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## New species of *Calamoncosis* Enderlein (Diptera: Chloropidae) from South Africa

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### Abstract

Three new and atypical species of Afrotropical *Calamoncosis* are described: *Calamoncosis agricola* sp. n. (type locality—South Africa: 15 km E Klaserie); *Calamoncosis flavida* sp. n. (type locality—South Africa: Roodewal); and *Calamoncosis unicornis* sp. n. (type locality—South Africa: 15 km E Klaserie). *Calamoncosis unicornis* exhibits extreme modification and sexual dimorphism in the antenna; in males the arista is reduced to a minute stub and the first flagellomere is greatly elongate and long setulose; in females the arista is well-developed and the first flagellomere is somewhat elongate and pubescent. *Calamoncosis agricola* is unusual for the genus in that crossvein dm-cu is absent, and *C. flavida* has an enlarged, rounded first flagellomere. The combination of characters seen in these species expands the known range of morphological variation, and thus the generic limits, of *Calamoncosis*. Recognition of these new species more than doubles the known Afrotropical fauna of *Calamoncosis*, previously represented only by *C. aenescens* (Becker) and *C. pauliani* (Séguy).

**Key words:** Oscinellinae, Afrotropical, sexual dimorphism, antenna, taxonomy

### Introduction

The chloropid genus *Calamoncosis* Enderlein includes almost 30 described species, mostly in the Holarctic region (Nartshuk 1962, 1971, Wendt 1994, Grégoire Taillefer & Wheeler 2011) and India (Cherian 1989). Two species of *Calamoncosis* have been described from the Afrotropical region: *C. aenescens* (Becker) from Uganda and *C. pauliani* (Séguy) from Madagascar.

In this paper, three new species of *Calamoncosis* from South Africa are described. All have distinctive morphological characters not documented in other species of the genus. Although these characters are unusual and apomorphic, the specimens are otherwise consistent with *Calamoncosis*. Proposal of new genera is not warranted based on our current knowledge of chloropid phylogeny, but some characters of these species call into the question the distinction between *Calamoncosis* and related genera such as *Siphonella* Macquart.

### Material and methods

Type specimens are deposited in the Lyman Entomological Museum, McGill University, Ste-Anne-de-Bellevue, QC, Canada (LEM)

Genitalic preparations were made by removing the abdomen of mounted specimens and heating them in 85% lactic acid in a microwave oven for two periods of 10 seconds, separated by a cooling period of one minute. Cleared genitalia were examined in glycerin and subsequently stored in glycerin in a microvial pinned beneath the source specimen.

Morphological terminology follows Cumming & Wood (2009) and Wheeler (2010).