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New World *Stephanocampta* (Hymenoptera: Mymaridae)—descriptions of a new species from Argentina and of the male of *S. masoni*

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The genus *Stephanocampta* Mathot (Hymenoptera: Mymaridae) includes only two previously described species, *S. yaosekoensis* Mathot from the Democratic Republic of the Congo (Mathot 1966) and *S. masoni* (Yoshimoto) from Costa Rica and Panama (Yoshimoto 1990). Here we describe and illustrate a new species from Argentina based on a female, illustrate both sexes and newly describe the male of *S. masoni*, and provide a key to differentiate females of the three species.

According to the classification proposed by Huber & Lin (1999) and Lin *et al.* (2007), *Stephanocampta* belongs to the *Camptoptera* group of genera, which is characterized by the following morphological features: females with antennal funicle 6-, 7-, or rarely 8-segmented (if 7-segmented then second funicular segment often minute, ring-like); body usually minute but sometimes moderately large, with a distinct, narrow but short petiole so mesophragma not projecting into the gaster; fore wing narrow, usually distinctly curved apically; mandible with 1 or 2 teeth (Huber & Lin 2007).

Terms used in the descriptions follow Gibson (1997). All measurements, unless stated otherwise, are in micrometers (µm), as length or length:width. An abbreviation used is: F = funicular segment of antenna. The holotype of the new species is deposited in Museo de La Plata, La Plata, Buenos Aires, Argentina (MLPA).

Stephanocampta Mathot, 1966

Stephanocampta Mathot 1966: 219–221. Type species: *S. yaosekoensis* Mathot, by original designation. Important subsequent reference: Huber & Lin 1999: 39–40 (diagnosis, distribution, comments).

Hadromymar Yoshimoto 1990: 30–31. Type species: *H. masoni* Yoshimoto, by original designation. Synonymized under *Stephanocampta* by Huber & Lin 1999: 39.

Diagnosis. Body length 0.3–0.65 mm. Occiput with a curved, transverse groove extending to lateral margin of head at about mid-eye height. Mandible with 1 tooth. Female funicle 7-segmented with F2 either subequal to remaining segments or ring-like; male flagellum 10-segmented with F2 ring-like. Prosternum anteriorly pointed. Scutellum without a transverse row of foveae. Fore wing relatively broad, especially towards apex, and slightly curved, with setae usually numerous on the disc; proximal macrochaeta present but distinctly shorter than distal macrochaeta. Tarsi 5-segmented. Propodeum at least half as long as scutellum, with a set of rigid translucent membranous lamellae. Petiole short, surrounded ventrally and laterally by translucent lacey collar extending out from base of gaster.

In some Madagascar species [specimens in California Academy of Sciences, San Francisco, California, and Entomology Research Museum, University of California, Riverside, California (UCRC)] the fore wing in both sexes is quite narrow with few discal setae and the male flagellum is 10-segmented with only F2 ring-like, as in *Stephanocampta* and also as in males of the former genus *Eomymar* Perkins, now considered a synonym of *Camptoptera* Foerster. Huber & Lin (1999) treated the former *Eomymar* spp. as aberrant *Camptoptera* Foerster and we agree. These specimens show that the limits between *Camptoptera* and *Stephanocampta* are less clear cut in some places.

Remarks. *Stephanocampta* can be recognized using the key in Huber & Lin (1999). In Luft Albarracin *et al.* (2009), it would key together at the same couplet as *Camptoptera*, from which it differs in having translucent, mesh-like lamellae on the propodeum.

Biology and hosts. Unknown.

Distribution. Afrotropical, Oriental, Nearctic (USA—Florida) and Neotropical (from Costa Rica south to Brazil (Huber 1999) and Argentina).

Key to females of the described species of *Stephanocampta*

- 1 F2 very short, as long as wide (Fig. 4).....*S. masoni* (Yoshimoto) (Costa Rica, Panama)
- F2 clearly longer than wide (as in Fig. 3)..... 2
- 2 Clava as long as combined length of F4–F7.....*S. yaosekoensis* Mathot (Democratic Republic of the Congo)
- Clava slightly shorter than combined length of F5–F7..... *S. chica* Aquino & Triapitsyn **sp. n.** (Argentina)

***Stephanocampta chica* Aquino & Triapitsyn sp. n.**

(Figs 1–3)

Type material. Holotype. **Argentina**, Misiones, Loreto, 6.i.1933, A.A. Ogloblin [♀, MLPA], on slide labeled: 1. “*Dicopus neotropica* (*Stylo membanacea* in pencil) ♀ n. sp. Loreto 6.I.1933. A. A. O.”; 2. “*Stephanocampta* sp. ♀ det. S. Triapitsyn feb. 2014 *Stephanocampta chica* Aquino y Triapitsyn Holotype ♀”.

Diagnosis. The only known female of *S. chica* differs from that of *S. masoni* by its shorter body (352 µm vs 455–528 µm) and in having F2 clearly longer than wide rather than only as long as wide; it differs from *S. yaosekoensis* by the relative length of the clava, as stated in the key.

Description. FEMALE. Body length including head: 352 µm. Body color brown, except legs and antennae light brown (a better description of the coloration cannot be made because the specimen is slide-mounted). Wings hyaline.

Head 0.9× as wide as mesosoma, smooth. Antenna with scape about 2× as long as pedicel; F1 longer than F2; F4 the longest funicular segment; F4–F7 decreasing in length and increasing in width; F7 as long as F3; clava almost as long as combined length of F5–F7, with 4 mps. Mesosoma 1.2× as long as gaster; pronotum short; mesoscutum 1.5× as wide as long, smooth, with two short lateral setae; scutellum smooth, with two setae at anterior margin; propodeum smooth. Fore wing 9.75× as long as wide; disc with several rows of setae in apical half; longest marginal seta 3.84× maximum wing width. Hind wing 20.2× as long as wide; longest marginal seta 6.3× maximum wing width. Metasoma with petiole short, 1.7× as long as wide; ovipositor 0.75× length of gaster and about 0.7× length of metatibia.

Measurements (µm). Head: 137.4; mesosoma: 168.3:151; mesoscutum: 48.3:73.5; gaster: 141.3; fore wing: 472:48.4; hind wing: 432:21.3; petiole: 27.1:15.5; ovipositor: 106.4; metatibia: 151(155). Antenna: scape: 71.6:13.5; pedicel: 34.8:19.4; F1: 23.2:7.7; F2: 19.4:5.8; F3: 32.9:7.7; F4: 38.7:9.7; F5: 34.8:9.7; F6: 34.8:9.7; F7: 32.9:13.5; clava: 106.4:29.

MALE. Unknown.



FIGURES 1–3. *Stephanocampta chica* ♀ (holotype): 1, habitus (dorsal view); 2, fore and hind wings; 3, antenna. Scale bars = 0.2 mm.

Stephanocampta masoni (Yoshimoto, 1990)

(Figs 4–11)

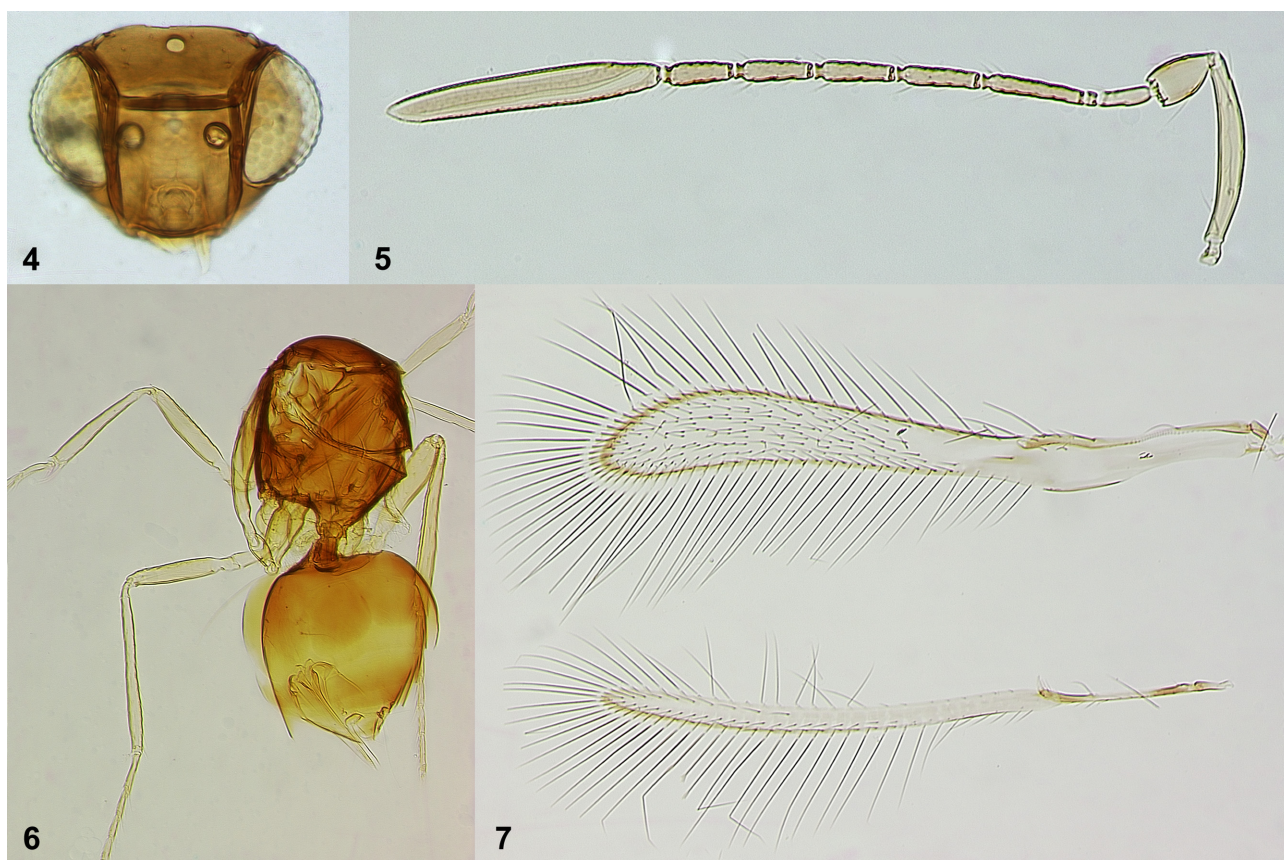
Hadromymar masoni Yoshimoto 1990: 86.

Stephanocampta masoni (Yoshimoto): Huber & Lin 1999: 40.

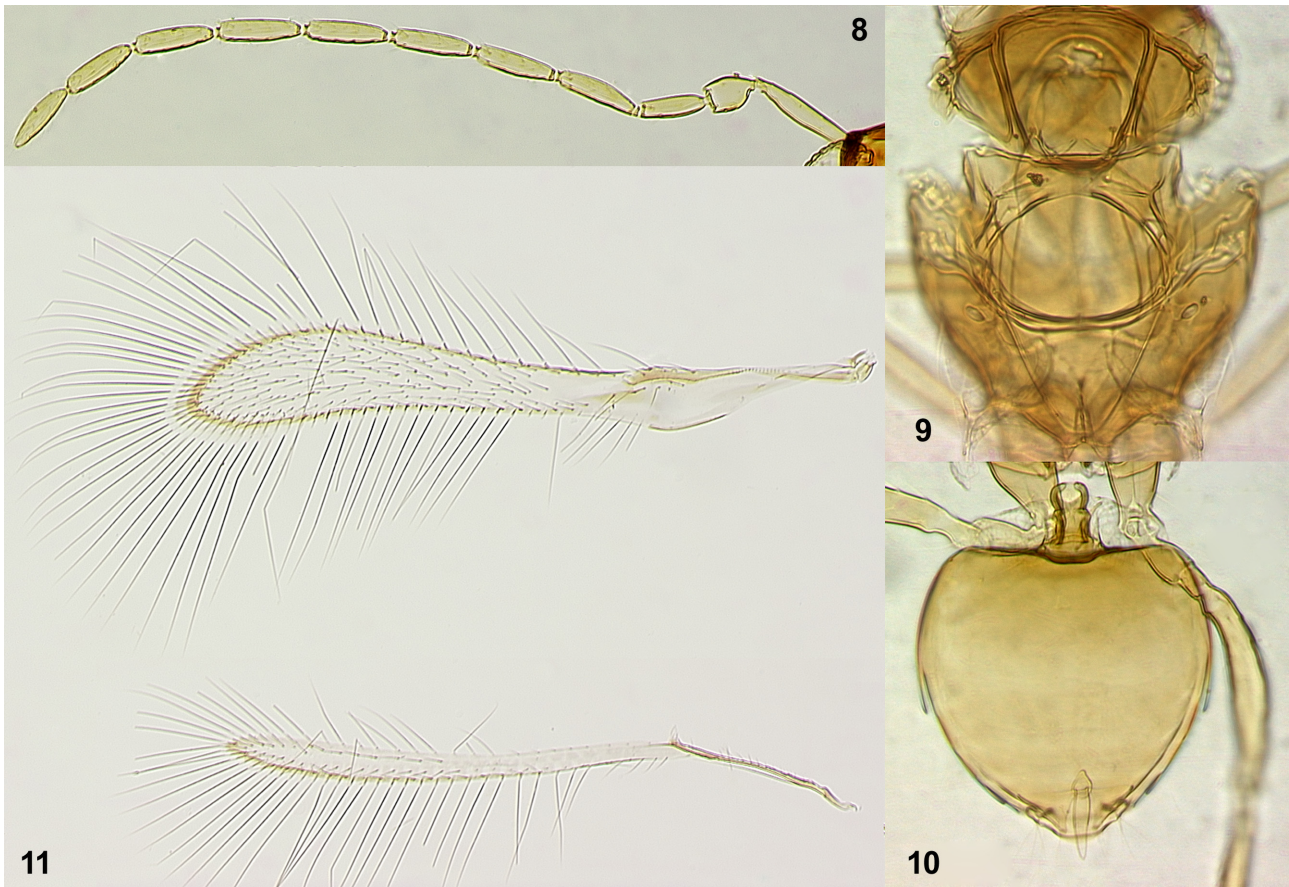
Non-type material examined. Costa Rica, Heredia: Estación Biológica La Selva: 50–150 m, iv–v.1993, P. Hanson [1 ♀, UCRC]; 10°43'N 84°02'W, 16.viii.1995, ALAS [1 ♀, UCRC]. 16 km SSE of La Virgen, 10°16'N 84°05'W, 1050–1150 m, INBio-OET-ALAS Transect, ii.2001, M. Sharkey [2 ♂, UCRC].

Taxonomic notes. Yoshimoto (1990) described *S. masoni* from three females: the holotype from Costa Rica (Reserva Biológica Bosque Nuboso Monteverde, Puntarenas, 1500 m elevation), one paratype from Ecuador (Sacha [Lodge], Napo), and one paratype from Panama (15 km NW of El Hato de Volcán, Chiriquí, 1200 m elevation). The type series is deposited in the Canadian National Collection of Insects, Arachnids and Nematodes, Ottawa, Ontario, Canada (CNC).

While sorting UCRC Neotropical specimens of *Stephanocampta*, the second author of this communication noticed that more than one species appeared to be represented by specimens from Costa Rica, and that these did not appear to be conspecific with the *S. masoni* paratype from Ecuador. John T. Huber (CNC) was requested to check the type series of *S. masoni* and measure the length of its holotype (indicated in the original description as 2.0 mm) and the number of funicular segments (originally described as 6-segmented). Dr. Huber informed us that the correct body length of the holotype is 0.455 mm, that the funicle is 7-segmented (F2 is very short, about as long as wide). The body length of a dry-mounted, critical point-dried non-type female from Estación Biológica La Selva is 0.528 mm. Moreover, the female paratype from Ecuador is not a *Stephanocampta* but a *Camptoptera* sp. (J.T. Huber, personal communication). An antenna and a fore wing that were imaged in Yoshimoto (1990, fig. 17 and fig. 61, respectively) are mounted on a slide; these had been removed, along with one hind wing, from the paratype from Panama, which is conspecific with the holotype (J.T. Huber, pers. comm.). The specimen of *S. masoni* used for the scanning electron micrograph (Yoshimoto 1990, fig. 131) must have been yet another specimen, which was not part of the type series because it has both pairs of wings.



FIGURES 4–7. *Stephanocampta masoni* ♀ (Estación Biológica La Selva, Heredia, Costa Rica): 4, head (frontal view); 5, antenna; 6, mesosoma and metasoma; 7 fore and hind wings.



FIGURES 8–11. *Stephanocampta masoni* ♂ (16 km SSE of La Virgen, Heredia, Costa Rica): 8, antenna; 9, mesosoma; 10, metasoma; 11, fore and hind wings.

To facilitate recognition of *S. masoni*, we illustrate both sexes based on the UCRC non-type specimens from Costa Rica. Images of the female from Estación Biológica La Selva (head: Fig. 4, antenna: Fig. 5, mesosoma and metasoma: Fig. 6, and fore and hind wings: Fig. 7) were kindly compared by Dr. Huber with the holotype and the paratype from Panama. We also provide a brief description of the male because it was unknown previously, though Huber & Lin (1999) had mentioned one undetermined male of a *Stephanocampta* sp.

Description. MALE. Body length of a dry-mounted, critical point-dried specimen 0.3 mm, that of a slide-mounted specimen 0.578 mm. Head dark brown to black, rest of body dark brown; appendages light brown to brown. Antenna (Fig. 8) with scape 5.2× as long as wide; flagellum 10-segmented, F1 about 0.8× length of F3, F2 ring-like (much wider than long). Mesosoma (Fig. 9) longer than metasoma (Fig. 10). Fore wing (Fig. 11) 7.7× as long as wide; hind wing (Fig. 11) about 18× as long as wide. Genitalia (Fig. 10) length 60 µm.

Acknowledgment

We thank John T. Huber (CNC) for providing valuable information on the type series of *S. masoni*.

References

- Gibson, G.A.P. (1997) Chapter 2. Morphology and terminology. In: Gibson, G.A.P., Huber, J.T. & Woolley, J.B. (Eds.), *Annotated keys to the genera of Nearctic Chalcidoidea (Hymenoptera)*. NRC Research Press, Ottawa, pp. 16–44.
- Huber, J.T. & Lin, N. (1999) World review of the *Camptoptera* group of genera (Hymenoptera: Mymaridae). *Proceedings of the Entomological Society of Ontario*, 130, 21–65.
- Lin, N.-Q., Huber, J.T. & La Salle, J. (2007) The Australian genera of Mymaridae (Hymenoptera: Chalcidoidea).

Zootaxa, 1596, 1–111.

- Luft Albarracin, E., Triapitsyn, S.V. & Virla, E.G. (2009) Annotated key to the genera of Mymaridae (Hymenoptera: Chalcidoidea) in Argentina. *Zootaxa*, 2129, 1–28.
- Mathot, G. (1966) Contribution à la connaissance des Mymaridae et Mymarommidae d'Afrique centrale (Hymenoptera Chalcidoidea). *Bulletin et Annales de la Société Royale Entomologie de Belgique*, 102 (14), 213–239.
- Yoshimoto, C.M. (1990) *A review of the genera of New World Mymaridae (Hymenoptera: Chalcidoidea)*. Flora & Fauna Handbook No. 7, Sandhill Crane Press, Inc., Gainesville, Florida, v–ix +166 pp.