

A new species of the wasp genus *Sericophorus* in New Caledonia

(Hymenoptera: Apoidea: Crabronidae)

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Abstract: A new species of the wasp genus *Sericophorus* is described, which is the second species of the genus from New Caledonia. *Sericophorus pulawskii* **n. sp.** is structurally similar to the other New Caledonian species, *S. rhinoceros* Pulawski, but can be differentiated by the clypeal structure: *S. rhinoceros* has a unique, horn-like projection, whereas *S. pulawskii* has a short, sparsely setose projection in the same position.

Zusammenfassung: Eine neue Art der Grabwespen-Gattung *Sericophorus* wird beschrieben. *Sericophorus pulawskii* **n. sp.** ist die zweite bekannt gewordene Art von Neukaledonien, die morphologisch in vielem *S. rhinoceros* Pulawski ähnelt. Die beiden Arten lassen sich leicht an der Clypeus-Morphologie unterscheiden: *S. rhinoceros* besitzt einen ungewöhnlichen, hornartigen Fortsatz, während *S. pulawskii* **n. sp.** an gleicher Stelle durch eine wesentlich kleinere Erhebung charakterisiert ist.

Key words: Hymenoptera, Apoidea, Sphecidae, Miscophini, *Sericophorus*, taxonomy

Introduction

The genus *Sericophorus* currently comprises 69 valid species (PULAWSKI 2009) exclusively known from the Australasian region. Almost all species are known from Australia and Tasmania, but one species is described each from New Caledonia (*S. rhinoceros* Pulawski, 1989) and New Guinea (*S. rhamphigaster* Menke, 1989). Both species are known

from females only, and no material other than the type specimens has become available since the description. *Sericophorus rhinoceros* from New Caledonia is a peculiar species that can be easily identified by its spectacular clypeal horn. However, only the holotype is known yet, which remained the only New Caledonian specimen of *Sericophorus* until now.

I recently received unidentified apoid wasps from New Caledonia, and I found seven specimens of *Sericophorus* among them, all females. Five of them clearly belong in *S. rhinoceros*, whereas two represent an undescribed species. I am describing the new species now to make it formally available for an ongoing revision of *Sericophorus* currently in preparation by Wojciech J. PULAWSKI at the California Academy of Sciences, San Francisco.

Results

Sericophorus pulawskii n. sp.

(Figs. 1–2)

Diagnosis: *Sericophorus pulawskii* n. sp. is most similar to *S. rhinoceros*, and these are the only species of the genus occurring in New Caledonia. *Sericophorus rhinoceros* is unique in *Sericophorus* in having a large, horn-like clypeal projection (Fig. 3a, b), whereas *S. pulawskii* has a short, sparsely setose projection on the clypeus (Fig. 1a, 2a). Additionally, the clypeal projection of *S. pulawskii* is dorsally bordered by a relatively sharply edged swelling (best seen in lateral view, Fig. 2a), whereas the dorsal side of the clypeal horn is evenly confluent with the clypeal surface in *S. rhinoceros*. The two species are otherwise structurally very similar.

Description: Female (based holotype and paratype; the male is unknown).

Body length about 11.0 mm. Flagellomere I about 1.3x as long as wide apically; median flagellomeres about as long as wide, length of flagellomere X about twice basal width.

Body black, with the following reddish brown: distal half of mandible (tip dark in paratype), most flagellomeres ventrally, foretibial venter and inner face, foretarsomeres partly. Forewing infumate except nearly hyaline in basal half. Hindwing infumate beyond cellular area.

Inner orbits diverging ventrad. Frons transversely swollen before midocellus, finely punctatorugose; frontal line shiny, short, not extending

into dorsal half of frons and not to clypeus. Free clypeal lobe broadly emarginate medially, double-edged. Clypeus with conical projection, which is dorsally bordered by relatively sharply edged swelling (Fig. 2a); projection asetose, densely punctured except for tip of projection (most punctures less than one diameter apart). Propleuron expanded anterolaterally. Scutal and scutellar punctures minute, averaging about one to two diameters apart; scutal flange lamellate, ending gradually. Mesopleural punctures minute, about one diameter apart. Episternal sulcus with a few transverse rugae below ill-defined scrobal sulcus. Propodeal dorsum with minute punctures, one to two diameters apart; median line shallowly impressed, shiny, impunctate, with short median carina posteriorly; anterior margin coarsely foveolate; sides with shallow, indistinct, sparse punctures; triangular area on posterior propodeal surface almost completely smooth and with median carina in longitudinal impression. Forewing vein M diverging from M+Cu proximally to Cu-a; second submarginal cell narrowly truncate anteriorly. Basolateral carina of tergum I (Fig. 2c) shiny, markedly long, extending almost to posterior tergal margin, curved posteriorly; spiracle elongate, slit-like (Fig. 2c); punctures of tergum I minute, two or more diameters apart near center of horizontal part. Sternum I with conspicuous bulge over most of sternal length, which is broadly constricted (in lateral view, Fig. 2c). Sternum VI impunctate smooth, with two coarsely punctatorugose areas apicolaterally. Pygidial plate covered with thick setae, almost concealing integument.

Setae light golden on clypeus and frons, obscuring integument; suberect on vertex and scutum; and directed anterad on vertex.

Etymology: The new species is dedicated to Wojciech J. PULAWSKI, who is a dear friend, a critical colleague, and a pleasant travel companion. His papers are among the most outstanding works on the taxonomy of apoïd wasps of the last decades.

Records: Holotype (female): New Caledonia: Foret Nord, site 1, 480m, Malaise [trap], 22°19'S 166°55'E, 1-22 Dec 2004, BURWELL, WRIGHT [collectors], rainforest (Queensland Museum, Brisbane, Australia, # 11882).

Paratype: New Caledonia: Province Nord; Mt. Mandjélia, 5 km WSW Puébo; hand net; [elevation] 720 m, 20°24'S 164°32'E; 27 Nov 2000;

M.E. IRWIN (1 female, Illinois Natural History Survey, Insect Collection, Champaign, Illinois; # 20.521).



Fig. 1 (left). *Sericophorus pulawskii* n. sp., holotype. a) habitus, lateral view. b) left forewing.

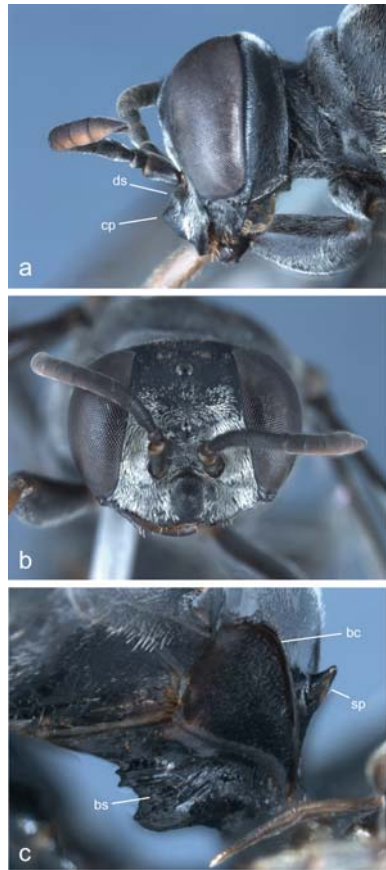
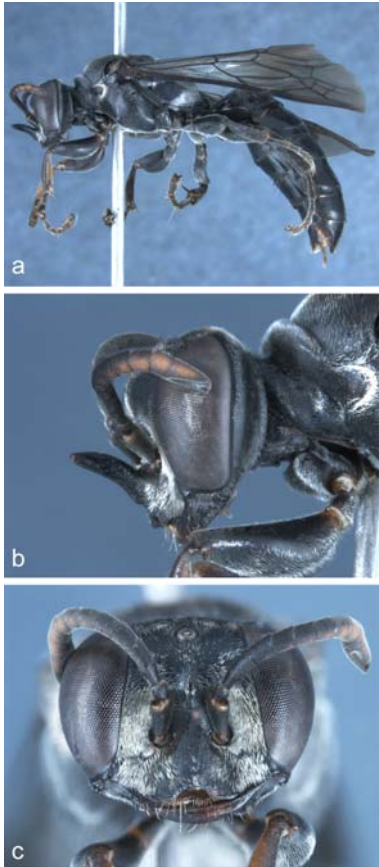


Fig. 2 (right). *Sericophorus pulawskii* n. sp., holotype. a) head in lateral view. b) head in frontal view. c) metasomal segment I in oblique lateral view. Abbreviations: bc – basolateral carina of tergum I; bs – bulge at base of sternum I; cp – clypeal projection; ds – swelling dorsal of clypeal projection; sp – elongate spiracle of tergum I.

Additional material: *Sericophorus rhinoceros* Pulawski
New Caledonia: Province Nord; Mt. Mandjélia, 6 km WSW Puébo; Malaise [trap] in rain forest; el[evation] 545 m, 20°24'09"S 164°30'54"E; 17

January 1996; M.E. IRWIN, D. W. WEBB (1 female, Illinois Natural History Survey, Insect Collection, Champaign, Illinois; # 20.519).

Pic du Pin, site 2, rainfor[est]; 22°14'S 166°50'E, 280m, 23 Dec 2004 – 12 Jan 2005, Malaise [trap], BURWELL, WRIGHT [collectors] (2 females, Queensland Museum, Brisbane, Australia; # 12047). Same data, 25 Nov – 23 Dec 2004 (1 female, Queensland Museum, Brisbane, Australia; # 11864). Foret Nord, site 2, 200m, Malaise [trap], 22°19'S 166°55'E, 22 Dec 2004 – 9 Jan 2005, BURWELL, WRIGHT [collectors], rainforest (1 female, Queensland Museum, Brisbane, Australia; # 12082).



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I thank Don WEBB (Illinois Natural History Survey, Insect Collection, Champaign, Illinois, USA) and Chris BURWELL (Queensland Museum, South Brisbane, Queensland, Australia) for providing material from New Caledonia. Wojciech J. PULAWSKI (California Academy of Sciences, San Francisco, USA) provided me with a list of characters of diagnostic significance in *Sericophorus*.

Fig. 3. *Sericophorus rhinoceros*. a) habitus, lateral view. b) head in lateral and, c) in frontal view.

References

- BOHART, R. M. & MENKE, A. S. (1976): Sphecid wasps of the World. A generic revision. IX + 695 pp. Berkeley, Los Angeles, London (University of California Press).
- MENKE, A. S. (1989): A new species of *Sericophorus* from New Guinea (Hymenoptera: Sphecidae: Larrinae). – *The Pan-Pacific Entomologist* **65**: 458–462.
- PULAWSKI, W. J. (1989): *Sericophorus rhinoceros*, a new species from New Caledonia (Hymenoptera: Sphecidae). – *The Pan-Pacific Entomologist* **65**: 319–321.
- PULAWSKI, W. J. (2009): Sphecidae. Catalog of genera and species. *Sericophorus*. http://research.calacademy.org/research/entomology/Entomology_Resources/Hymenoptera/sphecidae/Genera_and_species_PDF/Sericophorus.pdf. [Last accessed 3 June 2009].

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