



## A new Afrotropical genus and species of Tetrastichinae (Hymenoptera: Eulophidae) inducing galls on *Bikinia* (Fabaceae: Caesalpinioideae) and a new species of *Ormyrus* (Hymenoptera: Ormyridae) associated with the gall

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### Abstract

*Gallastichus mutuus* Rasplus & La Salle **gen. nov.** & **sp. nov.** (Hymenoptera: Chalcidoidea: Eulophidae) and *Ormyrus nkoloensis* Rasplus **sp. nov.** (Hymenoptera: Chalcidoidea: Ormyridae) are described from Cameroon. Both taxa were collected from leaf galls formed on *Bikinia letestui* (Pellegr.) Wieringa subsp. *letestui* (Fabaceae: Caesalpinioideae). *Gallastichus mutuus* appears to be responsible for gall induction, whereas *O. nkoloensis* is likely a secondary coloniser, either a parasitoid or an inquiline. This is the first recorded instance of a gall being induced in an extrafloral nectary.

**Key words:** Cameroon, extrafloral nectary, gall parasite, gall wasp, leaf gall, rainforest, taxonomy

### Introduction

Gall induction in Eulophidae is well documented, and has arisen independently on more than one occasion (La Salle 2005). Within the Tetrastichinae, there are two major groups associated with gall induction—Neotropical forms that are generally large and strongly sclerotized, and Australian forms (which do not represent a single evolutionary lineage) associated mainly with Myrtaceae (La Salle 2005). Few gall-inducing Eulophidae are known from Africa, with the only documented examples being a small group of species in the genus *Quadrastichus* Girault, which induce galls on coral trees (*Erythrina* spp.; Fabaceae: Faboideae) (Prinsloo and Kelly 2009) and *Ceratoneura indi* Girault [quoted as *Ceratoneura* sp.] which galls the ovaries of *Solanum aethiopicum* L. in West Africa (Etienne & Delvare 1989). *Quadrastichus erythrinae* Kim has become an invasive pest in many parts of the world (Kim *et al.* 2004).

The eulophid wasps described herein appear to be the inducers of unusual galls on new leaves of the lowland rainforest tree *Bikinia letestui* (Pellegr.) Wieringa subsp. *letestui* (Fabaceae: Caesalpinioideae) in Cameroon. To provide a basis for further ecological investigation of plant-animal symbioses associated with *B. l. letestui* galls, this paper uses collection material and field-based observations to describe the eulophid wasp inducing the galls and an ormyrid wasp associated with the gall. Species of *Ormyrus* Westwood are parasitoids in galls of other insects, mainly Diptera and Hymenoptera galls, although some tropical species develop in figs (Moraceae: *Ficus* L.) (Bouček 1988).