



Nota Científica
(Short Communication)

NEW STATE RECORD OF *RUTELISCA* BATES, 1888 (COLEOPTERA: SCARABAEOIDEA: SCARABAEIDAE: RUTELINAE) FROM PUEBLA, MEXICO

NUEVO REGISTRO ESTATAL DE *RUTELISCA* BATES, 1888 (COLEOPTERA: SCARABAEOIDEA: SCARABAEIDAE: RUTELINAE) DE PUEBLA, MÉXICO

Recibido: 23/02/2016; aceptado: 23/08/2016

Moctezuma, V. (2016). Nuevo registro estatal de *Rutelisca* Bates, 1888 (Coleoptera: Scarabaeoidea: Scarabaeidae: Rutelinae) de Puebla, México. *Acta Zoológica Mexicana* (n.s.), 32(3), 398-399.

RESUMEN. Se reporta por primera vez la presencia del género *Rutelisca* Bates, 1888 en el estado de Puebla, México. Se discute el área de distribución geográfica del género, con énfasis en *R. flohri*, y se incluye información ecológica.

Palabras clave: escarabajos, distribución, datos ecológicos.

Rutelisca Bates, 1888, is a little-known genus of scarab beetles that includes two black moderate-sized species (10-15 mm) of Mexico (Morón, 1994; Jameson, 2000). *Rutelisca* was considered by Bates (1888) as an intermediate genus between the tribes Rutelini and Cyclocephalini. The phylogenetic relationships of *Rutelisca* with other members of Rutelini are unstable, but the last classification includes to *Rutelisca* and *Methapachylus* Bates, 1888, in the "*Rutelisca* lineage" (Jameson, 1998, 2000). *Rutelisca* shows a very interesting biogeographic affinity: is a relict taxa related to the Old World genus *Desmoryx* Arrow, 1907, to *Parastasia* Westwood, 1841, to the Chilean *Oryctomorphus* Guérin-Méneville, 1830 and to the Mesoamerican *Methapachylus* (Morón, 1994; Jameson, 2000).

Members of *Rutelisca* can be recognized by mandibles with one recurved apical tooth, mentum with apex reflexed into oral cavity, frontoclypeal suture incomplete medially and cariniform laterally, apex of metatibia with spinules, apex of profemur dilated and rounded, protibial base with notch, meso- and metatarsal claws widely cleft in male and female (Jameson, 2000). *Rutelisca flohri* Bates, 1888, is distinguished by its elytral striae (lacking in *R. durangoana* Ohaus, 1905); terminal segment of the maxillary palp with a dorsal-longitudinal flattened area that extends from the base to the apical third or fourth

(extends from the base to the middle of the segment in *R. durangoana*); males with dorsal maculae on frons, lateral margins of pronotum, bases and apices of elytra (males of *R. durangoana* with maculae only on frons); female with dorsal macula on the frons (macula lacking in *R. durangoana*) and clypeal apex narrowly parabolic (apex broadly parabolic in *R. durangoana*), basis of parameres in *R. flohri* are broadly projected outwards, while in *R. durangoana* those are narrow (Jameson, 2000).

The formerly known distribution of *R. flohri* encompassed mountain pine-oak forests from Colima, Estado de México, Distrito Federal, Guerrero, Jalisco, Oaxaca and Veracruz, at elevations of 1800-2600 masl (Morón, 1994, 1997; Jameson, 2000; Rivera-Cervantes & García-Real, 2008; Ramírez-Ponce *et al.*, 2009). Herein, I provide a **new state record** for *Rutelisca* (Figure 1): one female identified as *R. flohri*, labeled "México, Acajete, Pue. Acajete. 3/VII/2013, C. D. luz pública, y- 97°57'13.16" W, x- 19°6'23.2" N, zona urbana, 2460 m, P. Moctezuma J. Victor Col.". The specimen was captured manually at urban light, and has a total length of 18 mm from the clypeus border to the pygidium and a maximum elytral width of 11 mm. The voucher specimen was deposited in the author personal collection (Victor Moctezuma Collection, Puebla, Mexico). With this new record, the scarab beetles from Puebla include at least 316 species and 85 genera (Aragón *et al.*, 2011; Morón *et al.*, 2013).

The examined specimen was found in a small urban zone (Acajete, Puebla) beside a pine-oak forest nucleus (Figure 2). The currently known distribution of *R. flohri* extends on the Trans-Mexican Volcanic Belt and the Sierra Madre del Sur (Morón, 1994, 1997; Jameson, 2000, Rivera-Cervantes & García-Real, 2008; Ramírez-Ponce *et al.*, 2009). *Rutelisca flohri* could inhabit the wide pine-oak forest areas of Tlaxcala, Morelos, and Michoacán.



Figure 1. *Rutelisca flohri* female habitus in dorsal view.

ACKNOWLEDGMENTS. I am grateful to Fernando Escobar Hernández for his aid for fieldwork. Fieldwork was possible thanks to Professor Gonzalo Halfpeter. I thank to Alfonso Aceves-Aparicio for the picture of the specimen.

LITERATURE CITED

- Aragón, A., Carrillo-Ruiz, H., Morón, M. A. & Yanes-Gómez, G. (2011). Coleópteros lamellicornios, pp. 174-177. In: CONABIO (Ed.). *La biodiversidad en Puebla: estudio de estado*. CONABIO, Gobierno del Estado de Puebla & BUAP, México.
- Bates, H. W. (1888). *Rutelisca*. Pectinicornia and Lamellicornia, pp. 270-271. In: F. D. Godman & O. Salvin (Eds.). *Biologia Centrali Americana. Insecta, Coleoptera. Volume II, Part 2*. Taylor and Francis, London.
- Jameson, M. L. (1998 [1997]). Phylogenetic analysis of the subtribe Rutelina and revision of the *Rutela* generic groups (Coleoptera: Scarabaeidae: Rutelinae: Rutelini). *Bulletin of the University of Nebraska State Museum*, 14, 1-184.

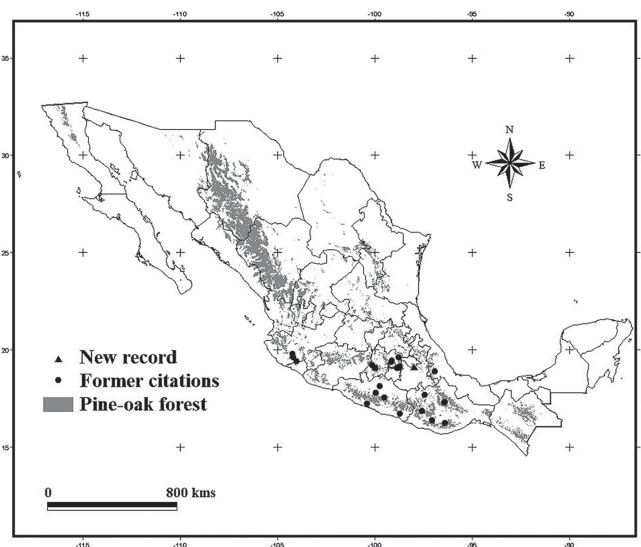


Figure 2. Currently known distribution of *R. flohri*. An updated distribution of the Mexican pine-oak forests is shown.

- Jameson, M. L. (2000). Synopsis of the Mexican and Guatemalan genera *Rutelisca* Bates and *Metapachylus* Bates (Coleoptera: Scarabaeidae: Rutelinae) with comments on classification of the subtribe Rutelina. *Proceedings of the Entomological Society of Washington*, 102, 332-349.
- Morón, M. A. (1994). La diversidad genética de los coleópteros Melolonthidae en México. *Acta Zoológica Mexicana (n.s.)*, 61, 7-19.
- Morón, M. A. (1997). Rutelinae. Diagnósis, generalidades hábitos y distribución. Pp. 29-30. In: M. A. Morón, B. C. Ratcliffe & C. Deloya (Eds.). *Atlas de los escarabajos de México. Coleoptera: Lamellicornia. Familia Melolonthidae. Volume I*. CONABIO and Sociedad Mexicana de Entomología, A. C., Xalapa, Veracruz, México.
- Morón, M. A., Aragón-García, A. & Carrillo-Ruiz, H. (2013). *Fauna de escarabajos del estado de Puebla*. Coordinación Editorial Miguel Ángel Morón Ríos, Coatepec, Veracruz, México.
- Ramírez-Ponce, A., Allende-Canseco, J. & Morón, M. A. (2009). Fauna de coleópteros lamellicornios de Santiago Xiacui, Sierra Norte, Oaxaca, México. *Acta Zoológica Mexicana (n.s.)*, 25, 323-343.
- Rivera-Cervantes, L. E. & García-Real, E. (2008). Primeros registros de distribución de *Rutelisca flohri* Bates, 1888 y *Gymnetina cretacea* (LeConte, 1863) (Coleoptera: Melolonthidae) para Jalisco y Colima, México. *Dugesiana*, 15, 41-42.

VÍCTOR MOCTEZUMA

Instituto de Ecología, A. C., Red de Ecoetología, Carretera Antigua a Coatepec No. 351, El Haya, 91070, Xalapa, Veracruz, MÉXICO.
<abadonjvpm@hotmail.com>
Editor responsable: Cuauhtémoc Deloya.