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Scientific note

First record of ant crickets in Peru

(Orthoptera, Ensifera, Gryllidea, Myrmecophilidae)

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Fig. 1. A. Dorsal view of one specimen (W). **B.** Lateral view of the same specimen. *, ovipositor.

Ant crickets are small, distinctive inquilines of ants. There are currently 82 valid, extant species in 6 genera according to Cigliano et al. (2018). The majority of species belong to the genus *Myrmecophilus*. Of those, only few species occur in the New World, with *M. americanus* Saussure, 1877 having records reaching into the Neotropics (Colombia: Saussure 1877; Brazil: Wasmann 1905; overview: Wetterer 2008). We did not, however, find any records of ant crickets from Peru. Thus, we report here the presence of ant crickets in Peru for the first time.

Figure 1 shows the female of two specimens (the other was male), which were observed on the beach of Miraflores (Lima, Peru) in September 2017 (approx. Lat -12.135, Lon -77.030). The beach was largely unvegetated with a few tussocks around. The crickets were active underneath a procumbent tussock together with their ant hosts during midday. The specimens were light brown on the dorsal side with darker posterior edges of the first four tergites (Fig. 1). A narrow, light median stripe extended from the tip of the abdomen to the epicranium of the head, where it ramified towards the two antennal bases. The pronotum showed anteriorly small, dark spots. Thus, the Miraflores ant crickets did not resemble *M. americanus*, which are darkish brown with a conspicuous light posterior half of the mesonotum (Saussure 1877, Wetterer & Hugel 2014).

The host ants belong to *Tetramorium bicarinatum* (Hymenoptera: Formicidae, pers. comm. M. Verhaagh, Karlsruhe, Germany), which has been reported to occur in Peru (Bolton 1979). This further supports that the Miraflores ant crickets belong to a species other than *M. americanus*, which is usually hosted by *Paratrechina longicornis* (Wetterer & Hugel 2008). *T. bicarinatum*, the cricket guest of which is, to our knowledge, unknown, is invasive and is distributed globally (e.g. Wetterer 2009). It could, thus, be that the Miraflores ant crickets came to Peru with *T. bicarinatum*. The status of the Miraflores ant crickets – either allo- or autochthonous – remains, thus, open.

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