

Second of its kind 'sharpshooter' leafhopper from Brazil 'strikes' with its colouration

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Newly described sharpshooter species *Cavichiana alpina* (top) and the only other leafhopper (*Cavichiana bromelicola*, bottom) known to feed on bromeliads in their natural habitat. Credit: Gabriel Mejdalani

When, in 2014, Brazilian researchers stumbled across a never-before-seen red-eyed leafhopper feeding inside the rosettes of bromeliads, growing in the restingas of southeastern Brazil, they were certain it was a one-of-a-kind discovery. Described as new-to-science species, as well as genus (*Cavichiana bromelicola*) and added to the sharpshooter tribe Cicadellini, it became the first known case of a leafhopper feeding on otherwise nutrition-poor bromeliads in their natural habitat.

Several years later, however, a team of entomologists from Universidade Federal do Rio de Janeiro carried out fieldwork in a mountainous area of southeastern Brazil and, as a result, another bromelicolous leafhopper species of the genus was discovered: *Cavichiana alpina*. Only, the new one appeared even more spectacular.

The new species, described and illustrated in the open-access journal *Zoologia*, is known from Itatiaia National Park (state of Minas Gerais, southeastern Brazil), where it can be found at altitudes above 1,800 m a.s.l. In fact, its characteristic mountainous habitat came to determine its species name (*alpina*). In contrast, its relative was originally described exclusively from sea level regions, even though the latest field trips have recorded it from a site located at 1,250 m a.s.l.

Slightly larger than the previously known *C. bromelicola* and similarly red-eyed, what most remarkably sets apart the newly-described species is its colouration. Rather than a single large yellow blotch contrasting against the dark-brown to black back of the insect, this sharpshooter sports a motley amalgam of red and blue covering most of its upper side.

In conclusion, the researchers explain that the peculiarity of the two known *Cavichiana* species is best attributed to a putative common ancestor that had likely once been widely distributed in southeastern and southern Brazil. Later, they speculate, a vicariant event, such as the uplift of the southeastern Brazilian mountain ranges during the latest Eocene

and Oligocene, might have caused its diversification into two separate species.



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leafhopper (*Cavichiana bromelicola*, bottom) known to feed on bromeliads in their natural habitat. Credit: Gabriel Mejdalani

More information: Gabriel Mejdalani et al. A new genus and new bromelicolous species of Cicadellini (Insecta: Hemiptera: Cicadellidae) from Southeastern Brazil. *Zootaxa* (2014). [DOI: 10.11646/zootaxa.3755.6.3](#)

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