

## The Aculeata of French Polynesia. IV. First record of *Chrysis angolensis* (Hymenoptera, Chrysididae)

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**Abstract.** – *Chrysis angolensis* Radoszkowski, 1881, has been collected in the Marquesas and Society Islands and this is the first report for this species and for the family Chrysididae in French Polynesia. Its biology and a list of its potential hosts are briefly discussed.

**Résumé.** – Les Aculéates de Polynésie française. IV. Première citation de *Chrysis angolensis* (Hymenoptera, Chrysididae). *Chrysis angolensis* Radoszkowski, 1881, a été collecté dans les archipels des Marquises et de la Société. C'est la première citation de cette espèce et de la famille des Chrysididae pour la Polynésie française. La biologie de *C. angolensis* ainsi que la liste de ses hôtes potentiels sont brièvement présentées.

**Keywords.** – Society Islands, Marquesas Islands, Cuckoo wasp, new record.

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Recent entomological surveys in the Society Islands highlighted our poor knowledge of the Aculeate fauna of French Polynesia (RAMAGE, 2014; RAMAGE *et al.*, 2015a, b, c). The family Chrysididae is here reported from French Polynesia for the first time with the presence of *Chrysis angolensis* Radoszkowski, 1881, in the Marquesas and Society Islands.

*Chrysis angolensis* is known to parasitize the nests of potter wasps and mud-dauber wasps. As the latter build nests on man-made structures, *C. angolensis* must have been introduced in French Polynesia along with these nests through international trade (RAMAGE *et al.*, 2015c). *C. angolensis* has been collected near houses, where the mud-dauber wasps have the habit of making their nests.

The neighboring Cook Islands host at least three unidentified Chrysididae species, none of them being *C. angolensis* (G. McCormack, pers. comm.). It is most likely that other chrysidid species will be reported from French Polynesia in a near future.

**Abbreviations.** – BME, Bohart Museum of Entomology, University of California, Davis, USA; CS, Symbiocode's collection, Lyon; CTR, Thibault Ramage's personal collection.

Family **Chrysididae** Latreille, 1802

Genus **Chrysis** Linnaeus, 1761

***Chrysis angolensis*** Radoszkowski, 1881 (fig. 1-3)

**Material examined.** – 1 ♀, Moorea, XII.2006, *S. Charlat* (CS); 1 ♂ and 1 ♀, Taha'a / Pueheru, garden, 29.IX.2012, 30 m, 16°35'20.29"S - 151°31'47.16"W, *Th. Ramage* (BME); 1 ♂, Nuku Hiva / vallée Française, IV.2013, *F. Jacq* (CTR).

**Diagnosis.** – *Chrysis angolensis* is the only Chrysididae known from French Polynesia. It superficially resembles another wasp species in French Polynesia, *Chalybion bengalense* (Dahlbom, 1845) (Sphecidae), which is also metallic blue with brown-tinted wings (RAMAGE *et al.*, 2015c). *Chalybion bengalense* can be easily distinguished from *Chrysis angolensis* by its long and tubular petiole. Living specimens of *C. angolensis* are metallic green and blue, but become dark blue when dead.

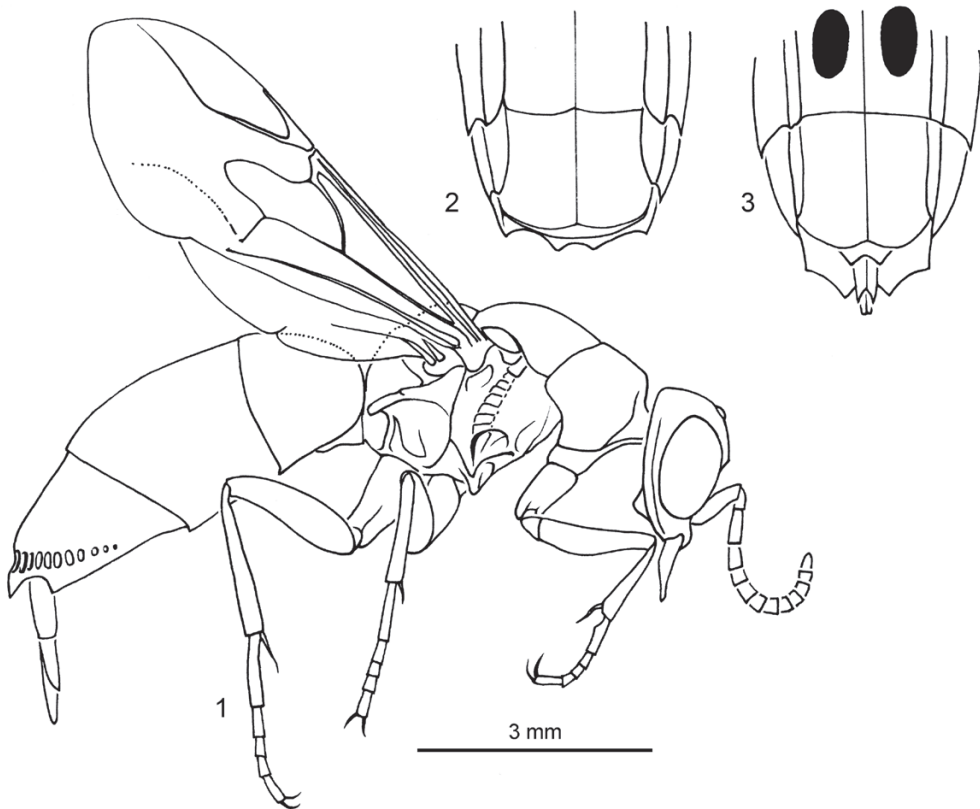


Fig. 1-3. – *Chrysis angolensis* Radoszkowski. – 1, Side view (♀). – 2-3, Apex of the metasoma, ventral view: 2, ♂; 3, ♀.

**Distribution.** – Worldwide in temperate and tropical regions, with the exception of Europe; native to Africa.

**Biology.** – *C. angolensis* is a nest parasite of *Sceliphron* Klug, 1801 (Sphecidae) and *Eumenes* Latreille, 1802 (Vespidae) wasps (KIMSEY & BOHART, 1990; KIMSEY, 2006).

**Observations in French Polynesia.** – *Chrysis angolensis* is new to French Polynesia and is here recorded from the Marquesas and Society Islands. This chrysid wasp has a nearly cosmopolitan distribution due to its habit of parasitizing mud nests of sphecids, crabronids and vespids built on structures, particularly sailing ships (KIMSEY & BOHART, 1990; KIMSEY, 2006).

Three *Sceliphron* species, *S. caementarium* (Drury, 1773), *S. laetum* (Smith, 1856) and *S. curvatum* (Smith, 1870) (RAMAGE *et al.*, 2015c) and one *Eumenes* species, *E. mediterraneus* (Kriechbaumer, 1879) (GUSENLEITNER, 2011) are reported from French Polynesia. These species are indeed potential hosts for *Chrysis angolensis*. However, *C. angolensis* seems to be more host nest-type specific than host species specific, so all the Aculeata that build mud nests in French Polynesia are potential hosts, including *Chalybion bengalense* (Dahlbom, 1845) and the six known species of the genus *Pison* Jurine, 1808 (MENKE, 1979).

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