



## New species of the genus *Klinckowstroemia* Baker & Wharton from Mexico (Acari: Mesostigmata: Trigynaspida: Klinckowstroemiidae)

GABRIEL A. VILLEGAS-GUZMAN<sup>1</sup>, TILA M. PÉREZ<sup>1</sup> & PEDRO REYES-CASTILLO<sup>2</sup>

<sup>1</sup>Colección Nacional de Ácaros, Departamento Zoología, Instituto de Biología, Universidad Nacional Autónoma de México. Apartado Postal 70-153, Ciudad Universitaria, 03510 México, D. F. E-mail: gabrvill@yahoo.com, tilam@ibiologia.unam.mx

<sup>2</sup>Instituto de Ecología, A. C. Apartado Postal 63, 91000 Xalapa, Veracruz, México. E-mail: pedro.reyes@inecol.edu.mx

### Table of contents

Abstract .....	1
Introduction .....	2
Materials and methods .....	2
Notes on nomenclature .....	3
<i>Klinckowstroemiidae</i> Camin & Gorirossi .....	4
<i>Klinckowstroemia</i> Baker & Wharton, 1952: 135 .....	4
<i>Klinckowstroemia bifurcata</i> <b>sp. nov.</b> .....	7
<i>Klinckowstroemia hunteri</i> <b>sp. nov.</b> .....	8
<i>Klinckowstroemia montanoi</i> <b>sp. nov.</b> .....	11
<i>Klinckowstroemia valdezi</i> <b>sp. nov.</b> .....	15
<i>Klinckowstroemia brevimarginata</i> <b>sp. nov.</b> .....	19
<i>Klinckowstroemia rectimarginata</i> <b>sp. nov.</b> .....	25
<i>Klinckowstroemia franckei</i> <b>sp. nov.</b> .....	26
<i>Klinckowstroemia santibanezi</i> <b>sp. nov.</b> .....	32
<i>Klinckowstroemia ballesterosi</i> <b>sp. nov.</b> .....	39
<i>Klinckowstroemia cristinae</i> <b>sp. nov.</b> .....	40
Discussion .....	42
Key to the species of <i>Klinckowstroemia</i> based on females (modified from Rosario & Hunter, 1988) .....	44
Acknowledgments .....	45
References .....	46

### Abstract

Ten new species of the genus *Klinckowstroemia* are described from passalid beetles (Coleoptera: Passalidae) collected in eastern and southern Mexico. The new species are *Klinckowstroemia bifurcata* **sp. nov.**, *K. hunteri* **sp. nov.**, *K. valdezi* **sp. nov.**, *K. montanoi* **sp. nov.**, *K. brevimarginata* **sp. nov.**, *K. rectimarginata* **sp. nov.**, *K. franckei* **sp. nov.**, *K. santibanezi* **sp. nov.**, *K. ballesterosi* **sp. nov.** and *K. cristinae* **sp. nov.** In some cases two species of *Klinckowstroemia* occurred on a single individual beetle and in one case an individual specimen of *Odontotaenius zodiacus* carried three species of mites: *K. hunteri*, *K. bifurcata* and *K. valdezi*. Eleven species of passalid beetles are new hosts for *Klinckowstroemia*. The beetle species associated with the most species of mites was *Odontotaenius zodiacus*, with six species; the other beetle species carried one or two mite species each. Mites were found in three areas of the passalid's body: the coxae, the mesoepisternum and the humeri. Some species of *Klinckowstroemia* were found on more than one host species: *K. valdezi* and *K. santibanezi* were associated with four and three species of passalids respectively. This work increases the number of described species of the genus *Klinckowstroemia* from 14 to 24 species. The number of species of passalid beetles associated with this mite genus increased from 22 to 33.

**Key words:** Passalidae, *Klinckowstroemia*, Mexico, host associations