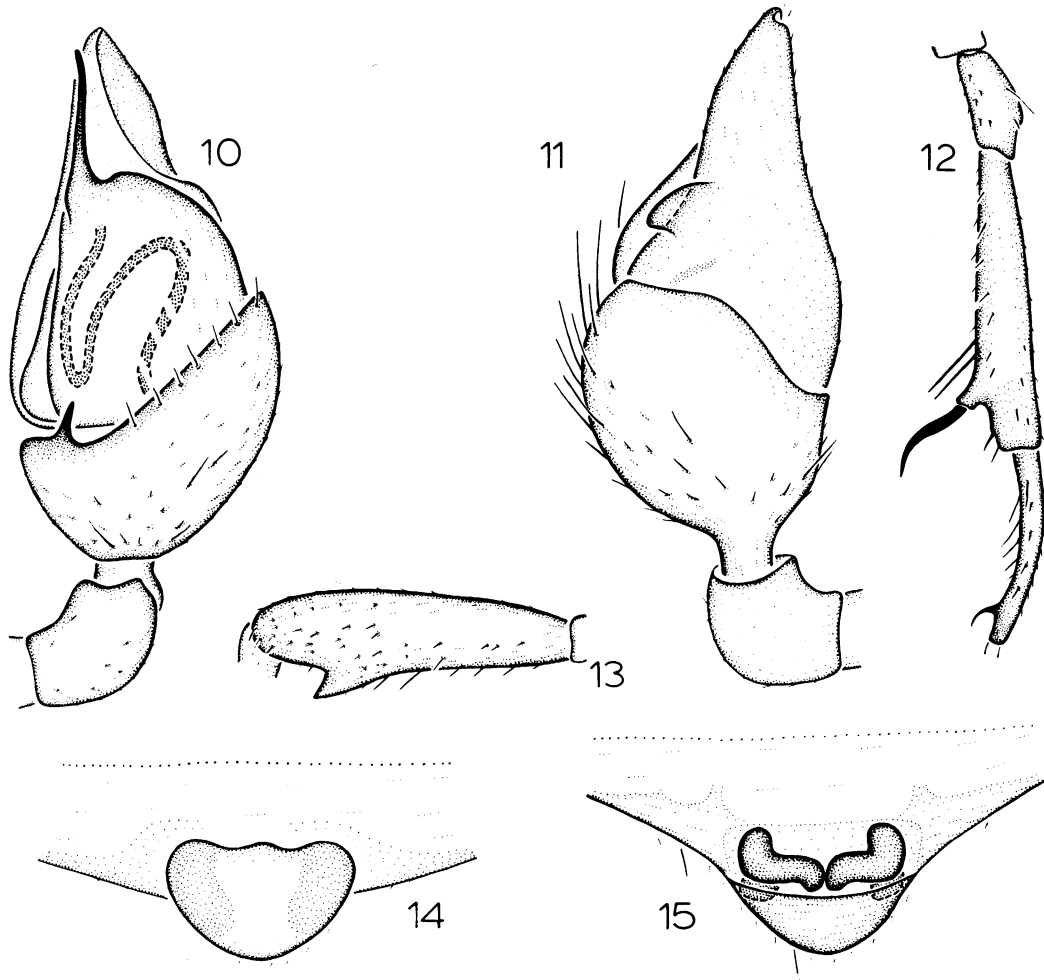
DIAGNOSIS: *Mysmenopsis beebei* seems clos-

est to *M. dipluramigo* but may be distinguished by the relatively narrow embolus (fig. 16) and the lack of a distinct anterior epigynal margin (fig. 20).

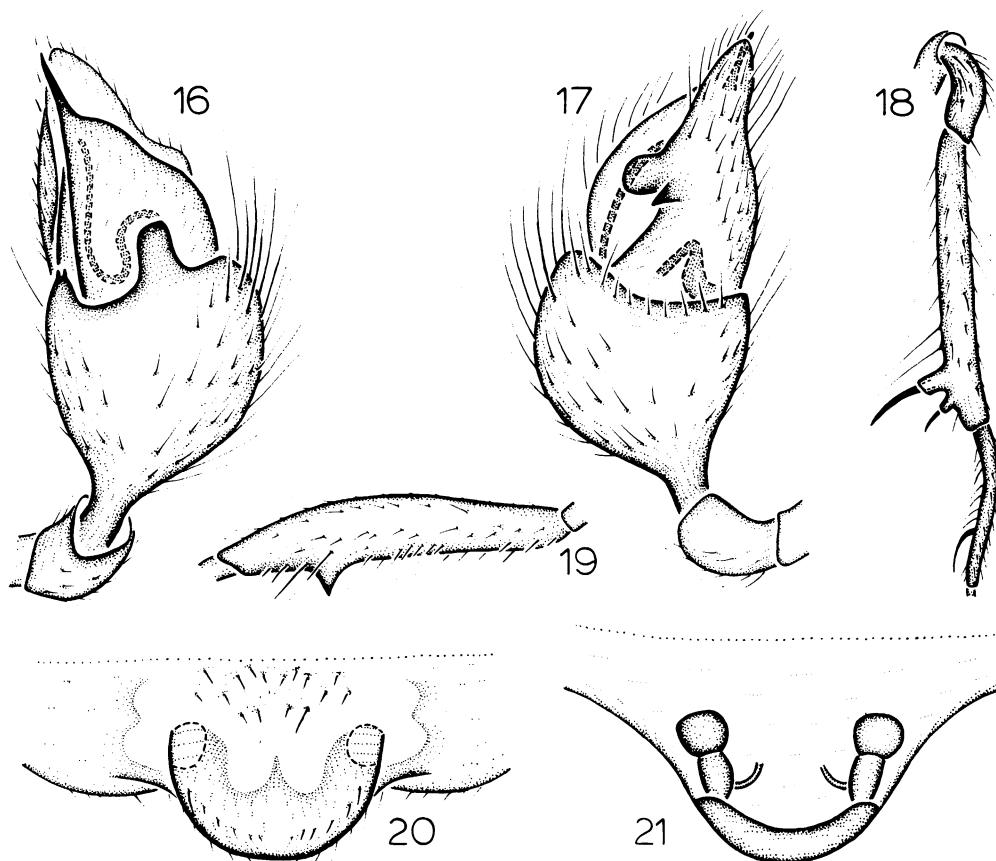
MALE: Described by Gertsch (1960).
FEMALE: Total length 1.69. Carapace 0.85 long, 0.58 wide, 0.26 high. Abdomen 0.84 long, 0.83 wide, 0.95 high. Femora I, II, and III almost uniformly darkened, femur IV with proximal and distal dark rings only; tibiae uniformly darkened; distal rings on metatarsi scarcely discernible.

	I	II	III	IV
Femur	0.97	0.83	0.65	0.72
Patella	0.25	0.25	0.22	0.18
Tibia	0.79	0.65	0.43	0.61
Metatarsus	0.58	0.52	0.47	0.52
Tarsus	0.54	0.49	0.42	0.44
Total	3.13	2.74	2.19	2.47

Femur I with slight dorsal tubercle on retro-lateral side near distal end and sharply pointed ventral tubercle (fig. 19). Epigynum heart-shaped, without distinct anterior margin (fig.



FIGS. 10-15. *Mysmenopsis ischnamigo*, new species. 10. Palp, retrolateral view. 11. Palp, prolateral view. 12. Male tibia and metatarsus I, anterior view. 13. Female femur I, prolateral view. 14. Epigynum, ventral view. 15. Vulva, dorsal view.



FIGS. 16-21. *Mysmenopsis beebei* (Gertsch). 16. Palp, retrolateral view. 17. Palp, prolateral view. 18. Male tibia and metatarsus I, anterior view. 19. Female femur I, prolateral view. 20. Epigynum, ventral view. 21. Vulva, dorsal view.

20). Spermathecae widely separated (fig. 21).

MATERIAL EXAMINED: **Trinidad:** Piarco, Nov. 27, 1954 (A. M. Nadler, AMNH), 2♂; March 1, 1959 (A. M. Nadler, AMNH), 1♀; Simla, Arima Valley, Apr. 17, 1964 (A. M. Chickering, MCZ), 1♂.

***Mysmenopsis dipluramigo*, new species**

Figures 22-27

Lucarachne beebei (misidentification): Chickering, 1960, p. 95, figs. 1-4.

TYPES: Male holotype and female paratype from web of Dipluridae, probably *Diplura* sp., 5.4 mi. past Gamboa Airport turnoff, Pipeline Road, Río Mendosa, Canal Zone, Panama

(July, 1976; L. Kirkendall), deposited in AMNH courtesy of Mr. Kirkendall.

ETYMOLOGY: The specific name is from the stem of the family Dipluridae and the Spanish amigo (friend), referring to the occurrence of the species in diplurid webs.

DIAGNOSIS: *Mysmenopsis dipluramigo* seems closest to *M. beebei* but may be distinguished by the relatively wide embolus (fig. 22) and the distinct anterior epigynal margin (fig. 26).

MALE: Total length 1.55. Carapace 0.94 long, 0.83 wide, 0.32 high. Abdomen 0.68 long, 0.79 wide, 0.81 high. Legs without dark markings. From above, posterior eye row straight.

	I	II	III	IV
Femur	1.30	1.08	0.70	0.83
Patella	0.37	0.32	0.22	0.20
Tibia	1.18	0.93	0.63	0.79
Metatarsus	0.53	0.79	0.65	0.65
Tarsus	0.55	0.61	0.47	0.50
Total	3.93	3.73	2.67	2.97

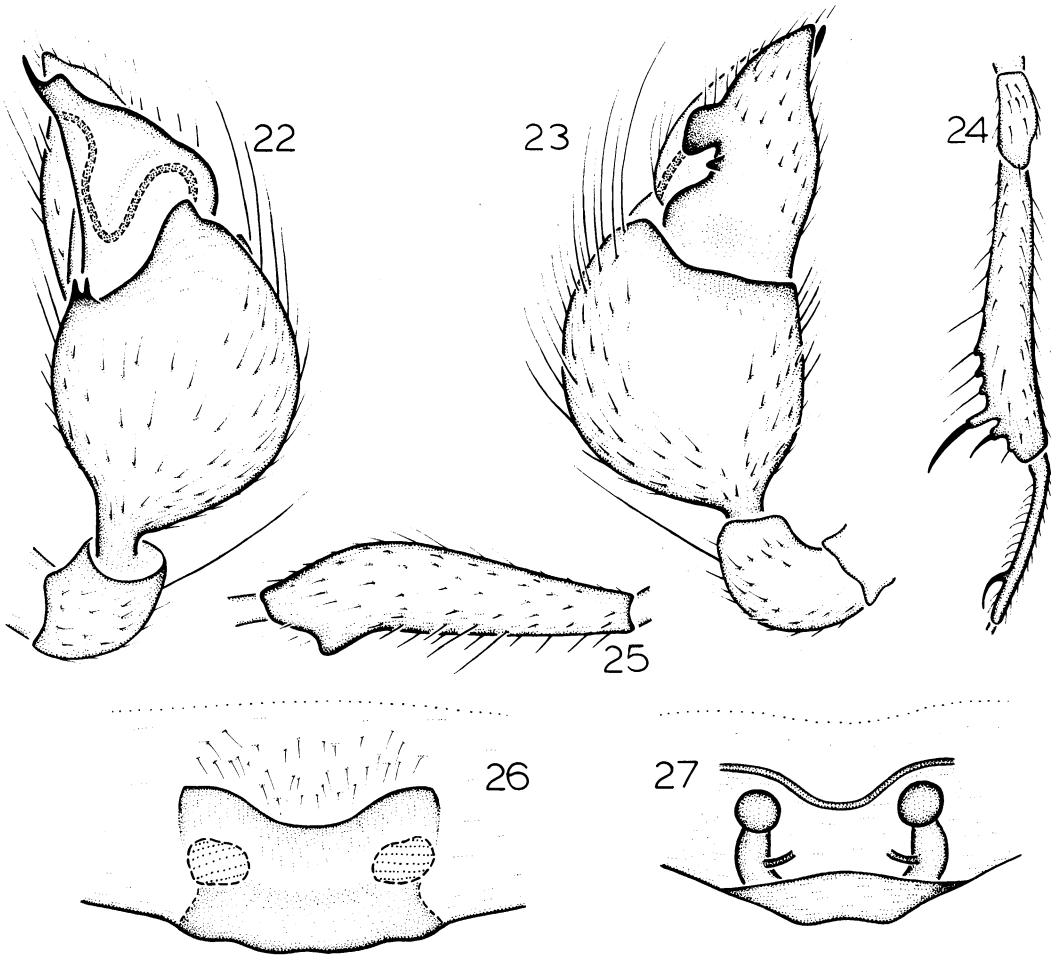
Tibia I with long and short clasp spurs (fig. 24). Ventral ledge of palpal tibia with two cusps, dorsal ledge rounded (fig. 22). Cymbium with two dorsal lobes (fig. 23).

FEMALE: Described by Chickering (1960).

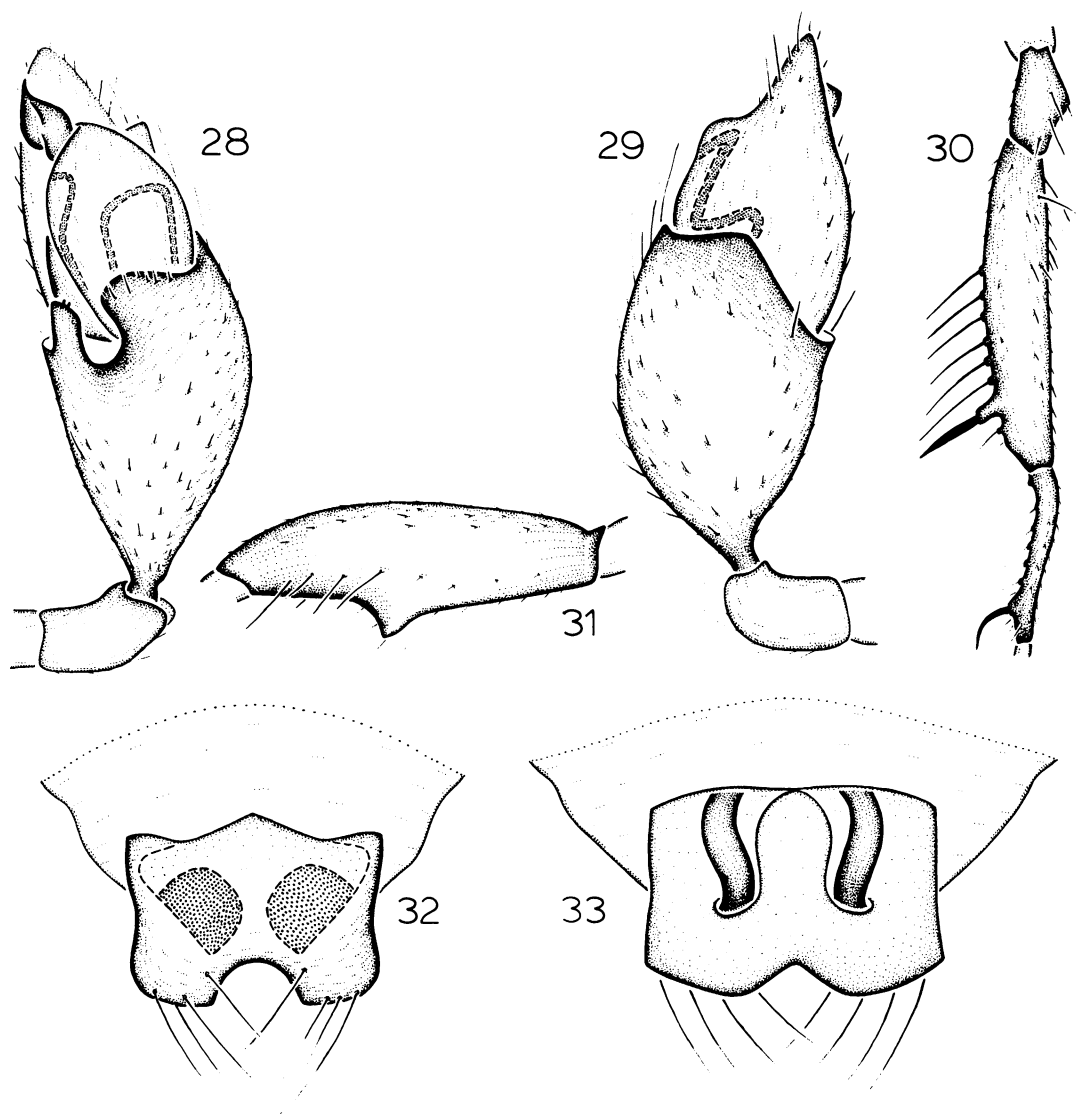
MATERIAL EXAMINED: **Panama:** Canal Zone: Río Mendosa, July, 1976 (L. Kirkendall, LK), 4♂, 2♀. Coclé: El Valle, July, 1936 (A. M. Chickering, MCZ), 1♂; 5 mi. S El Valle, Jan. 11, 1958 (A. M. Chickering, MCZ), 4♂, 11♀. Panamá: Bayano, Río Majé, in webs of Dipluridae, June 11, 1976 (L. Kirkendall, MCZ), 1♂, 1♀.

Mysmenopsis cidrelicola (Simon),
new combination
Figures 28-33

Theridion cidrelicola Simon, 1894, p. 539, figs.



FIGS. 22-27. *Mysmenopsis dipluramigo*, new species. 22. Palp, retrolateral view. 23. Palp, prolateral view. 24. Male tibia and metatarsus I, anterior view. 25. Female femur I, prolateral view. 26. Epigynum, ventral view. 27. Vulva, dorsal view.



FIGS. 28-33. *Mysmenopsis cidrelicola* (Simon). 28. Palp, retrolateral view. 29. Palp, prolateral view. 30. Male tibia and metatarsus I, anterior view. 31. Female femur I, prolateral view. 32. Epigynum, ventral view. 33. Vulva, dorsal view.

547, 552 (male lectotype, designated by Gertsch, 1960, p. 29, from Colonia Tovar, Aragua, Venezuela, in Muséum National d'Histoire Naturelle, Paris, not examined; not fig. 553 or paralectotype female, =*Echinotheridion elicolum* Levi); 1895, p. 140 (male only).
Lucarachne cidrelicola: Gertsch, 1960, p. 28.

DIAGNOSIS: *Mysmenopsis cidrelicola* seems

closest to *M. gamboa* but may be distinguished by the invaginated palpal tibia (fig. 28) and posterior epigynal margin (fig. 32).

MALE: Described by Simon (1894, 1895).

FEMALE: Total length 1.66. Carapace 0.58 long, 0.57 wide, 0.25 high. Abdomen 1.12 long, 0.92 wide, 0.94 high. Legs with median and distal femoral dark rings fused, patellae

and tibiae almost uniformly darkened, and metatarsal rings scarcely discernible.

	I	II	III	IV
Femur	0.72	0.65	0.50	0.58
Patella	0.22	0.14	0.14	0.14
Tibia	0.58	0.47	0.36	0.50
Metatarsus	0.43	0.36	0.29	0.43
Tarsus	0.32	0.29	0.36	0.36
Total	2.27	1.91	1.65	2.01

Femur I with ventral tubercle near midpoint (fig. 31). Epigynum on wide scape extending

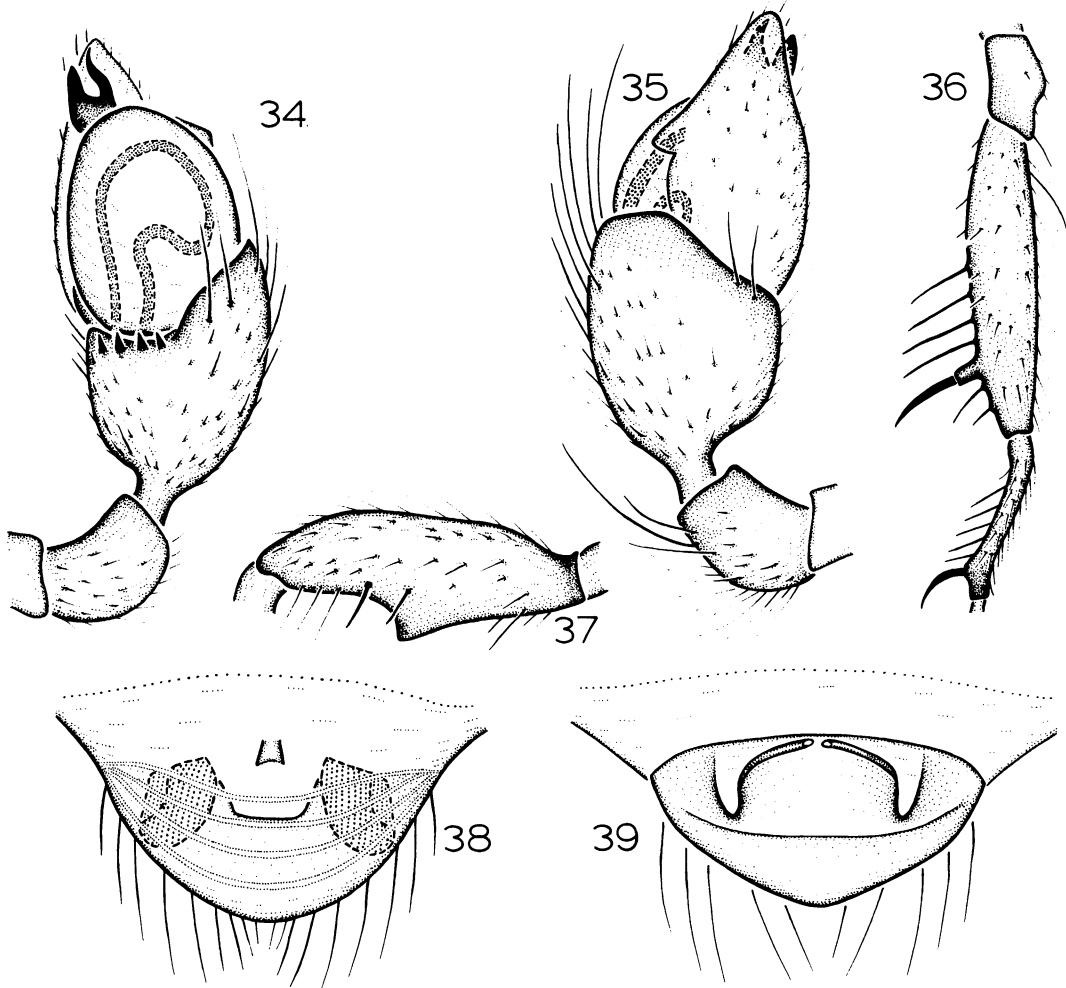
one-quarter of distance between epigastric furrow and base of spinnerets (fig. 32). Spermathecae fused to posterior epigynal plate (fig. 33).

MATERIAL EXAMINED: **Venezuela:** *Aragua:* Rancho Grande, "commensal on diplurid webs [*Diplura* sp.] in cloud forest," Dec. 29, 1970 (W. B. Peck, AMNH), 1♂, 2♀; no date (C. T. Collins, AMNH), 1♀.

***Mysmenopsis gamboa*, new species**

Figures 34-39

TYPES: Male holotype and female paratype



FIGS. 34-39. *Mysmenopsis gamboa*, new species. 34. Palp, retrolateral view. 35. Palp, prolateral view. 36. Male tibia and metatarsus I, anterior view. 37. Female femur I, prolateral view. 38. Epigynum, ventral view. 39. Vulva, dorsal view.

from webs of Dipluridae, probably *Diplura* sp., about 6.5 mi. past Gamboa Airport turnoff, Pipeline Road, Canal Zone, Panama (July, 1976; L. Kirkendall), deposited in AMNH courtesy of Mr. Kirkendall.

ETYMOLOGY: The specific name is a noun in apposition from the type locality.

DIAGNOSIS: *Mysmenopsis gamboa* seems closest to *M. cidrelicola* but may be distinguished by the bifid embolus (fig. 34) and epigynal hood (fig. 38).

MALE: Total length 1.28. Carapace 0.63 long, 0.58 wide, 0.29 high. Abdomen 0.61 long, 0.56 wide, 0.70 high. Abdomen brownish gray with scattered white spots.

	I	II	III	IV
Femur	0.83	0.65	0.58	0.61
Patella	0.25	0.22	0.22	0.18
Tibia	0.65	0.50	0.36	0.48
Metatarsus	0.36	0.38	0.34	0.43
Tarsus	0.46	0.45	0.34	0.40
Total	2.55	2.20	1.84	2.10

Tibia I with prolateral series of four spines, clasp spur, and two spines (fig. 36). Palpal tibia with four long cusps (fig. 34). Cymbium with one dorsal lobe (fig. 35).

FEMALE: Total length 1.44. Carapace 0.65 long, 0.63 wide, 0.29 high. Abdomen 0.84 long, 0.85 wide, 0.83 high. Abdomen as in male. Tibiae with median dark spot ventrally.

	I	II	III	IV
Femur	0.77	0.61	0.58	0.61
Patella	0.22	0.22	0.20	0.17
Tibia	0.61	0.50	0.36	0.50
Metatarsus	0.40	0.43	0.34	0.43
Tarsus	0.41	0.43	0.37	0.40
Total	2.41	2.19	1.85	2.11

Femur I with ventral tubercle near middle and two prolateral spines (fig. 37). Epigynum with hood (fig. 38). Spermathecae fused to posterior epigynal plate (fig. 39).

MATERIAL EXAMINED: **Panama:** Canal Zone: Pipeline Road, July 1976 (L. Kirkendall, LK), 2♀. **Panamá:** Bayano, Río Majé, in webs of Dipluridae, June 11, 1976 (L. Kirkendall, MCZ), 1♂, 1♀.

Mysmenopsis funebris Simon

Figures 4-6

Mysmenopsis funebris Simon, 1897, p. 865 (one female and two male syntypes from St. Vincent, British West Indies, in BMNH, examined); 1903, p. 991. Gertsch, 1960, p. 25, figs. 40-43.

DIAGNOSIS: *Mysmenopsis funebris* seems closest to the group of species including *M. kochalkai*, *M. penai*, and *M. archeri*. Males of the first species may be distinguished by the small but globose palpal tibia (fig. 4). The female syntype examined is in poor condition and lacks an epigynum; judging by Levi's sketches (in Gertsch, 1960) it has a typical posterior plate lacking the median arch found in *M. kochalkai* and *M. archeri* and spermathecae resembling those of *M. beebei* and *M. dipluramigo* (from which it differs by lacking a ventral tubercle on femur I).

MALE: Described by Simon (1897) and Gertsch (1960).

FEMALE: Described by Simon (1897) and Gertsch (1960).

MATERIAL EXAMINED: **Trinidad:** Arima Valley, elevation 800-1200 ft., Feb. 10-22, 1964 (P. Wygodzinsky and J. G. Rozen, Jr.; AMNH), 1♂. Levi (in Gertsch, 1960) reported that additional specimens from the type locality are in the Muséum National d'Histoire Naturelle, Paris.

Mysmenopsis kochalkai, new species

Figures 40-45

TYPES: Male holotype and female paratype from large epiphytic bromeliads between San Pablo and San Javier, elevation 5130 feet, Sierra Nevada de Santa Marta, Magdalena, Colombia (March 29, 1975; J. A. Kochalka), deposited in AMNH courtesy of Mr. Kochalka.

ETYMOLOGY: The specific name is a patronym in honor of the collector of the type specimens.

DIAGNOSIS: *Mysmenopsis kochalkai* seems closest to *M. penai* and *M. archeri* but may be distinguished by the rectangular dorsal ledge of the palpal tibia (fig. 40) and the posteriorly invaginated epigynum (fig. 44).

MALE: Total length 1.55. Carapace 0.79 long, 0.72 wide, 0.40 high. Abdomen 0.84 long, 0.87 wide, 0.99 high. Abdomen beige with dark brown markings concentrated at sides and venter; dorsum with dark cardiac mark and posterior chevrons.

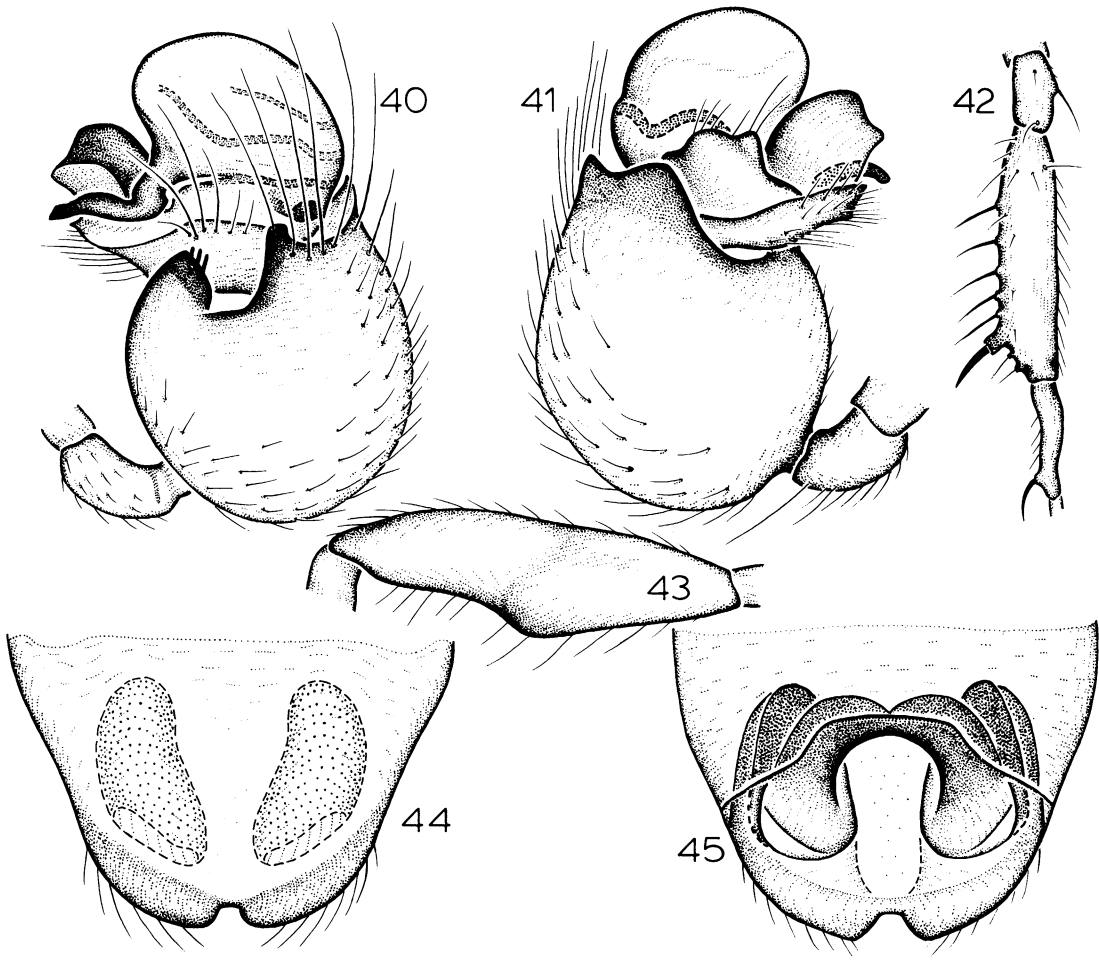
	I	II	III	IV
Femur	0.86	0.78	0.61	0.72
Patella	0.25	0.25	0.14	0.22
Tibia	0.72	0.65	0.47	0.58
Metatarsus	0.40	0.50	0.37	0.43
Tarsus	0.47	0.45	0.42	0.45
Total	2.70	2.63	2.01	2.40

Tibia I with prolateral series of five spines, clasping spur, and two small spines at distal end (fig. 42). Palpal tibia bulbous, invaginated retrolaterally; ventral ledge with three cusps

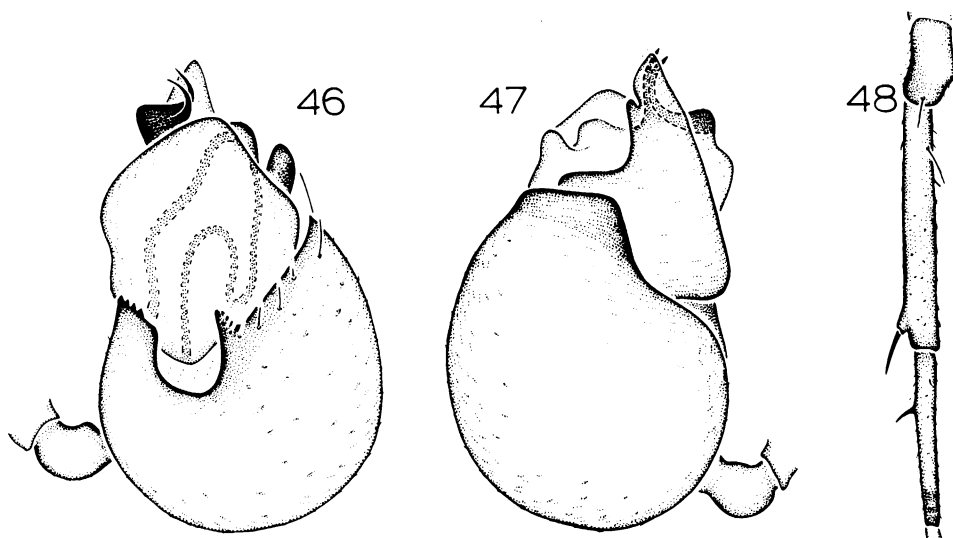
(fig. 40). Cymbium reflexed ventrally (fig. 41).

FEMALE: Total length 1.47. Carapace 0.83 long, 0.70 wide, 0.32 high. Abdomen 0.81 long, 0.83 wide, 0.79 high. Coloration as in male.

	I	II	III	IV
Femur	0.79	0.68	0.54	0.67
Patella	0.25	0.25	0.22	0.18
Tibia	0.61	0.58	0.40	0.50
Metatarsus	0.47	0.42	0.32	0.40
Tarsus	0.40	0.36	0.36	0.40
Total	2.52	2.29	1.84	2.15



FIGS. 40-45. *Mysmenopsis kochalkai*, new species. 40. Palp, retrolateral view. 41. Palp, prolateral view. 42. Male tibia and metatarsus I, anterior view. 43. Female femur I, prolateral view. 44. Epigynum, ventral view. 45. Vulva, dorsal view.



FIGS. 46-48. *Mysmenopsis penai*, new species. 46. Palp, retrolateral view. 47. Palp, prolateral view. 48. Male tibia and metatarsus I, anterior view.

Femur I expanded ventrally at about half its length (fig. 43). Epigynal margin invaginated medially (fig. 44). Posterior epigynal plate with median arch (fig. 45).

MATERIAL EXAMINED: **Colombia:** *Magdalena*: San Pedro, Sierra Nevada de Santa Marta, elevation 3150 ft., low to medium height vegetation, May 19, 1975 (J. A. Kochalka, JAK), 1♂, 1♀; San Pedro Carmelo, elevation 4100 ft., Feb. 7, 1974 (J. A. Kochalka, JAK), 1♀.

***Mysmenopsis penai*, new species**
Figures 46-48

TYPE: Male holotype from Coca, Río Napo, Napo, Ecuador (May, 1965; L. Peña), deposited in MCZ.

ETYMOLOGY: The specific name is a patronym in honor of the collector of the type specimen.

DIAGNOSIS: *Mysmenopsis penai* seems closest to *M. archeri* but may be distinguished by the smaller dorsal ledge of the palpal tibia (fig. 46).

MALE: Total length 0.86. Carapace 0.50 long, 0.47 wide, 0.25 high. Abdomen 0.49 long, 0.58 wide, 0.42 high. Legs with additional median dark rings on tibiae, metatarsi, and tarsi.

	I	II	III	IV
Femur	0.59	0.47	0.32	0.47
Patella	0.14	0.14	0.12	0.13
Tibia	0.49	0.38	0.23	0.29
Metatarsus	0.30	0.33	0.25	0.22
Tarsus	0.35	0.25	0.25	0.23
Total	1.87	1.57	1.17	1.34

Tibia I without spines, with clasping spur only (fig. 48). Ventral ledge of palpal tibia with four cusps (fig. 46). Cymbium with short, basal dorsal lobe (fig. 47).

FEMALE: Unknown.

MATERIAL EXAMINED: Only the holotype.

***Mysmenopsis archeri*, new species**
Figures 49-53

TYPES: Male holotype from Foz da Cascatinha, Floresta da Tijuca, Guanabara, Brazil (July 2, 1962; A. F. Archer) and female paratype from Morro de São João, Copacabana, Guanabara, Brazil (June 30, 1962; A. F. Archer), deposited in AMNH.

ETYMOLOGY: The specific name is a patronym in honor of the collector of the type specimens.

DIAGNOSIS: *Mysmenopsis archeri* seems closest to *M. penai* but may be distinguished

by the much larger dorsal ledge of the palpal tibia (fig. 49). Females of the latter species are unknown but those of the former may be recognized by the narrow median arch of the posterior epigynal plate (fig. 53).

MALE: Total length 1.12. Carapace 0.50 long, 0.52 wide, 0.29 high. Abdomen 0.71 long, 0.63 wide, 0.79 high. Legs with additional median dark rings on tibiae and tarsi.

	I	II	III	IV
Femur	0.61	0.50	0.44	0.47
Patella	0.22	0.17	0.14	0.14
Tibia	0.54	0.46	0.32	0.34
Metatarsus	0.32	0.25	0.25	0.25
Tarsus	0.43	0.34	0.25	0.29
Total	2.12	1.72	1.40	1.49

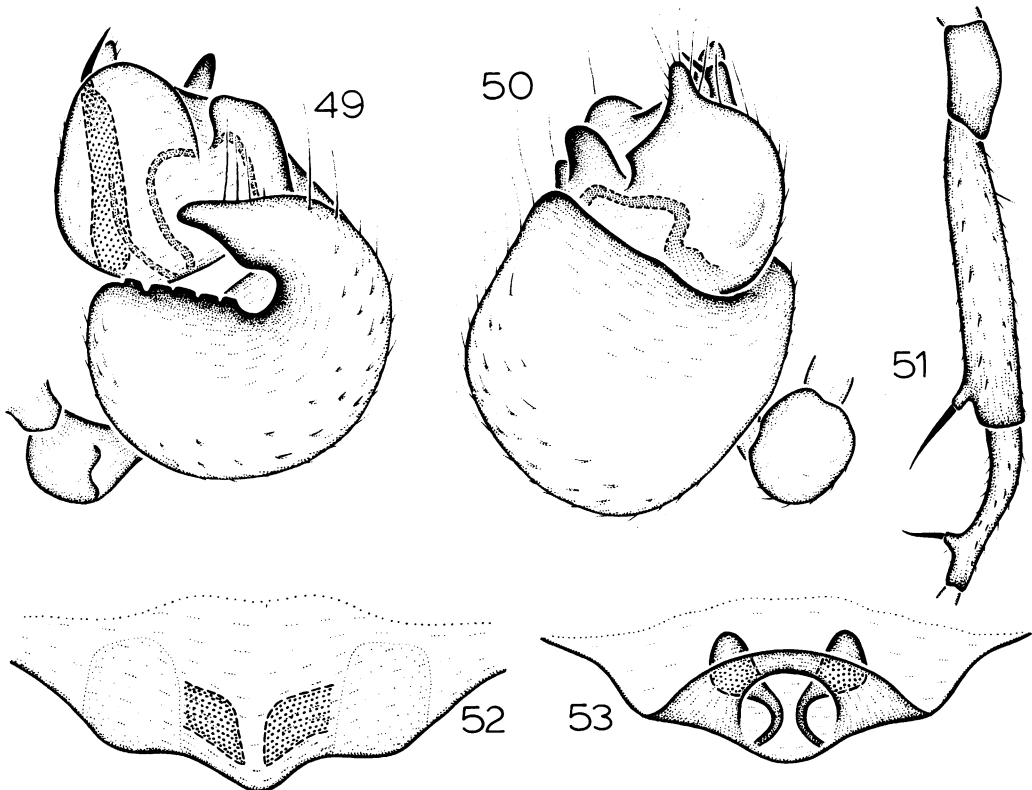
Tibia I without spines (fig. 51). Ventral ledge

of palpal tibia with five broad cusps (fig. 49). Cymbium with sinuous dorsal lobe (fig. 50).

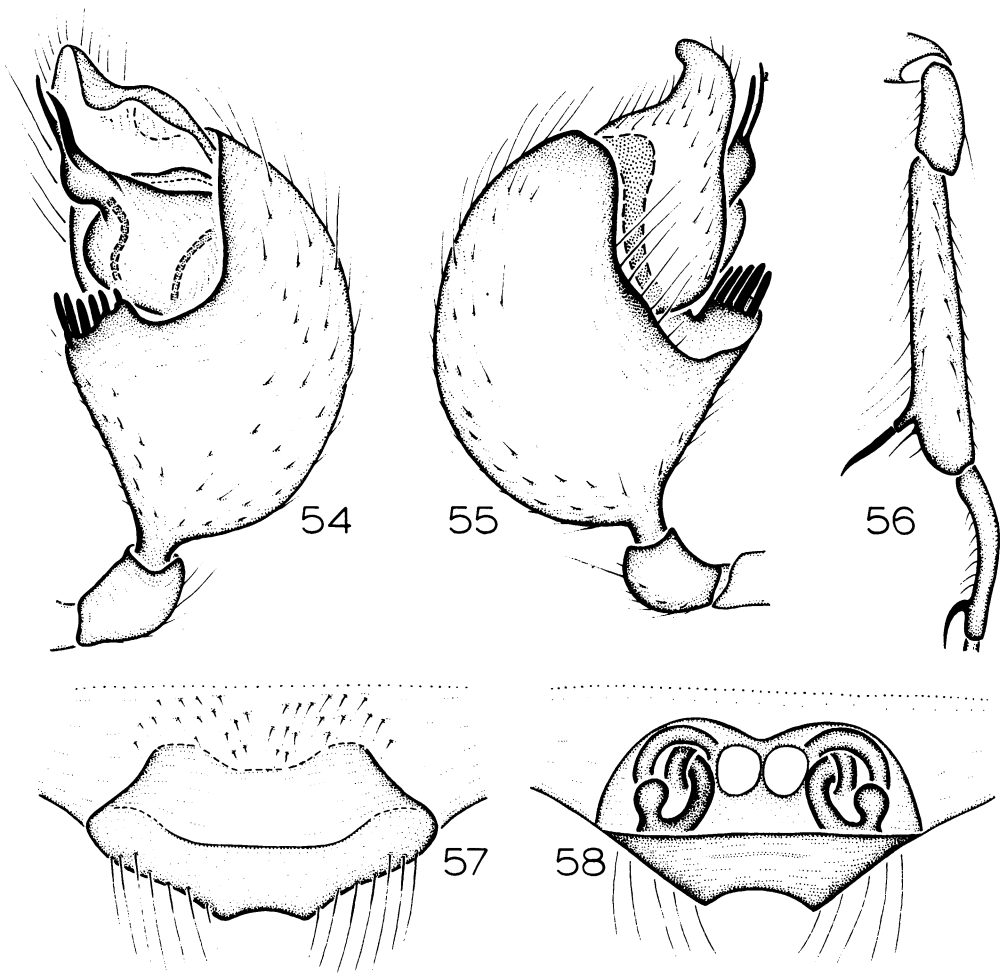
FEMALE: Total length 1.21. Carapace 0.52 long, 0.51 wide, 0.27 high. Abdomen 0.79 long, 0.85 wide, 0.81 high. Legs as in male.

	I	II	III	IV
Femur	0.52	0.47	0.38	0.50
Patella	0.22	0.18	0.14	0.19
Tibia	0.36	0.32	0.29	0.30
Metatarsus	0.29	0.25	0.25	0.24
Tarsus	0.31	0.27	0.29	0.28
Total	1.70	1.49	1.35	1.51

Femur I with slight retrolateral expansion basally. Epigynal margin elongated medially (fig. 52). Posterior epigynal plate with narrow median arch (fig. 53).



FIGS. 49-53. *Mysmenopsis archeri*, new species. 49. Palp, retrolateral view. 50. Palp, prolateral view. 51. Male tibia and metatarsus I, anterior view. 52. Epigynum, ventral view. 53. Vulva, dorsal view.



FIGS. 54-58. *Mysmenopsis palpalis* (Kraus). 54. Palp, retrolateral view. 55. Palp, prolateral view. 56. Male tibia and metatarsus I, anterior view. 57. Epigynum, ventral view. 58. Vulva, dorsal view.

MATERIAL EXAMINED: One female taken with the paratype (AMNH).

Mysmenopsis palpalis (Kraus),
new combination
Figures 54-58

Lucarachne palpalis Kraus, 1955, p. 30, figs. 79-85 (male holotype from Copán, Copán, Honduras, in Naturmuseum Senckenberg, not examined). Forster, 1959, p. 328, fig. 149. Gertsch, 1960, p. 30.

DIAGNOSIS: *Mysmenopsis palpalis* seems closest to the group including *M. tibialis*, *M.*

wygodzinskyi, and *M. schlingeri* but may be distinguished by the lobelike tibial ledge bearing six large cusps (fig. 54) and the convoluted anterior epigynal ducts (fig. 58).

MALE: Described by Kraus (1955).

FEMALE: Described by Kraus (1955).

MATERIAL EXAMINED: **Honduras:** *Copán:* Copán, in webs of *Ischnothele digitata* O. P.-Cambridge, Sept. 9, 1951 (H. M. Peters, AMNH), 1♀. **Mexico:** *Chiapas:* Tapachula, Aug., 1909 (A. Petrunkevitch, AMNH, MCZ), 4♂, 4♀. *Veracruz:* La Buena Ventura, near Santa Rosa, Istmo de Tehuantepec, July, 1909 (A. Petrunkevitch, AMNH), 4♂, 4♀.

Mysmenopsis tibialis (Bryant),
new combination
Figures 59-64

Lucarachne tibialis Bryant, 1940, p. 350, figs. 116-120, 123 (male holotype from Pico Turquino, Oriente, Cuba, in MCZ, not examined). Gertsch, 1960, p. 28.

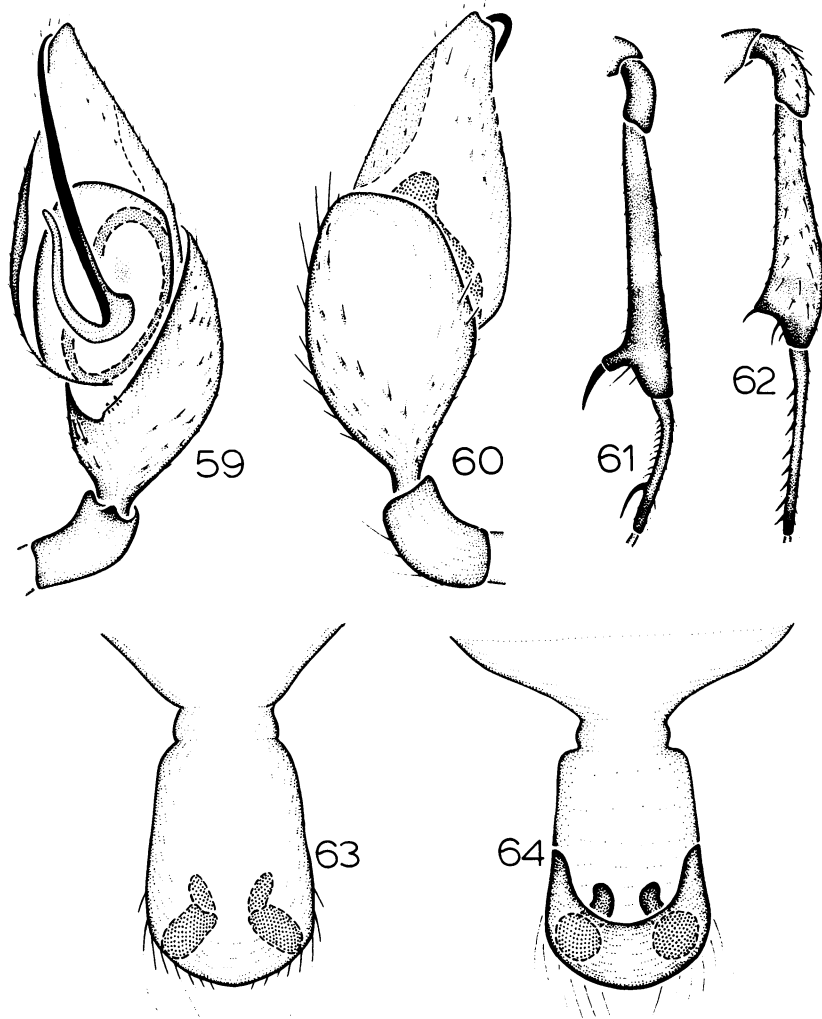
DIAGNOSIS: *Mysmenopsis tibialis* seems closest to *M. wygodzinskyi* and *M. schlingeri* but may be distinguished by the position of the epigynum on a long lobe (figs. 63, 64). Males

of the last two species are unknown but those of *M. tibialis* may be recognized by the long, bifid embolus (fig. 59). The cusps on the palpal tibia are small and fused to the inside of the tibial ledge.

MALE: Described by Bryant (1940).

FEMALE: Described by Bryant (1940).

MATERIAL EXAMINED: **Cuba:** Oriente: Pico Turquino, elevation 1500 ft., June 25, 1936 (P. J. Darlington, Jr.; MCZ), 1♂, 1♀ (paratypes).



FIGS. 59-64. *Mysmenopsis tibialis* (Bryant). 59. Palp, retrolateral view. 60. Palp, prolateral view. 61. Male tibia and metatarsus I, anterior view. 62. Female tibia and metatarsus I, anterior view. 63. Epigynum, ventral view. 64. Vulva, dorsal view.

***Mysmenopsis wygodzinskyi*, new species**

Figures 65-67

TYPE: Female holotype from an elevation of 350 meters at Montenegro, Bagua, Amazonas, Peru (September 29-October 1, 1963; A. Herrero and P. Wygodzinsky), deposited in AMNH.

ETYMOLOGY: The specific name is a patronym given with pleasure in honor of my colleague and friend, Dr. Pedro Wygodzinsky, one of the collectors of the holotype.

DIAGNOSIS: *Mysmenopsis wygodzinskyi* seems closest to *M. tibialis* and *M. schlinger* but may be distinguished by the presence of only four sharp spines on metatarsus I (fig. 67).

MALE: Unknown.

FEMALE: Total length 1.33. Carapace 0.62 long, 0.50 wide, 0.18 high. Abdomen 0.83 long, 0.58 wide, 0.83 high. Tibiae with median dark ring.

	I	II	III	IV
Femur	0.65	0.58	0.47	0.54
Patella	0.16	0.14	0.13	0.14
Tibia	0.63	0.46	0.34	0.38
Metatarsus	0.38	0.34	0.25	0.27
Tarsus	0.36	0.33	0.27	0.27
Total	2.18	1.85	1.46	1.60

Femur I unmodified; metatarsus I with four sharp spines (fig. 67). Epigynum a rounded lobe (fig. 65). Spermathecae with anterior ducts (fig. 66).

MATERIAL EXAMINED: Only the holotype.

***Mysmenopsis schlinger*, new species**

Figures 68-71

TYPE: Female holotype from Monzón Valley, near Tingo María, Huánuco, Peru (December 15, 1954; E. I. Schlinger and E. S. Ross), deposited in CAS.

ETYMOLOGY: The specific name is a patronym in honor of one of the collectors of the holotype.

Diagnosis. *Mysmenopsis schlinger* seems closest to *M. wygodzinskyi* and *M. tibialis* but may be distinguished by the prolateral femoral tubercle (fig. 68).

MALE: Unknown.

FEMALE: Total length 2.51. Carapace 1.19

long, 0.94 wide, 0.32 high. Abdomen 1.87 long, 1.55 wide, 1.84 high. Femora lacking median dark rings.

	I	II	III	IV
Femur	1.80	1.44	1.01	1.15
Patella	0.50	0.39	0.34	0.36
Tibia	1.44	1.15	0.73	0.93
Metatarsus	0.86	0.85	0.72	0.72
Tarsus	0.72	0.60	0.52	0.58
Total	5.32	4.43	3.32	3.74

Femur I elongate, thickened distally, with prolateral tubercle at distal end (fig. 68); metatarsus I with nine spines (fig. 71). Epigynum with distinct anterior margin (fig. 69). Spermathecae with anterior lobes and ducts (fig. 70).

MATERIAL EXAMINED: Only the holotype.

***Mysmenopsis ixlitla* (Levi)**

Mysmena ixlitla Levi, 1956, p. 9, figs. 31, 33-37 (male holotype and female allotype from Ixlitla [probably Xilitla], San Luis Potosí, Mexico, in AMNH, examined); not fig. 32 or record from Guerrero.

Mysmenopsis ixlitla: Gertsch, 1960, p. 25, fig. 45.

DIAGNOSIS: *Mysmenopsis ixlitla* seems closest to *M. mexcala* but may be distinguished by the presence of seven cusps on the palpal tibia (Gertsch, 1960, fig. 45). Females of the latter species are unknown but those of the former species may be recognized by the long posterior epigynal ducts (Levi, 1956, fig. 33; this illustration shows no posterior epigynal plate but one is present).

MALE: Described by Levi (1956).

FEMALE: Described by Levi (1956).

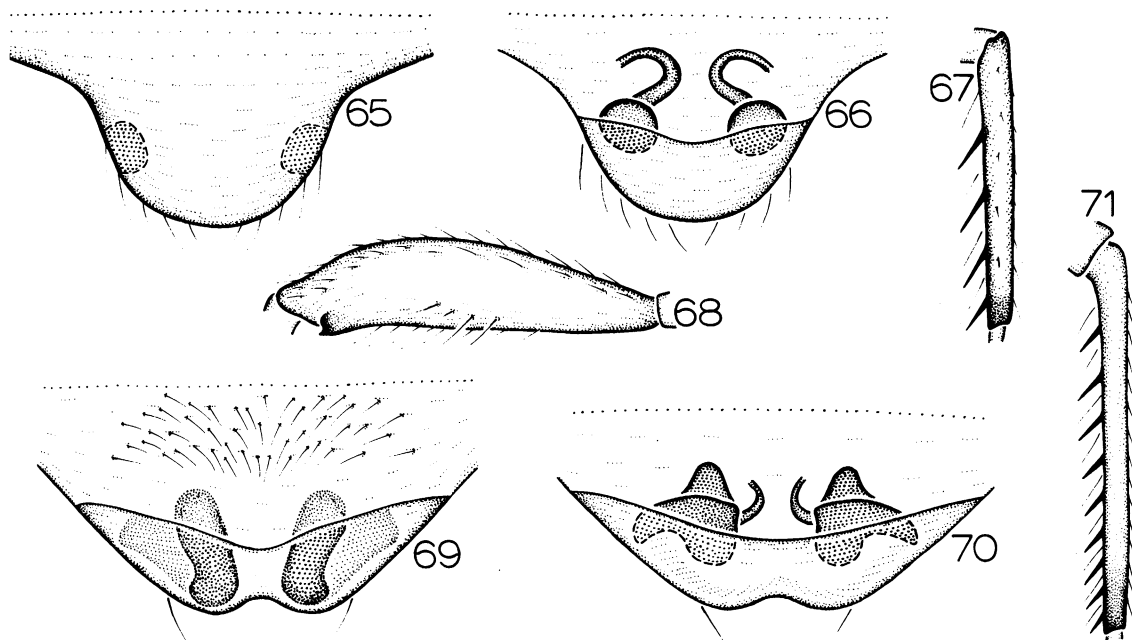
MATERIAL EXAMINED: **Mexico:** *San Luis Potosí*: Ixlitla (probably Xilitla), Dec. 2, 1939 (A. M. and L. I. Davis, AMNH), 2♂, 2♀.

***Mysmenopsis mexcala* Gertsch**

Mysmena ixlitla (misidentification): Levi, 1956, p. 9, fig. 32 (male from Guerrero only).

Mysmenopsis mexcala Gertsch, 1960, p. 26, fig. 46 (male holotype from Mexcala, Guerrero, Mexico, in AMNH, examined).

DIAGNOSIS: *Mysmenopsis mexcala* seems closest to *M. ixlitla* but may be distinguished



FIGS. 65-71. 65-67. *Mysmenopsis wygodzinskyi*, new species. 65. Epigynum, ventral view. 66. Vulva, dorsal view. 67. Female metatarsus I, anterior view. 68-71. *M. schlingeri*, new species. 68. Female femur I, prolateral view. 69. Epigynum, ventral view. 70. Vulva, dorsal view. 71. Female metatarsus I, anterior view.

by the presence of only four cusps on the palpal tibia (Gertsch, 1960, fig. 46).

MALE: Described by Gertsch (1960).

FEMALE: Unknown.

MATERIAL EXAMINED: **Mexico:** *Guerrero:* Mexcala, July 2, 1941 (L. I. Davis, AMNH), 1♂.

Mysmenopsis cymbia (Levi)

Mysmena cymbia Levi, 1956, p. 10, figs. 38-47 (male holotype from Perrine, Dade County, Florida, in AMNH, examined).

Mysmenopsis cymbia: Gertsch, 1960, p. 25.

DIAGNOSIS: *Mysmenopsis cymbia* is a distinctive species easily recognized by the long embolus coiled around the cymbium (Levi, 1956, figs. 43-47) and the tiny spermathecae (Levi, 1956, fig. 38; this illustration shows no posterior epigynal plate but one is present and has wide oblique extensions projecting anteriorly from each side).

MALE: Described by Levi (1956).

FEMALE: Described by Levi (1956).

MATERIAL EXAMINED: **United States:** *Florida:* Dade Co.: Perrine, Nov. 25, 1952 (A. M. Nadler, AMNH), 1♂. Lake Co.: Leesburg, March 1-11, 1954 (M. Statham, AMNH), 1♀.

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