



Adding another piece to the cynipoid puzzle: the description of a new tribe, genus and species of gall wasp (Hymenoptera: Cynipidae) endemic to The Republic of South Africa

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Abstract

Larvae and adult females of a single species inducing galls on *Scolopia mundii* (Salicaceae) are described as *Qwaqwaia scolopiae* Liljeblad, Nieves-Aldrey & Melika **sp. n.** The genus *Qwaqwaia* Liljeblad, Nieves-Aldrey & Melika **gen. n.** is also described as new and placed in a tribe, Qwaqwaiini Liljeblad, Nieves-Aldrey & Melika **trib. n.**, herein erected to encompass this sole species. Diagnostic characters and a key to all eight cynipid tribes are given. With its unique South African distribution and seemingly plesiomorphic morphology, this gall wasp is important for the future untangling of the early evolution of the microcynipoids.

Key words: Cynipoidea, Qwaqwaiini, *Qwaqwaia*, inquiline, parasitoid, *Scolopia*

Introduction

During the last few decades there has been a marked increase in work on the systematics and evolution of the Cynipoidea. With the new millennium, we seem to have reached a critical level of knowledge, as it has brought with it a multitude of descriptions and revisions of higher-level taxa (Parnipinae: Ronquist & Nieves-Aldrey 2001; Plectocynipinae: Ros-Farré & Pujade-Villar 2007; Thrasorinae: Ros-Farré & Pujade-Villar 2007, Buffington 2008; Euceroptinae: Buffington & Liljeblad 2008; Paraulacini: Nieves-Aldrey *et al.* 2009; a new figitid subfamily: Paretas-Martínez *et al.* in prep.). With this increased understanding we are only just beginning to appreciate the complexity of the evolutionary origins of the micro-cynipoids.

For historical reasons, all extant gall wasps belong to the subfamily Cynipinae and, hence, they are divided into seven tribes (Tab. 1). These are mainly characterized using biology and host plant data in combination with a few morphological features. The Cynipini, Diplolepidini, Pediaspidini and Eschatocerini comprise the typical gall wasps found on oaks and roses as well as some other woody plants of the eudicot subclass Rosidae (collectively called the woody rosid gallers). All gall inducers on herbaceous plants (+ some *Rubus*), from a wide variety of plant families, belong to the paraphyletic assemblage ‘Aylacini,’ whereas the Synergini encompass those species that are inquilines in galls usually made by other gall wasps (Liljeblad 2002). The seventh tribe, the Paraulacini, is the most recently described and might host inquilines as well (Nieves-Aldrey *et al.* 2009). However, judging from larval biology and by the fact that they are lethal to the gall inducing *Aditrochus* (Chalcidoidea: Pteromalidae: Ormocerinae) host species on *Nothofagus* (Nothofagaceae), it is entirely possible that they are parasitoids (Nieves-Aldrey *et al.* 2009).