

**A NEW GENUS AND SPECIES OF LACHNOPHORINI AND TWO NEW SPECIES OF LEBIINI FROM COSTA RICA (COLEOPTERA: CARABIDAE)**

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**Abstract**

A new genus and new species of Lachnophorini and 2 new species of Lebiini from Costa Rican are described (type localities in parentheses): *Quammenis spectabilis*, **n. gen., n. sp.** (type locality: COSTA RICA: Heredia Province, Estacion Magsasay, Parque Nacional Braulio Carrillo, 200m, LN264600,531100); *Lebia (Chelonodema) inbio*, **n. sp.** (type locality: Guanacaste Province, Estación Pitilla, 9 km S Santa Cecilia, 700 m, LN329950,380450 #4355); *Agra yola*, **n. sp.** (type locality: Guanacaste Province, Estación Pitilla, 9 km S Santa Cecilia, 700 m, LN329650,378600 #4600).

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This is the first in a new series of papers with new taxa descriptions for the family Carabidae for the National Biodiversity Inventory project of Costa Rica. A full description of all taxa, including color images, maps of their known distributions, and what is known of their natural history may be found at the following web-site: <http://www.inbio.ac.cr/ubis/>

**Taxonomic History of Taxa Discussed**

The unexpected discovery of a new genus of Lachnophorini in Costa Rica is recorded here. Its placement within that tribe and its relationship to *Stenocheila* Laporte 1832 of South America will be discussed elsewhere (Erwin, in prep.).

Reichardt (1972) revised *Chelonodema* Laporte 1834 in which he accounted for 44 species; two additional species were described subsequently, one by Reichardt, the other by Nègre. Reichardt treated *Chelonodema* as a subgenus of *Lebia* Latreille 1802, following Madge (1967).

Erwin, in a series of 10 group revisions, has studied *Agra* Fabricius 1801, in which there are currently 656 described species.

**Accounts of Taxa**

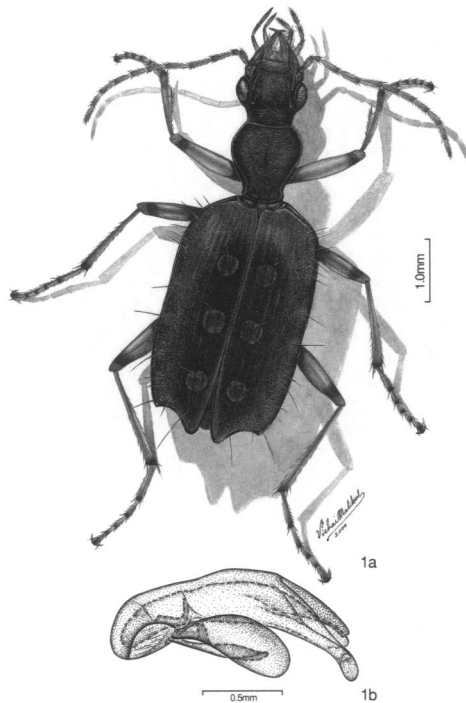
**Lachnophorini**

*Quammenis* Erwin, **new genus**  
(Fig. 1a)

**Type Species.** *Quammenis spectabilis* Erwin, **new species**, here designated.

**Derivation of Name.** The generic name, *Quammenis*, is a latinized masculine noun based on the surname of David Quammen, author of **The Song of the Dodo** (1996, Simon & Schuster, New York), a book that should be required reading for every student of biology and every student interested in conservation.

**Diagnosis.** Unique (Fig. 1a) among new world Carabidae; with metallic green dorsum and elytra with large purplish ocellate foveae; head and pron-



**Fig. 1.** *Quammenis spectabilis*: a) habitus; b) left lateral aspect, aedeagus.

tum with fine, closely spaced ridges, longitudinally arranged on head, transversely arranged on pronotum.

**Description.** Head across eyes slightly broader than prothorax; elytral apex deeply arcuate; pronotum without setae.

**Notes.** This genus is related to *Stenocheila* Laporte of South America, which is known to have two species.

*Quammenis spectabilis* Erwin, new species

(Figs. 1a, 1b)

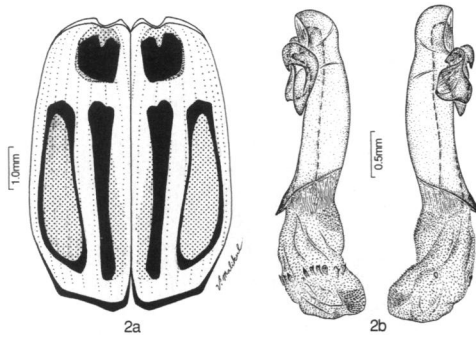
**Type Series.** Holotype female, **COSTA RICA**: Heredia Province, Estación Magsasay, Parque Nacional Braulio Carrillo, 200 m, LN 64600,531100, October, (A. Fernandez)(INBio: CRI 000-647080).

**Derivation of Name.** The species name, *spectabilis*, is an adjective describing the elegance of this metallic green mountain beetle.

**Diagnosis.** (Fig. 1a) As described for genus.

**Description.** As described for genus. Size moderately small: 6.44 to 7.32 mm in length, 2.56 to 2.76 in width. Aedeagus (Fig. 1b) without armature on the endophallus; right paramere small, narrow.

**Specimens Examined.** Paratypes: **COSTA RICA**: 1 male, Cartago Province, Pacayas, 1600 m, 09°55'N, 083°48'W, (C. Werckele)(AMNH)



**Fig. 2.** *Lebia (Chelonodema) inbio*, **a)** dorsal aspect, elytra; **b)** left lateral aspect, aedeagus.

ADP44192; 1 female, San Jose Province, Estación Zurqui, 500 meters before the tunnel, 1600 m, LN226800,535200, April, (G. Maass)(USNM) ADP100513.

**Notes.** Remarkably, this species has remained unnoticed. I suspect it lives among mossy boulders at the steep sunny edges of mountain torrents, a slippery and perhaps dangerous place to collect.

**Lebiini: Lebiina**

*Lebia (Chelonodema) inbio* Erwin, **new species**

(Figs. 2a, 2b)

**Type Series.** Holotype male, **COSTA RICA:** Guanacaste Province, Estación Pitilla, 9 km S Santa Cecilia, 700 m, LN329950,380450 #4355 (C. Moraga)(INBio: CRI 002-134601). Paratypes, 5 males, 13 females from the type locality (11-INBio, 2-CAS, 2-UASM, 3-USNM), 1 male, Estación Maritza, west slope of Volcan Orosi, 600 m, LN326900,373000 (K. Taylor)(INBio: CRI 000-394820); 1 male, Alajuela Province, Estación San Ramon, 620 m, LN318100,381900 #2817 (F. Quesada)(INBio: CRI 001-776999), 1 male, Sect. San Ramon de Dos Rios, 1.5 km N Hde. Nueva Zelandia, 620 m, LN 318100,381900 #7332 (F. Quesada) (USNM), 1 male, Finca San Gabriel, 2 km SW Dos Rios, 600 m, LN318800,383500 (GNP Biodiv. Survey)(INBio: CRI 001-024138).

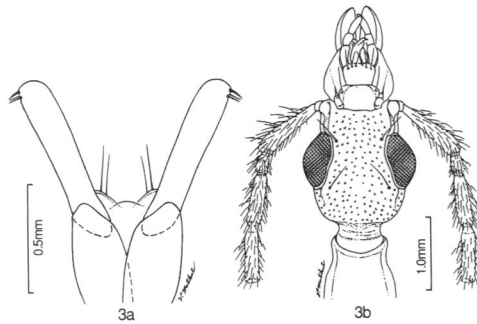
**Derivation of Name.** The specific epithet, *inbio*, an acronym for the Costa Rican institution in which the type series was encountered is used as a noun in apposition.

**Diagnosis.** This is the only species of *Lebia (Chelonodema)* with two longitudinal and bordered spots on the elytron (Fig. 2a) which cover 2/3 of the elytral surface.

**Description.** Testaceous; each elytron with 3 "spots," the scutellar one black, the discal ones beige with black borders; palpi, antennomeres 3–11, femoral apex, tibiae and tarsomeres black. Pronotum broadly explanate; disc finely rugose. Size moderately large: 9.8 to 11.84 mm in length, 5.38 to 5.86 mm in width. Aedeagus (Fig. 2b).

**Specimens Examined.** The type series of 23 specimens is listed above.

**Notes.** This species does not trace satisfactorily in Reichardt's key (1972)



**Fig. 3.** *Agra yola*, a) dorsal aspect, stylomere 2; b) dorsal aspect, head with partial antenna.

due to the unique elytral color pattern; the key will need to be significantly reordered rather than simply adding a step.

**Lebiini: Agrina**

*Agra yola* Erwin, **new species**

(Figs. 3a, 3b)

**Type Series.** Holotype female, **COSTA RICA:** Guanacaste Province, Estacion Pitilla, 9 km S Santa Cecilia, 700 m, LN329650,378600 #4600, April (E. Alfaro)(INBio: CRI 002-140738).

**Derivation of Name.** The specific epithet, *yola*, is a noun in apposition based on the given name of Yolanda Camacho Garcia, Curator of Mollusca at INBio and sometime guide for me to the carabid habitats of Costa Rica.

**Diagnosis.** Head and pronotum markedly punctate; antenna markedly long for genus, scape elongate and robust, antennomeres robust (Fig. 3b). Mouthparts, antennae, forepart of the head, tibia, tarsomeres, coxae, and femoral apex testaceous; base of head and neck, femoral base and venter piceous; pronotum and elytra with piceous, elytra with deep blue metallic sheen.

**Description.** Elytral interneurs markedly deep, punctulae slightly cribriform. Stylomere 2 (Fig. 3a) elongate, with three terminal seta, two of which are spinose. Size moderately large: 12.43 mm in length, 3.38 in width.

**Specimens Examined.** Known only from the type. Two undescribed species of this group are known from Panamá and another 8 undescribed ones from South America.

**Notes.** This species belongs to the *fallax* group of *Agra* whose range extends from Costa Rica to Bolivia along the east side of the Andes and east into Guyana. In addition to *A. yola* and the 10 undescribed species, this group includes *A. fallax* Liebke, *A. punctulata* Liebke, and *A. cribriceps* Straneo.

**Literature Cited**

- Fabricius, J. C. 1801.** Systema eleutheratorum, I. Kiliae. 506 pp.  
**de Laporte, F. L. N. 1832.** [Descriptions]. Magasin de Zoologie 2:1-50.  
**de Laporte, F. L. N. 1834.** Études Entomologiques, ou description d'insectes nouveaux, et observations sur la synonymie 1(1):1-94.

**Madge, R. B.** 1967. A revision of the genus *Lebia* Latreille in America north of Mexico (Coleoptera, Carabidae). *Quaestiones Entomologicae* 3:139–242.

**Reichardt, H.** 1972. Monograph of *Lebia* (*Chelonodema*) (Coleoptera: Carabidae). *Archivos de Zoología* 23(1):1–72.

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