

## Two new species of *Kapateira* Young from Costa Rica (Auchenorrhyncha: Cicadellidae: Cicadellinae)

CAROLINA GODOY<sup>1</sup>, JERSON GARITA-CAMBRONERO<sup>2</sup>, CARMEN RIVERA<sup>3</sup>  
WILLIAM VILLALOBOS<sup>2</sup>

<sup>1</sup>Instituto Nacional de Biodiversidad. Current address: Museo de Zoología, Universidad de Costa Rica, San Pedro de Montes de Oca. San José, Costa Rica.

<sup>2</sup>Centro de Investigación en Biología Celular y Molecular, Universidad de Costa Rica, 2060, San José, Costa Rica.

<sup>3</sup>Centro de Investigación en Biología Celular y Molecular and Facultad de Microbiología, Universidad de Costa Rica, 2060, San José, Costa Rica.

### Abstract

The genus *Kapateira* was described by Young (1977), who included one species from Colombia but noted that the genus also occurs in Panama, Venezuela, Ecuador, and Bolivia. In this paper two new species are described, *K. peruana* from Peru and *K. coffea* from Costa Rica. The latter species is associated with coffee and citrus, and information is provided on its biology. DAS-ELISA tests for the bacterium, *Xylella fastidiosa*, yielded numerous positive results, suggesting that *K. coffea* is a potential vector of diseases such as coffee leaf scorch and citrus variegation chlorosis.

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

### Introduction

The genus *Kapateira* was established by Young (1977), who included one species, *K. rosipennis* (Osborn). Despite the possible role of *Kapateira* species as vectors of plant diseases, there has been no further taxonomic work on this genus. Species of Cicadellinae, the subfamily to which *Kapateira* belongs, are among the most important vectors of *Xylella fastidiosa*, a bacterium that invades the xylem of various crop plants. Examples of diseases caused by this bacterium in Costa Rica include coffee leaf scorch on *Coffea arabica* (Rubiaceae), which was detected in the country in 2001 (Rodríguez et al., 2001); and citrus variegation chlorosis on *Citrus* (Rutaceae), which was detected in 2005 (Aguilar et al., 2005). An inventory of potential disease vectors in these crops has shown that one of