

SUBFAMILY ACAMPSOHELCONINAE

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INTRODUCTION. The subfamily Acampsohelconinae was erected by Tobias (1987) for a fossil (*Acampsohelcon*) in Baltic amber. Van Achterberg (2002) added three extant genera to the subfamily, i.e., *Afrocampsis*, *Canalicephalus*, and *Urosigalphus*. Of these genera, only *Urosigalphus* is found in the New World. Arias-Penna and Whitfield (2012) give a complete introduction to all aspects of the subfamily and revised the Colombian species.

PHYLOGENY. *Urosigalphus* was included in the tribe Brachistini of the Helconinae. Sharanowski et al. (2011) demonstrated that the two are not closely related; rather, *Urosigalphus* (and presumably other acampsohelconines, which were not included in the analyses) was found to be sister to a large clade including all Helconoids and the Macrocentroid subcomplex.

BIOLOGY. Unknown for all other genera but members of *Urosigalphus* are endoparasitoids of the larval stage, perhaps egg-larval parasitoids, of Curculionidae and Bruchinae (Chrysomelidae).

COMMON GENERA. *Urosigalphus*.

DISTRIBUTION. *Afrocampsis*, and *Canalicephalus* are old World genera and *Urosigalphus* is widespread in the Nearctic and Neotropical realms.

DISTINGUISHING FEATURES. The hind claws are dimorphic, i.e., the outer claw is longer than the inner claw. There are sometimes other differences in the two claws as well, e.g., different curvature and the presence of a lobe basal to the inner claw. Hind wing vein 2-CU present. Metasoma in the form of an unsegmented carapace. Second submarginal cell of forewing absent. Crossvein 2cu-a of forewing absent.

GENERIC TREATMENTS

Urosigalphus Ashmead 1889

Diagnosis. The hind claws are dimorphic, i.e., the outer claw is longer than the inner claw and there may be other differences as well including different curvature and the presence of a lobe basal to the inner claw. Hind wing vein 2-CU present. Metasoma in the form of an unsegmented carapace. Second submarginal cell of forewing absent. Crossvein 2cu-a of forewing absent. Many species have a protuberance between the lateral ocelli and tubercles at the apex of the metasomal carapace.

Biology. Emerging from the larval stage (perhaps egg-larval parasitoids); endoparasitoids of Curculionidae and Bruchinae (Chrysomelidae). A complete list of the host records for *Urosigalphus* is contained in Table 1 of Arias-Penna and Whitfield (2012).

Diversity. 100 described species, probably 3 or 4 times that number undescribed.

Distribution. Nearctic and Neotropical. The closely related genus *Canalicephalus* is found exclusively in the Old World.

Publications. Gibson (1972a, b, 1974, 1982) described and keyed the New World species of *Urosigalphus*. Arias-Penna and Whitfield (2012) described 23 new species from Colombia and presented a key to all South American species.

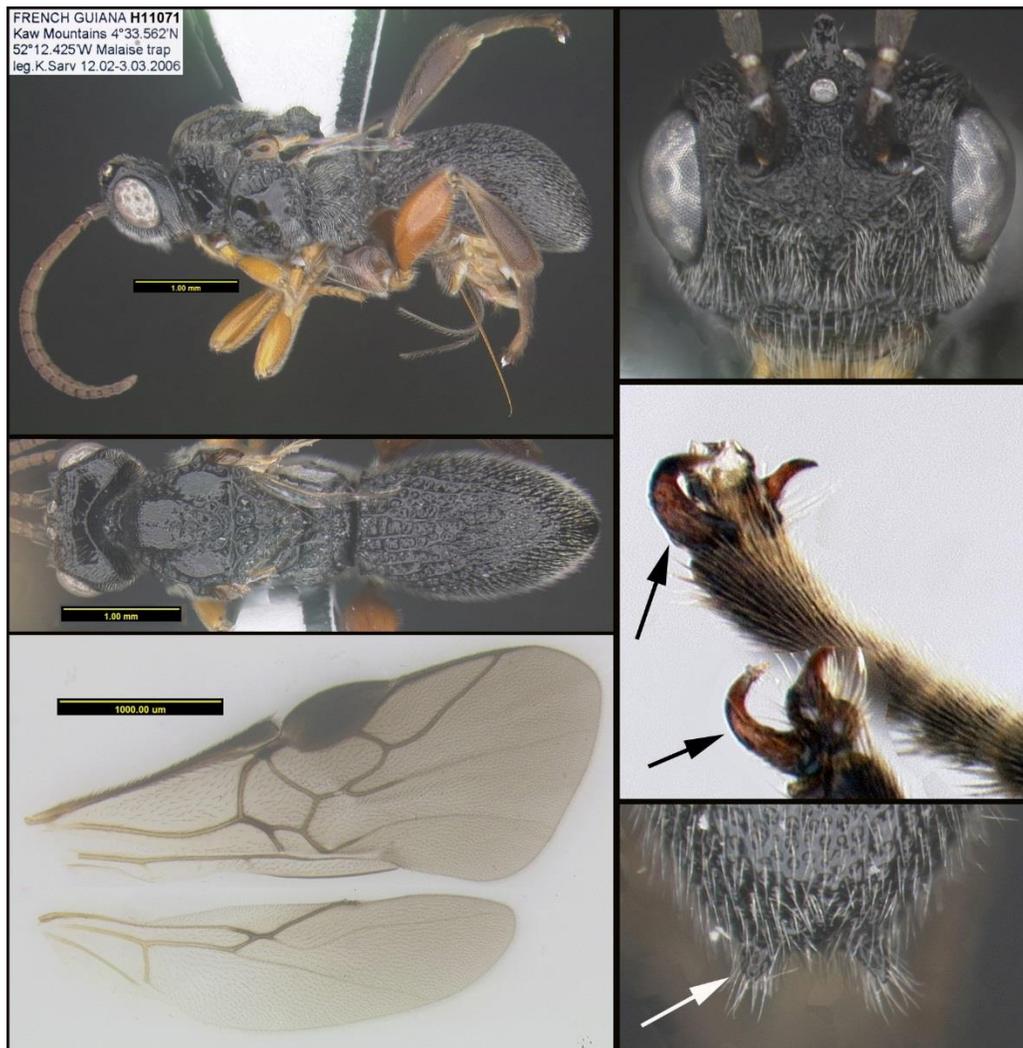


Figure 1. *Urosigalphus* sp.

REFERENCES

- Achterberg C van. 2002. Revision of the genus *Canalicephalus* Gibson and the recognition of the Acampsohelconinae (Hymenoptera: Braconidae) as extant. *Zoologische Mededelingen Leiden*. 76(20):347-370.
- Arias-Penna DC, Whitfield JBA. 2012 taxonomic revision of the Colombian species of *Urosigalphus* Ashmead (Hymenoptera: Braconidae). *Zootaxa* 3411: 1-54.
- Gibson LP. 1972a. Revision of the genus *Urosigalphus* of the United States and Canada (Hymenoptera: Braconidae). *Miscellaneous Publications of the Entomological Society of America* 8: 8:3-134.
- Gibson LP. 1972b. *Urosigalphus* of Mexico and Central America (Hymenoptera: Braconidae). *Miscellaneous Publications of the Entomological Society of America* 8:135-157.
- Gibson LP. 1974. South American *Urosigalphus* (Hymenoptera: Braconidae). *Miscellaneous Publications of the Entomological Society of America* 9: 201-226.
- Gibson LP. 1982. New species of *Urosigalphus* (Hymenoptera: Braconidae) from South America. *Proceedings of the Entomological Society of Washington*. 84(1):167-176.
- Sharanowski BJ, Dowling AP, Sharkey MJ. 2011. Molecular phylogenetics of Braconidae (Hymenoptera: Ichneumonoidea), based on multiple nuclear genes, and implications for classification. *Systematic Entomology* 36: 549-572.
- Tobias VI. 1987. New taxa of Braconidae from Baltic amber (Hymenoptera). *Entomologicheskoye Obozreniye*. 66(4): 845-859. [*Entomological Review*. 67(4):18-32.].