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First records of the fungus beetles *Aegithus hogei* Gorham, 1888 and *Aegithus melaspis* Gorham, 1888 (Coleoptera: Erotylidae) in Sonora, Mexico

Primeros registros de los escarabajos de los hongos *Aegithus hogei* Gorham, 1888 y *Aegithus melaspis* Gorham, 1888 (Coleoptera: Erotylidae) en Sonora, México

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Beetles in the Erotylinae subfamily of the Erotylidae are primarily fungus feeders, mostly on macrobasidiomycetes (Skelley et al. 1991). *Aegithus hogei* Gorham, 1888 is only known from the type locality in Guerrero, México (Alvarenga 1994, Blackwelder 1945, Gorham 1887-1899, Kuhn 1909). *Aegithus melaspis* Gorham, 1888 is known from Guatemala, Nicaragua, and México. In México, it has been reported from the states of Guerrero, Jalisco, Michoacán, Oaxaca, and Veracruz (Navarrete-Heredia and Novelo-Gutiérrez 2000). Here we provide new distributional data and field notes for the two species of *Aegithus* in Sonora in northwestern México.

The specimens of *Aegithus hogei* from Rancho Las Gallinas were found in 2016 at a wildlife camera site in GreaterGood.org's Project WILDCAT predator protection project. The *Aegithus melaspis* specimens from La Aduana were collected in 1991 as part of a general inventory of the tropical deciduous forest of the Sierra de Álamos (Robichaux and Yetman 2000). All animal and plant records and images from these projects are publicly available in the Madrean Discovery Expeditions database (madreandiscovery.org).

Aegithus hogei Gorham, 1888

Fig. 1

Diagnosis. *Aegithus hogei* is distinguished from other Mexican species of the genus by its' smaller size (~7mm in length), elongate slightly flattened body entirely orange, legs orange, alutaceous (dulled) dorsal surface, and elytra with punctate striae gemellate (paired).

Material examined. *Aegithus hogei*. MÉXICO, Sonora, Municipio de Divisaderos, Rancho Las Gallinas, 16.0 km (by air) ESE of Divisaderos, W of Río Bavispe. Valle del Río Sonora, 29.57778°N -109.31194°W, 1251 m elev., foothills thornscrub, 20 November 2016. T.R. Van Devender, A.L. Reina-G., M.J. Galaz-G. Det. P. Skelley (CNIN [Colección Nacional de Insectos, Instituto de Biología, Universidad Nacional Autónoma de México],

FSCA [Florida State Collection of Arthropods, 6], UAIC [University of Arizona Insect Collection, 4]). Determined by Paul E. Skelley.

The northern limits of the New World tropics are in Sonora, not at the Tropic of Cancer at 23°26'13"N just north of Mazatlán, Sinaloa. Tropical deciduous forest reaches the Sierra San Javier (28°38'N). Thornscrub is tropical transitional between Sonoran desertscrub and tropical deciduous forest in southern Sonora, and desertscrub and oak woodland farther north. At its northern limits in the Arizpe area in the Río Sonora Valley (30°11'N, Van Devender et al. 2013), hard freezes convert thornscrub into desert grassland in this elevation and rainfall zone. Many tropical animals extend northward into southern Arizona, including the brown vine snake ("huirotillo", *Oxybelis aeneus*), desert hooknose snake (*Gyalopion quadrangulare*), elegant trogon ("coa", *Trogon elegans*), jaguar ("tigre", *Panthera onca*), and ocelot ("tigrillo", "gato galaviz", *Leopardus pardalis*; Lowe 1964).

The Rancho las Gallinas locality for *Aegithus hogei* is in the Río Bavispe Valley 1500 km northwest of Guerrero in a transition between foothills thornscrub and desert grassland at the northern edge of the New World tropics. There were hundreds of beetles inside a ranch house where hay bales and dog food were stored.

Aegithus melaspis Gorham, 1888

Fig. 2

Diagnosis. *Aegithus melaspis* is distinguished from other Mexican species of the genus by its' larger size (~10mm in length), oval slightly flattened body entirely orange, tibiae and tarsi black, alutaceous (dulled) dorsal surface, and elytral lacking stria punctures.

Material examined: *Aegithus melaspis*. MÉXICO, SONORA, Municipio de Álamos, above la Aduana, 6.7 km (by air) WNW of Álamos, N side of the Sierra de Álamos, 27.0325°N -109.01389°W, 551 m elev., rocky, shady mountain canyon in tropical deciduous forest. 26 Septem-

ber 1991, T.R. Van Devender, UAIC [6]. Determined by Carl A. Olson.

In Guerrero, *Aegithus melaspis* was found in tropical sub-deciduous forest. In Michoacán, it was collected in an aggregation of hundreds of individuals at the base of a *Ficus petiolaris* Kunth (“amate amarillo”; “tescalama” in Sonora) tree in tropical deciduous forest (Navarrete-Heredia and Novelo-Gutiérrez 2000). The La Aduana record reported here is in tropical deciduous forest in the Sierra de Álamos 947 kilometers north-northwest of the Casimiro Castillo, Jalisco site, the northernmost previous record. The aggregation of beetles was on fungus growths in damaged bark on the buttress of a massive *F. cotinifolia* Kunth (“camichín”, “nacapulí”) buttress in a deep, shady, rocky canyon.

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Fig. 1. *Aegithus hogei*. Rancho Las Gallinas, Río Bavispe Valley. Photo by Van Devender.
Fig. 2. *Aegithus melaspis*. La Aduana, Sierra de Álamos. Photo by Charles Hedgcock.