



A new species of *Eurytoma* (Hymenoptera: Eurytomidae) attacking *Quadrastichus* spp. (Hymenoptera: Eulophidae) galling *Erythrina* spp. (Fabaceae), with a summary of African *Eurytoma* biology and species checklist

M. GATES & G. DELVARE

(MG) Systematic Entomology Laboratory, PSI, ARS, USDA, c/o National Museum of Natural History, Washington, D. C. 20013-7012, USA, email: michael.gates@ars.usda.gov;

(GD) CIRAD UMR CBGP, Campus International de Baillarguet, CS 30016, F-34988 Montferrier-sur-Lez cedex, France, email: gerard.delvare@cirad.fr

Abstract

Eurytoma erythrinae Gates and Delvare, new species, is described and illustrated. This species was reared from field-collected galls on *Erythrina* spp. (Fabaceae) induced by *Quadrastichus* spp. (Hymenoptera: Eulophidae), in Tanzania, Ghana, and South Africa. It is compared with very similar African species, *Eurytoma radicolica* Risbec. Afrotropical species classified in *Eurytoma* are reviewed and twenty-seven new combinations are proposed: *Aximopsis acaciicola* (Hedqvist) **comb. n.**, *A. caryedocida* (Rasplus) **comb. n.**, *A. lamtoensis* (Rasplus) **comb. n.**, *A. mateui* (Hedqvist) **comb. n.**, *A. mimosarum* (Rasplus) **comb. n.**, *A. obocki* (Risbec) **comb. n.**, *A. oryzivora* (Delvare) **comb. n.**, *A. saharensis* (Hedqvist) **comb. n.**, *A. senegalensis* (Risbec) **comb. n.**, *A. tropicana* (Risbec) **comb. n.**, *Bruchophagus conapionis* (Rasplus) **comb. n.**, *Fronsona ellenbergeri* (Risbec) **comb. n.**, *Gibsonoma amborasahae* (Risbec) **comb. n.**, *G. aphloiae* (Risbec) **comb. n.**, *G. bararakae* (Risbec) **comb. n.**, *G. eugeniae* (Risbec) **comb. n.**, *G. mandrakae* (Risbec) **comb. n.**, *G. pauliani* (Risbec) **comb. n.**, *G. plectroniae* (Risbec) **comb. n.**, *G. tavolae* (Risbec) **comb. n.**, *Philolema arachnovora* (Hesse) **comb. n.**, *P. arnoldi* (Waterston) **comb. n.**, *P. bambeyi* (Risbec) **comb. n.**, *P. braconidis* (Ferrière) **comb. n.**, and *P. syleptae* (Ferri_re) **comb. n.**, *Phylloxeroxenus cressoni* (Howard) **comb. n.**, and *Sycophila plectroniae* (Risbec) **comb. n.** Lectotypes are designated for ten species: *Eurytoma perineti* Risbec, *E. radicolica* Risbec, *E. toddaliae* Risbec, *Gibsonoma amborasahae* (Risbec), *G. aphloiae* (Risbec), *G. eugeniae* (Risbec), *G. mandrakae* (Risbec), *G. pauliani* (Risbec), *G. tavolae* (Risbec), and *P. bambeyi* (Risbec). We also provide a checklist of Afrotropical species that are or were classified in *Eurytoma* and tabulate the known host/associations of these species with references.

Key words: *Eurytoma*, *Quadrastichus*, *Erythrina*, parasitic wasps, description, host relationship, checklist

Introduction

The genus *Eurytoma* is species-rich and widely divergent in its host range (Noyes 2003). Of approximately 700 nominal species worldwide, 301 are known from the Palaearctic Region and 61 from Africa (Noyes 2003). The African taxa are compiled in checklist form (see below), along with nomenclatural changes. Forty-seven African species have documented host/associate records (Table 1), of which seven are known to attack Hymenoptera. Of these seven species, only two are documented as parasitoids of Chalcidoidea (known hosts in parentheses): *E. risbecomaphaga* Rasplus (*Risbecoma capensis* (Walker), *R. pigrae* Rasplus; Eurytomidae) and *E. cressoni* Howard (*Eurytoma attiva* Burks). Neither of the chalcidoid hosts form galls, rather they attack bruchines (Coleoptera) on *Acacia* spp. and *Albizia* spp. (*R. capensis*), seeds of *Mimosa pigra* (*R. pigrae*) (Rasplus 1988), or seeds of *Cordia* spp. (Boraginaceae) (*E. attiva*). Of the remaining five species, one attacks Vespidae (Eumeninae): *Eurytoma pletiodropa* Delvare (*Eumenes caffer* (L.)) and four attack Braconidae: *E. apantelesi* Risbec (*Apanteles ghesquierei* de Saegar); *E. braconidis* Ferrière (*Aleiodes*, *Apanteles*, *Bracon*, *Euvipio*, and *Microbracon* species); *E. syleptae* Ferrière (*Apanteles* spp.) and *E. verbena* Ferrière (*Rhaconotus sudanensis* Wilkinson). Only two species have been recorded from Tanzania (country containing