

Two genera of Gellini (Hymenoptera: Ichneumonidae), new to Mexico, with description of a new species

Два новых для Мексики рода трибы Gellini (Hymenoptera: Ichneumonidae), с описанием нового вида

D. R. Kasparyan^{1,2} and E. Ruiz Cancino²
Д. Р. Каспарян^{1,2}, Энрике Руис-Канцино²

¹ Zoological Institute of Russian Academy of Sciences, Universitetskaya nab. 1, St. Petersburg 199034 Russia.

¹ Зоологический институт Российской Академии Наук, Университетская наб. 1, Санкт-Петербург 199034 Россия.

² Centro de Investigación, UAM Agronomía y Ciencias, Universidad Autónoma de Tamaulipas, Cd. Victoria, Tam. 87149, México.

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КЛЮЧЕВЫЕ СЛОВА: Ichneumonidae, *Amydraulax*, *Apotemnus*, новый вид, Мексика.

ABSTRACT: The cryptine genera *Amydraulax* and *Apotemnus* are firstly recorded from Mexico. A new species *Amydraulax mexicana* sp.n., from Tamaulipas and Coahuila, Mexico is described and illustrated.

РЕЗЮМЕ: Два рода ихневмонид *Amydraulax* и *Apotemnus* (подсем. Сгуртинае) впервые указываются для Мексики. Дано описание нового вида *Amydraulax mexicana* sp.n. из штатов Тамаулипас и Коahuila, Мексика.

Introduction

Two closely related cryptine genera *Amydraulax* Cushman, 1922 and *Apotemnus* Cushman, 1940 are now placed in the subtribe Mastrina of the tribe Gellini [Townes, 1970]. They are not typical members of Mastrina and perhaps closer to *Helcostizus* Foerster, 1869, which is also an unusual mastrine ichneumonid (these three genera share first metasomal tergite with spiracles near the middle, reduced longitudinal carinae of propodeum, and long first three flagellar segments). Outer face of mandible in *Amydraulax* and *Apotemnus* with rather strong subbasal swelling is not characteristic of Mastrina, but is a diagnostic character of Gellina. These genera also are very remarkable in convergence of their common appearance and habitus with some ichneumonids of subfamilies Pimplinae (genus *Apotemnus*) and Banchinae (genus *Amydraulax*). Both genera were described as monotypical from southwestern United States [Cushman, 1922, 1940], but are also found in northeastern part of Sierra Madre Oriental (Mexico), at elevations about 3000 m; here Californian *Amydraulax pulchra* Cushman, 1922 is replaced by *A. mexicana* sp.n., but the genus *Apotemnus* is represented by the same species (*A. truncatus* Cushman, 1940, generotype).

Type of the new species is deposited in the Insect Museum, UAT, in Cd. Victoria, Mexico.

Taxonomic part

Genus *Amydraulax* Cushman, 1922

Type species *Amydraulax pulchra* Cushman, 1922

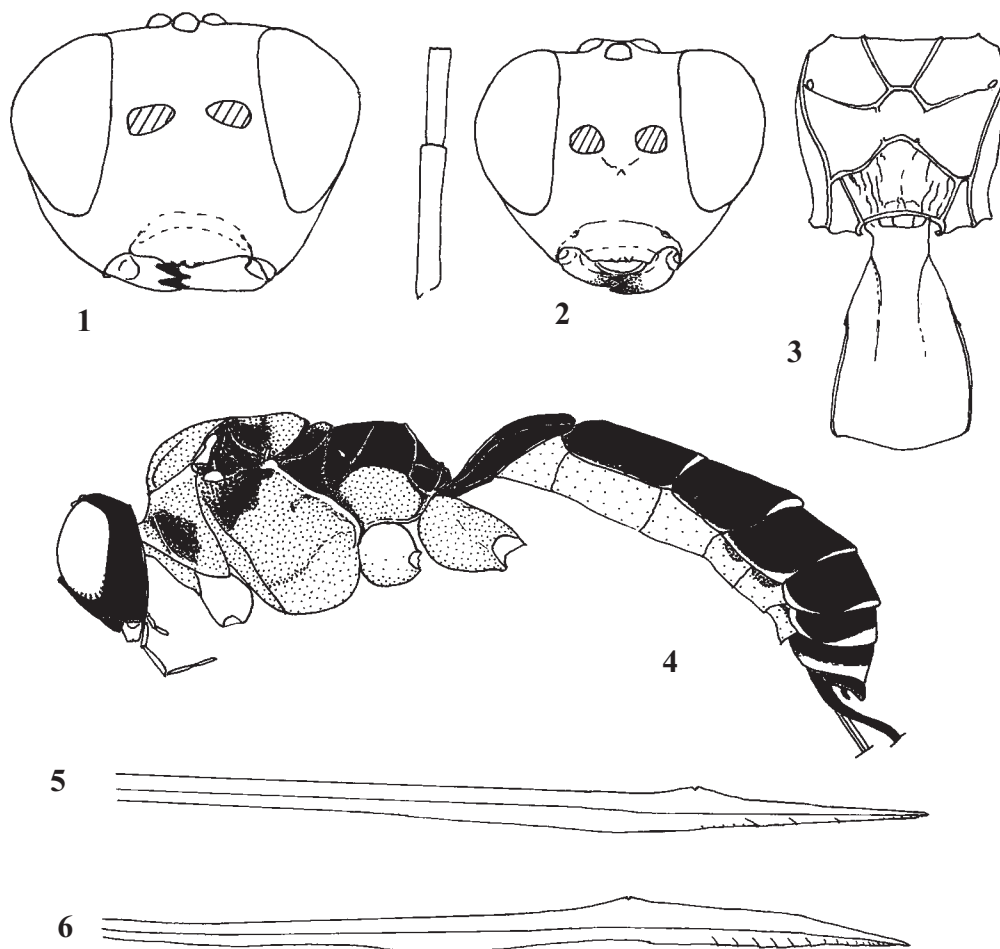
South-nearctic genus *A. pulchra* is described from USA, California, Giant Forest; reared from Cerambycidae. Second species, *A. mexicana* sp.n. is described here from Mexico, Sierra Madre Oriental (about 3000 m).

KEY TO SPECIES OF *AMYDRAULAX* (FEMALES)

1. 1st and 2nd flagellar segments combined about 2.1 times as long as maximum eye diameter; 1st segment about 12 times as long as wide. Antenna in the type specimen with 32 flagellar segments, fore wing 6.7 mm. Cheeks rather convex (Fig. 1). Mandible slightly convex subbasally, punctures at the middle part more dense. Sternaulus very superficial, indistinct. Mesoscutum dull, but without distinct granulation. Upper valve of ovipositor beyond nodus slightly convex, teeth of lower valve numerous (Fig. 6). Pronotum red, blackish dorsally, its hind corner light yellow. Apical whitish band on tergites 3–6 longer, on tergite 3 about 0.2 as long as length of tergite *A. pulchra* Cushman
- 1st and 2nd flagellar segments combined 1.5–1.6 times as long as eye diameter; 1st segment about 7–8 times as long as wide. Antenna with about 25 flagellar segments, fore wing 5–6 mm. Cheeks almost straightly convergent to base of mandible (Fig. 2). Mandible distinctly convex and polished before base. Sternaulus distinct. Mesoscutum polished with fine inconspicuous punctures. Upper valve of ovipositor beyond nodus straight, teeth of lower valve rather sparse (Fig. 5). Pronotum red, blackish up to transverse groove, with collar and upper margin of pronotum between tegulae entirely white. Apical whitish band on tergites 3–6 narrow, on tergites 3–5 0.1–0.15 as long as length of tergite *A. mexicana* sp.n.

Amydraulax mexicana Kasparyan et Ruiz, sp.n.
Figs. 2–5.

DESCRIPTION. Female. Fore wing length about 5 (holotype) to 6 mm; antenna slender, filiform, with 25 flagellar



Figs 1–6. The genus *Amydraulax*: 1 — head of *A. pulchra* (holotype), anterior view; 2–5 — *A. mexicana*: 2 — head and two basal flagellar segments, 3 — propodeum and first abdominal tergite, dorsal view, 4 — habitus and coloration, 5 — ovipositor; 6 — ovipositor of *A. pulchra* (holotype).

Рис. 1–6. Род *Amydraulax*: 1 — голова спереди *A. pulchra* (голотип); 2–5 — *A. mexicana*, ср.п.: 2 — голова спереди и два базальных членика жгутика, 3 — пропodeум и 1-й тергит брюшка, сверху, 4 — общий габитус и окраска тела, 5 — яйцеклад; 6 — яйцеклад *A. pulchra* (голотип).

segments (holotype); first three flagellar segments long and subequal; first flagellar segment about 8 times as long as wide at its middle; segments 1 and 2 combined about 1.5 times as long as maximum eye diameter (Fig. 2). Cheeks rather strongly convergent (Fig. 2), mouth 0.9 as wide as face at its median length (1.0 in *A. pulchra*). Malar space about as long as basal width of mandible. Clypeus with two distinct small apical teeth (in *A. pulchra* teeth very small or indistinct). Mandibles at basal 0.2 swollen and polished, impressed at base; mandibular teeth subequal (upper tooth a little broader). Temples strongly narrowed. Ocellar-ocular line and distance between posterior ocelli about 1.0–1.2 times as long as maximum diameter of ocellus. Face and basal half of clypeus smooth, with small, distinct, dense punctures and whitish hairs. Frons dull with fine microsculpture and sometimes very finely punctured; concavity above antennal sockets smooth. Temples polished, very finely and sparsely punctate; punctures on vertex fine but denser. Epomia distinct. Notauli sharp and long. Sternauli faint but distinct, sinuate (Fig. 4). Scutellum slightly convex, with lateral carinae only at very base. Propo-

deum without any trace of juxtacoxal carina; submetapleural carina sharp and straight. Propodeum with both transverse carinae distinct; longitudinal carinae mostly lacking, except for carinae delimiting basal area (Fig. 3); pleural carina between transverse carinae very fine. Thorax smooth and polished with very fine inconspicuous punctures, except for discernible fine dense punctures on median lobe of mesoscutum; central parts of lateral lobes of mesoscutum, as well as of lateral parts of pronotum, and of mesopleurum almost hairless. First abdominal segment (Fig. 3) with longitudinal dorsolateral and ventrolateral carinae strong and complete; median dorsal carinae strong and distinct approximately at their basal 0.6. Tergites 1–3 evenly granulate; hind part of tergite 1 sometimes finely striate; apical half of tergite 3 and of following tergites subpolished. Dorsal hairs on tergites 2 and 3 very sparse. Ovipositor sheath as long as fore wing (or body beyond prothorax); ovipositor sagittate apically, beyond distinct nodus sharply pointed; about 8 teeth at apex of lower valve are discernible (Fig. 5). Hind femur about 5.1 times as long as its maximal width (approximately at basal 0.33);

proportion of hind tarsal segments (in the type specimen) 7 : 3.1 : 2 : 0.8 : 1.5. Fore wing with areolet not closed (distal *rm* reduced); second recurrent vein with two bullae; nervulus opposite or slightly distad basal vein; nervellus intercepted at posterior 0.25; brachiella extends to hind margin of hind wing.

Head entirely black; mandibles white at basal half. Antennae reddish-brown; scape (dorsally), pedicel, and flagellar segments 1 and 2 dorsally blackish in their basal parts. Thorax mostly red with white and black marks as figured (Fig. 4); mesoscutum with black line at notauli and with central black triangular spot; prescutellar groove and propodeum entirely black; posterior margin of scutellum black or brownish. Metasomal tergites black with white marks (Fig. 4); sternites and epipleura white, each sternite with a lateral black spot; only epipleurum of tergite 2 with black posterior spot. Fore coxa and trochanters, middle coxa (dorsally), middle and hind trochanters II ventrally white. Middle coxa (except dorsally), hind coxa, most of middle and hind trochanters, all femora reddish to rufous; tibiae greyish-white, often with fuscous subbasal marks, hind tibia a little darker (greyish) with fuscous spurs; tarsi light brownish with their last segments blackish. Pterostigma light brownish.

DIAGNOSIS. *Amydraulax mexicana* sp.n. differs from *A. pulchra* in structure of ovipositor tip (Figs. 5 and 6), and in having basal flagellar segments stouter (Fig. 2); other diagnostic characters are given in the key to species.

Material. Holotype: ♀, México, Tamaulipas, Miquihuana: Joya larga, Bosque pino, 3000 m 12 V 2000 (J. A. Martínez Rmz). Paratype: México, Coahuila, El Tunal east of Arteaga, apple orchard, about 3000 m, 8 VII 2000 (C. Covarrubias), ♀.

Amydraulax pulchra Cushman, 1922

Cushman, 1922: 5, ♀; holotype: ♀, n 24617, Giant Forest, California, ex *Callidium sequoiae* Fisher (Mus. Washington).

Material. USA: ♀ (holotype).

Genus *Apotemnus* Cushman, 1940

Type species: *Apotemnus truncatus* Cushman, 1940

Only generotype is known; it was described from United States (Oregon). Here the genus is firstly recorded from Mexico.

Apotemnus truncatus Cushman, 1940

Cushman, 1940 : 360, ♀; holotype: ♀, n 53494, "Corvallis, Ore., VII 13 1935 G.Ferguson col." (Mus. Washington).

Material. USA: ♀ (holotype). México: Tamaulipas, Miquihuana, km 22–25, 2800 m, Bosque pino, 12 V 2000 (Kasparyan), ♀.

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