
Insects of Mount Wilhelm, Papua New Guinea

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New species and new records of *Betylobraconinae*, *Braconinae*, *Cheloninae*, *Helconinae* and *Rogadinae* (Hymenoptera: Braconidae) from Papua New Guinea

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ABSTRACT

New taxa were found among the Braconidae collected during the “Our Planet Reviewed” mission in Papua New Guinea. We describe here several new species of *Austroascogaster* Kittel & Austin, 2014 (Cheloninae), *Betylobracon* Tobias, 1979, *Gelasinibracon* Quicke, 1989 (Braconinae), *Jannya* van Achterberg, 1995b (Rogadinae) and *Mesocentrus* Szépligeti, 1900 (Betylobraconinae): *Austroascogaster baite-taensis* n. sp.; *A. elsa* n. sp.; *A. floriani* n. sp.; *A. kittelae* n. sp.; *A. missai* n. sp.; *A. morganae* n. sp.; *A. sebastiani* n. sp.; *A. sergei* n. sp.; *A. wilhelmensis* n. sp.; *Betylobracon leponcei* n. sp.; *B. novotnyi* n. sp.; *Gelasinibracon inopinatus* n. sp.; *Jannya ameiva* n. sp.; *Mesocentrus pappi* n. sp.; *M. sergeyi* n. sp. and *M. villemantae* n. sp. For the first time, the genus *Jannya* is recorded outside of the New World. Identification keys are updated for the corresponding genera. Additional distribution data are also given for *Austroascogaster mellosa* Kittel & Austin, 2014, *A. varia* Kittel & Austin, 2014 (Cheloninae), *Brulleia latianulata* (Cameron, 1911), *B. melanocephala* Szépligeti, 1904 (Helconinae), *Gelasinibracon sedlaceki* Quicke, 1989 (Braconinae), and *Mesocentrus crassipes* Szépligeti, 1900 (Betylobraconinae).

RÉSUMÉ

Nouvelles espèces et nouvelles données pour les *Betylobraconinae*, *Braconinae*, *Cheloninae*, *Helconinae* et *Rogadinae* (Hymenoptera : Braconidae) de Papouasie-Nouvelle-Guinée.

De nouveaux taxons ont été découverts parmi les Braconidae récoltés au cours de l’expédition «La Planète Revisitée» en Papouasie-Nouvelle-Guinée. Nous décrivons ici plusieurs espèces nouvelles appartenant aux genres *Austroascogaster* Kittel & Austin, 2014 (Cheloninae), *Betylobracon* Tobias, 1979, *Gelasinibracon* Quicke, 1989 (Braconinae), *Jannya* van Achterberg, 1995b (Rogadinae) et

Abbreviations for morphological terms and institutions:

OOL	shortest distance between hind ocellus and compound eye;
OD	ocellus diameter;
POD/OOL	ratio diameter of hind ocellus to the OOL;
POL	shortest distance between the two posterior ocelli;
F1/F2	ratio length of first flagellomere to second;
ED/TD	ratio length of eye in dorsal view to length of temple;
WF/HF	ratio width of face in frontal view to height;
MS/BM	ratio length of malar space to length of base of mandible;
WC/HC	ratio width of clypeus to height;
HMS/LMS	ratio height of mesosoma to length;
LHTI/LHTA	ratio length of hind tibia to hind tarsus;
LPS/LHBT	ratio length of longer posterior tibial spur to length of hind basitarsus;
LW/LB	ratio wing length to body;
SR1/PT	ratio length SR1 to pterostigma;
LPT/WPT	ratio length to width of pterostigma;
LMS/LMT	ratio mesosomal length to metasoma;
LT1/WT1	ratio length of first tergite to its apical width;
WMT/LMT	ratio width to length of metasoma;
IRSNB	Institut royal des Sciences Naturelles de Belgique, département d'entomologie, Bruxelles, Belgique;
MNHN	Muséum national d'Histoire naturelle, Paris, France.

The number of antennal segments includes all the flagellomeres + scapus and pedicel. The length and height of the mesosoma is measured in profile view from the anterior margin of mesoscutum to the junction with the metasoma, and from the ventral part of the mesoscutum to the dorsal part of lobes of mesoscutum, respectively. The type specimens have been deposited in the collections of IRSNB and MNHN.

SYSTEMATIC PART

Subfamily BETYLOBRACONINAE Tobias, 1979

Genus **BETYLOBRACON** Tobias, 1979

Betylobracon Tobias, 1979: 131.

Type species. *Betylobracon waterhousei* Tobias, 1979.

***Betylobracon leponcei* n. sp.**

Figures 1, 3-11

TYPE MATERIAL—Holotype female (MNHN), Papua New Guinea. Province Madang, Mount Wilhelm (-5.759910, 145.2347) 1700 m, 04-05/11/2012, leg Valeba, Tulei, Novotny, Leponce, Plot 2, understorey, Malaise, MAL-MW1700B-11/16-d11.

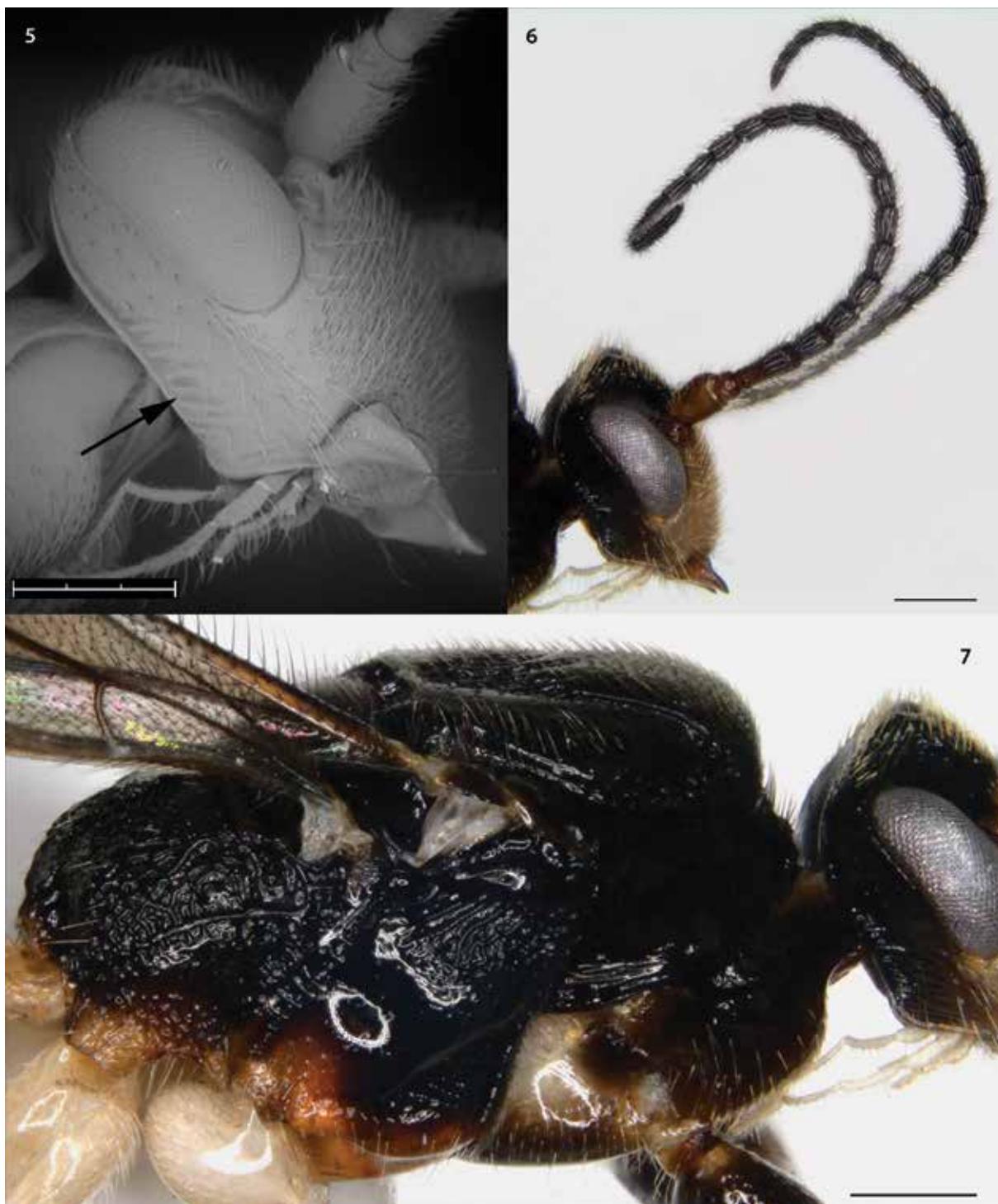
Paratype, Papua New Guinea. Female (IRSNB), Province Madang, Mount Wilhelm (-5.760916,-145.2353) 1700 m, 01-02/11/2012, leg Valeba, Tulei, Novotny, Leponce, Plot 3, understorey, Malaise, MAL-MW1700C-08/16-d08.

DISTRIBUTION — Papua New Guinea.

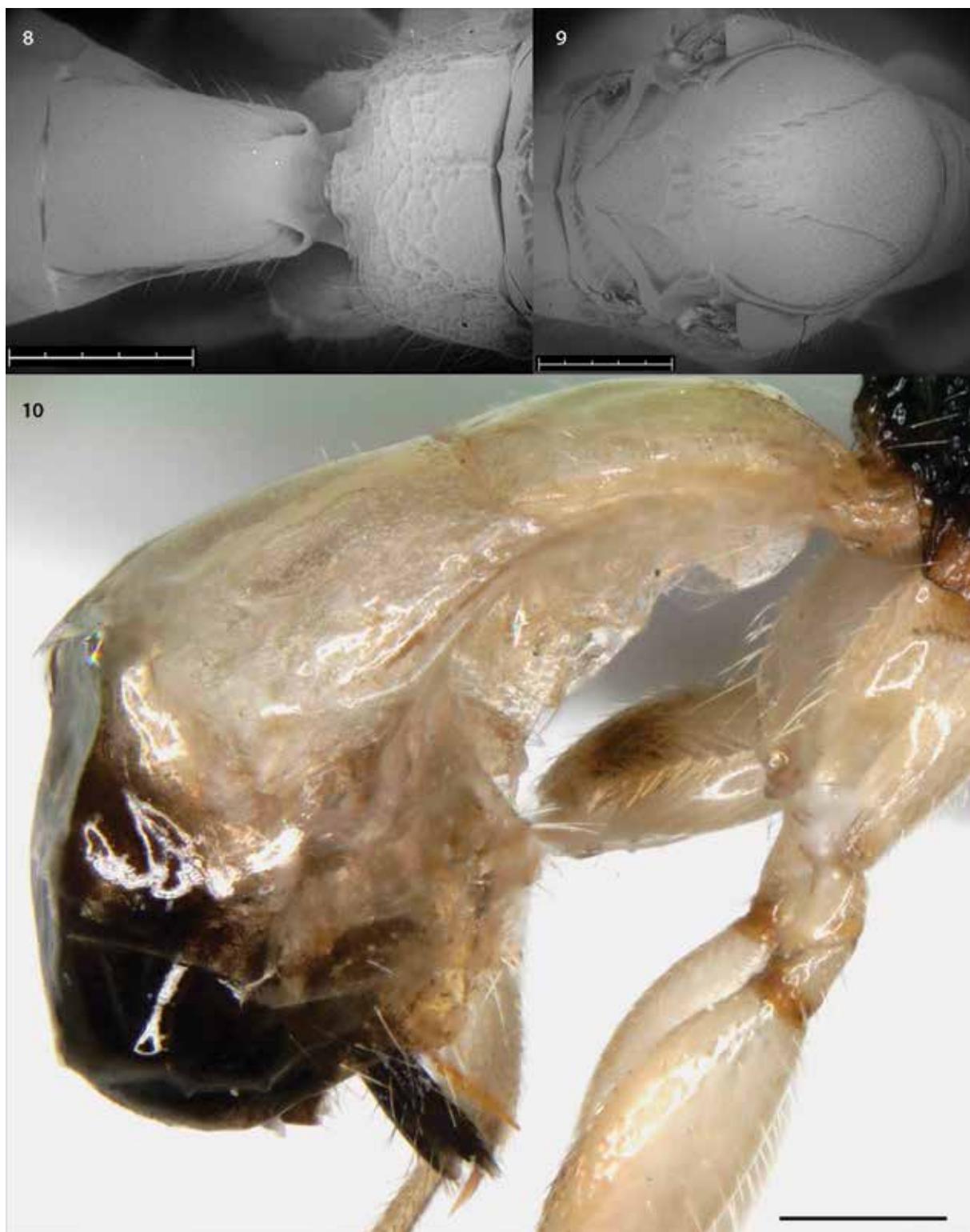
DIAGNOSIS — Metasoma bicolor, first tergite smooth; gena strongly concave and striate ventrally.

DESCRIPTION (Holotype) — FEMALE: body length 4 mm, length of fore wing 3.7 mm. Head. Right antenna missing, left antenna damaged: remaining antennal segments 16, F1/F2 = 1.50, length of first and second flagellomeres 2.25 and 1.50x their width, respectively; shape of flagellomeres 1-4 rather trapezoidal; maxillary palp 0.80x height of head; ED/TD = 1.80; OOL:OD:POL = 9.00:2.50:5.00; vertex partly rugulose; frons densely punctate; face and clypeus convex,



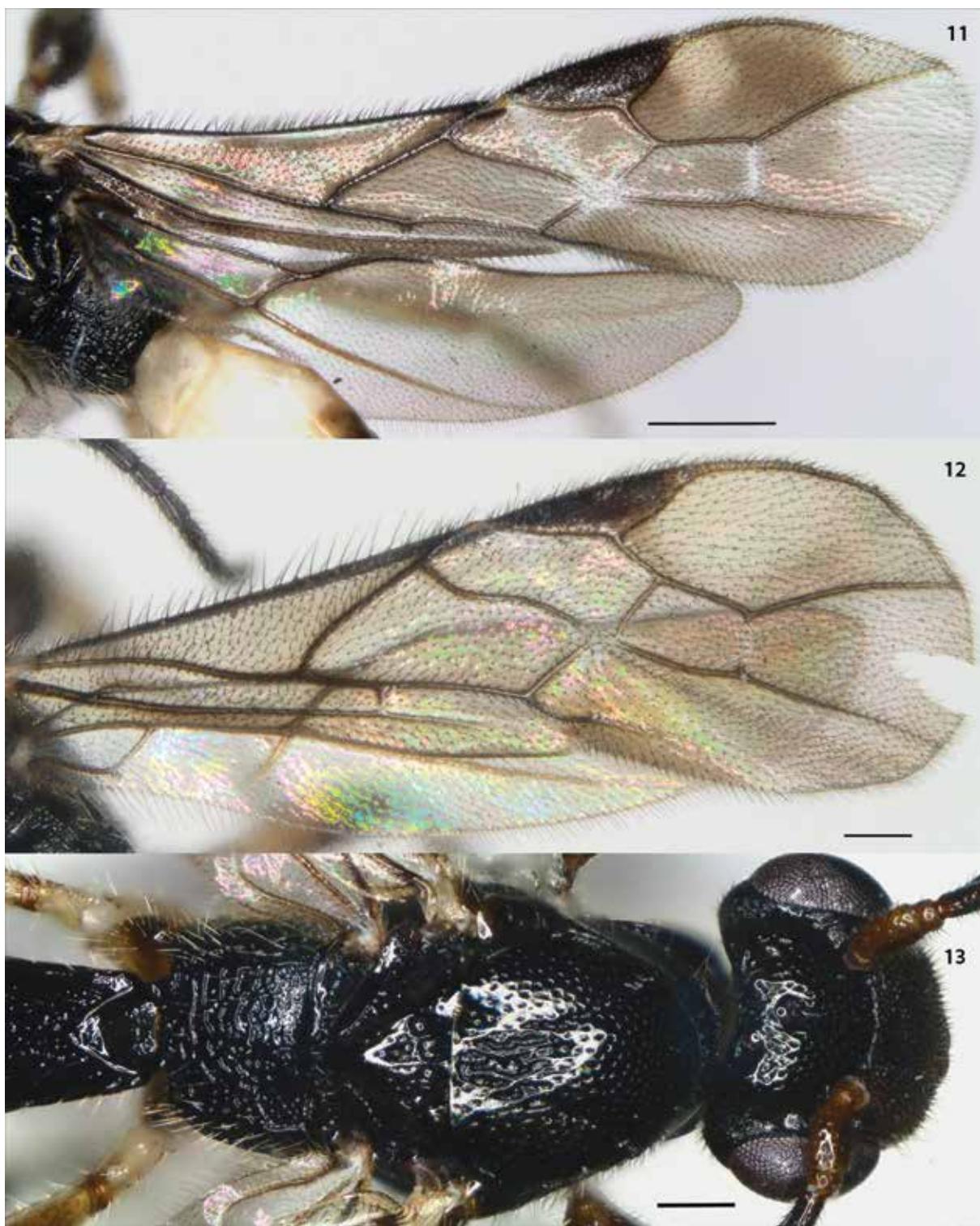
**FIGURES 5-7**

Betylobracon leponcei n.sp., holotype, female. **5**, head, lateral; **6**, head and antenna; lateral; **7**, mesosoma, lateral. Scales: **5** = 300 µm; **6** = 500 µm; **7** = 500 µm.



FIGURES 8-10

Betylobracon leponcei n.sp., holotype, female. **8**, first metasomal tergite and propodeum, dorsal; **9**, mesosoma, dorsal; **10**, metasoma, lateral. Scales = 500 µm.



FIGURES 11-13

11, *Betylobracon leponcei* n.sp., holotype, female. 12-13, *Betylobracon novotnyi* n.sp., holotype, female. 11-12, wings; 13, head and mesosoma, dorsal. Scales: 11 = 500 µm; 12 = 200 µm; 13 = 200 µm.