
Insects of Mount Wilhelm, Papua New Guinea

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Description of three new species of *Anteon* Jurine, 1807 (Hymenoptera: Chrysoidea: Dryinidae) from Papua New Guinea, with a checklist of the species from New Guinea

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ABSTRACT

In the Australasian region, the genus *Anteon* Jurine, 1807 (Hymenoptera, Chrysoidea, Dryinidae), includes 76 species. Three new species, *A. leponcei*, *A. novotnyi* and *A. wilhelmense*, based on material collected by the project “Our Planet Reviewed – Niugini 2012-2013, Terrestrial component”, are described from Papua New Guinea. The keys to the Australasian species of *Anteon* are modified to include the above new species. A checklist of the *Anteon* species known from New Guinea is presented.

RÉSUMÉ

Description de trois nouvelles espèces d'*Anteon* Jurine, 1807 (Hyménoptères : Chrysoidea : Dryinidae) de Papouasie-Nouvelle-Guinée, avec une liste actualisée des espèces de Nouvelle-Guinée.

Dans la région australasienne le genre *Anteon* Jurine, 1807, comprend 76 espèces. Trois nouvelles espèces, *A. leponcei*, *A. novotnyi* and *A. wilhelmense*, collectées lors de l'expédition «La Planète revisitée – IBISCA Niugini 2012-2013», sont décrites de Papouasie-Nouvelle-Guinée. Les clés de détermination des espèces australasiennes d'*Anteon* sont modifiées pour insérer les nouvelles espèces. Une liste actualisée des espèces d'*Anteon* connues en Nouvelle-Guinée est présentée.

SYSTEMATIC PART

Family DRYINIDAE Haliday, 1833

Genus *ANTEON* Jurine, 1807

Anteon Jurine, 1807: 302.

DIAGNOSIS — FEMALE: Fully winged; rarely brachypterous; occipital carina complete; palpal formula 6/3; antenna without rhinaria; forewing with three cells enclosed by pigmented veins (costal, median and submedian), stigmal vein and pterostigma; distal part of stigmal vein usually much shorter than proximal part, rarely slightly shorter, as long as, or longer than proximal part; propodeum usually with transverse keel between dorsal and posterior surface; protarsus chelate; inner side of enlarged claw with proximal prominence bearing one long bristle; tibial spurs 1/1/2. MALE: Fully winged; rarely brachypterous; occipital carina complete; vertex of head usually without two oblique keels connecting posterior ocelli to occipital carina; palpal formula 6/3; forewing with three cells enclosed by pigmented veins (costal, median and submedian), stigmal vein and pterostigma; distal part of stigmal vein usually much shorter than proximal part, rarely slightly shorter, as long as, or longer than proximal part; pterostigma less than four times as long as broad; propodeum usually with transverse keel between dorsal and posterior surface; paramere without inner branch wrapping penis; tibial spurs 1/1/2.

Anteon leponcei n. sp.

Figure 1

TYPE MATERIAL — Female holotype, Papua New Guinea. Madang Province, Mt. Wilhelm, -5.721022, 145.2703, 1200 m, 26-27.X.2012, Malaise trap, MW1200B-02, P1795-11299, Philip, Alois, Novotny & Leponce leg. (MNHN). Paratype: same locality label as holotype, 1 female (MNHN).

DISTRIBUTION — Papua New Guinea.

DESCRIPTION — FEMALE: Fully winged; length 3.7 mm. Head black, except mandible testaceous; antenna testaceous, except segments 6-10 brown; mesosoma black; metasoma brown; foreleg whitish, except tarsus testaceous; mid and hind legs whitish, except tibiae and tarsi testaceous. Paratype with antenna brown, except segments 1-2 testaceous; legs brown, except part of coxae, trochanters and tarsi testaceous. Antenna clavate; antennal segments in following proportions: 16:7:12:9:8:9:8:8:8:11. Head dull, completely reticulate rugose; frontal line complete; face without lateral keels around orbits and directed towards antennal toruli; occipital carina complete; POL = 7; OL = 4; OOL = 5; OPL = 6; TL = 4; greatest breadth of posterior ocellus about as long as OOL. Pronotum dull, reticulate rugose, except for transverse stripe near posterior margin unsculptured; posterior surface shorter than scutum (10:17); pronotal tubercle reaching tegula. Scutum dull, with median region anteriorly sculptured by large punctures, posteriorly reticulate rugose; lateral regions sculptured by oblique curvilinear keels. Notauli incomplete, reaching approximately 0.5 × length of scutum. Scutellum and metanotum punctate, unsculptured among punctures. Propodeum reticulate rugose, with strong transverse keel between dorsal and posterior surface; posterior surface with two longitudinal keels and lateral areas rugose; median area shiny, mostly unsculptured, with areolae along lateral margins. Forewing hyaline, without dark transverse bands; distal part of stigmal vein much shorter than proximal part (3:13). Protarsal segments in following proportions: 7:3:6:11:27. Enlarged claw (Figure 1) with proximal prominence bearing one long bristle. Segment 5 of protarsus (Figure 1) with basal part shorter than distal part, with two rows of approximately 34 lamellae without interruption to distal apex. Tibial spurs 1/1/2.

MALE: Unknown

ETYMOLOGY — The species is named after Dr. Maurice Leponce.

HOSTS — Unknown.

REMARKS — *A. leponcei* is similar to *A. corruptum* Olmi, 1984, and *A. miles* Olmi, 1984, but with different notauli and POL/OOL ratio (see key below). The new species can be included in the key to the females of the Australasian *Anteon* published by Olmi (1984) by replacing couplets 15 and 16 as follows:

- 15 Scutum completely or mostly reticulate rugose or partly sculptured by irregular keels 15'
 – Scutum punctate or very weakly granulated, not reticulate rugose 17
- 15' Head with POL longer than OOL; notauli reaching about $0.5 \times$ length of scutum *A. leponcei* n. sp.
 – Head with POL shorter than OOL; notauli absent, or reaching about $0.75 \times$ length of scutum 16
- 16 Scutellum smooth; notauli absent, or faintly and shortly visible near anterior margin of scutum
 *A. corruptum* Olmi
 – Scutellum partly reticulate rugose; notauli reaching approximately $0.75 \times$ length of scutum
 *A. miles* Olmi

***Anteon novotnyi* n. sp.**

Figures 1-2

TYPE MATERIAL — Female holotype, Papua New Guinea. Madang Province, Mt. Wilhelm, -5.806698, 145.0729, 3200 m, 27-28.X.2012, Malaise trap, MW3200A-d12, P3349-9150, Dahl, Kaupa, Novotny & Leponce leg. (MNHN).

DISTRIBUTION — Papua New Guinea.

DESCRIPTION — MALE: Fully winged; length 1.7 mm. Head black, except mandible testaceous; antenna brown, except segments 1-2 testaceous; mesosoma black; metasoma brown; legs brown-testaceous. Antenna filiform; antennal segments in following proportions: 9:5:6:6:6:6:6:6:9. Head shiny, granulated and weakly rugose; frontal line complete; face without lateral keels around orbits directed towards antennal toruli; occipital carina complete; POL = 3; OL = 2; OOL = 4.5; OPL = 1.5; TL = 2.5; greatest breadth of posterior ocellus about as long as OL. Scutum granulated. Notauli incomplete, reaching approximately $0.65 \times$ length of scutum. Scutellum and metanotum shiny, unsculptured. Propodeum without distinct transverse keel between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface reticulate rugose, with two longitudinal keels. Forewing hyaline, without dark transverse bands; distal part of stigmal vein much shorter than proximal part (3:9). Paramere (Figure 2) with inner rounded expansion covered with many papillae. Tibial spurs 1/1/2.

FEMALE: Unknown.

ETYMOLOGY — The species is named after Dr. Vojtech Novotny.

HOSTS — Unknown.

REMARKS — *A. novotnyi* is similar to *A. sucklingi* Olmi, 1984, but with a paramere provided with papillae (Figure 2) while papillae are absent in *A. sucklingi* paramere (Figure 3). The new species can be included in the key to the males of the Australasian *Anteon* published by Olmi (1984) by replacing the first three couplets as follows:

- 1 Propodeum without strong transverse keel between dorsal and posterior surface 2
 – Propodeum with strong transverse keel between dorsal and posterior surface 4
- 2 Posterior surface of propodeum with two complete longitudinal keels 2'
 – Posterior surface of propodeum without longitudinal keels 3
- 2' Paramere (Figure 3) with inner subdistal pointed process not provided with papillae *A. sucklingi* Olmi
 – Paramere (Figure 2) with inner subdistal rounded expansion covered with papillae *A. novotnyi* n. sp.
- 3 Head smooth, slightly punctate, unsculptured among punctures *A. myrmecophilum* (Perkins)
 – Head completely reticulate rugose *A. aulicum* Olmi

Anteon wilhelmense n. sp.

Figure 6

TYPE MATERIAL — Male holotype, Papua New Guinea. Madang Province, Wanang, -5.22767, 145.0797, 175 m, 27-28. XI.2012, Malaise trap, WAN02-D10, P4925-2206, Basset leg. (MNHN). Paratypes: Madang Province, Mt. Wilhelm, -5.731961, 145.2522, 700 m, 19-20.V.2013, Malaise trap, MW0700-02, P4723-20850, Sam *et al.* leg., 1 male paratype (MNHN); Madang Province, Mt. Wilhelm, -5.731961, 145.2522, 700 m, 22-23.V.2013, Malaise trap, MW0700-02, P4726-20875, Sam *et al.* leg., 1 male paratype (MNHN); Madang Province, Mt. Wilhelm, -5.731961, 145.2522, 700 m, 14-15.V.2013, Malaise trap, MW0700-02, P4718-20988, Sam *et al.* leg., 1 male paratype (MOLC); Madang Province, Mt. Wilhelm, -5.720874, 145.2695, 1200 m, 23-24.V.2013, Malaise trap, MW1200-01, P4775-20948, Sam *et al.* leg., 1 male paratype (MNHN); Madang Province, Mt. Wilhelm, -5.720874, 145.2695, 1200 m, 19-20.V.2013, Malaise trap, MW1200-03, P4803-20924, Sam *et al.* leg., 1 male paratype (MOLC); Madang Province, Mt. Wilhelm, -5.731961, 145.2522, 700 m, 17-18.V.2013, Malaise trap, MW0700-04, P4753-20839, Sam *et al.* leg., 1 male paratype (MOLC); Madang Province, Mt. Wilhelm, -5.731961, 145.2522, 700 m, 21-22.V.2013, Malaise trap, MW0700-04, P4757-20867, Sam *et al.* leg., 1 male paratype (MNHN); Madang Province, Mt. Wilhelm, -5.731961, 145.2522, 700 m, 24-25.V.2013, Malaise trap, MW0700-02, P4728-20604, Sam *et al.* leg., 1 male paratype (MNHN); Madang Province, Mt. Wilhelm, -5.731961, 145.2522, 700 m, 17-18.V.2013, Malaise trap, MW0700-03, P4737-20837, Sam *et al.* leg., 1 male paratype (MNHN).

DISTRIBUTION — Papua New Guinea.

DESCRIPTION — MALE: Fully winged; length 1.9-2.5 mm (holotype 2.1 mm). Head black, except mandible testaceous; antenna brown-testaceous, except segments 1-3 testaceous; mesosoma black; metasoma brown, partly testaceous; legs testaceous. Antenna filiform; antennal segments in following proportions: 9:4:6.5:5:5:5:4.5:5:5:7. Head shiny, strongly punctate and with irregular longitudinal keels and areolae; face with large punctate area in front of anterior ocellus; frontal line complete; face with two lateral keels around orbits directed towards antennal toruli; occipital carina complete; POL = 6; OL = 4; OOL = 4.5; OPL = 4; TL = 2; greatest breadth of posterior ocelli longer than TL (3:2). Scutum, scutellum and metanotum shiny, finely punctate, unsculptured among punctures. Notauli incomplete, reaching approximately 0.5 × length of scutum. Propodeum reticulate rugose, with a distinct transverse keel between dorsal and posterior surface; posterior surface with two longitudinal keels, lateral areas rugose and median area shiny, partly unsculptured, except areolae along margins. Forewing hyaline, without dark transverse bands; distal part of stigmal vein much shorter than proximal part (2:8). Paramere (Figure 6) with distal inner rounded process, without dorsal proximal membranous process. Tibial spurs 1/1/2.

FEMALE: Unknown.

ETYMOLOGY — The species is named after Mt. Wilhelm, where all paratypes have been collected.

HOSTS — Unknown.

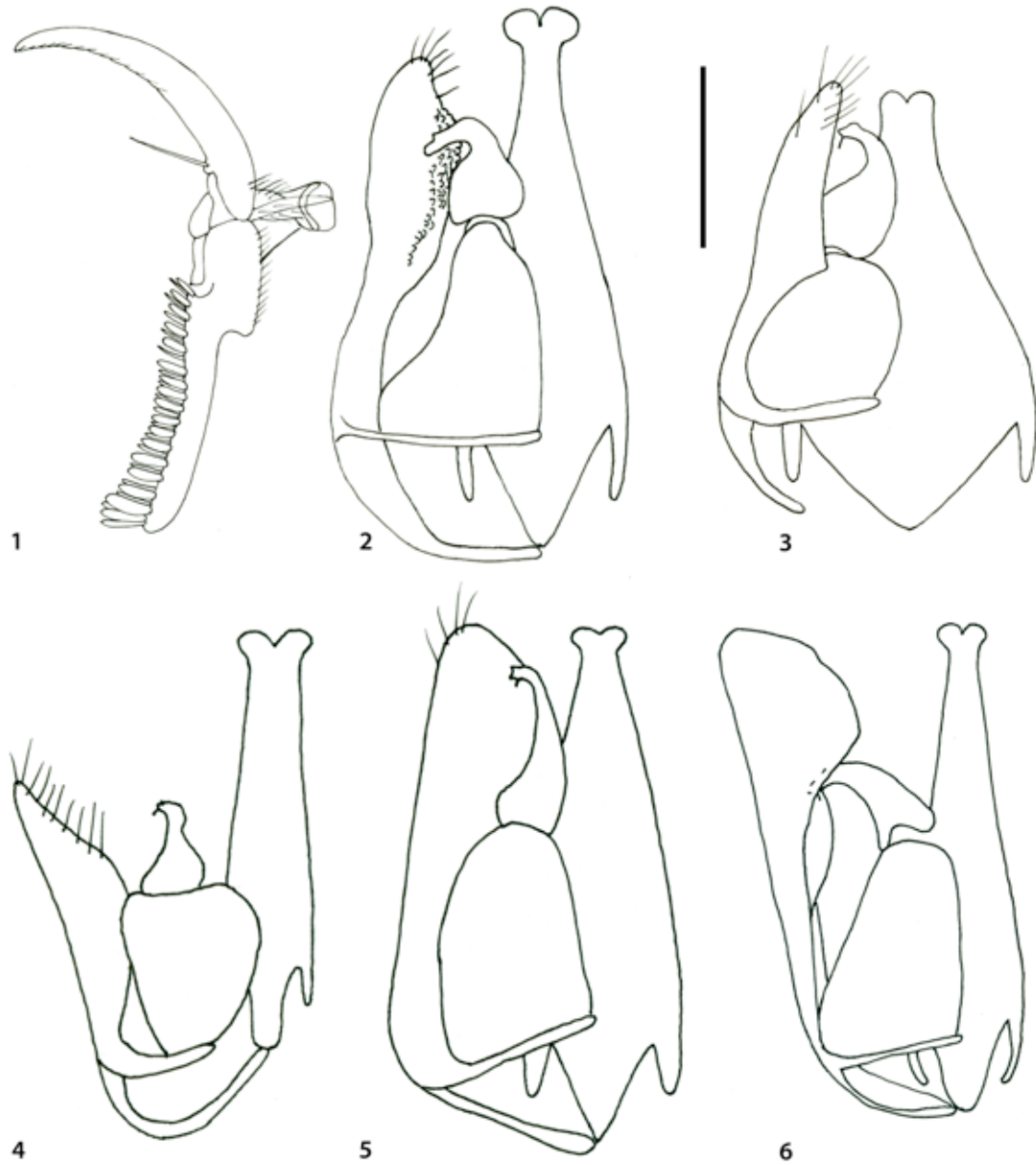


FIGURE 1-6

1, chela of *Anteon leponcei*, holotype. 2-6, male genitalia. 2, *Anteon novotnyi*, holotype. 3, *A. sucklingi*, holotype. 4, *A. hageni*, holotype. 5, *A. luctuosum*, holotype. 6, *A. wilhelmense*, holotype. Scale bar 0.22 mm for 1, 0.06 mm for 2, 0.07 mm for 3 and 6, 0.08 mm for 4 and 5.