

## New species and distribution records of Mesoamerican *Ateuchus* (Coleoptera:Scarabaeidae)

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**Abstract:** This paper describes three new species of *Ateuchus* for Mesoamerica. The new *taxa* are: *A. gershensoni* (copulatory hooks subequal in size and spinelike), *A. perezvelai* (small size; frons very convex; one very big copulatory hook and two small spine-like ones associated with a spiny fascies) and *A. perpusillus* (anterior pronotal margin incomplete; small and compact copulatory hooks, associated with a spiny fascies) from southern Mexico, Guatemala and Honduras. Redescriptions are also given for *A. chrysopyge* (Bates) (big size; copulatory hooks, one big, a spine-like medium-sized one and a hook-like small one) and *A. guatemalensis* (Bates) (pronotum punctured; anterior pronotal margin almost effaced; pygidium convex; copulatory hooks, two small and compact and one very thin and curved). New country and distributional records are also registered for Mexico, Guatemala, Belize, Honduras and El Salvador. Distribution map, internal sac of aedeagus illustrations and photographs of dorsal habitus are included, as well as drawings of the dorsal habitus of the three new species. The present work clarifies the situation of the genus in Mesoamerica and updates knowledge of the group in Mexico.

**Key words:** *Ateuchus*, Scarabaeinae, dung beetles, Coleoptera, new species, Neotropical, Mesoamerica

This work is an extension of the work originally done on North American *Ateuchus* (Kohlmann 1984). It describes three new species from the Mesoamerican area. The new *taxa* are: *A. gershensoni*, *A. perezvelai* and *A. perpusillus*. It also reports new country and distribution records for Mexico, Guatemala, Belize, Honduras and El Salvador.

This paper attempts also to partially update the knowledge of the North American *Ateuchus* fauna (Kohlmann 1984), by reporting the presence of four more species in Mexico (two new species, *A. gershensoni* and *A. perezvelai*; and two new country records, *A. chrysopyge* (Bates) and *A. guatemalensis* (Bates)) and thus increasing the number of previously known species from this country from eight to twelve. The paper also enlarges the distribution of previously recorded species in Mexico.

A redescription of *A. chrysopyge* and *A. guatemalensis* is also given. Since their original description by Bates (1887) no one had reported any information regarding any of the two species. Together with previous information from Costa Rica (Kohlmann 1996-97) and Panama (Howden and Young 1981), this paper is filling a knowledge gap of the Mesoamerican area, although Nicaragua still remains largely unknown.

Mesoamerican *Ateuchus* species closely resemble each other and many times it is very difficult to separate them solely on the ground of external morphology. Natural variation compounds this problem further. Without the aid of the analysis of the internal sac of the aedeagus, identification of many species would rest on shaky ground. It is therefore that the internal sacs of all species have to be

studied and depicted, as is the case here with these previously unknown *taxa* and the redescribed ones.

#### MATERIALS AND METHODS

Specimens came from my personal collection, as well as from H.F. Howden, Ottawa, Canada; M.A. Morón and C. Deloya, Instituto de Ecología, Xalapa, México and R.

Cave, Escuela Agrícola Panamericana, El Zámorano, Honduras.

The specimens were studied using a stereozoom binocular microscope. Measurements were made to the nearest 0.1 mm using an ocular micrometer. Genital dissections and preparations were done following the techniques described by Zunino (1978).

Types and paratypes of the new species are deposited at the Canadian Museum of Nature, Ottawa.

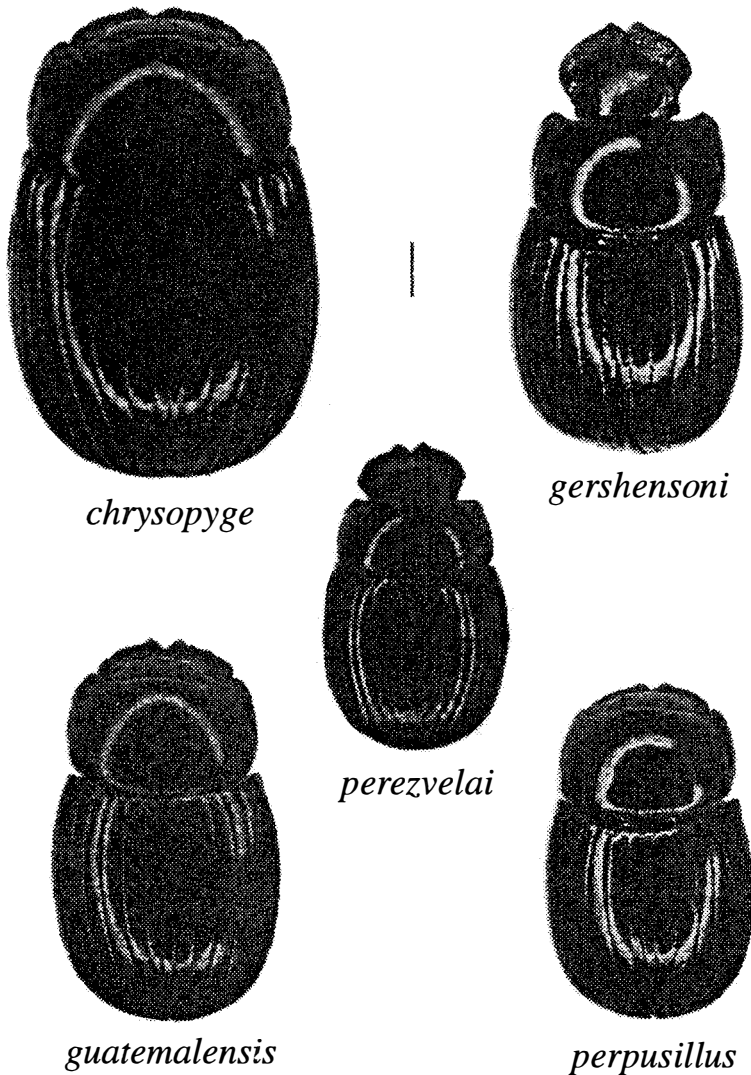


Fig. 1. Photograph of the dorsal habitus of the new and redescribed species. Scale 1 mm.

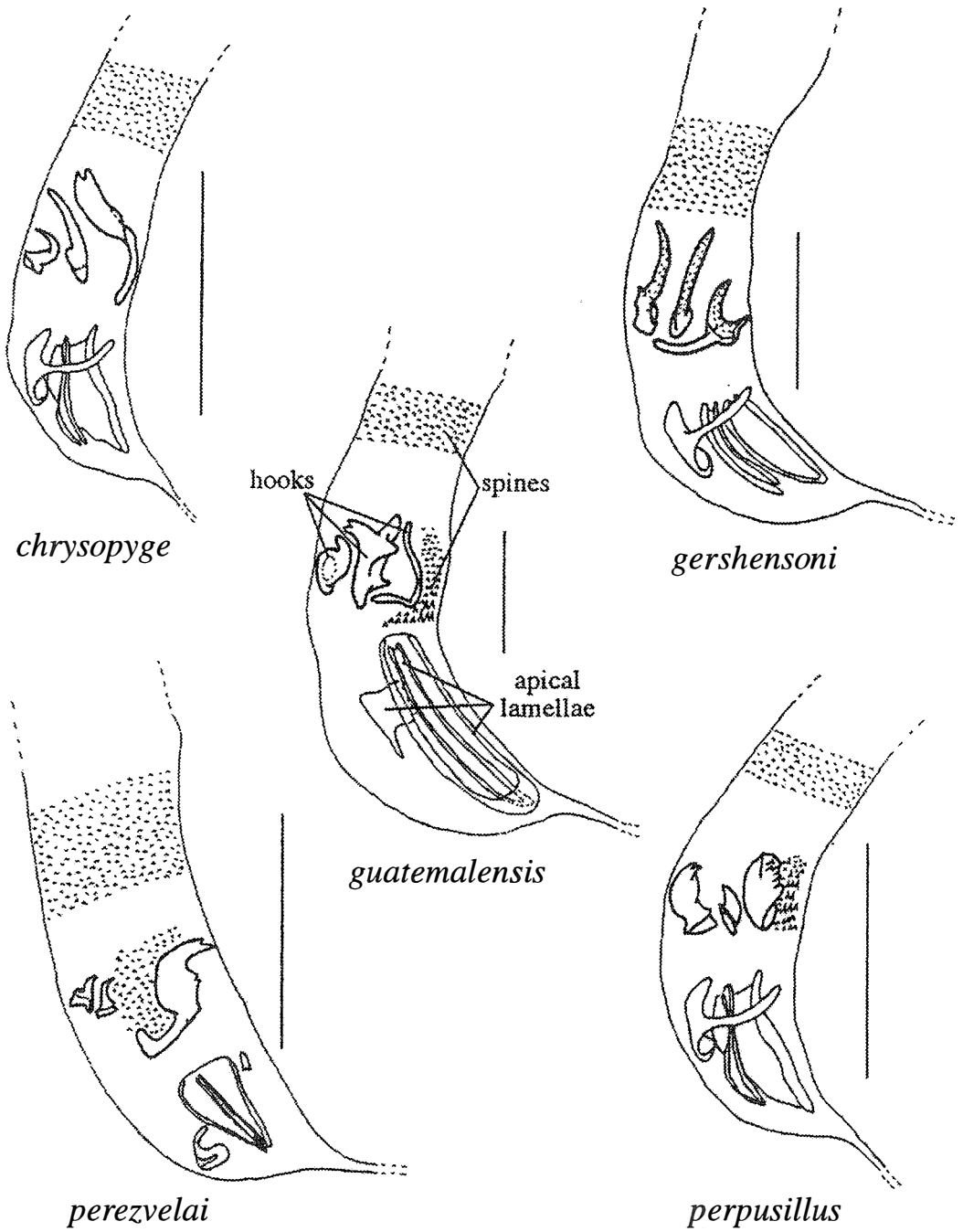


Fig.2. Internal sac of aedeagus of the new and redescribed species. Scale 1 mm.

## NEW SPECIES

*Ateuchus gershensoni* n. sp.

Figs. 1-3, 6

Description- HOLOTYPE. Male. Length 7.4 mm, greatest width 4.7 mm. Medium-sized, convex, oval-ovoid body shape (Fig. 1). Dorsally dark brown to black, head and pronotum with a reddish-greenish cast, ventral surface dark brown.

Clypeal margin anteriorly broadly V-shaped, clypeal margin laterally arcuate, clypeal border moderately punctate and wrinkled, frons and vertex feebly tumid and finely punctate, eyes dorsally small.

Anterior pronotal margin complete; midline weakly impressed at base, pronotal surface finely punctate, including the anterior angles. Proepisternum and proepimeron finely granular.

Elytral striae lightly impressed, distinctly so at apex, striae evidently punctate, crenating at apex, intervals feebly convex, surface smooth and finely punctate.

Pygidium almost flat, surface smooth and minutely punctate.

Foretibia with four teeth on outer margin, foretibial spur expanded into a slightly irregular oval shape. Foretibiae and forefemora long and slender. Forefemur smooth with very few coarse punctures at the posterior border. Last abdominal segment slender.

The internal sac of the aedeagus with three copulatory hooks (Fig. 2), more or less of the same size and spine-like. The apical lamellae are also three (Fig. 2).

Allotype- Female. Length 6.9 mm, greatest width 4.4 mm. Same as male, with the following sexual differences: clypeal margin anteriorly, not so broadly V-shaped (Fig. 3); lateral pronotal margin not arched; last abdominal segment broader; foretibial spur slender and slightly bent at tip (Fig. 3).

Variation: Length: 6.9-7.4 mm. Width: 4.4-4.7 mm. Some specimens do not show the reddish-greenish cast on the head and pronotum; sometimes the anterior margin is

not so evident, although it does not become effaced; pronotal surface in some cases with some coarser punctures along the basal and anterior margins.

## Type material-

Holotype. Male. Mexico: Chiapas: 20 mi N Bochil, 24/VIII/1971, 5600'; A. Newton. Allotype. Female. Same data as holotype.

Paratypes. Mexico: Chiapas: Ocosingo, 6/IX/1947, 1200 m, zona montañosa, bosque primitivo, M. del Toro, (1 specimen); 6.6 mi W El Bosque, 25-29/VIII/1973, 4800', cloud forest, A. Newton, (1); Finca Trinidad, Mpio. El Bosque, 4/IX/1981, 1450 m, bosque mesófilo, P. Reyes, G. Quintero, J. Valenzuela, (1).

Etymology: This species is named after my good friend, Daniel Gershenson.

Chorology: The species is only known from the mountains of Chiapas at mid-elevations (Fig. 6).

Ecology: The species has been found in cloud forest only.

*Ateuchus perezvelai* n. sp.

Figs. 1, 2, 4, 6

*Ateuchus klugi* (Harold), Kohlmann 1984 (in part).

Description- HOLOTYPE. Male. Length 5.5 mm, greatest width 3.5 mm. Small-sized, convex, oval-ovoid body shape (Fig. 1). Dorsally dark brown to black, head and pronotum sometimes with a very faint greenish cast, ventral surface dark brown.

Clypeal margin anteriorly broadly V-shaped, clypeal margin laterally arcuate, clypeal border moderately punctate and wrinkled, frons and vertex tumid and finely punctate, eyes dorsally small.

Anterior pronotal margin complete; midline completely effaced, pronotal surface finely punctate. Proepisternum and proepimeron finely granular.

Elytral striae very lightly impressed, somewhat more impressed at apex, striae lightly punctate, slightly crenating at apex; intervals feebly convex, surface smooth and very finely punctate. Pygidium lightly convex, surface smooth and minutely punctate.

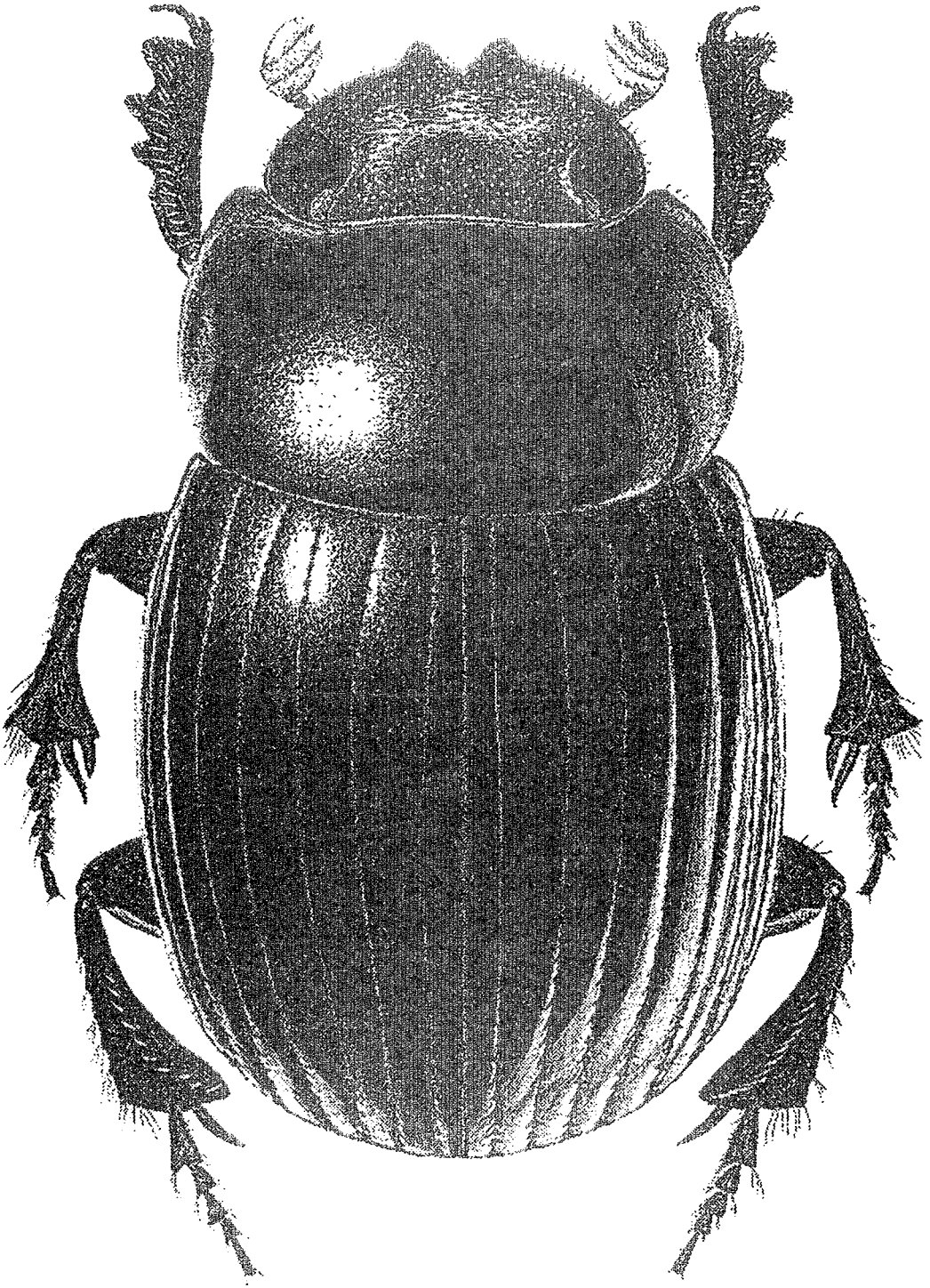


Fig. 3. Dorsal habitus of a female *A. gershensoni*.

Foretibia with four teeth on outer margin, foretibial spur expanded into a slightly irregular oval shape. Foretibiae and forefemora short and stout. Forefemur smooth with very few coarse punctures at apex. Last abdominal segment slender.

The internal sac of the aedeagus has three copulatory hooks (Fig. 2), one big and two smaller ones. The apical lamellae are also three (Fig. 2).

Allotype: Female. Length 5.5 mm, greatest width 3.5 mm. Same as male, with head and pronotal punctures more evident and a more convex pygidium and with the following sexual differences: clypeal margin anteriorly, not so broadly V-shaped (Fig. 4); lateral pronotal margin not arched; last abdominal segment broader; foretibial spur slender and slightly bent at tip (Fig. 4).

Variation: Length: 4.8-5.5 mm. Width: 2.9-3.5 mm. Some specimens do not show the reddish-greenish cast on the head and pronotum; the pronotal surface can be more evidently, but still finely punctate.

Observations: Some specimens of this new species appeared recorded as *A. klugi* in Kohlmann (1984). These were female specimens which are always difficult to identify and which can be easily confused with the females of *A. klugi*. The following specimens cited as *klugi* in Kohlmann (1984) belong to this new species: El Suspiro and Lacanjá-Chansayab, Chiapas and Temax, Yucatán.

Type material- Holotype. Male. Mexico: Yucatán: 2 km E Chichén-Itzá, 20/V/1983, 20 m, seas. for. litter, S. & J. Peck. Allotype. Female. Same data as holotype.

Paratypes. Mexico: Chiapas: El Suspiro, 12 km NW de Berriozábal, 1000 m, 2/XI/1974, selva tropical húmeda, cebo pescado, J. Mateu, (1), Lacanjá-Chansayab, 25/II/1977, 300 m, selva tropical, P. Reyes, (1), Oaxaca: 9 mi N Valle Nacional, 100', 1/VIII/1971, A. Newton, (2); Veracruz: Lake Catemaco, 1200', 31/VII-4/VIII/1970, A. Newton, (1), 8 mi NW Sontecomapan, 500', 31/VII-4/VIII/1970, A. Newton, (1), Río Metlac, 3200', 1/VIII/1973, A. Newton, (1); Yucatán: 2 km E Chichén-Itzá, 20/V/1983, 20 m, seas. for. litter, S. & J. Peck, (3); Temax, Gaumer, B.C.A. 45.3, (1).

Etymology: This species is named after my good friend Juan Antonio Pérez-Vela.

Chorology: The species seems to be distributed in south-east Mexico at low and mid-altitudes (Fig. 6).

Ecology: The species has been found in tropical evergreen and tropical deciduous forest as well.

*Ateuchus perpusillus* n. sp.

Figs. 1, 2, 5, 6

Description- HOLOTYPE. Male. Length 6.4 mm, greatest width 3.0 mm. Small-sized, convex, oval-ovoid body shape (Fig. 1). Dorsally dark brown to black, head and pronotum with a very evident reddish-coppery cast (Fig. 5), ventral surface dark brown.

Clypeal margin anteriorly broadly V-shaped (Fig. 5), clypeal margin laterally arcuate, clypeal border moderately punctate and wrinkled, frons and vertex slightly tumid and finely to moderately punctate, eyes dorsally small.

Anterior pronotal margin incomplete; midline only evident at base, pronotal surface finely punctate, a few coarse punctures present at anterior angles and basal margin. Proepisternum and proepimeron finely granular.

Elytral striae very lightly impressed, somewhat more impressed at apex, striae lightly punctate, slightly crenating at apex; intervals feebly convex, surface smooth and very finely punctate. Pygidium protruding pyramidally, surface smooth and minutely punctate.

Foretibia with three teeth on outer margin, foretibial spur expanded into a slightly irregular oval shape. Foretibiae and forefemora short and stout. Forefemur smooth with very few coarse punctures at apex. Last abdominal segment slender.

The internal sac of the aedeagus has three small copulatory hooks (Fig. 2). The apical lamellae are also three (Fig. 2).

Allotype. Female. Length 6.4 mm, greatest width 3.5 mm. Same as male, with

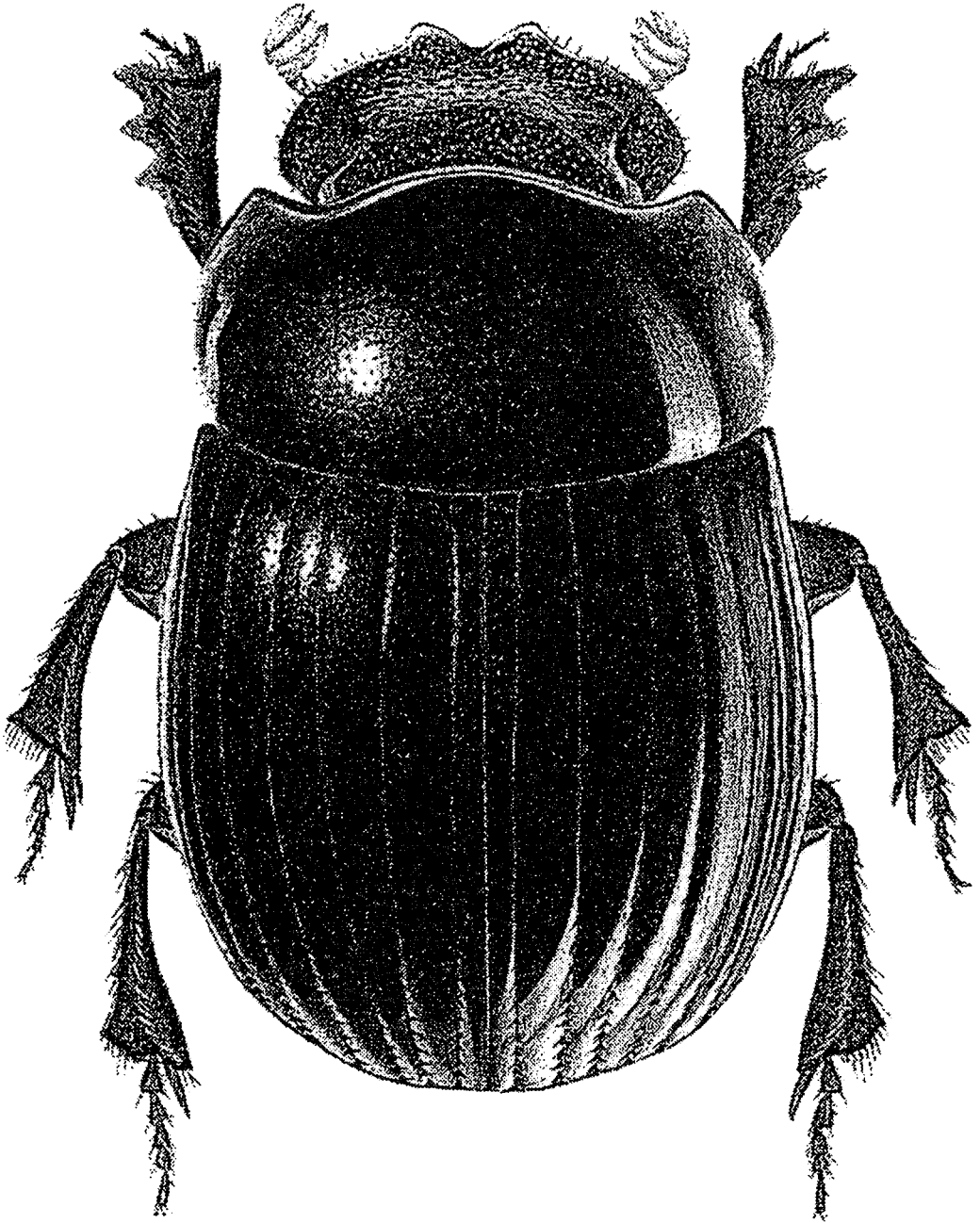


Fig. 4. Dorsal habitus of a female *A. perezvelai*.

head and pronotal punctures more evident and a less protruding pygidium and with the following sexual differences: clypeal margin anteriorly, not so broadly V-shaped; lateral pronotal margin not arched; last abdominal segment broader; foretibial spur slender and slightly bent at tip.

Variation: Length: 5.0-5.5 mm. Width: 3.0-3.5 mm.

#### Type material-

Holotype. Male. Honduras: El Paraíso: Cerro Apagius, Danlí, 28/II/1988, 900 m, R.D. Cave. Allotype. Female. Same data as holotype.

Paratypes. Guatemala: Zapote, Champion, (2). Honduras: El Paraíso: Cerro Apagius, Danlí, 28/II/1988, 900 m, R.D. Cave, (1).

Etymology: The name derives from the latin adjective *perpusillus*, meaning small.

Chorology: The species is found in mountainous areas (Fig. 6). Zapote used to be a small town that has now been engulfed by Guatemala-City.

Ecology: The species has been found in mixed-deciduous forest in Honduras; Zapote used to have oaks and pine-oak forests.

### NEW COUNTRY RECORDS

#### *Ateuchus candezei* (Harold), 1868

The species was only known from the state of Chiapas, Mexico; it is now here recorded for the first time from the state of Oaxaca and Guatemala and Belize as well.

Mexico: Chiapas: Boca de Chajul, NTP-80, 28/V/1984, 110 m, selva alta subperennifolia, necrotrampa, Fragoso-Villalobos, (2); Bonampak, 8/VII/1983, 230 m, rain forest, S. & J. Peck, (1); Oaxaca: 4.5 mi S Valle Nacional, 16/VIII/1973, 1600', A. Newton, (1).

Guatemala: Alta Verapaz: Lanquín, 28-30/VIII/1969, 1000', trop. for., S. & J. Peck, (1).

Belize: Cayo: Belmopan, 11-16/VIII/1972 S. & J. Peck, (4); Augustine, 20/VIII/1972, 1500', S. & J. Peck, (1); Orange Walk: Lamanai, 22-26/II/1989, dung traps at camp, Glen Kit, (6).

#### *Ateuchus chrysopyge* (Bates), 1887

Figs. 1, 2, 6

*Choeridium chrysopyge* Bates, 1887. p. 44.

Lectotypes and paralectotypes: London and Paris. Paris specimens examined.

Redescription. Length 7.0-8.5 mm, greatest width 4.0-5.0 mm. Medium to big-sized, convex, oval-ovoid body shape (Fig. 1). Dorsally dark brown to black, head and pronotum sometimes with a reddish cast, ventral surface dark brown.

Clypeal margin anteriorly broadly (male,) to moderately (female) V-shaped, clypeal margin laterally arcuate, clypeal border moderately punctate and wrinkled, frons and vertex feebly tumid and finely punctate, eyes dorsally small.

Anterior pronotal margin complete, midline weakly impressed at base, pronotal surface smooth, in some cases with some coarser punctures along the basal and lateral margins, including the basal and anterior angles. Proepisternum and proepimeron finely granular.

Elytral striae lightly impressed, distinctly so at apex, striae evidently punctate, crenating at apex, intervals feebly convex, surface smooth and finely punctate.

Pygidium almost flat, surface smooth and minutely punctate.

Foretibia with four teeth on outer margin, foretibial spur of males expanded into a slightly irregular oval shape, female spur slender and slightly bent near acute apex. Foretibiae and forefemora longer and slender in males. Forefemur with coarse punctures at the posterior border. Last abdominal segment slender in males, broad in females.

The internal sac of the aedeagus has three copulatory hooks, one bigger, two smaller and very claw-like (Fig. 2). The apical lamellae are also three (Fig. 2).

Observations: The species was only known from San Gerónimo (*sic*, it should be San Jerónimo), Guatemala, and it is now recorded for the first time for Mexico, Belize, El Salvador and Honduras (Fig. 6).



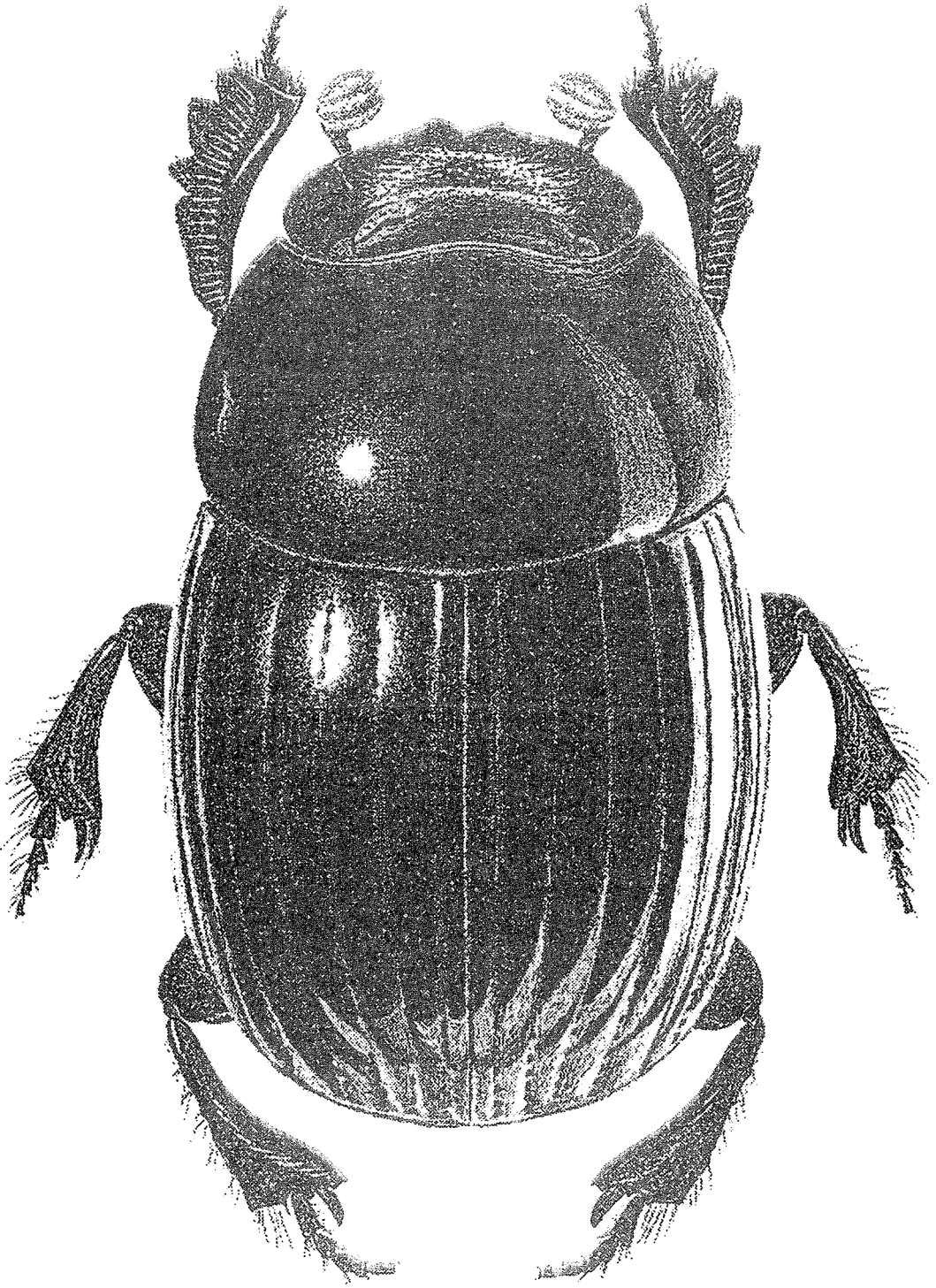


Fig. 5. Dorsal habitus of a male *A. perpusillus*.

### Material examined-

México: Chiapas: Montebello, VI/1967, excr. vaca dentro de bosque, G. Halfter, (2); *ibid*, 14-17/VIII/1969, 4500', tropical montane forest, S. & J. Peck, (1); Comitán, 20/IX/1987, F. Arias, (4); Lacanjá-Chansayab, 23/VII/1977, 220 m, selva tropical, excr. humano, B. Kohlmann, (1); 12 mi E San Cristóbal de las Casas, 3/V/1969, H.F. Howden, (5); 9 mi SE Teopisca, Rt. 24, 3/VI/1969, H.F. Howden, (2); Laguna Bélgica, 16 km NW Ocozacoatlá, 13/VI/1990, 970 m, H. & A. Howden, (4); 10 mi E Teopisca, 11-12/V/1969, H.F. Howden, (1); Lagos de Colores, Rt. 17, 1/VI/1969, H. Howden, (2).

Belize: Cayo: Caves Branch, 23-28/VIII/1972, S. & J. Peck, (1); 6 mi S Belmopan, 20/VIII/1972, litter-carrion, S. & J. Peck, (1); Augustine, 1-20/VIII/1972, 1500', S. & J. Peck, (1).

Guatemala: Baja Verapaz: 8 km S Purulhá, 27/VI/1991, 1500 m, H. & A. Howden, (3); 7 km NE Purulhá, 1/VI/1991, 1500 m, H. & A. Howden, (1); 8.6 km W Chilascó, 28/V/1991, 1560 m, H. & A. Howden, (2); San Jerónimo (*sic*, it should be San Jerónimo), Champion, (2); Chiquimula: Fca. San José, 9/VIII/1991, 1385 m, J. Monzón, (1); Guatemala: Guatemala, 12/X/1988, trampa pitfall, R. Pérez, (1), S. J. Pinula, 28/VIII/1984, J. Melgar, (2); Petén: Tikal, 23-26/VIII/1972, dung trap, S. & J. Peck, (1); Progreso: Cerro Pinalón, Los Albores, 7/VIII/1990, 1350 m, E. Ordócia, (1).

El Salvador: Santa Ana: Monte Cristo 23 km N Metapan, 8-10/V/1971, 2300 m, H.F. Howden, (6).

Honduras: La Paz: Mercedes, R.D. Cave, (1).

### *Ateuchus guatemalensis* (Bates), 1887

Figs. 1, 2, 6

*Choeridium guatemalense* Bates, 1887, p. 45.

Lectotypes and paralectotypes: London and Paris. Paris specimens examined.

Redescription. Length 5.2-6.7 mm, greatest width 3.9-4.2 mm. Small, convex, oval-ovoid body shape (Fig. 1). Dorsally dark brown to black, head and pronotum with golden-green cast, ventral surface dark brown.

Clypeal margin anteriorly broadly (male) to moderately (female) V-shaped, clypeal margin laterally arcuate, clypeal border moderately punctate and wrinkled, frons and vertex feebly tumid and finely punctate, eyes dorsally small.

Anterior pronotal margin almost effaced, midline weakly impressed at base, pronotal surface moderately to evidently punctate, females tend to have a coarser punctation. Proepisternum and proepimeron finely granular.

Elytral striae lightly impressed, distinctly so at apex, striae evidently punctate, crenating at apex, intervals feebly convex, surface smooth and finely punctate.

Pygidium very big and convex, surface smooth and minutely punctate.

Foretibia with four teeth on outer margin, foretibial spur of males expanded into a slightly irregular oval shape, female spur slender and slightly bent near acute apex. Foretibiae and forefemora longer and slender in males. Forefemur with some coarse punctures apically and at the posterior border. Last abdominal segment slender in males, broad in females.

The internal sac of the aedeagus has three copulatory hooks. One of them is very peculiar in the form of a long and slender filament (Fig. 2). The apical lamellae are also three, one of them has a distinct canoe shape (Fig. 2).

Observations: The species was only known from El Tumbador (*sic*, it should be El Zumbador), Volcán Atitlán and Pantaleón, Guatemala and it is now recorded for the first time for Mexico and Honduras too (Fig. 6).

### Material examined-

Mexico: Chiapas: Unión Juárez, 29/VI-1-2/VII/1972, ca. 3000', coffee finca, U.V light & litter, P.A. Meyer & G. Ball, (2).

Guatemala: Guatemala: Villanueva, Fca. Paraíso, 9/III/1991, Macuana, (1); San Marcos: El Tumbador (*sic*, it should be El Zumbador), 2500', Champion, (2).

Honduras: El Paraíso: Yuscarán, 1850 m, R.D. Cave, cloud forest, (5); Olancho: La Unión, La Muralla, 1450 m, rainforest dominated by oaks, laurels and liquidambar, R.D. Cave, (5).

Remarks. Howden and Young (1981) cited an *A.* (near?) *guatemalensis* in their work on Panamanian Scarabaeinae. Those specimens actually represented a new species, which was later described under the name of *A. howdeni* (Kohlmann 1996-1997).

### *Ateuchus laetitiae* Kohlmann, 1981

This species was only known from the typical locality in Chiapas, its distribution has now been greatly expanded with the knowledge of its presence in the Mexican state of Campeche and in neighbouring Belize. The records are as follows:

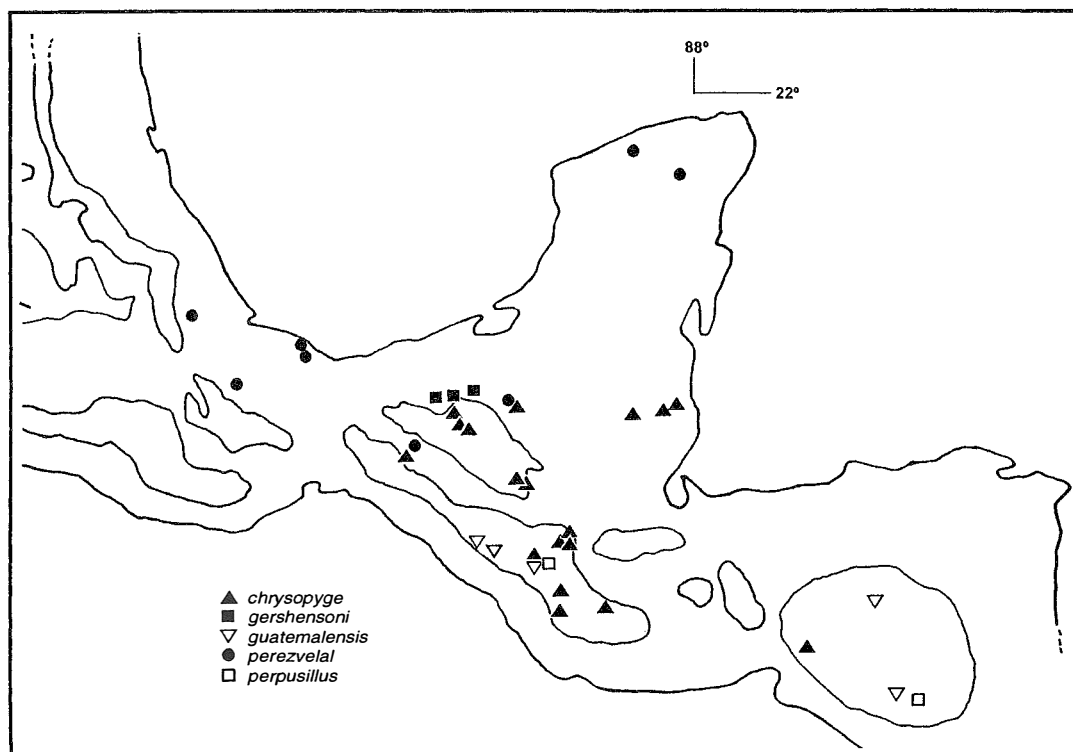


Fig. 6. Known distribution of the new and redescribed species. Drawn areas indicate the distribution of pine and pine-oak forests.

Mexico: Campeche: Chicanna, 10 km W Xpujil, 12-14/VII/1983, 300 m, trop. seas. For. car. tps. S. & J. Peck, (1); Escárcega, 6 km W El Tormento, 23/VII/1983, evergreen trop. forest, fungi & litter Ber., S. & J. Peck, (2).

Belize: Orange Walk: Lamanai, 22-26/II/1980, palm forest trail, Glen Kit, (1).

NEW DISTRIBUTION RECORDS

*Ateuchus carolinae* Kohlmann, 1981

This is the second known locality for this species in the state of Jalisco.

Mexico: Jalisco: 9 mi NW Barra de Navidad, 17/IX/1971, 700', A. Newton, (1).

*Ateuchus halfferi* Kohlmann, 1981

The species was previously known from the states of Guerrero and Morelos, it has now been found in the state of Puebla as well.

Mexico: Puebla: Tepexco (near Izúcar de Matamoros), NTP-80, 7-25/V-VI/1989, A.C. Deloya, (43); Guerrero: Acahuizotla, VI-VII/1989, 650 m, NTP-80, bosque tropical mediano subperennifolio, L. Delgado, (37).

*Ateuchus illaesum* (Harold), 1868

The species was previously recorded from the states of Chiapas, Hidalgo, Querétaro, San Luis Potosí and Veracruz in Mexico. There is a new state record for this species from Tamaulipas:

Mexico: Tamaulipas: Rancho El Cielo, Gómez Farías, 1-4/VII/1969, 3700', cloud forest, S. & J. Peck, (8).

*Ateuchus rodriguezii*  
(Preudhomme de Borre), 1886

Although this species was originally described from Guatemala, no precise location was given at the time. Here we give the first detailed localities for this country.

Guatemala: Escuintla: Finca Sta. Cecilia, 29/III/1991, M.E. González, (1); Guatemala: Sta. Catalina Pinula, Punta Parada, 20/III/1991, P. Broll, (1).

*Ateuchus texanus* (Robinson), 1948

The species is known from Texas, Tamaulipas, Nuevo León, Veracruz and San Luis Potosí. It is now recorded for the first time from the state of Querétaro.

Mexico: Querétaro: 20 mi W Xilitla, Rt. 120, 10-11/VI/1971, 5300', H. Howden, (6).

#### FINAL REMARKS

From the scanty evidence of *Ateuchus* distribution in Mesoamerica, there seem to emerge certain patterns. A mountainous orofauna (a fauna developed in the area and representing its history) seems to occupy an area starting from southern Nicaragua to Costa Rica and Panama, with as yet not a precisely known southern limit (Kohlmann 1996-97). Another mountainous orofauna seems to be distributed from northern Nicaragua to Chiapas (*A. chrysopyge*, *A. gershensoni*, *A. guatemalensis*, *A. perpusillus*). The dry Pacific forests would represent another orofauna (*A. rodriguezi*). Wet Atlantic and Pacific forests have also their orofauna (*A. howdeni*, *A. laetitiae*, *A. perezvelai*), plus elements representing Amazonian invasions (*A. aeneomicans*, *A. candezei*). However, more information is still needed in order to clarify this situation.

#### ACKNOWLEDGEMENTS

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lending me their *Ateuchus* material. I am also grateful to Y. Cambefort for lending me type material. I am especially indebted to C. Aragón for the beautiful habitus drawings.

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#### RESUMEN

Este trabajo describe tres nuevas especies de *Ateuchus* para Mesoamérica. Los nuevos taxa son: *A. gershensoni*, *A. perezvelai* y *A. perpusillus* del sur de México, Guatemala y Honduras. Se incluyen redescriptiones de *A. chrysopyge* (Bates) y *A. guatemalensis* (Bates). Se citan nuevos registros de países y de distribución para México, Guatemala, Belice, Honduras y El Salvador. Se incluyen mapas, ilustraciones del saco interno del edeago y fotografías del hábito dorsal, así como ilustraciones del hábito dorsal de las tres nuevas especies. Este estudio representa una extensión del trabajo originalmente realizado para los *Ateuchus* de Norteamérica. El trabajo clarifica la situación del género en Mesoamérica. También actualiza el conocimiento del grupo para México al reportar la presencia de cuatro especies más (dos nuevas, *gershensoni* y *perezvelai*; y dos nuevos registros para el país, *chrysopyge* y *guatemalensis*) y así incrementar el número de especies conocidas de ocho a doce.

#### REFERENCES

- Bates, H.W. 1887. Pectinicornia and Lamellicornia. In: *Biologia Centrali-Americana. Zoologia. Insecta. Coleoptera. Vol. 2, Part 2.* 432 p.
- Howden, H.F. & O.P. Young. 1981. Panamanian Scarabaeinae: Taxonomy, distribution, and habits (Coleoptera, Scarabaeidae). *Contr. Am. Ent. Inst.* 18: 1-204.
- Kohlmann, B. 1984. Biosistemática de las especies norteamericanas del género *Ateuchus* (Coleoptera: Scarabaeidae: Scarabaeinae). (Published: 15 February, 1985). *Folia Ent. Mex.* 60: 3-81.
- Kohlmann, B. 1996-1997. The Costa Rican species of *Ateuchus* (Coleoptera: Scarabaeidae). *Rev. Biol. Trop.* 44(3)/45(1): 177-192.
- Zunino, M. 1978. L'armatura genitale negli Onthophagini: Tecniche di preparazione e criteri di studio. L'informatore del Giovane Entomologo. (supl.) *Boll. Mus. Zool. Univ. Torino* 90: 1-5.