

New record of the genus *Paraleptomenes* Giordani Soika (Hymenoptera: Vespidae: Eumeninae) from Vietnam, with description of one new species

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Abstract. The genus *Paraleptomenes* Giordani Soika, 1970, is recorded in Vietnam for the first time. A new species, *P. incultus*, and one newly recorded species, *P. communis* Giordani Soika, 1994, are described and figured.

Key words. Eumeninae, *Paraleptomenes*, new species, new record, southern Vietnam

INTRODUCTION

The genus *Paraleptomenes* was proposed by Giordani Soika (1970) for *Paraleptomenes nurseanus* Giordani Soika, 1970, as monotypic. Up to now, the genus contains eight species and three subspecies (Kumar et al., 2014). This genus is distributed primarily in the Oriental Region, with one species also in Pakistan, Iran, and Mauritius, but no species has been recorded in Vietnam before.

In this paper, based on specimens deposited in the Institute of Ecology and Biological Resources, Hanoi, Vietnam (IEBR), the genus *Paraleptomenes* is recorded in Vietnam for the first time, represented by two species, one of them a newly recorded species for Vietnam and the other described as a new species for science.

MATERIAL AND METHODS

The material examined in the present study is deposited in the collections of the Institute of Ecology and Biological Resources, Hanoi, Vietnam (IEBR).

The adult morphological and colour characters were observed on pinned and dried specimens under a stereoscopic microscope. Measurements of body parts were made with an ocular micrometer attached to a stereoscopic microscope.

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“Body length” indicates the lengths of head, mesosoma, and the first two metasomal segments combined. Terminology follows Yamane (1990). Photographic images were made with Nikon SMZ 800N Digital Stereo Microscope, using Helicon Focus 7 software; the plates were edited using Photoshop CS6.

TAXONOMIC ACCOUNTS

Paraleptomenes Giordani Soika, 1970

Paraleptomenes Giordani Soika, 1970, Boll. Mus. Civ. Stor. Nat. Venezia, 20/21: 79, genus.

Type species. *Paraleptomenes nurseanus* Giordani Soika, 1970, by original designation and monotypy.

Diagnosis. Metanotum without tubercles; anterior face of pronotum with two foveae coalesced, pronotal face punctate laterally; propodeum with submarginal carina produced into pointed lamella apically and valvula enlarged and free posteriorly from submarginal carina; metasomal segment I in dorsal view narrower than II, wider apically than basally; tergum I not carinate; tergum II ridged basally, not forming acarinarium, not reflexed apically.

Paraleptomenes incultus, new species (Figs. 1–6)

Material examined. Holotype: male (deposited in IEBR), labelled “VIETNAM, Ma Da, Vinh Cuu, Dong Nai, 18.v.2007”.

Diagnosis. This species can be distinguished from other species of genus *Paraleptomenes* by the following combination of characters: pronotal carina strongly raised laterally, very weak dorsally; scutellum and metanotum convex; propodeum deeply excavated medially with the excavation narrow, about one-third the width of propodeum,



Figs. 1–6. *Paraleptomenes incultus*, new species, holotype, male. 1, Head in frontal view. 2, Vertex in dorsal view. 3, Left antenna. 4, Propodeum in dorsal view. 5, Tergum I & II and valvulae in dorsal view. 6, Habitus. Scale = 1 mm.

with median carina running from midpoint to apical margin; terga I and II covered with coarse punctures but punctures smaller than those on pronotum and mesoscutum; tergum II without hump.

Description. Male (Fig. 6). Body length 6.5 mm; fore wing length 5.0 mm. Head in frontal view subcircular, wider than high, about 1.2 times as wide as high (Fig. 1). Vertex without cephalic foveae, strongly depressed before occipital carina. Distance from posterior ocelli to apical margin of vertex about 1.7 times distance from posterior ocelli to inner eye margin (Fig. 2). Gena much narrower than eye, in lateral view about 0.5 times as wide as eye. Occipital carina complete, present along entire length of gena. Inner eye margins strongly convergent ventrally; in frontal view nearly 1.5 times further apart from each other at vertex than at clypeus. Disc of clypeus in lateral view weakly convex, in frontal view nearly 1.2 times as wide as high (Fig. 1), with basal margin strongly convex medially and almost touching antennal sockets; apical margin deeply emarginate medially, forming sharp tooth on each lateral side (Fig. 1); width of emargination much less than $\frac{1}{3}$ width of clypeus between inner eye margins. Mandible with four prominent teeth. Antennal scape about 3.3 times as long as its maximum width; flagellomere I about 1.3 times as long as wide, flagellomeres II slightly longer than wide, flagellomeres III–IX wider than long, terminal flagellomere slender, finger-like, and almost straight (Fig. 3).

Mesosoma longer than wide in dorsal view. Pronotal carina strongly raised at lateral part, very weak at dorsal part, reaching ventral corner of pronotum. Mesoscutum in lateral view weakly convex, in dorsal view wider than long between tegulae, about 1.1 times as wide as long, with two short longitudinal depressions at apical half. Disc of scutellum slightly convex, with a longitudinal depression in the middle, in profile slightly higher than level of apical margin of mesoscutum. Metanotum convex, sloping down to apical margin. Propodeum deeply excavated medially with the excavation narrow, about one-third the width of propodeum, posterior surface strongly rugose, basal triangular area without basal fovea, with median carina runs from half to apical margin (Fig. 4); dorsal surface of propodeum strongly rugose; border between dorsal and posterior faces round, border between dorsal and lateral faces bluntly angled. Metasomal tergum I in dorsal view about 1.7 times as wide as long (Fig. 5), with shallow horizontal depression near apical margin, narrower than tergum II; tergum II without hump, in dorsal view about 1.1 times as wide as long; sternum II in lateral view gradually and slightly convex to apical margin.

Body covered with silvery setae. Clypeus covered with long setae, with sparse and strong punctures, punctures at centre larger than at sides, space between punctures larger than puncture diameter, punctures near apical margin smaller but denser. Mandible with several shallow small punctures. Frons densely covered with coarse punctures, interspaces between punctures slightly raised to form reticulation. Vertex and gena with coarse punctures. Pronotum with punctures coarser than those on frons, spaces between punctures narrow, strongly

raised to form reticulation, anterior face with deep and large punctures medially, smooth laterally. Mesoscutum densely and coarsely covered with flat-bottomed punctures. Punctures on scutellum similar to those on mesoscutum. Punctures on metanotum smaller than those on scutellum. Mesepisternum with punctures similar to those on pronotum posterodorsally, several shallow and small punctures anteroventrally; border between posterodorsal and anteroventral parts distinct. Metapleuron with strong striation in dorsal area, with sparse deep and large punctures in ventral area. Propodeum with punctures on dorsal surface very coarse, spaces between punctures strongly raised to form reticulation, lateral faces with weaker and shallower punctures, posterior surface rugose and with several large punctures. Metasomal terga I–II densely covered with coarse punctures but punctures smaller than those on pronotum and mesoscutum, punctures on tergum I coarser and denser than those on tergum II, punctures on terga III–V much smaller and weaker than those on terga I–II; tergum VI with minute punctures; punctures on sternum II stronger and larger than those on sterna III–V, sternum VI with minute punctures.

Colour. Black; following parts yellow: clypeus entirely, main part of mandible, spot at ocular sinus, short band at gena below eye margin, large spot between antennal sockets, antennal scape beneath, two large spot at dorsal part of pronotum near pronotal carina, tegula except brown band in the middle, parategula, transverse band at metanotum medially, apical band of terga I and II, apical half of fore femora, all tibiae and tarsus. Propodeal valvulae dark brown. Wings transparent, slightly infuscate at apical margin, veins dark brown.

Female. Unknown.

Distribution. Vietnam (Dong Nai).

Etymology. The specific name is a Latin word ‘*incultus*’ (= coarse), referring to coarse punctures on the body of the species.

Remarks. This species comes close to *P. humbertianus* (de Saussure, 1867) in having coarse punctures on tergum II, but can be distinguished from the latter by: tergum II lacking hump (versus tergum II with three humps in *P. humbertianus*), border between dorsal and lateral faces bluntly round (versus border between dorsal and lateral faces sharply angled in *P. humbertianus*), and the proportions for width versus length of tergum II being less than those in *P. humbertianus*.

***Paraleptomenes communis* Giordani Soika, 1994**
(Figs. 7–11)

Paraleptomenes communis Giordani Soika, 1994, Ann. Mus. Civ. Stor. Nat. “G. Doria” 90: 124 (key), 129, female, male – “Giava: ... Pasoeroean” (holotype female Venezia).

Diagnosis. This species can be distinguished from other species of the genus *Paraleptomenes* by the following combination of characters: female clypeus with longitudinal



Figs. 7–11. *Paraleptomenes communis*, female. 7, Head in frontal view. 8, Vertex and pronotum in dorsal view. 9, Propodeum in dorsal view. 10, Tergum I & II in dorsal view. 11, Habitus. Scale = 1 mm.

depressed part at the middle (Fig. 7), punctures at apical margin larger than those on the other part; scutellum convex; metanotum oblique; propodeum with unpunctured part on posterior surface large and shiny (Fig. 9); terga I and II (Fig. 10) covered with sparse and strong punctures, tergum II without hump. Pronotum with two large yellow marks, almost coalesced.

This species is recorded in Vietnam for the first time.

Material examined. 1 female (IEBR), Gia Lai, Chu Se, Ia Pal, waterfall, 13°39'46.2"N 108°08'04.2"E, alt. 369 m, 20 July 2012, Nguyen Thi Phuong Lien.

Distribution. India: Kerala; Thailand; Malaysia; Singapore; Indonesia: Java; Bali; Vietnam (new record).

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