

SHORT COMMUNICATION

On the tetragnathid genera *Alcimosphenus*, *Leucauge*, *Mecynometa* and *Opas* (Araneae, Tetragnathidae).

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Abstract. The genus *Mecynometa* contains one species, *M. globosa* O. Pickard-Cambridge 1889 that has three new synonyms. However, species belonging to two distinct genera, *Alcimosphenus* and *Opas*, had been included. *Opas* includes six known species. Two other *Mecynometa* species based on males, are synonyms of each other and appear to be the otherwise missing male of the common West Indian *Alcimosphenus licinus* Simon 1895. Male palpi of species of the three genera are illustrated for the first time. Three species of *Leucauge* are synonymized.

Keywords: Spiders, long-jawed, taxonomy, nomenclature, synonymy

Simon (1894) described *Mecynometa gemmata* and *Mecynometa scintillans* (both synonyms of *M. globosa*). A year later (1895) he gave a diagnosis for *Mecynometa* and a type species *M. globosa* O. Pickard-Cambridge 1889 (Figs. 1–10). In 1895 he also mentioned his previously described species, *M. gemmata* from Venezuela and *M. scintillans* from the Amazon. Petrunkevitch (1911) placed *Argyropeira flabilis* Keyserling 1893 (also a synonym of *M. globosa*) in *Mecynometa*.

Later Mello-Leitão added four more species to *Mecynometa*, which were unlike any previously named species in appearance: *M. paraensis* Mello-Leitão 1937, *M. trilineata* Mello-Leitão 1940, *M. caudata* Mello-Leitão 1944, and *M. melanoleuca* Mello-Leitão 1944. An additional species, *Epeira caudacuta* (Taczanowski 1873), was transferred to the genus (Levi 1991). All five belong to the previously described *Opas* O. Pickard-Cambridge 1896 for *O. lugens* of Central America (Figs. 11, 12) and which is at present misplaced in *Leucauge* (Levi 1980). A male *Opas* of unknown species was found in the available collections (Figs. 15–18).

All original species of *Mecynometa* were originally described from female specimens. Two additional species placed in the genus, *M. torrei* Archer 1958 and *M. montivaga* Archer 1958, were described from males, minute in size (Figs. 19–24; both probably the same species), from the Greater Antilles, from which females of neither *Mecynometa* or *Opas* have been reported. Unlike all others, they are described as crimson in color (the holotypes have since faded) and were presumably placed in *Mecynometa* because of the small size of *M. globosa*. Since, as recently reported (Levi 2005), the male of the common orange West Indian *Alcimosphenus licinus* Simon 1895 is unknown, I have to assume they are the missing males of *Alcimosphenus* and were overlooked because of their unusually small size, slightly more than 1.0 mm total length.

All four genera have a row of trichobothria on the fourth femur (Fig. 14). Males of *Alcimosphenus*, *Mecynometa*, and *Opas* are minute, less than 2 mm total length.

Abbreviations for museums holding specimens are given in the acknowledgements.

Mecynometa Simon 1894

Type species.—*Meta globosa* O. Pickard-Cambridge 1889, designated by Simon 1895. (This was not an included name when the name was first used, however Simon's two included species, *M. gemmata* and *M. scintillans*, are synonyms of *M. globosa*).

Diagnosis.—Posterior median eye row slightly procurved. *Leucauge*-like with unusually long legs; second patella plus tibia 3 times the length of the carapace; femur relatively short (Simon 1894 also

described *Mecynometa* as having a slightly procurved posterior eye region and the posterior coxae farther apart than those of *Leucauge*).

The female epigynum is very lightly sclerotized with a rectangular depression (Figs. 1–3) leading anteriorly into an even less distinct oval (Fig. 3). On each side of the median depression may be a slightly darker area, showing the spermathecae and ducts through the transparent integument (Figs. 1, 2).

The male palpus differs from that of other genera by having a large attached paracymbium and a basal hook on the cymbium (Fig. 10).

Mecynometa globosa (O. Pickard-Cambridge 1889), Figures 1–10
Meta globosa O. Pickard-Cambridge 1889:2, figs. pl. 1, fig. 5, ♀.
Female holotype from Teapa, Tabasco, Mexico in BMNH, examined.

Argyropeira flabilis Keyserling 1893:355, pl. 18, fig. 262, ♀. Female holotype from Rio de Janeiro, Brazil in BMNH, examined. NEW SYNONYMY

Mecynometa globosa Simon 1895:737, fig. 810.

M. gemmata Simon 1895:737. Female holotype from Venezuela in MNHN, examined. 1895:152. NEW SYNONYMY.

M. scintillans Simon 1895:737. Immature holotype from Amazon in MNHN, examined. 1895:152. NEW SYNONYMY.

Species names were synonymized because their type specimens have similar genitalia and the immature *M. scintillans* has similar color pattern and proportions.

The lateral view of the male and the palpus are illustrated in Figures 7–10.

Opas O. Pickard-Cambridge 1896

Type species.—*Opas lugens* O. Pickard-Cambridge 1896, originally designated.

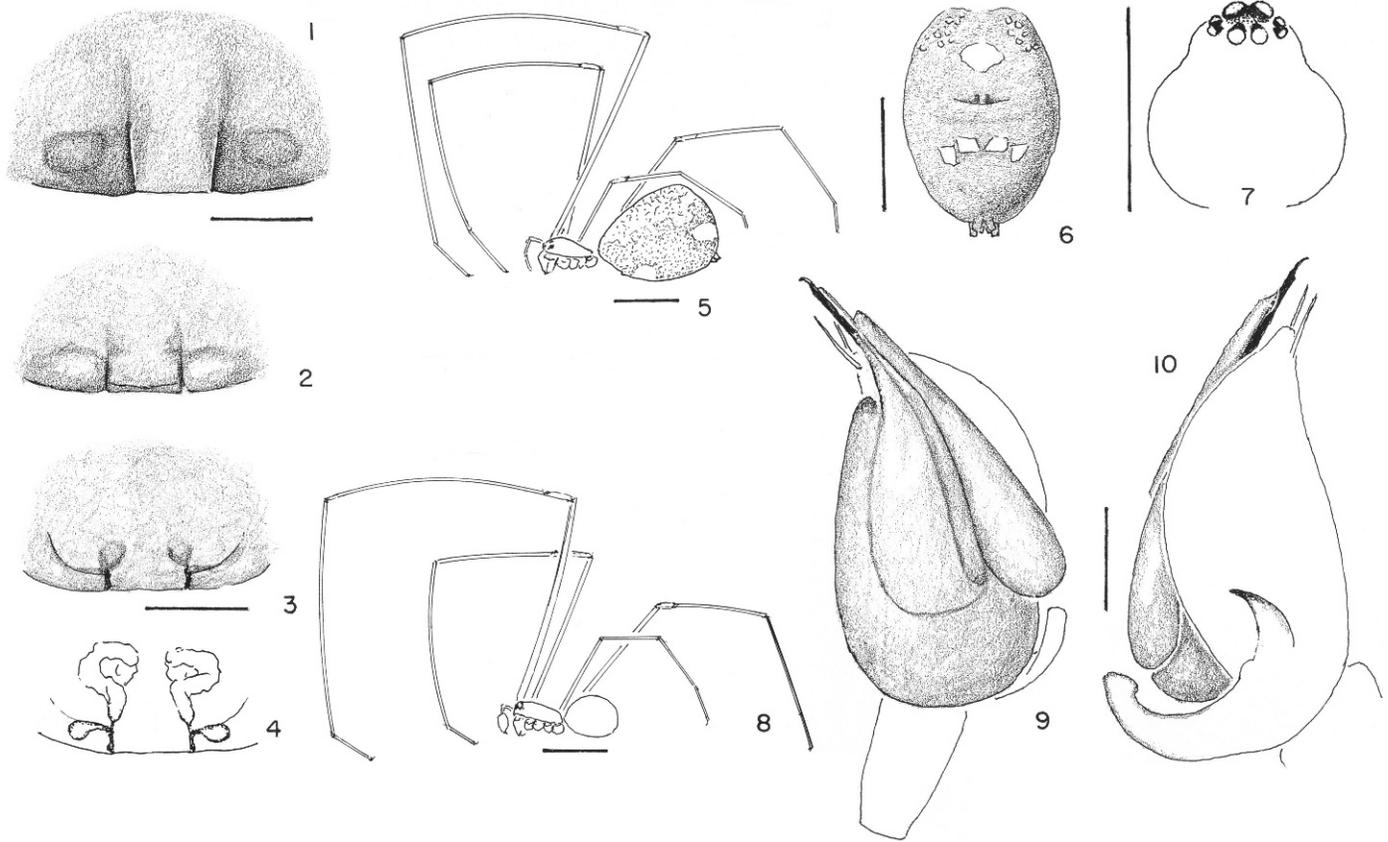
Diagnosis.—The abdomen has a posterior elongated tubercle with a striated base (Figs. 13, 14). Unlike *Leucauge* and *Mecynometa*, specimens are dark gray. The males are much smaller than females. Only one male has been found with females, among a collection from Madre de Dios, Peru (MUSM) (Figs. 15–18). There are undescribed species in various collections, all similar in appearance.

The female epigynum of all known species has a diagnostic wider than long, oval depression with a variable posterior lip (Fig. 11), sometimes enclosing a pair of depressions.

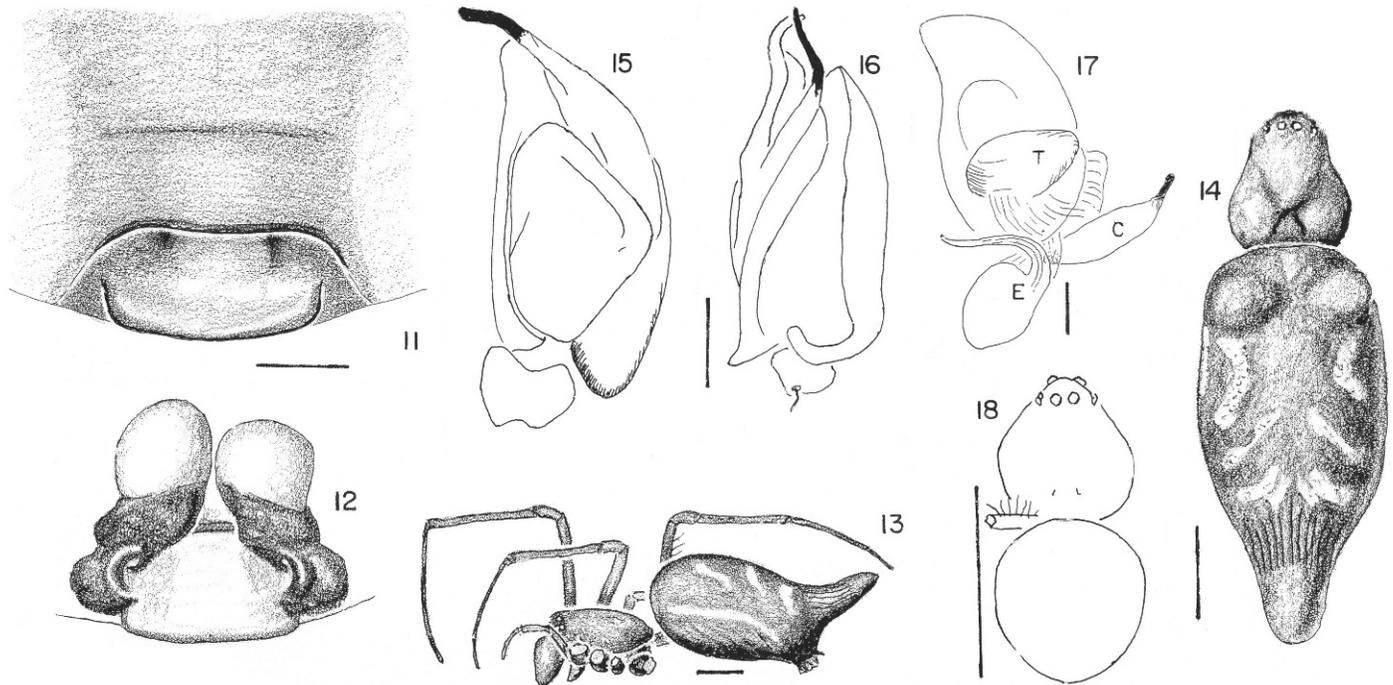
The male palpus has an attached paracymbium, relatively small tegulum with a projecting conductor enclosing the embolus (Figs. 15–17).

Opas lugens O. Pickard-Cambridge. Figures 11, 12

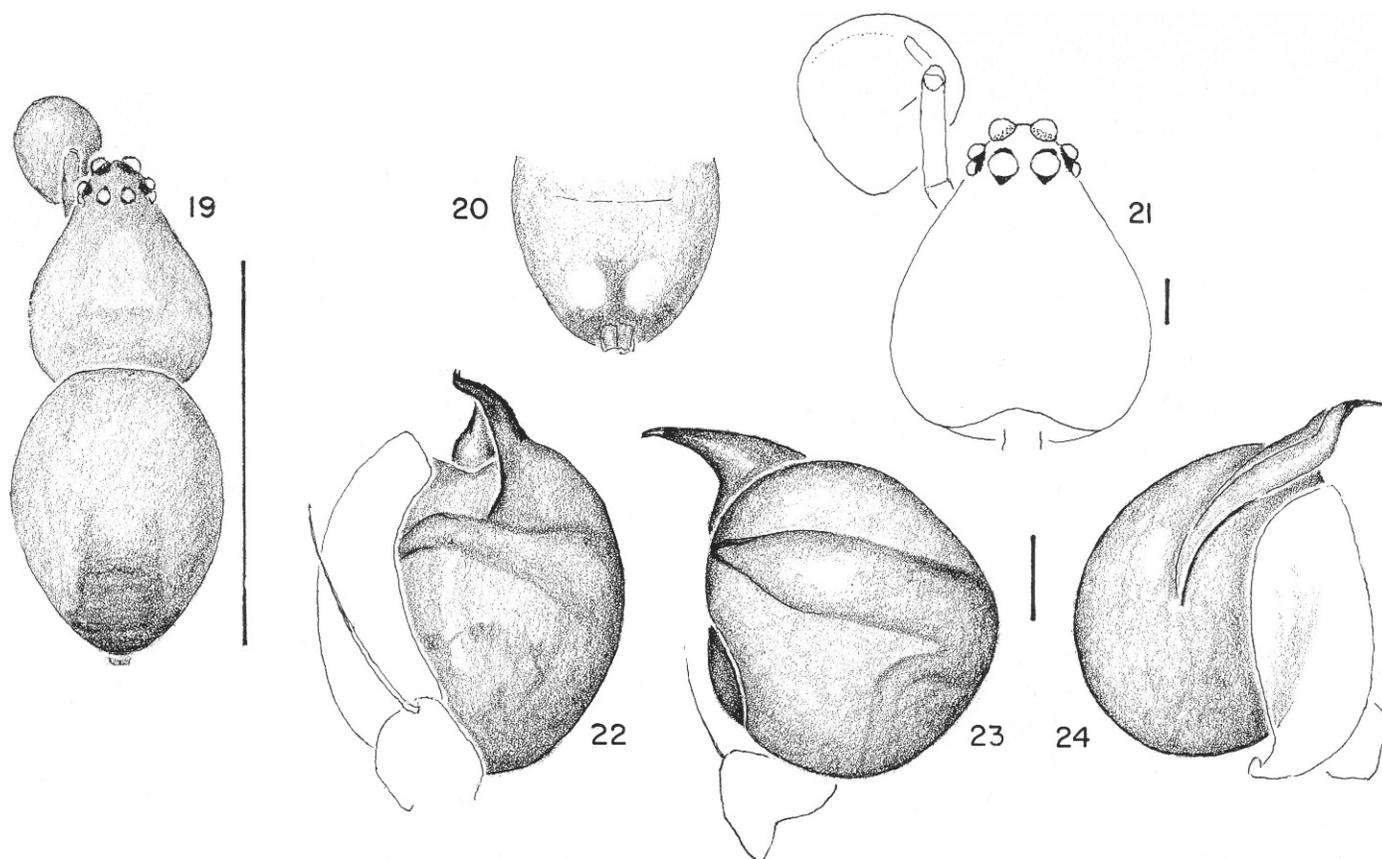
Opas lugens O. Pickard-Cambridge 1896:185, pl. 23, fig. 3, ♀. Female holotype from Teapa, Tabasco, Mexico in BMNH, examined.



Figures 1-10.—*Mecynometa globosa* (O. Pickard-Cambridge). 1-7. Female: 1. Epigynum (holotype); 2-4. Epigynum (Panama); 1-3, Ventral view; 4. Dorsal view, cleared; 5. Lateral view (Panama); 6. Abdomen, ventral view (holotype); 7. Carapace (Panama). 8-10. Male (Panama): 8. Lateral view; 9, 10. Left palpus; 9. Ventral view; 10. Lateral view. Scale lines = 1.0 mm, genitalia 0.1 mm.



Figures 11-18.—*Opas* species. 11, 12. *Opas lugens* O. Pickard-Cambridge, epigynum (holotype): 11. Ventral view; 12. Dorsal view, cleared. 13. *Opas* sp. (Panama); 14. *Opas caudacuta* (Taczanowski), carapace and abdomen; 15-18, *Opas* sp., male from Madre de Dios, Peru (MUSM); 15-17, left palpus; 15, 17, ventral; 16, lateral; 17, expanded; 18, male, dorsal, without appendages, except fourth femur. Scale lines = 1.0 mm; genitalia, 0.1 mm. Abbrev.: C, conductor; E, embolus; T, tegulum.



Figures 19–24.—*Alcimosphenus licinus* Simon, male; 19, carapace, abdomen and left palpus; 20, abdomen, ventral; 21, carapace and left palpus; 22–24, left palpus; 22, mesal; 23, ventral; 24, lateral. (Figs. 19, 20, *M. torrei*, Cuba, others *M. montivaga*, Jamaica). Scale lines = Figs. 19, 20, 1.0 mm; Fig. 21; genitalia, 0.1 mm.

Argyropeira lugens: — O. Pickard-Cambridge 1897:234.

Leucauge lugens: — F.O. Pickard-Cambridge 1903; Levi 1980.

Natural History.—W. Eberhard (personal communication) reports the spider being “at the hub of an orb attached to low plants in a clearing. The orb was relatively planar, and inclined at 45° with horizontal. The maximum frame length was 62 cm, so it spanned a moderate space (not a huge span as in, for instance, *Gasteracantha*, not a small space as in, for instance, *Azilia*)” in Costa Rica.

The following species, previously placed in *Mecynometa* (Platnick 2007) should be placed in *Opas*. Their genitalia are illustrated in a file entitled “Illustrations of American *Eustala* (Araneidae), *Azilia*, *Leucauge*, *Opas* (Tetragnathidae) species and the type species of some genera of the two families” that is available online at: <http://www.oeb.harvard.edu/faculty/levi/>.

Epeira caudacuta Taczanowski 1873:136, pl. 5, fig. 16. Female holotype from Cayenne, French Guiana in PAN, examined. Peruvian specimens are misidentified. Now *Opas caudacuta*. NEW COMBINATION.

Mecynometa caudata Mello-Leitão 1944:9. Female holotype from Barra do Tapirapés, Amazonas [Mato Grosso], Brazil in MNRJ, examined. Now *Opas caudata*. NEW COMBINATION.

Mecynometa melanoleuca Mello-Leitão 1944:8. Female holotype from Barra do Tapirapés, Amazonas [Mato Grosso], Brazil in MNRJ, examined. Now *Opas melanoleuca*. NEW COMBINATION.

Mecynometa melanoleuca may be a synonym of *M. caudata*

Mecynometa paranensis Mello-Leitão 1937:7, fig. 7. Female holotype from Curitiba, Paraná, Brazil in MNRJ, examined. Now *Opas paraensis* NEW COMBINATION.

Mecynogea trilineata Mello-Leitão 1940:28, figs. 9, 10. Female holotype from Rio Xingo [Mato Grosso, Pará], Brazil in MNRJ, examined. Now *Opas trilineata* NEW COMBINATION.

Alcimosphenus Simon 1895

Diagnosis.—The male is minute in size and distinguished by its orange coloration. The oval abdomen has a dark posterior patch and ventrally a pair of white patches (Figs. 19, 20).

The palpus is distinguished by being subspherical and the conductor and embolus are short. As seen through the tegulum, the sperm duct is ventrally swollen (Figs. 22–24).

Alcimosphenus licinus Simon. Figs. 19–24

Alcimosphenus licinus Simon 1895:931. Female holotype from Jamaica, in MNHN, examined. Levi 2005:754, figs. 1–9, ♀.

Mecynometa torrei Archer 1958:5, figs. 7, 11. Male holotype from Sierra las Casas, Isle of Pines [I. do Pinos, Isla de la Juventud], Cuba, in AMNH, examined. NEW SYNONYMY.

Mecynometa montivaga Archer 1958:6, fig. 8. Male holotype from Hardwar Gap, Portland Par., Jamaica, in AMNH, examined. NEW SYNONYMY.

Leucauge White 1841

There are numerous species with similar genitalia that I am hesitant to synonymize since their size, the shape of the abdomen, or their coloration may differ. However the following groups have very distinct genitalia and can easily be shown to be the same. All American *Leucauge* species whose types were found are illustrated

in a file that is available online at: <http://www.oeb.harvard.edu/faculty/levi/>.

Leucauge funebris Mello-Leitão 1930,

Leucauge funebris Mello-Leitão 1930. Female holotype from Rio Cuminá [Rio Paru de Oesta, Pará], Brazil in MNRJ, examined.

Leucauge fagei Caporiacco 1954. Female holotype from Charvein, French Guiana in MZUF, examined. NEW SYNONYMY.

Leucauge mariana (Taczanowski)

Meta mariana Taczanowski 1881:560. Female holotype from Peru in PAN, examined.

Leucauge mandibulata F.O. Pickard-Cambridge 1903:440, pl. 41, figs. 12–18, ♀, Female holotype from Teapa, Tabasco, Mexico in BMNH, examined. NEW SYNONYMY.

Leucauge venustella Strand 1916. Female holotype from Hispaniola in SMF, examined. NEW SYNONYMY.

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