

**A new species of the genus *Xysma* Pate, 1937
(Hymenoptera: Crabronidae: Pemphredoninae) from Panama**

**Новый вид рода *Xysma* Pate, 1937
(Hymenoptera: Crabronidae: Pemphredoninae) из Панамы**

A.V. Antropov* & R.A. Cambra T.
А.В. Антропов*, Р.А. Камбра Т.****

* Zoological Museum of Moscow State University, Bol'shaya Nikitskaya Str. 6, Moscow 125009 Russia. E-mail: antropov@zmmu.msu.ru
Зоологический музей Московского государственного университета им. М.В. Ломоносова, ул. Большая Никитская, 6, Москва 125009 Россия. E-mail: antropov@zmmu.msu.ru

** Museo de Invertebrados G. B. Fairchild, Universidad de Panamá, Estafeta Universitaria, Panamá, República de Panamá. E-mail: rcambra@ancon.up.ac.pa

KEY WORDS: taxonomy, Hymenoptera, Crabronidae, Pemphredoninae, *Xysma*, new species.

КЛЮЧЕВЫЕ СЛОВА: таксономия, Hymenoptera, Crabronidae, Pemphredoninae, *Xysma*, новый вид.

ABSTRACT. A new species of digger wasps genus *Xysma* Pate, 1937 is described from Panama. *Xysma panamense* sp. n., the first species of the genus described from Central America, differs from the North American *X. caenothae* (Viereck, 1904) by mainly yellow clypeus, longer pronotal collar, and absence of longitudinal medial carina of propodeal dorsum. The new species differs from *X. dominicum* Antropov, 1994 by emarginate medially pronotal collar, weaker body sculpture, and interrupted dorsal carinae outlining the propodeal posterior side.

РЕЗЮМЕ. Из Панамы описан новый вид роющих ос рода *Xysma* Pate, 1937. *Xysma panamense* sp. n., первый вид рода, описанный из Латинской Америки, отличается от североамериканского *X. caenothae* (Viereck, 1904) в основном желтым наличником, более длинным валиком переднеспинки и отсутствием продольного ребра дорсальной части проподеума. От *X. dominicum* Antropov, 1994 новый вид отличается медиальной выемкой валика переднеспинки, более слабой скульптурой тела и прерванными вверху гребнями, ограничивающими заднюю часть проподеума.

Introduction

Xysma Pate, 1937 is a genus of rarely collected small pemphredonine digger wasps, known from a few specimens. The genus includes two New World species: *X. caenothae* (Viereck, 1904) from eastern USA (Pennsylvania to Georgia), known from specimens of both sexes, and *X. dominicum* Antropov, 1994 from Dominica Is. (Lesser Antilles), known only from a single male. Bohart and Menke [1976] also included the South African *Telexysma africanum* Leclercq, 1959 in *Xysma*, but we regard it as a member of a closely related but separate genus.

The genus *Xysma* was reported from Ecuador [Cooper, 1993] and Costa Rica [Hanson and Menke, 1995], though the species have not been described. Cambra and Santos [2000] reported a female of *Xysma* from Panama. This specimen is described below.

Taxonomic part

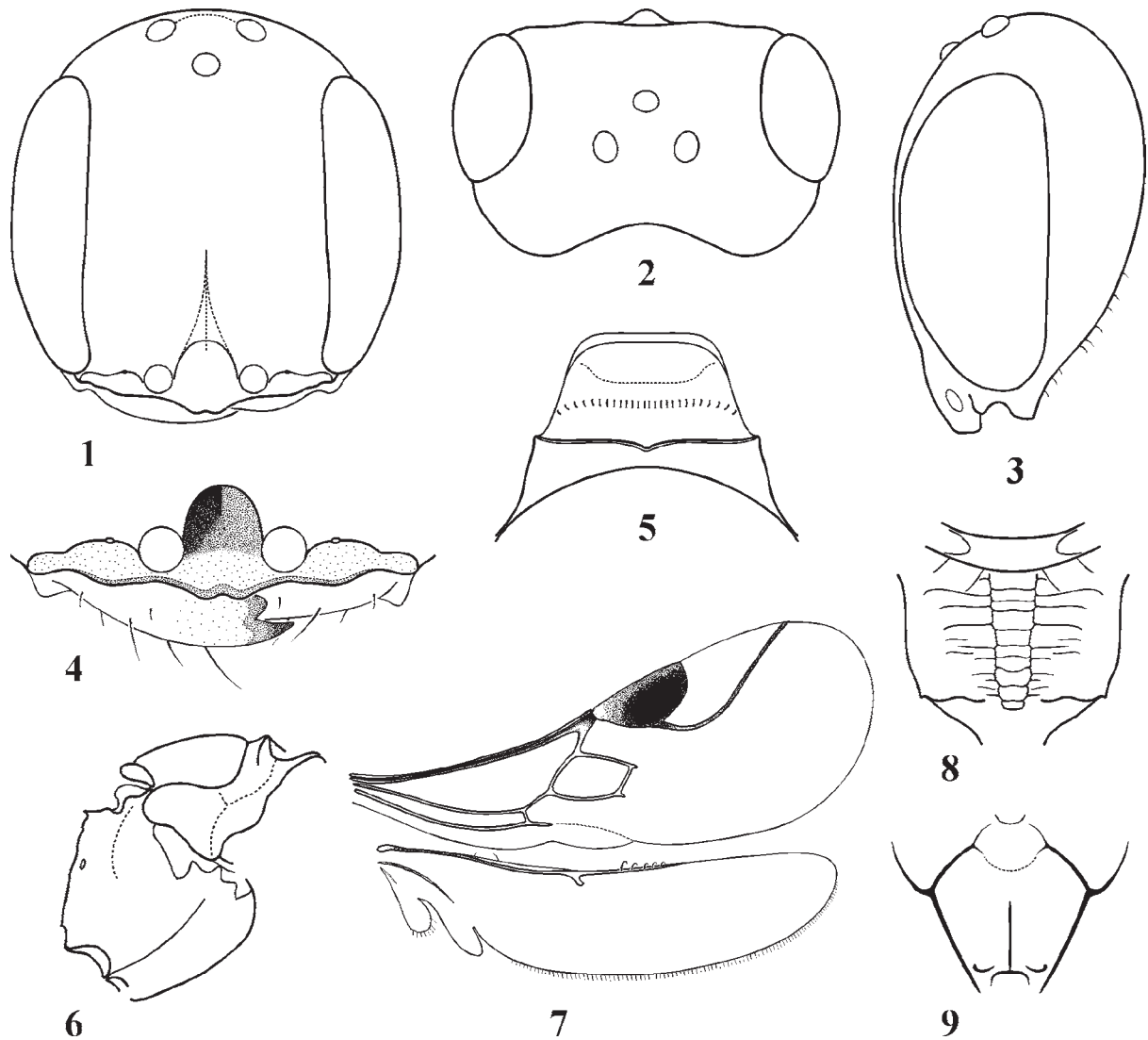
Xysma panamense Antropov and Cambra, **sp.n.**
Figs 1–9.

MATERIAL. Holotype, ♀: "PANAMÁ: Veraguas Province, P[arque] N[acional]. Coiba, Isla Coiba, Cerro la Equis, 90m, 8–12 mar 1998. Malaise (R. Cambra, A. Santos)". Deposited in the collection of the Zoological Museum of Moscow Lomonosov State University (Moscow, Russia). Map with the holotype locality in Cambra and Santos [2000].

DESCRIPTION. Female. Head in frontal view moderately oblong, ratio of height to width = 29:26 (Fig. 1); inner eye orbits slightly undulate, parallel, ratio of interorbital distances at vertex and clypeus = 15:15; gena rounded, shorter than eye, ratio between eye and genal lengths = 9:7 (Fig. 3); medial clypeal lobe roundly convex, slightly angulate posteriorly, anterior margin slightly emarginate (Fig. 4); ocelli forming an almost equilateral triangle, ratio of distances between lateral ocelli and between lateral and anterior ocelli = 7:5 (Fig. 2); ratio of oculo-ocellar distance at vertex to lateral ocellus diameter and to interocellar distance = 8:4:7; mandible bidentate apically, with shorter and rounded anterior tooth and longer and sharp posterior one. Pronotal collar moderately elongate, with distinct lateral angles, transversely carinate anteriorly and emarginate medially (Fig. 5); scutum moderately convex, with distinct lateral lamellae; admedial lines weak, not longer than length of pronotal collar; parapsidal lines absent; adlateral lines weak furrows; prescutellar furrow narrow, with several prolonged carenulae; scutellum convex, not lamellate laterally; postscutellum short, almost flat; mesopleuron convex, weakly

concave ventrally; episternal sulcus faintly visible (Fig. 6); omalulus present, angulate postero-ventrally and merged with concave medially acetabular carina; sternaulus, hypersternaulus and precoxal carina or tooth absent; metapleural flange not broadened; foretarsus without rake; hind tibia without stout spines; forewing with typical venation, though basal part of A_1 second abscissa developed (Fig. 7); hindwing with 5 hamuli, weakly sclerotized RS and R_1 , and traces of RS and A_1 (Fig. 7). Propodeal dorsum not enclosed by carinae, with narrow transversely striate medial area between a pair of longitudinal carenulae (Fig. 8) and weakly striate laterally; lateral keels present; propodeum with posterior medial carenula basally, without fovea, and with interrupted dorsally outlining carinae (Fig. 9); abdominal tergum VI without pygidial plate or medial carina.

Sculpture weak, surface usually shiny. Lower frons obliquely and genae prolongly microstriate; upper frons and vertex shiny, very sparsely micropunctate; pronotal collar, scutum, scutellum, and postscutellum half mat to shiny, microcoriaceous; scutum also very sparsely micropunctate; mesopleuron shiny, with indistinct microsculpture; metapleuron smooth and shiny ventrally, coriaceous and half mat dorsally; propodeum obliquely microcarinate laterally, with shiny interspaces; propodeum polished posteriorly, without distinct sculpture, particularly dorsally; gaster with tergum I unsculptured, polished; tergum II apically and terga III–V entirely shiny and transversely microstriate; terga III–V preapically sparsely micropunctate; tergum VI moderately punctate; sterna shiny, transversely microstriate; sterna III–V preapically and sternum VI almost entirely micropunctate.



Figs 1–9. *Xysma panamense* sp.n., ♀: 1 — head, frontal view; 2 — head, dorsal view; 3 — head, lateral view; 4 — clypeus and mandibles; 5 — pronotum, dorsal view; 6 — thorax, ventro-lateral view; 7 — wings; 8 — propodeum, dorsal view; 9 — posterior portion of propodeum.

Рис. 1–9. *Xysma panamense* sp.n., ♀: 1 — голова спереди; 2 — голова сверху; 3 — голова сбоку; 4 — наличник и мандибулы; 5 — переднеспинка сверху; 6 — грудь снизу-сбоку; 7 — крылья; 8 — проподеум сверху; 9 — задняя сторона проподеума.

Pubescence mainly weak, short, and sparse. Clypeal margin and mandibles with several sparse and gaster with segment VI with dense elongate bristles.

Body mainly black to dark-brown. Clypeal margin reddish; clypeus entirely (except brown posteriorly medial lobe), mandible entirely (except reddish-brown apex), scape entirely and flagellum ventrally (except brown apical segment), tegulae, all tarsi, fore and mid tibiae entirely and hind tibiae basally and apically, fore and mid femora anteriorly, all trochanters, and fore and mid coxae from inside amber-yellow; flagellum dorsally, pronotal lobe posteriorly, wing costal lamellae entirely, hind tibiae medially, fore and mid femora posteriorly and fore and mid coxae from outside reddish-brown; wing veins mainly discolored to slightly brownish, only forewing C, Sc+R, RS and stigma, and hindwing C and Sc prebasally brown; gaster dark-brown, with segments V–VI black.

Body length 2.1 mm.

MALE unknown.

BIOLOGY unknown. At the same time, the elongate head with short and stout mandibles and absence of developed psammophores, foretarsal rakes, and pygidial plate suggest nesting in suitable borings of small xylophagous beetles or other insects, as is known for *X. caenothae* [Krombein, 1958].

DIAGNOSIS. *Xysma panamense* sp.n. differs from *X. caenothae* by mainly yellow clypeus, longer pronotal collar, and absence of a longitudinal medial carina of the propodeal dorsum. In the last feature the new species is similar to *X. dominicum*, but differs from it in having an emarginate

medially pronotal collar; weaker transversely striate lateral portions of propodeal dorsum, and dorsally interrupted carinae bordering propodeal posterior side.

ETYMOLOGY. The species name refers to Panama, the holotype locality.

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