

Nomosphaecia Gupta, 1962 do Brasil
(Hymenoptera, Ichneumonidae, Pimplinae)¹

Nomosphaecia Gupta, 1962 in Brazil
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VINALTO GRAF²

Nomosphaecia Gupta, 1962 is a genus of ichneumonids (Pimplini) with large distribution and most of its species are from the Indo-Australian area. In the New World there are only three Central American species. It belongs to the *Theronia* genus-group that comprises six genera, with only two in the Tropical America, *Nomosphaecia* and *Neotheronia* Krieger, 1899, the latter very rich in species and almost exclusively Neotropical. The species of *Nomosphaecia* are very near the Neotropical species of *Neotheronia*, in several characters, but "it is presumed that this resemblance is the result of evolutionary convergence, and not indicative of true phylogenetic affinity." (GAULD, 1991: 380-381).

Nomosphaecia has two apomorphic characters: "Mandibular teeth with lower tooth slightly to conspicuously longer than the upper tooth" and "ovipositor tip depressed, its lower valve almost completely enclosing the upper valve, the teeth on lower valve in the form of curved ridges". (GUPTA, 1962; GAULD, 1991). I have followed Townes (1969) and GAULD (1991) in the descriptions of the species. The holotypus are deposited in Pe. Jesus S. Moure Entomological Collection, in Departamento de Zoologia, Universidade Federal do Paraná.

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Nomosphacia ceciliae sp. n.

(Figs. 1-3)

FEMALE: clypeus moderately large, somewhat hexagonal, without a median transverse ridge with margin thin, slightly concave; clypeus in profile more or less flat. Mandible moderately long and tapered, with upper tooth very reduced, about 0.1 times as long as the lower tooth; lower face 1.09 times as broad as medially high, centrally slightly convex; inner margins of eyes convergent below and notched little above the antennal socket. Occipital carina joining hypostomal carina some distance above base of mandible, dipped at the midline; hypostomal carinae very high. Frons without carina between antennal sockets; lateral ocellus separated from the eye by 1.4 times its own diameter. Scutellum convex, with lateral carinae present on anterior 0.6; submetapleural carina narrow behind but broadened anteriorly. Propodeum in profile weakly declivous; transverse carina behind centre, medially raised; lateromedian longitudinal carinae well developed anteriorly; lateral longitudinal carinae distinct in front of transverse carina, reaching about half way to anterior propodeal margin, posteriorly strong; pleural carina complete; flange on hind margin of propodeum strongly produced. Fore wing length 10 mm; areolet moderately large with anterior corner slightly truncated, emitting 2 m-cu distal to centre. Third segment of hind tarsus 2.4 times as long as broad. Metasoma with tergite 1 2.7 times as long as posteriorly broad; tergite 1 in profile very weakly bowed dorsally; tergite 2 with gastrocoeli separated medially by 1.2 times the width of a gastrocoelus. Ovipositor slender, straight, projecting beyond apex of subgenital plate by 1.02 times length of hind tibia; apex of lower valve bearing 6 small, oblique teeth.

A yellowish orange species with face yellow, and mesosoma laterally palid; flagellum blackish, with basal segment orange; scape ventrally yellow. Hind tarsus and ovipositor sheath orange blackish. Wings yellowish, the fore wing distal to 2m-cu infumate, blackish, with darker area on anterior distal margin. Pterostigma black.

HOLOTYPE FEMALE, BRAZIL, Rondônia, Vilhena, C. Elias leg (Polonoroeste), 13.XI.1986.

REMARKS: *Nomosphecia ceciliae* differs from *N. mexicana* (Morley, 1914) and *N. phillipsae* Gauld, 1991 in colour and structure (*N. mexicana* with "wings flavescent, with no darker apical border or spot; hind tarsus yellow with only distal segment black; propodeum without the dorso-lateral carinae and in having a much longer and stouter ovipositor"; *N. phillipsae* with "ovipositor upcurved and very long, 2.8 times the length of hind tibia; lateromedian longitudinal carina present anteriorly as vestiges or absent; lateral longitudinal carina absent in front of transverse carina").

Etymology: the name of this species is dedicated to my granddaughter Cecília.

Nomosphecia phillipsae Gauld, 1991

(Figs. 4-6)

The specimen from Ouro Preto do Oeste, Rondônia, Brazil, is very similar to *N. phillipsae* described by Gauld from Costa Rica; it is a female and some details of this specimen are mentioned as follow: clypeus large and somewhat hexagonal, slightly concave, with thin margin and convex near the base. Mandible with upper tooth very reduced, about 0.2 times as long as the lower tooth. Lower face 1.1 times as broad as medially high, centrally very slightly convex. Scutellum convex, with lateral carinae present on anterior 0.3; submetapleural carina quite narrow behind and evenly broadened anteriorly. Propodeum with transverse carina behind centre; lateromedian longitudinal carinae absent anteriorly; lateral longitudinal carinae absent in front of transverse carina, posteriorly weak; pleural carina complete. Fore wing length 11.33 mm. Third segment of hind tarsus 2.7 times as long as broad. Metasoma with tergite 1 2.5 times as long as posteriorly broad; tergite 1 very weakly bowed dorsally; tergite 2 with gastrocoeli separated medially by 1.13 times the width of a gastrocoelus. Ovipositor slender, slightly upcurved, projecting 2.02 times length of hind tibia; apex of lower valve bearing 8 small, oblique teeth. Flagellum blackish, scape and pedicel ventrally yellow. Ovipositor sheath and hind tarsus blackish. Wings with distal margin infumate, fore wing with darker area on anterior distal margin.

Female, BRAZIL, Rondônia, Ouro Preto do Oeste, C. Elias leg

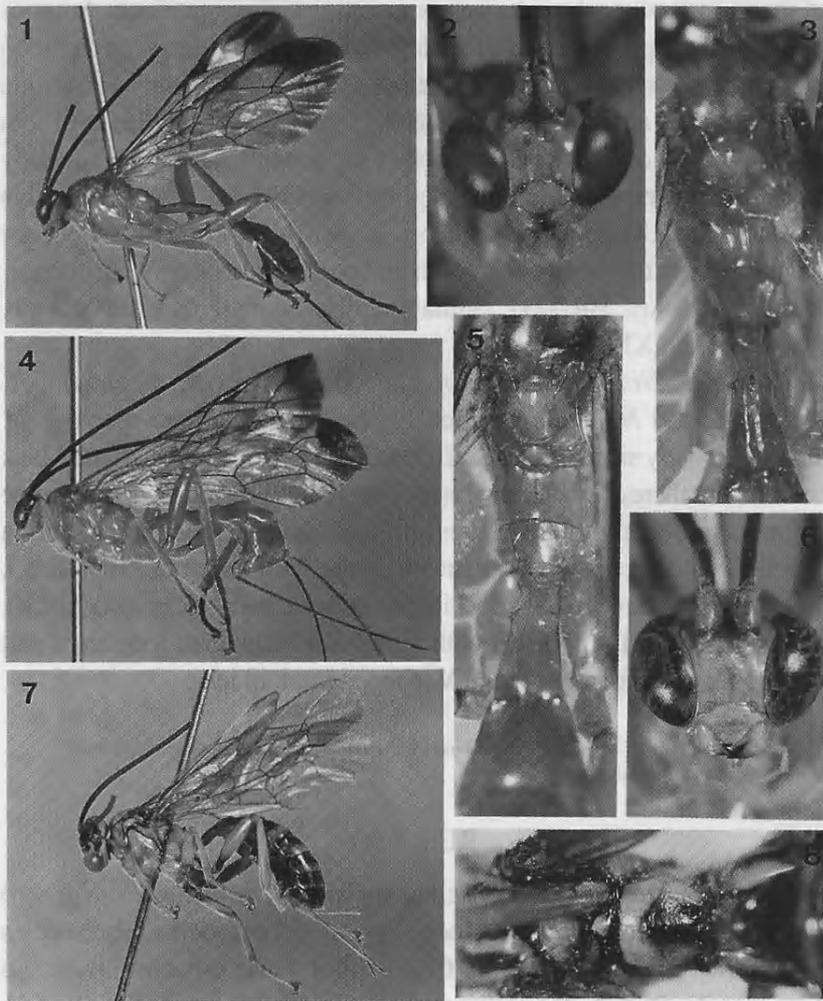
(Polonoroeste), 29.VII.1987.

Nomosphacia monicae sp. n.

(Figs. 7-8)

FEMALE: clypeus moderately large without a distinct median transverse ridge, in anterior view somewhat hexagonal, with margin thin and slightly concave; mandible moderately long, tapered, with upper tooth reduced, about 0.4 times as long as the lower tooth; lower face 1.4 times as broad as medially high (from supraclypeal suture to base of antenna), centrally slightly convex; inner margins of eyes convergent below and notched little above the antennal socket. Occipital carina dipped at the midline and joining hypostomal carina some distance above base of mandible, vertex with longitudinal sulcus at the middle; lateral ocellus separated from the eye by 1.4 times its own maximum diameter. Pronotum with epomia short, about 0.6 times the length of the basal mandibular width; scutellum convex, with lateral carinae present on anterior 0.2; submetapleural carina quite strongly, but evenly broadened anteriorly. Propodeum in profile quite short dorsally and transverse carina before centre, medially strongly raised; lateromedian longitudinal carinae developed anteriorly, lateral longitudinal carinae indistinct in front of transverse carina, developed posteriorly; pleural carina complete but weak posteriorly. Fore wing length 10 mm; arcolet moderately large with anterior corner acute, emitting 2 m-cu distal to centre. Hind leg with outer surface of tibia with isolated bristles; third segment of hind tarsus 2.5 times as long as broad. Metasoma with tergite 1 2.9 times as long as posteriorly broad; lateromedian longitudinal carina of tergite 1 absent; tergite 1 in profile very weakly bowed dorsally; tergite 2 with gastrocoeli quite broad and deep, separated medially by a convex ridge which is about 0.86 times as wide as the width of a gastrocoelus. Ovipositor rather slender, very slightly upcurved, projecting beyond apex of subgenital plate by 1.69 times length of hind tibia; apex of lower valve bearing 8 very small, oblique teeth.

A yellowish orange black species; head yellow, frons above antennal sockets, (and a stripe in the middle of the frons to middle ocellus), stripe from lateral ocellus to eye, marks along superior occipital carina and foramen magnum black. Antenna orange-blackish with scape and pedicel



Figs. 1-8. *Holotypes* (lateral view, head and mesosoma): 1-3, *Nomosphacia ceciliae* sp. n.; 4-6, *N. phillipsae* Gauld, 1991, and 7-8, *N. monicae* sp. n.

yellow specially ventrally. Mesosoma yellow with posterior narrow margin of pronotum, mesoscutal stripes, scuto-scutellar groove, posterior margins of scutellum and metanotum, anterior margin of mesopleurum and a stripe below subtegular ridge, below speculum and inferior part of mesepimeron, and marks below insertions of wings black. Anterior margins of propodeum and of metapleurum, and a rectangular mark on the posterior part of propodeum black. Metasoma yellowish black, tergite 1 orange with apical transverse narrow band black; tergites 2-6 with apical band yellow. Legs yellow, hind coxae dorsally striped and ventrally black; trochanters, trochantellus and posterior side of all femora and tibia infusate black. Ovipositor sheath orange with apice blackish, ovipositor orange. Wings uniformly yellowish and pterostigma yellowish orange. HOLOTYPE FEMALE, BRAZIL, Santa Catarina, Seara (Nova Teutônia), F. Plaumann leg, XI.1967.

REMARKS: *Nomosphacia monicae* differs from *N. mexicana*, *N. phillipsae*, and *N. ceciliae* in colour (yellowish orange species). *N. monicae* is very similar to *N. solisi* Gauld, 1991 in its yellow and black colours; but there are differences (in *N. solisi* between clasps): transverse carina before centre (behind centre); lateromedian longitudinal carina developed (absent); ovipositor sheath orange with apice blackish (black); hind tarsus orange (hind tarsus infusate with distal segments black); posterior side of propodeum with rectangular black area (posterior part of propodeum with an inverted V-shaped mark black).

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RESUMO

Nomosphacia Gupta, 1962 (Ichneumonidae, Pimplinae) é um gênero com muitas espécies na região Indo-Australiana e somente três espécies na América Central (México e Costa Rica). Duas espécies novas são descritas do Brasil, *N. ceciliae* sp. n. de Rondônia (Vilhena) e *N. monicae* sp. n. de Santa Catarina (Seara, Nova Teutônia) e *N. phillipsae* Gauld, 1991, de Rondônia (Ouro Preto do Oeste) é estudada.

PALAVRAS CHAVE: Ichneumonidae, *Nomosphacia*, Brasil, espécies novas.

SUMMARY

Nomosphecia Gupta, 1962 (Ichneumonidae, Pimplinae) is a genus with many species in the Indo-Australian area and with only three species in Central America. Two new species are described from Brazil: *N. ceciliae* sp. n. from Rondônia (Vilhena) and *N. monicae* sp. n. from Santa Catarina (Seara, Nova Teutônia). *N. phillipsae* Gauld, 1991 was studied, from Rondônia (Ouro Preto do Oeste).

KEY WORDS: Ichneumonidae, Pimplinae, *Nomosphecia*, Brazil, new species.

RÉSUMÉ

Nomosphecia Gupta, 1962 (Ichneumonidae, Pimplinae) est un genre avec large distribution (Indo-Australiana et Amérique Central), mais inconnu en l'Amérique du Sud. Deux espèces nouvelles sont décrits du Brésil: *N. ceciliae* sp. n. de Rondônia (Vilhena) et *N. monicae* sp. n. de Santa Catarina (Seara, Nova Teutonia). *N. phillipsae* Gauld, 1991 est étudié, de Rondônia (Ouro Preto do Oeste).

MOTS CLÉS: Ichneumonidae, Pimplinae, *Nomosphecia*, Brasil, Espèces nouvelles.

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