

## A new species of the genus *Digonocryptus* Viereck from Mexico (Hymenoptera: Ichneumonidae: Cryptini)

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*Digonocryptus coxator* sp. n. from Mexico is described. A key to 4 Mexican species of the genus is given.

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The genus *Digonocryptus* belongs to the subtribe Gabuniina. A review of Mexican species of this subtribe recently published by Kasparyan & Ruiz (2005) includes a key to North American species of *Digonocryptus* and description of 3 new species from Mexico. In the collection of Universidad Autónoma de Nuevo León (UANL, Facultad de Ciencias Biológicas, Universidad Autónoma de Nuevo León, San Nicolas de Los Garza, Monterrey, Mexico), a new species of this genus from the southern part of Mexico was found. This species is described below.

### *Digonocryptus coxator* sp. n.

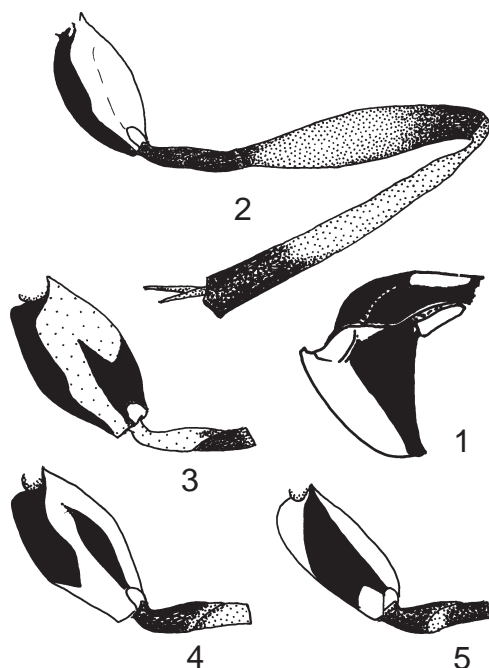
*Holotype*. ♂, **Mexico**, Quintana Roo, reserva El Eden, sitio 7, 24.XI.1998, CIB 98-0078; deposited at Department of Entomology, A&M Texas University, College Station, USA.

*Paratypes*. 2 ♂, same data as holotype; deposited at UANL and Universidad Autónoma de Tamaulipas, Cd. Victoria, Mexico.

*Description. Male*. Fore wing 5.2 mm; flagellum with 25 flagellar segments (holotype). Temples rounded, in lower part swollen and in profile about half as long as eye. Clypeus on lower margin with a small median tooth. Mandibles with lower tooth distinctly longer than upper tooth. Face and clypeus with large, moderately deep punctures; orbits granulate, with moderately fine punctures. Frons, vertex and temples shiny, with fine punctures, which are denser on vertex. Pronotum polished, with longitudinal rugae on lateral parts. Epomia very weak and obscured by adjacent wrinkles. Mesoscutum, prepectus, lower part of mesopleurum, mesosternum and base of propodeum more or less evenly covered with

rather coarse and dense punctures; mesoscutum with longitudinal striation on and beyond the median yellow spot; mesopleurum with longitudinal rugae under subtegular ridge, its hind half polished and impunctate. Punctures of metapleurum large, dense, but not deep. Hairs on mesopleurum and metapleurum rather short and not dense. Groove between metanotum and propodeum narrow, shallow, crossed by short carinae. Basal area of propodeum triangular, separated by strong carina; basal transverse carina strong and medially projecting to basal area. Pleural carinae, lateral sides of areola, and apical transverse carinae rather weak and partly obscured with shallow irregular rugosity, which covers hind half of propodeum. Fore wing with areolet moderately large, 1.2 times as long as section of second recurrent vein above the bulla; its sides uniformly convergent to front margin. Nervulus antefurcal; nervellus intercepted on lower 0.35. First abdominal tergite smooth, with scarce large punctures; spiracles of first tergite in its basal 0.46; dorsal carinae distinct before spiracles; median dorso-lateral carinae partly present on basal half of postpetiole. Second and third tergites shiny, covered with dense and moderately coarse setiferous punctures; sculpture of subsequent tergites similar, but punctures a little finer and not deep.

Antenna black with scape ventrally and flagellomeres (7)8-20 white (only 4-6 apical segments are black). Head white with malar space, broad band from antennal sockets to occiput, hind part of vertex and occiput completely black; mandibles blackish brown with basal white spot. Thorax and abdomen black with white spots and bands: propleurum, collar entirely, wide band on



**Figs 1-5.** *Digonocryptus*, male, colour pattern of pronotum (1) and parts of hind legs (2-5): 1, 2, *D. coxator* sp. n.; 3, *D. femorator* Kasp. & Ruíz z.; 4, *D. propodeator* Kasp. & Ruíz z.; 5, *D. thoracicus* Kasp. & Ruíz z.

front margin of pronotum, anterior mark on its dorsolateral margin and median round spot on mesoscutum (Fig. 1), subtegular ridge, apex of mesepimeron and mesopleuron almost entirely (except for prepectus, upper front corner and hind margin), scutellum and apex of postscutellum, metapleurum (except for completely black front and lower margin and upper division), propodeum beyond basal transverse carina almost entirely (except for its hind margin), petiole of first tergite, wide band on apical part (0.4-0.5) of tergites 2-4, apical half and lateral margins of tergites 5-8, parameres and sternites, fore and middle coxae (except for extreme base) and their trochanters (trochantelli pale brownish), dorsum of hind coxa completely and hind tarsus (except for pale rufous 0.4 of basitarsus) all are white. Fore and middle legs beyond trochanters predominantly pale rufous with middle tarsi entirely blackish, and segment 5 of fore tarsus and middle tibia posteriorly brownish. Hind coxa com-

pletely white dorsally; its lateral and ventral sides almost entirely blackish in holotype, but in paratypes ventral and partly posterior surfaces whitish; hind trochanters blackish, femur and tibia brownish yellow with blackish apical part (Fig. 2), and tarsus completely white (slightly pale rufous at base of segment 1).

*Female unknown.*

*Comparison.* *D. coxator* closely resembles *D. femorator* Kasp. & Ruíz z, 2005 in having one yellow median spot on mesoscutum, wide yellow transverse band on propodeum (propodeum entirely black in *D. propodeator* Kasp. & Ruíz z and *D. thoracicus* Kasp. & Ruíz z) and hind femora yellowish rufous and black (Fig. 2) rather than uniformly rufous. The male differs from other Mexican species in having the flagellum shorter, 1.1 times as long as fore wing (1.4-1.5 in males of other species) and hind coxa entirely white dorsally (with dorsal black spots in other species; Figs 3-5).

#### Key to Mexican species of *Digonocryptus*

1. Mesoscutum entirely black. Mesopleurum (except for white mesepimeron and subtegular ridge), metapleurum, propodeum and petiole of first abdominal segment entirely black. Hind coxa and trochanters of male with colour pattern as in Fig. 5 ..... *D. thoracicus* Kasparyan & Ruíz z
- Mesoscutum with one or two median yellow (or white) marks ..... 2
2. Mesoscutum with two median yellow stripes. Propodeum completely black. Hind coxa and trochanters of male with colour pattern as in Fig. 4 ..... *D. propodeator* Kasparyan & Ruíz z
- Mesoscutum with one median white spot ..... 3
3. Petiole of first abdominal segment entirely black. Apical half of propodeum white with median black marks extending anteriorly from hind margin. Hind coxa with black dorsal mark; hind trochanters of male with colour pattern as in Fig. 3 ..... *D. femorator* Kasparyan & Ruíz z
- Petiole of first abdominal segment white. Apical half of propodeum completely white except for hind margin. Hind coxa entirely white dorsally; hind trochanters of male with colour pattern as in Fig. 2 ..... *D. coxator* sp. n.

#### References

- Kasparyan, D.R. & Ruíz C., E. 2005. *Avispas parasiticas de plagas y otros insectos. Cryptini de México (Hymenoptera: Ichneumonidae: Cryptinae). Parte I.* Cd. Victoria, Tam., Mexico. UAT. 289 pp.

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