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Description of the female of *Tehuacania howdeni* Endrödi (Coleoptera: Scarabaeidae: Dynastinae: Oryctini), with a key to the genera of Oryctini from Mexico

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Tehuacania Endrödi is a monotypic genus endemic to Mexico (Endrödi 1975, 1985; Morón *et al*. 1997). The only species known in the genus, *T. howdeni* Endrödi, has a restricted distribution and represents the rarest of the Oryctini from Mexico. For more than 30 years the female remained unknown. Recently, three female specimens were collected in arid lands in the vicinity of Santa Maria Coapan and Santa Maria La Alta in the Valley of Tehuacan, near the site where the holotype and paratype males were collected in 1961.

Studied specimens are deposited in the entomological collections of the Canadian Museum of Nature (CMNC), Ottawa; Instituto Tecnológico de Ciudad Victoria (ITCV), Tamaulipas, Mexico; and the private collections of A. Bitar (CABS) Mexico City and M. A. Morón (MXAL) Xalapa, Veracruz, Mexico.

***Tehuacania howdeni* Endrödi, 1975**
(Figs. 1–5)

Material examined: "MEXICO: Puebla, Santa Maria Coapan; Junio, 2000. L. García" (1 female) (ITCV); "MEXICO: Puebla, Santa Maria Coapan; Julio, 2000, L. García." (1 female) (CABS); "MEXICO: Puebla, Tlacotepec de Juárez, Santa Maria La Alta, 18-VI-1998, 1960 m, luz fluor. V. Sánchez" (1 female) (MXAL); "20 m NW Tehuacan Pueb. Mexico, VIII.10.61. [Edward] Greenwood" (1 male holotype) (CMNC).

Description. Female (Figs. 1–4): Total body length 31.7–33.7 mm; maximum elytral width: 17.3–17.8 mm. Head, pronotum and elytra dark reddish black; legs and ventral region reddish black to almost black. Head: Clypeus strongly contracted, not reflexed; surface rugose; apex truncated. Frons with 2 small transverse protuberances, not connected; surface strongly punctate. Mandibles simple, emarginated; apex not incised. Surface of mentum with strong punctation to sparse smaller punctation, with long setae at sides, glabrous medially. Galea ventrally without setae, with dense setae dorsally. Antennae with 10 antennomeres, club short. Pronotum: broader than longer, convex; base bordered; sides curved; without tubercles; anterior marginal bead incomplete; punctures small, wrinkled at side and apical region; without setae. Prosternum: Prosternal process laminate. Elytra: shape longer than broad, with rows of small punctures; elytral sutural striae not well defined throughout its extension, with rows of small punctures. Metathoracic wings well developed. Legs: protibia tridentate, apical teeth triangular, closer together in relation to basal teeth, mesotibia and metatibiae triangularly dilated toward apex, both with transverse carina distinct and setose. Protarsi not thickened. Basal metatarsomere clearly enlarged. Abdomen: Pygidium convex with sparse micropunctation. Propygidium without stridulatory area; densely punctate with sparse, short setae. Genital plates (Fig. 3), ventromesial plates broad with shallow, circular impressions on surface, sides convergent, apex rounded with scattered setae; laterodorsal plates narrowed with apical border coarsely tridentate, without setae.

Male (Fig.5): Similar to female, except that the small transverse protuberances of the frons are slightly conical, with pointed apex. Basal border of last abdominal sternite weakly emarginate medially.

Type locality: 20 mi NW Tehuacan, State of Puebla, Mexico (approximately 18° 24‘ N, 96° 50‘ W).

Distribution: Known only from three localities in the Valley of Tehuacan, in the vicinity of the following towns: Tlacotepec de Díaz, Santa María La Alta and Santa María Coapan (Fig. 6).

Biological data: This species inhabits xerophilous shrub located between 1,600–1,960 m in elevation. The adults have been collected sporadically at light traps in June, July and August. Feeding habits of adults and larvae are unknown.

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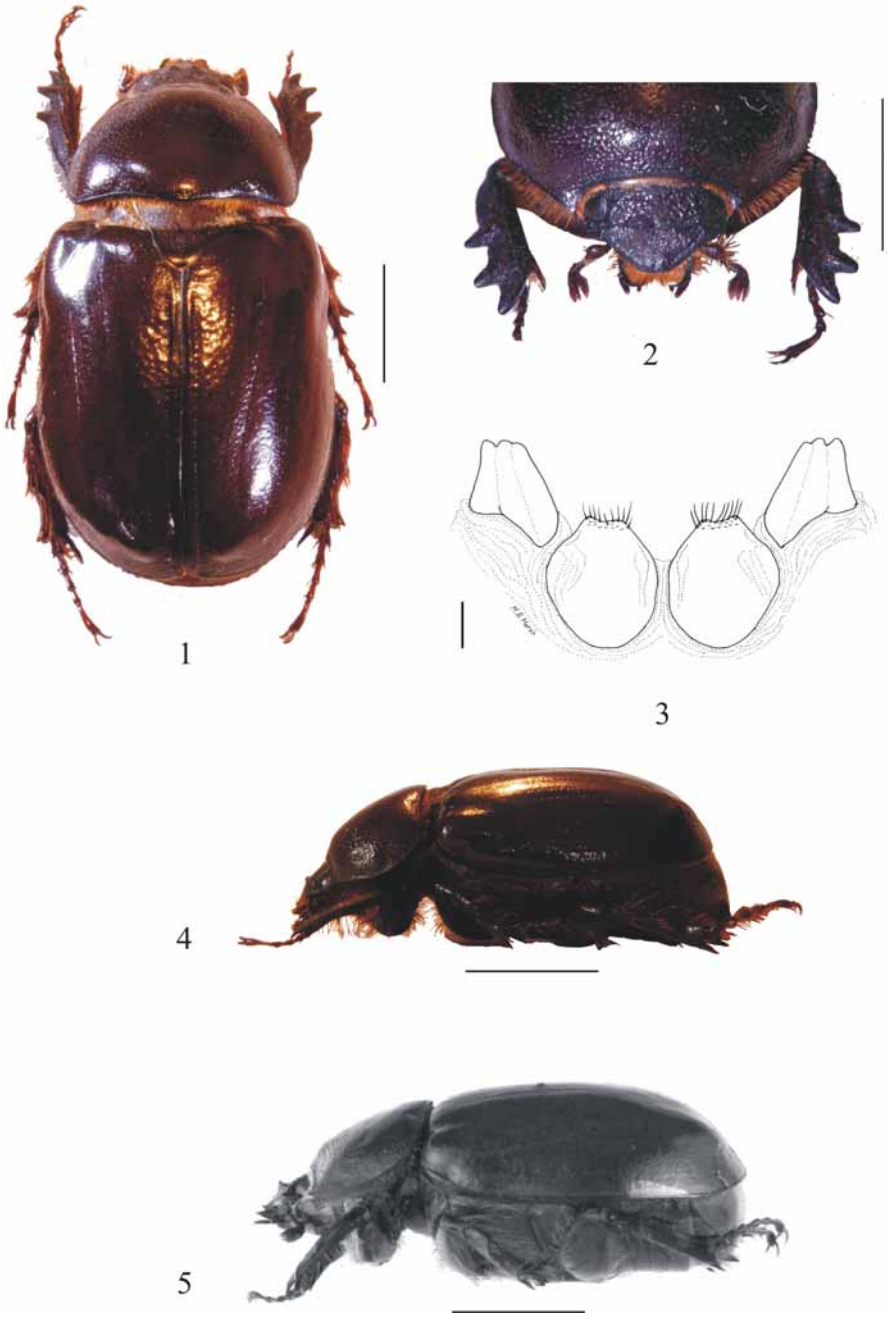
It is possible that the species are not commonly attracted to lights because their main activity occurs in the evening. Intense searching during day hours under rotten vegetal matter, on the stalks of plants, as well as with light traps did not turn up more specimens. The sites where the specimens were collected are located near the borders of the Tehuacan-Cuicatlan Biosphere Reserve (CONABIO-RTP-121), which is well known for the richness of xerophilous endemic plants, mainly cacti (Arriaga *et al*. 2000). We hope that a large population of *T. howdeni* lives in the reserve.

Remarks: Weak sexual dimorphism, lack of complex cephalic or pronotal structures and the lack of projections in the external border of the mandibles of *T. howdeni* may be indications of a primitive species of the Oryctini.



FIGURES 1–5. *Tehuacania howdeni* Endrödi. Female. 1—Dorsal view; 2—Head and pronotum, 3—Genitalia plates, 4—Lateral view. Male. 5—Lateral view holotype. Scale bar for Figs. 1, 2, 4, 5 = 1 cm; Fig. 3 = 1 mm.

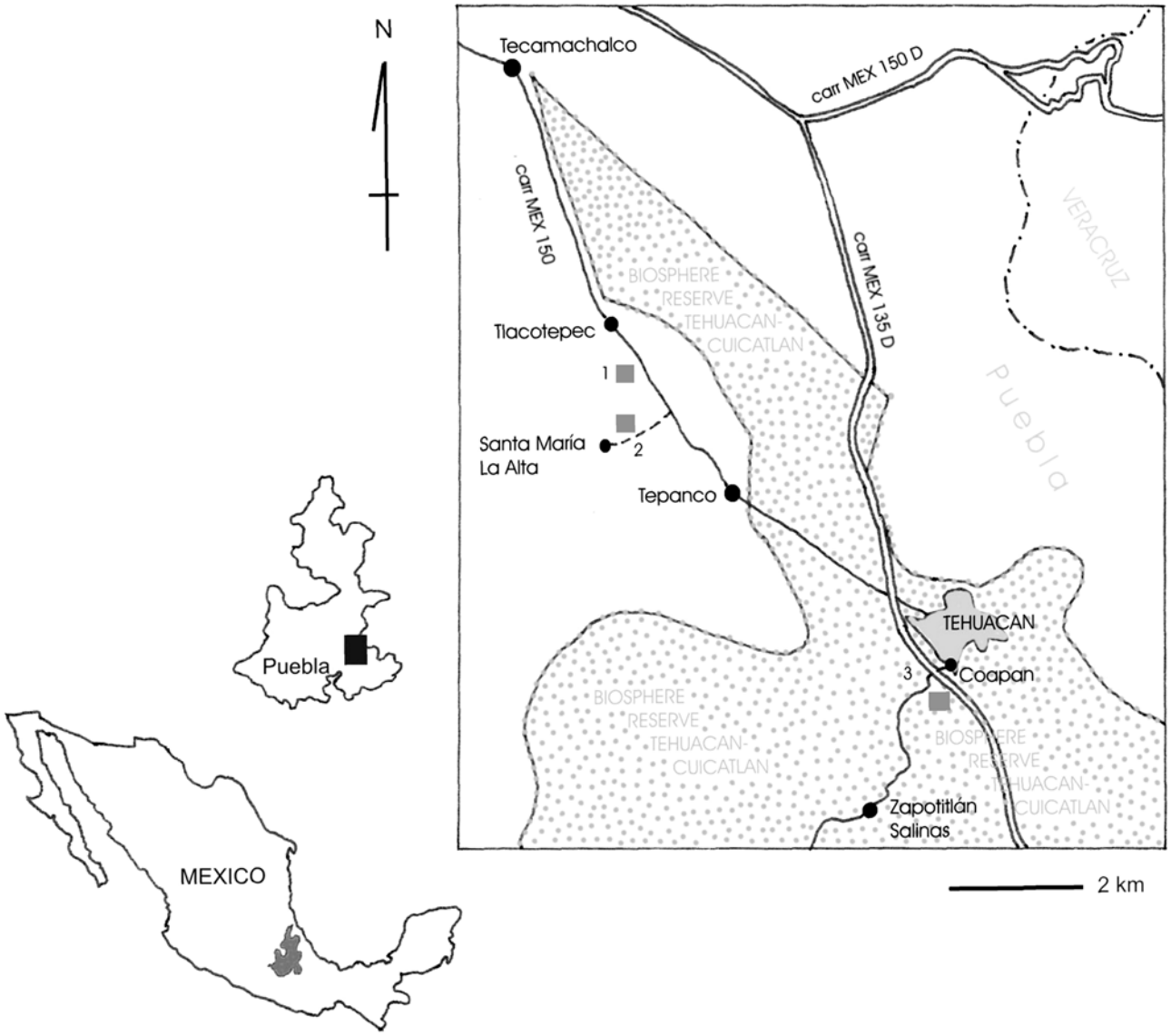


FIGURE 6. Distribution of *Tehuacania howdeni*. 1—type locality, 1961; 2—Santa María La Alta, 1998; 3—Santa María Coapan, 2000. Base map adapted from Roji & Roji (2008).

Key to the genera of Oryctini from Mexico
(Modified from Endrödi 1985, Delgado *et al.* 2000)

1. Apex of last abdominal sternite emarginate (males) 2
- Apex of last abdominal sternite rounded (females) 8
2 Protibiae tridentate 3
- Protibiae quadridentate 5
3 Frons with horn-like structure, pronotum with strong protuberances 4
- Frons with 2 weak tubercles, pronotum convex ..... *Tehuacania* Endrödi
4 Clypeus reflexed, bilobed. Mandibles without teeth on external border, covered by clypeus ..... *Xyloryctes* Hope
- Clypeus not reflexed, with 2 teeth. Mandibles with teeth on their external border, exposed at sides of clypeus. ..... *Coelosis* Hope
5 Frons without horn. Pronotum with 3 processes..... *Strategus* Hope
- Frons with horn. Pronotum with single central process..... 6
6 Protibial teeth at 90° angle from tibia..... *Podischnus* Burmeister
- Protibial teeth oblique angled from tibia 7
7 Prosternal process almost absent. Proximal tooth of protibia small..... *Enema* Hope

- Prosternal process well developed. Proximal tooth of protibia well developed..... *Heterogomphus* Burmeister
8 Protibiae tridentate..... 9
- Protibiae quadridentate..... 11
9 Clypeus reflexed. Mandibles covered by clypeus..... *Xyloryctes* Hope
- Clypeus not reflexed. Mandibles exposed..... 10
10 Mandibles with teeth on external border..... *Coelosis* Hope
- Mandibles without teeth on external border..... *Tehuacania* Endrödi
11 Frons with a horn-like structure..... *Enema* Hope
- Frons with short tubercles..... 12
12 Protibial teeth at 90° angle from tibia..... *Podischnus* Burmeister
- Protibial teeth oblique angled from tibia..... 13
13 Pronotum with fovea..... *Strategus* Hope
- Pronotum convex, not foveate..... *Heterogomphus* Burmeister

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