N O T E

Occurrence of *Camponotus striatus* (Hymenoptera: Formicidae) Associated with *Tripsacum dactyloides* (Poales: Poaceae) in Northeastern Mexico[1]

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Camponotus striatus (Smith) (Hymenoptera: Formicidae) is a small-sized species, with workers 3 mm in length and soldiers 4 mm in length. This species is normally found in open habitats and at an elevation from 20 to 1,990 m above sea level (AntWeb 2018, https://www.antweb.org/). In addition to their size, they are characterized by the black color of the workers and their production of an unpleasant odor, possibly to repel predators. The anterior half of the head is yellowish or reddish brown in color, as are the scapes, tibiae, and trochanters, while the remainder of the body is black. The mandibles are punctate basally and mostly striate apically. The anterior half of the head is slightly more coarsely sculptured than the posterior half, the mesosoma has striae that are mostly parallel on the sides, but on the dorsum, the striae are arranged in concentric circles. The pronotum usually reveals two of these patterns, while the propodeum shows the concentric circles. The metanotal suture is deeply imprinted. The petiole is wider than long and also displays a pattern of stretch marks similar to those of the mesosome. Erect setae are abundant on the entire surface, including the eye area (Mackay and Mackay 2003, https://www.utep.edu/leb/ants/Camponotus.htm).

Geographical distribution of *C. striatus* comprises the area from Mexico to Venezuela. These ants are distributed from Mexico southward into Venezuela and inhabit a range of ecosystems, from cloud forest to tropical dry forests (AntWeb 2018). In Mexico, *C. striatus* is reported from the states of Nayarit, Veracruz

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(Rojas 1996, Pp. 483–500 *in* Biodiversidad, Taxonomía y Biogeografía de Artrópodos de México: Hacia una Síntesis de su Conocimiento, CONABIO, México D.F.), Tabasco (Del Toro et al. 2009, Dugesiana 16: 1–14), Yucatán (Rodríguez-Garza 2008, Entomol. Mex. 7: 1006–1008), Quintana Roo (Dejean et al. 2003, J. Trop. Ecol. 19: 325–331), Chiapas (AntWeb 2018), and Jalisco (Vásquez-Bolaños 2015, Métodos en Ecología y Sistemática 10: 1–53). Nests are commonly found in dead vegetation and/or associated with *Cordia alliodora* (Ruiz and Pavón) (Boraginaceae), *Brahea edulis* H. Wendl. ex S. Watson (Arecaceae), *Acacia* spp. (Fabaceae) (Mackay and Mackay 2003), as well as in coffee agroecosystems (Livingston et al. 2012, Biotropica 45: 10–17). Moreover, a relationship is reported between *C. striatus* and the spike aphid, *Sitobion avenae* (F.) (Hemiptera: Aphididae) on *Pennisetum purpureum* Schumacher (Poaceae) (Espadaler et al. 2012, Sociobiology 59: 959). The grass *Tripsacum dactyloides* L. (Poaceae) is of special interest in Mexico, as it is a wild relative of *Zea mays* L. (Dewald et al. 1987, Am. J. Bot. 74: 1055–1059) and is important in *Z. mays* biodiversity and conservation (Vidal-Martínez et al. 2010, Rev. Fitotec. Mex. 33: 27–30). Our objective was to document the spread of *C. striatus* on the American continent associated with *T. dactyloides*.

Sampling was conducted from 23 to 30 October 2015 in the rainy season. Ants were collected by using a manual vacuum and by beating the vegetation (Imes 1992, The Practical Entomologist, New York: Simon & Schuster). The sampling site was located at latitude N 23°37′42″, longitude W 99°12′16″, in the Protected Natural Area (PNA) "Altas Cumbres," at an elevation of 1,128 m, at the municipality of Ciudad Victoria, Tamaulipas, Mexico. Average temperature oscillates between 20 and 24°C, a subhumid semiwarm climate with a rainy summer, and an average rainfall of 912.8 mm. (Instituto Nacional de Estadística Geografía e Informática 2017, www.inegi.org.mx). Both entomological and botanical material were deposited in the Entomological and Plant Collection "Francisco González Medrano" at the Instituto de Ecología Aplicada of the Universidad Autónoma de Tamaulipas.

Three workers of *C. striatus* were collected on spikes of *T. dactyloides*. *Camponotus striatus* is described as "rare" in tropical forests (AntWeb 2018). However, two colonies of *C. striatus* along with 57 colonies of *Procryptocerus hyleaus* Kempf were reported in a coffee agroecosystem in Chiapas (Philpott 2010, Oikos 119: 1954–1960). Likewise, three workers of *C. striatus* on spines of *Vachellia sphaerocephala* (Schlechtendal and Chamisso) Seigler and Ebinger (Fabaceae) were reported by Wheeler (1934, Bull. Mus. Comp. Zool. 77: 157–240) in Veracruz. This latter report is consistent with the number of individuals collected in this study, and it also represents the first record of *C. striatus* for Tamaulipas in northeastern Mexico. Moreover, this report extends the geographical distribution of *C. striatus* approximately 1,190 km to the north in the American continent. Additionally, this finding is the first record of *C. striatus* associated with *T. dactyloides* in Mexico although the relationship of *Camponotus* sp. with *T. dactyloides* is already documented of southern Mexico (Moya-Raygoza 2000, Ann. Entomol. Soc. Am. 93: 929–940). Populations of *T. dactyloides* were observed in oak forests characterized by species such as *Quercus oleoides* Schlechtendal and Chamisso (Fagaceae) and *Quercus polymorpha* Schlechtendal & Chamisso. Also, plant species as *Brahea berlandieri* Bartlett (Arecaceae), *Litsea glaucescens*

Kunth (Lauraceae), and *Ungnadia speciosa* Endlicher (Sapindaceae) were observed in the ecosystem. The PNA Altas Cumbres is one of the most important biodiversity reservoirs in northeastern Mexico. This work contributes to the knowledge of ecological associations of Formicidae with plant species of importance in Mexico.