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Paul E. Skelley

Héctor Jaime Gasca-Álvarez

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Paul E. Skelley

Florida State Collection of Arthropods
Florida Department of Agriculture and Consumer Services
P. O. Box 147100
Gainesville, FL 32614–7100 USA

Héctor Jaime Gasca-Álvarez

Programa de Biología
Universidad Pedagógica y Tecnológica de Colombia
Avenida Central del Norte 39–115
Sede Central – Tunja, Boyacá, Colombia

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Paul E. Skelley

Florida State Collection of Arthropods
Florida Department of Agriculture and Consumer Services
P. O. Box 147100
Gainesville, FL 32614–7100 USA
Paul.Skelley@FDACS.gov

Héctor Jaime Gasca-Álvarez

Programa de Biología
Universidad Pedagógica y Tecnológica de Colombia
Avenida Central del Norte 39–115
Sede Central – Tunja, Boyacá, Colombia
hector.gasca@uptc.edu.co

Abstract. *Michyrus* Skelley and Gasca-Álvarez, **new genus**, is a Neotropical Tritomini (Coleoptera: Erotylidae: Erotylinae) with many unusual characters, whose relationships are unclear. Two **new species** are described: *M. thomasi* Skelley and Gasca-Álvarez and *M. yvineci* Skelley and Gasca-Álvarez.

Key words. Taxonomy, morphology, *Pselaphacus*, *Ischyrus*, *Megischyrus, Lybas*, *Myceporthus*

Resumen. *Michyrus* Skelley y Gasca-Álvarez, **nuevo género**, es un Tritomini Neotropical (Coleoptera: Erotylidae: Erotylinae: Tritomini) con muchos estados de carácter inusuales, cuyas relaciones no están claras. Se describen dos **nuevas especies**: *M. thomasi* Skelley y Gasca-Álvarez y *M. yvineci* Skelley y Gasca-Álvarez.

Palabras clave. Taxonomía, morfología, *Pselaphacus*, *Ischyrus*, *Megischyrus*, *Lybas*, *Myceporthus*

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Introduction

A resurgence of publications on foundational faunal works, descriptive and revisionary taxonomy, and nomenclatural issues within the new world Erotylinae (Erotylidae) is happening because of several emerging researchers and their projects (e.g., Skelley and Cekalovic 2002; Lásaro Lopes 2006; Skelley 2009; Gasca-Álvarez 2009; Skelley and Powell 2018; Pecci-Maddalena and Lopes-Andrade 2017, 2018a, 2018b, 2020; Pecci-Maddalena et al. 2019; Skelley 2020a, 2020b; Lásaro Lopes et al. 2020; Powell and Skelley, in press). With this increase in studies, many new taxa are coming to light that need description.

The genus described here has coarsely faceted eyes and could be placed within the genera *Ischyrus* Lacordaire (1842) or *Megischyrus* Crotch (1873). However, some taxa already placed in those genera make them broad heterogeneous conglomerates of potentially unrelated taxa (see discussions in Skelley 1998, 2020b). Several characters of this unusual new genus argue against placement in either *Ischyrus* or *Megischyrus*, even with their current *sensu lato* taxonomic hypotheses. It is here described to be available for ongoing studies.

Materials and Methods

Materials reported in this work are deposited in the following collections (curators in parentheses): **FSCA –** Florida State Collection of Arthropods, Gainesville, FL, USA (Paul Skelley); **MNHN –** Muséum National d'Historie Naturelle, Paris, France (Antoine Martinelli); **UCDC –** Bohart Museum, University of California, Davis, CA, USA (Lynn Kimsey).

Terminology follows several references. Skelley (1998) was followed for color patterns and general structures. More recent terminology follows McHugh et al. (1997), Węgrzynowicz (2002), Leschen (2003), with updates as presented in Lawrence et al. (2010).

Genitalia studied are placed in DMHF (Steedman 1958), which is water soluble, on a paper card beneath the specimen. Specimens on paper points were glued with "Gelva", a polyvinyl acetate, which is soluble in 95% ethanol.

Photographs by PES were taken using a Syncroscopy Auto-Montage system with a JVC 3-CCD, KY-F75U digital camera through a Leica Z16 APO lens. Photographs courtesy of Jean-hervé Yvinec were taken with a Canon EOS 70D camera through a Canon MPE 65 lens.

Label data are quoted verbatim. A single slash (/) indicates a break between lines on the same label, and a double slash (//) indicates a different label. Our comments are in brackets [ ].

The phylogenetic species definition of Wheeler and Platnick (2000) is used in an evidently synchronic sense, which considers the species as the smallest aggregation of populations diagnosable by a unique combination of character states.

Michyrus Skelley and Gasca-Álvarez, new genus

Type species. *Michyrus thomasi* Skelley and Gasca-Álvarez, **new species**, present designation.

Diagnosis. *Michyrus* is a genus of Neotropical Tritomini characterized by having a robust body, large coarsely faceted eyes, emarginate anterior clypeal margin, mentum with plate pentagonal, undilated tibiae, compact antennal club with a short hemispherical antennomere IX, pronotum with marginal bead posteriorly behind group of large punctures at each side, and elytra lacking a marginal bead at the base.

Description. Length 6.9–8.3 mm. Body shape elongate-elliptical, weakly parallel-sided, convex dorsally; surface microreticulation weak, surface dull or glossy; unicolorous dark brown to black, lighter maculations present on elytral humeral angles and apex, appendages lighter brown.

Head with ocular striae ending at or before anterior angle of eye; frons with an impression near base of antennae; epistome wedge-shaped (i.e. with antennal insertions more lateral, not readily visible anteriorly), with weakly concave apex, lacking marginal bead; epistome punctures denser and larger than punctures on vertex. Eye large, bulging from side; facets coarse. Antenna short, reaching middle of pronotum; antennomere I large, elongate; antennomere II circular, ball-like, length = 0.5× antennomere I; antennomere III elongate, length equal to next 2 antennomeres combined; antennomeres IV to VIII length subequal to width, apically rounded; antennomeres IX–XI form a compact club; antennomeres IX–XI equal length and 3× width of antennomere VIII; antennomere IX–X hemispherical, with weakly concave apex; antennomere XI transversely elongate-oval, symmetrical. Maxilla with terminal palpomere securiform, slightly elongated laterally, width = 1 to 2× length. Labium with terminal palpomere elongate, elliptical, length = 1.5× width. Mentum with carinal lined plate pentagonal, sides equal to basal width; medial ridge extension carinate. Subgenal braces present, lateral edge broadly rounded, forming inner side of groove next to the eye for reception of antennomeres.

Pronotum with disc evenly rounded; sides arched inwardly toward eyes; anterior angles closer together than posterior angles; anterior edge lacking marginal bead between eyes; anterior angles forwardly produced, making anterior edge concave; base sinuate, lobed at middle, marginal bead present behind group of large punctures at each side; disc with evenly scattered puncture. Scutellar shield pentagonal, wider than long. Elytra with sides parabolically rounded to apex; lacking with marginal bead at base; 7 striae evident by rows of punctures, lacking at humerus and extreme apex; intervals flattened, with minute punctures; elytral epipleuron widest at base, narrowing at hind coxae, gradually folding under to apex.

Prosternum weakly keeled, with complete anterior marginal bead and strongly constricted (pinched); sternal plate triangular-trapezoidal; coxal lines anteriorly converging, barely surpassing front of procoxa, lines not continuous around coxae, line anterior to coxa broad, groove-like; posterior edge of prosternal process slightly concave, with weak marginal bead. Mesoventrite coxal lines parallel, straight, short, width between mesocoxae 4 times length of line; plate transversely rectangular; posteriorly truncate. Metaventrite lines extending onto disc from inside of mesocoxa toward posterior angle of metaventrite not continuous around mesocoxae, length a third distance to posterior angle; line behind mesocoxae strongly impressed.

Legs with femora slightly swollen, posterior margin sharp with weak marginal bead; protibia weakly curved; meso- and metatibae almost straight, gradually widening to weakly dilated apex; tarsi pseudotetramerous.

The first visible abdominal ventrite with coxal lines present or absent, continuous around metacoxae or not. Male genitalia unknown, all available specimens are female. Female genitalia with straps appendant to abdominal segment VIII; abdominal segment IX elastic, length variable; flattened plate-like proctigeral lobe; gonocoxite with slender gonostylus (Fig. 9–10). Proportions of these structures vary little throughout the genus. Spermatheca sclerotized, head oval, narrow. Stridulatory files not present on base of female heads. Sexual dimorphism unknown.

Etymology. The genus name, *Michyrus*, is for Dr. Michael C. Thomas, a friend and mentor. The name is based on the linking of his first name "*Mich-*" and the suffix "*-yrus*" from the name *Ischyrus* (Gender masculine).

Remarks. None of the available specimens is male, making it impossible to describe male genitalia, speculate on sexual dimorphisms, or confidently discuss potential relationships. *Michyrus* has coarsely faceted eyes, but falls outside of the *Ischyrus-Megischyrus* complex (Skelley 2020b) and is one of the "new genera" with pentagonal mentum mentioned in couplet 1 of Skelley (2020b). However, the pentagonal mentum, curved protibiae, and concave anterior clypeal margin, in some ways, are similar to those seen in *Pselaphacus* Percheron, 1838. Other characters, like their smaller body size, more robust body shape, compact antennal club, and prosternal development, are like those seen in *Lybas* Lacordaire, 1842, or *Myceporthus* Skelley and Powell, 2018, which have triangular to weakly pentagonal mentum and finely faceted eyes. Male specimens and a full phylogenetic analysis are needed to help resolve the relationship questions which are outside the scope and necessity of this paper. Only after a majority of these strange genera of Tritomini are described can a meaningful analysis be made.

Key to species of *Michyrus*

1. Pronotal disc finely, sparsely punctate (Fig. 1, 4); elytral striae with punctures coarse and deeply impressed; procoxal lines widely separated anteriorly, connecting across middle (Fig. 2, 6); Panama . . . . . ***M. thomasi* Skelley and Gasca-Álvarez, new species**

— Pronotal disc finely, densely punctate (Fig. 11, 14); elytral striae with punctures of moderate size and weakly impressed; procoxal lines more narrowly separated anteriorly, not connecting across middle (Fig. 12, 15); French Guiana . . . . . ***M. yvineci* Skelley and Gasca-Álvarez, new species**

Michyrus thomasi Skelley and Gasca-Álvarez, new species

Figures 1–9.

Diagnosis. A member of the genus *Michyrus*, notably differs the other species of the genus (*M. yvineci*) in many characters including the pronotal disc finely, sparsely punctate; elytral striae punctures coarse and strongly impressed; prosternal hypomeron lacking coarse punctures; procoxal lines widely separated anteriorly, connecting across middle; mesoventrite with transverse groove connecting coxal lines anteriorly, and abdominal ventrite I lacking coxal line.

Description. Length: 6.9–8.3 mm; Width: 3.5–4.4 mm. Body elongate-elliptical, widest at elytral third (Fig. 1), convex in lateral view (Fig. 3) lacking microreticulations, strongly glossy, dorsally finely, sparsely punctate; body dark brown, with disc of pronotum laterally tan, elytra with vague tan marking at humerus and broad tan areas on apex, and all appendages tan.

Head width between eyes = 3 eye widths (Fig. 4); ocular striae reach base of antennae; vertex puncture size = facet, separated by 3–4× diameters; epistome puncture size = facets, separated by 1× diameter. Antennae reach middle of pronotum; antennomere III as long as next 2 antennomeres combined; antennomeres IX–XI symmetrical; antennomere XI transversely oval (Fig. 7).

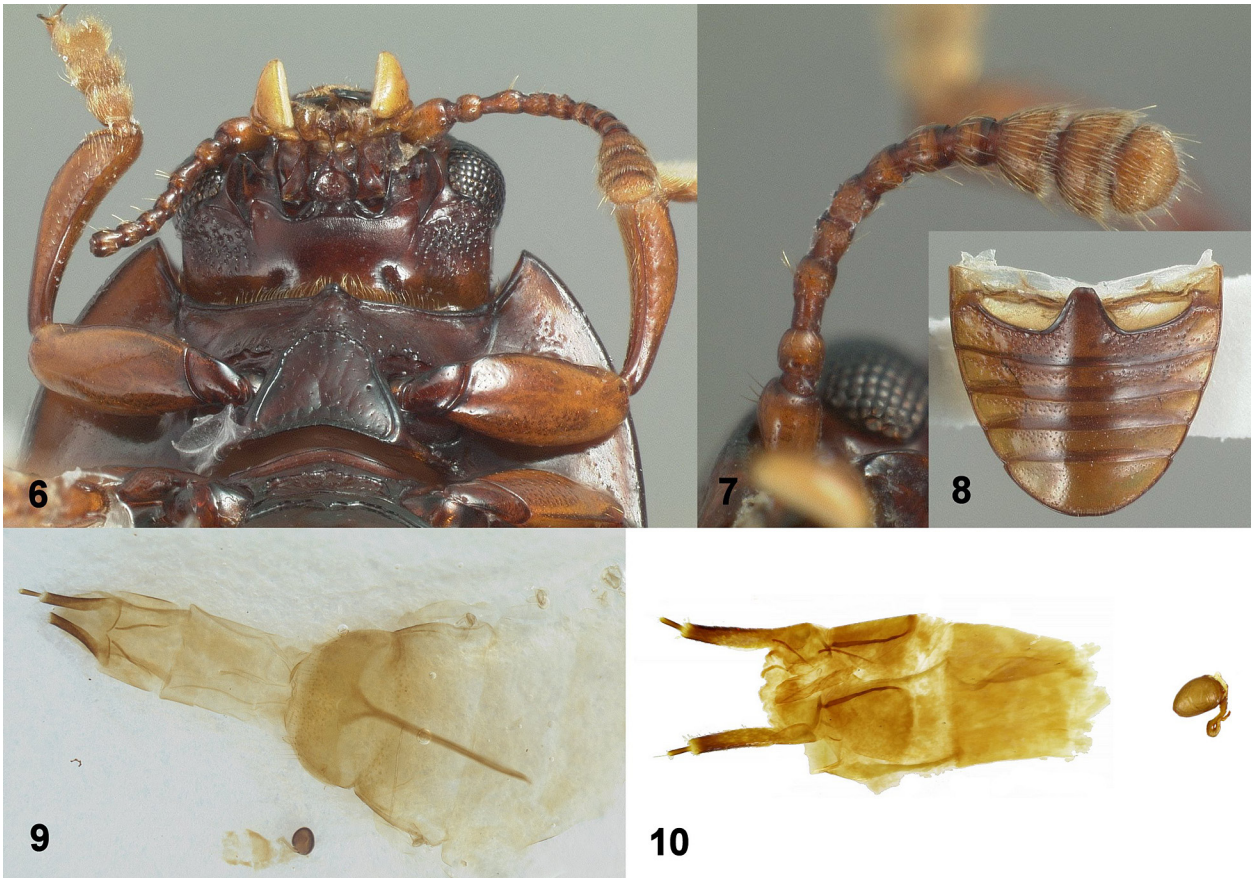
Maxilla with terminal palpomere securiform, length = 0.5× width. Labium with terminal palpomere elongate, sides arcuate to narrow rounded apex. Terminal palpomere of labium width = 0.25 maxilla terminal palpomere width. Mentum with plate pentagonal (Fig. 6), depressed below strong carina forming plate, length = width, all sides nearly equal in length, sides straight and parallel at base; ridge medial extension depressed in middle, carinate laterally to apex.

Figures 1–5. *Michyrus thomasi* Skelley and Gasca-Álvarez, holotype female. **1)** Dorsal habitus. **2)** Ventral habitus. **3)** Lateral habitus. **4)** Head and pronotum, anterior view. **5)** Head and pronotum, dorsal oblique view. Photographs by PES.

Pronotum with disc finely, sparsely punctate, punctures becoming coarser laterally, but are absent near lateral margins (Fig. 5); sublateral coarse puncture size = an ocular facet, separated by 1–2 diameters. Scutellar shield pentagonal, length = 0.5× width. Elytra with strial punctures coarse and strongly impressed, puncture size on disc = 2× ocular facet diameter; intervals with fine to minute punctures.

Prosternum weakly keeled and strongly pinched anteriorly, rugose medially, smooth and impunctate laterally in front of coxa (Fig. 2, 6); prosternal plate with pores on each side near mid-length of procoxae; procoxal lines weakly sinuate, slightly concave at middle, length = 0.6× sternal length, lines converging anteriorly, anterior separation = 0.5× basal width of sternal process, curved inward anteriorly and weakly connecting across middle, barely surpassing coxae, length = basal width; prosternal plate apical width = half basal width; base shallowly concave; prosternal hypomeron with few poorly defined coarse punctures.

Mesoventrite with rugose transverse groove across disc connecting coxal lines anteriorly. Metaventrite with coxal lines meeting at middle, recurved; lines extend 0.33× distance to posterior lateral angle; entire surface of metaventrite with scattered minute punctures.



Figures 6–10. Miscellaneous structures. **6–8)** *Michyrus thomasi* Skelley and Gasca-Álvarez, holotype female. **6)** Head and prothorax, ventral view. **7)** Antenna, ventral view. **8)** Abdomen, ventral view. **9–10)** Female genitalia. **9)** *Michyrus thomasi* Skelley and Gasca-Álvarez, paratype. **10)** *Michyrus yvineci* Skelley and Gasca-Álvarez, holotype. Photographs 6–9 by PES, 10 courtesy Jean-hervé Yvinec.

Abdominal ventrite I lacking coxal line (Fig. 8); all ventrites coarsely punctate along anterior margin, becoming finely punctate near posterior margin. Female genitalia with spermathecal head kidney-shaped, tail narrow, tightly curved (Fig. 9). Male unknown.

Material examined. Holotype female of *Michyrus thomasi* label data: "/ Barro Colorado I. / CZ Panama IX / 22,24,26 1986 / Henk Wolda // Trap 3b/" (UCDC). Paratypes (2 females): "/ Barro Colorado I. / CZ Panama VII-21 / 23,25 1986 / Henk Wolda // Trap 2b/" (1 UCDC); "/ Barro Colorado I. / CZ Panama VII-21 / 23,25 1986 / Henk Wolda // Trap 4b/" (1 FSCA).

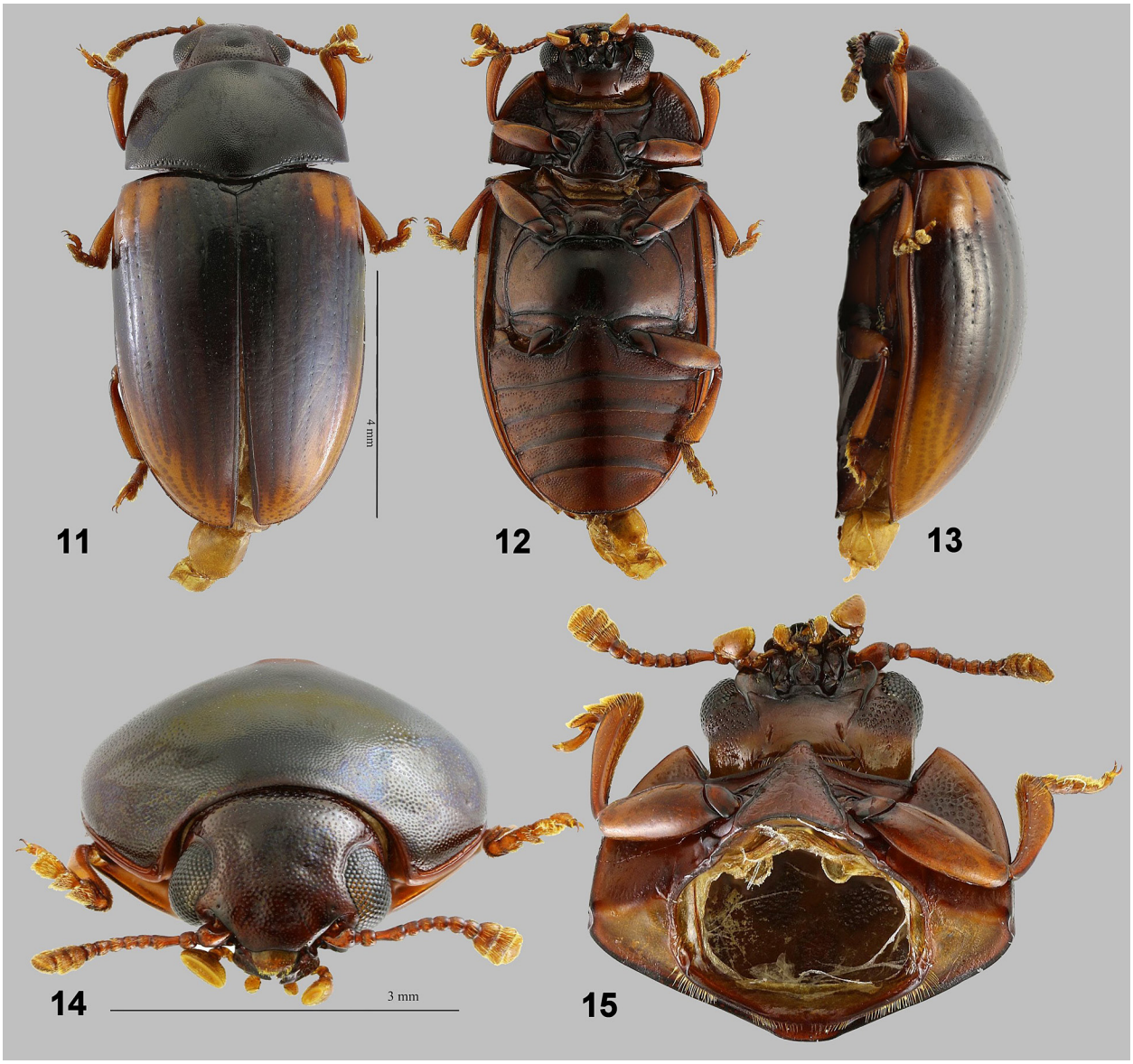
Etymology. This species is named after Mike Thomas, who encouraged PES to study the Erotylidae.

Michyrus yvineci Skelley and Gasca-Álvarez, new species

Figures 10–15.

Diagnosis. A member of the genus *Michyrus*, notably differs from the other species of the genus (*M. thomasi*) in many characters including the pronotal disc finely, densely punctate; elytral striae punctures moderate in size and weakly impressed; prosternal hypomeron coarsely punctate; procoxal lines more narrowly separated anteriorly, not connecting across middle; mesoventrite lacking transverse groove; and abdominal ventrite I with distinct coxal line.

Description. Length: 8.2 mm; Width: 4.1 mm. Body elongate-elliptical, widest at elytral third (Fig. 11), dorsally convex in lateral view (Fig. 13); with microreticulations, appearing dulled; dorsally punctate; body black, elytra with orange marking at humerus and apex, and all appendages brown.



Figures 11–15. *Michyrus yvineci* Skelley and Gasca-Álvarez, holotype female. **11)** Dorsal habitus. **12)** Ventral habitus. **13)** Lateral view. **14)** Head and pronotum, anterior view. **15)** Head and prothorax, ventral view. Photographs courtesy Jean-hervé Yvinec.

Head width between eyes = 3× eye widths (Fig. 14); ocular striae reach middle of eye; vertex and epistome puncture size = facet, separated by 1× diameter. Antennae reach middle of pronotum; antennomere III as long as next 2 antennomeres combined; antennomeres IX–XI symmetrical; antennomere XI transversely oval.

Maxilla with terminal palpomere securiform, length = 0.5× width. Labium with terminal palpomere elongate, sides arcuate to narrow rounded apex. Terminal palpomere of labium width = 0.25× maxilla terminal palpomere width. Mentum with plate pentagonal, strong carina forming plate, length = width, all sides nearly equal in length, sides straight and converging to base; ridge medial extension keel-like.

Pronotum with pronotal disc finely, densely punctate, punctures becoming slightly coarser laterally, reaching lateral margins; sublateral coarse puncture size = 0.75× ocular facet diameter, separated by > 1 diameters. Scutellar shield pentagonal, length = 0.5× width. Elytra with strial punctures moderate in size and weakly impressed, puncture size on disc = 0.5× ocular facet diameter; intervals with fine to minute punctures.

Prosternum weakly keeled and strongly pinched anteriorly, weakly rugose medially, smooth and impunctate laterally in front of coxa (Fig. 12, 15); prosternal plate apparently lacking pores; procoxal lines weakly sinuate, slightly concave at middle, length = 0.75× sternal length, lines converging and narrowly separated anteriorly, anterior separation = 0.3× basal width of sternal process, lines weakly curved inward anteriorly and not connecting across middle, surpassing coxae anteriorly, length = basal width; prosternal plate apical width = third basal width; base shallowly concave; prosternal hypomeron coarsely punctate

Mesoventrite with disc flat, smooth, lacking transverse groove. Metaventrite with coxal lines meeting at middle, not recurved; lines extend 0.33× distance to posterior lateral angle; entire surface of metaventrite with scattered minute punctures. Abdominal ventrite I with coxal line; all ventrites coarsely punctate over entire surface. Female genitalia with spermathecal head kidney-shaped, tail narrow, tightly curved (Fig. 10). Male unknown.

Material examined. Holotype female holotype of *Michyrus yvineci* label data: "[3 labels each with black border] / Nouragues Inselberg / 27/01/2013 SEAG Leg. 97 // Guyane / piege vitre / Dét. J. H. Yvinec // Ischyrus 6364 / F Col. JHY N° 6364 /" (MNHN). More precisely the type locality is French Guiana: Cayenne, Commune de Régina, Réserve naturelle des Nouragues, Camp Inselberg, Petit Plateau et Grand Plateau, 4°5′N – 52°41′W (J. Yvinec, in lit.)

Etymology. This species is named for Jean-hervé Yvinec, a private researcher focusing on the exciting erotylids of French Guiana, who provided photographs of this unique species.

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Literature Cited

Crotch GR. 1873. A list of Erotylidae collected by Edward M. Janson, in the vicinity of Santo Domingo, Chontales, Nicaragua, with descriptions of new genera and species. Cistula Entomologica 1: 141–150.

Gasca-Álvarez HJ. 2009. New records of Erotylidae (Coleoptera: Cucujoidea) for Colombia. Revista Colombiana de Entomología 35: 98–100.

Lacordaire JT. 1842. Monographie des Erotyliens, Famille de l'Ordre des Coléoptères. Roret; Paris. xiv+543 p.

Lásaro Lopes P. 2006. Taxonomic revision of *Mycolybas* Crotch, 1876 (Coleoptera: Erotylidae). Zootaxa 1373: 1–35.

Lásaro Lopes P, Gasca-Álvarez HJ, Skelley PE. 2020. Redescriptions, new synomym, new combination and new records of *Bacis* Dejean and *Phricobacis* Crotch (Coleoptera: Erotylidae: Erotylinae) for Colombia. Zootaxa 4809: 349–362

Lawrence JF, Beutel RG, Leschen RAB, Ślipiński A. 2010. 2. Glossary of morphological terms. p. 9–20. In: Leschen RAB, Buetel RG, Lawrence JF, Ślipiński A (eds.). Coleoptera, beetles. Volume 2: Morphology and systematics (Elateroidea, Bostrichiformia, Cucujiformia partim). Handbook of Zoology, Arthropoda: Insecta. Walter de Gruyter; Berlin, Germany. 786 p.

Leschen RAB. 2003. Erotylidae (Insecta: Coleoptera: Cucujoidea): phylogeny and review. Fauna of New Zealand No. 47. Manaaki Whenua Press; Lincoln, NZ. 103 p.

McHugh JF, Marshall CJ, Fawcett FL. 1997. A study of adult morphology in *Megalodacne heros* (Say) (Coleoptera: Erotylidae). Transactions of the American Entomological Society 123(4): 167–223.

Pecci-Maddalena ISC, Lopes-Andrade C. 2017. Redescription of two species and proposal of a new synonym in the genus *Mycotretus* Lacordaire, 1842 (Coleoptera: Erotylidae: Tritomini). Zootaxa 4282: 147–165.

Pecci-Maddalena ISC, Lopes-Andrade C. 2018a. Redescriptions, lectotype designations, new synonyms and new geographic records for the "tiger" species of *Mycotretus* Lacordaire, 1842 (Coleoptera: Erotylidae: Tritomini). Insects 9: 1–22.

Pecci-Maddalena ISC, Lopes-Andrade C. 2018b. *Mycotretus alvarengai* sp. nov. (Coleoptera: Erotylidae: Tritomini) from the Amazon Biome. Annales Zoologici 68: 837–842.

Pecci-Maddalena ISC, Lopes-Andrade C. 2020. *Mycomystes nigriventris* sp. nov. (Coleoptera: Erotylidae: Tritomini) from South America, with insights into the genus *Mycomystes* Gorham. Zootaxa 4780: 579–586.

Pecci-Maddalena ISC, Lopes-Andrade C, Skelley P. 2019. *Xalpirta mauryi* sp. nov. (Coleoptera: Erotylidae: Tritomini) from Southeast Brazil. Zootaxa 4629: 342–350.

Percheron A. 1838. G. *Pselaphacus*. Famille des Clavipalpes, Tribu des Érotylènes. 4(6): t.17. In: Guérin E, Percheron A. Genera des insectes, ou exposition détaillée de tous les caractères propres à chacun des genres de cette class d'animaux. Mèquignon-Marvis; Paris. 1835–1838. 8. 6 lief., 10 col. taf.

Powell GS, Skelley PE. [in press]. Review of *Myceporthus* Skelley and Powell, 2018 (Coleoptera, Erotylidae). Insect Systematics & Evolution.

Skelley PE. 1998. Revision of the genus *Ischyrus* Lacordaire (1842) of North and Central America (Coleoptera: Erotylidae: Tritominae). Occasional Papers of the Florida State Collection of Arthropods 9: i–vii + 1–134.

Skelley PE. 2009. Pleasing fungus beetles of the West Indies (Coleoptera: Erotylidae: Erotylinae). Insecta Mundi 0082: 1–94.

Skelley PE. 2020a. Nomenclatural notes for the Erotylinae (Coleoptera: Erotylidae). Insecta Mundi 0767: 1–35.

Skelley PE. 2020b. A new Central American genus of pleasing fungus beetles (Coleoptera: Erotylidae) from the *Ischyrus-Megischyrus* complex. Insecta Mundi 0804: 1–11.

Skelley PE, Cekalovic T. 2002. *Xalpirta*, n. gen., and *Neoxestus* Crotch (1876) from Chile and South America (Erotylidae: Tritominae). Insecta Mundi [2001] 15(4): 221–241.

Skelley PE, Powell GS. 2018. Necessary nomenclatural corrections for *Mycophtorus* Lacordaire, 1842, and *Neomycotretus* Deelder, 1942, with the establishment of *Myceporthus* Skelley and Powell, new genus (Coleoptera: Erotylidae: Tritomini). The Coleopterists Bulletin 72(2): 305–313.

Steedman HF. 1958. Dimethyl hydantoin formaldehyde: A new water-soluble resin for use as a mounting medium. Quarterly Journal of Microscopical Science 99(4): 451–452.

Węgrzynowicz P. 2002. Morphology, phylogeny and classification of the family Erotylidae based on adult characters (Coleoptera: Cucujoidea). Genus 13(4): 435–504.

Wheeler QD, Platnick NI. 2000. The phylogenetic species concept (*sensu* Wheeler and Platnick). p. 55–69. In: Wheeler QD, Meier R (eds.). Species concepts and phylogenetic theory, a debate. Columbia University Press; New York. 230 p.

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