

## Two new species of *Graphocephala* Van Duzee from Costa Rica (Cicadellidae: Cicadellinae)

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### Abstract

The genus *Graphocephala*, which was described by Van Duzee (1916), is a large complex group distributed from southern Canada to Colombia, Venezuela, and French Guiana. Young (1977) revised the genus and described twelve new species. Later, Nielson and Godoy (1995) added five more species. In this paper two new species are described from Costa Rica: *G. crusa* and *G. riverae*. The first species showed positive DAS-ELISA results for the bacterium, *Xylella fastidiosa*.

**Key words:** Hemiptera, Auchenorrhyncha, leafhopper, taxonomy, *Xylella*, coffee

### Introduction

The genus *Graphocephala* was described by Van Duzee (1916). It is a large complex group with more than 50 species and occurs from southern Canada to Colombia, Venezuela, and French Guiana. The country with the greatest number of species is Mexico, with 39, 19 of which are endemic. Young (1977) revised the genus and described twelve new species: *alagarta*, *apicata*, *delongi*, *depicta*, *fennahi*, *kukla*, *penignava*, *psephena*, *pulchra*, *sasaima*, *simulata*, and *soluna*. Nielson and Godoy (1995) later added five more species from Costa Rica. Presently, fifteen species are known from Costa Rica: *albomaculata* (Distant), *aurolineata* (Fowler), *bivittata* (Nielson & Godoy), *clepsydra* (Fowler) *coccinea* (Föster), *coronella* (Nielson & Godoy), *distanti* (Metcalf), *edwardsi* (Signoret), *janzeni* (Nielson & Godoy), *marathonensis* (Olsen), *nigricephala* (Nielson & Godoy), *permagna* (Nielson & Godoy), *redacta* (Fowler), *rufimargo* (Walker), and *versuta* (Say). In this paper two new species are described from Costa Rica, *G. crusa*, and *G. riverae*. Adults of the first species were collected from *Coffea arabica* (Rubiaceae),