

A. GUGLIELMINO, M. OLMI

**A host-parasite catalog of world Dryinidae  
(Hymenoptera Chrysoidea): second supplement**

**Abstract** - This paper is a second updated supplement to the host-parasite catalog of world Dryinidae published by Guglielmino & Olmi (1997, 2006). Forty one new records of relationships between Auchenorrhyncha and Dryinidae are listed, including thirty six new relationships discovered by the authors.

**Riassunto** - *Catalogo degli ospiti dei Dryinidae (Hymenoptera Chrysoidea): secondo supplemento.*

Questo lavoro è un secondo supplemento aggiornato al catalogo degli ospiti dei Dryinidae pubblicato da Guglielmino & Olmi (1997; 2006). Vengono elencate quarantuno nuove segnalazioni di relazioni tra Auchenorrhyncha e Dryinidae, delle quali trentasei sono nuove relazioni scoperte dagli autori.

**Key words:** Dryinidae, Fulgoromorpha, Cicadomorpha.

INTRODUCTION

Dryinidae is a highly specialized family of Aculeata which is widely distributed in the world and includes approximately 1500 species (Olmi & Virla, 2006). At present some Dryinidae species are used in biological control programs as their hosts, Fulgoromorpha and Cicadomorpha, include many species able to cause considerable damages to their host plants.

Guglielmino & Olmi published a host-parasite catalog of world Dryinidae (1997) and a first supplement to this catalog (2006), where 767 and 157 new relationships between Auchenorrhyncha and Dryinidae were listed respectively.

Recent researches realized mainly in tropical areas permitted to discover new relationships, resulting in an updating of the above catalog.

## MATERIAL AND METHODS

For ease of use, this supplement is compiled in the same format as the 1997 and 2006 catalogs of Guglielmino & Olmi. All the papers dealing with relationships between Dryinidae and Auchenorrhyncha published after 2006 were taken into consideration, but only the quotations treating Dryinidae at species level were listed.

The classification of the Fulgoromorpha and Cicadomorpha used is based on that of Nast (1972, 1987), Asche (1985), Oman *et al.* (1990), and the suggestions of Dr M. Stiller (personal communications). The systematics at the subfamily and tribe level adopted in this paper has to be considered provisional because in some cases the position of some genera is controversial (for instance, *Exitianus* is considered belonging to Stirellini (Nast, 1972; Hoch, 2004) or Athysanini (Oman *et al.*, 1990); *Paradorydium* is considered belonging to subfamily Dorycephalinae (Nast, 1972; Hoch, 2004) or Eupelicinae (Oman *et al.*, 1990).

The classification of the Dryinidae is based on that of Olmi (1984; 1993; 1994; 1999). For each relationship the following data are given:

- The host Auchenorrhyncha species, and its family, subfamily and, in many cases, tribe;
- The Dryinidae species, subfamily;
- The country/ies where the parasitization was recorded.
- The author who gives the parasite record is followed by the year of publication of the paper. When the author uses old Auchenorrhyncha and/or Dryinidae names the names are given in brackets and are preceded by one asterisk (\*) if referring to Auchenorrhyncha, or two asterisks (\*\*) for the Dryinidae.
- If there is no author given the relationship is a new record discovered by the authors herein based on their research. A newly recorded relationship between the Dryinidae and Auchenorrhyncha is indicated by the symbol (!). A known relationship reported for the first time for a country is followed by the symbol (!!).

*Gonatopus secundus* (Fenton, 1927) is now considered a junior synonym of *Gonatopus testaceus* Cameron 1888 (Olmi, 1998). For this reason, the host record of *Acanalonia conica* (Say) in the U.S.A. attributed to *Gonatopus secundus* by Guglielmino & Olmi (1997) is here assigned to *Gonatopus testaceus*.

CATALOG

PALAEARCTIC REGION

**FULGOROMORPHA**

CIXIIDAE

*Cixius cunicularius* (L.)

*Dryinus niger* Kieffer (Dryininae)

- Finland (**Väänänen & Vikberg**: 2007 in press).

ISSIDAE

*Ommatidiotus dissimilis* (Fallén)

*Gonatopus formicicolus* (Richards) (Gonatopodinae)

- Italy (!)

TROPIDUCHIDAE

*Ommatissus lybicus* De Bergevin

*Bocchus hyalinus* Olmi (Bocchinae)

- Oman (!)

**CICADOMORPHA**

CICADELIDAE

Deltocephalinae

Scaphoideini

*Scaphoideus titanus* Ball

*Gonatopus audax* (Olmi) (Gonatopodinae) (\*)

- France (!)

*Gonatopus clavipes* (Thunberg) (Gonatopodinae)

- France (**Malausa**: 2004)

- Slovenia (**Malausa**: 2004)

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(\*) *Gonatopus audax* (Olmi) was reared from *S. titanus* by Dr Jean Claude Malausa (INRA, Valbonne, France) (personal communication of Dr Malausa).

## AFROTROPICAL REGION

## FULGOROMORPHA

## DELPHACIDAE

## Delphacinae

*Falcotoya aglauros* (Fennah)*Haplogonatopus katangae* (Benoit) (Gonatopodinae)

- South Africa (!)

*Matutinus vitticollis* (Stål)*Gonatopus acutus* (Olm) (Gonatopodinae)

- South Africa (!)

*Gonatopus amoenus* Olmi (Gonatopodinae)

- South Africa (!)

*Sogatella kolophon* (Kirkaldy)*Gonatopus acutus* (Olm) (Gonatopodinae)

- South Africa (!)

*Gonatopus festivus* Olmi (Gonatopodinae)

- South Africa (!)

*Gonatopus similis* Brues (Gonatopodinae)

- South Africa (!)

*Syndelphax nigricaudata* (Muir)*Haplogonatopus katangae* (Benoit) (Gonatopodinae)

- South Africa (!)

*Syndelphax* n. sp. (Asche, in press)*Gonatopus vannoorti* Olmi (Gonatopodinae)

- South Africa (!)

*Toya ceresensis* (Muir)*Gonatopus acutus* (Olm) (Gonatopodinae)

- South Africa (!)

*Gonatopus amoenus* Olmi (Gonatopodinae)

- South Africa (!)

**CICADOMORPHA**

CICADELIDAE

AGALLINAE

Agalliini

*Austroagallia cuneata* (Distant)

*Gonatopus maritimus* Olmi (Gonatopodinae)

- Namibia (!)

Deltocephalinae

Athysanini

*Caffrolix cyclopia* (Cogan)

*Gonatopus operosus* Olmi (Gonatopodinae)

- South Africa (!)

*Colistra* n. sp. (Stiller, in press)

*Gonatopus maritimus* Olmi (Gonatopodinae)

- South Africa (!)

*Exitianus nanus* (Distant)

*Deinodryinus paulyi* (Olmi) (Anteoninae)

- Namibia (!)

*Exitianus okahandia* Ross

*Deinodryinus paulyi* (Olmi) (Anteoninae)

- Namibia (!)

*Exitianus taeniaticeps* (Kirschbaum)

*Gonatopus vulgaris* Olmi (Gonatopodinae)

- South Africa (!)

Deltocephalini

*Recilia cotula* (Cogan)

*Gonatopus communis* Olmi (Gonatopodinae)

- South Africa (!)

Doraturini

***Aconurella aethiopica*** (Cogan)***Gonatopus ridens*** Olmi (Gonatopodinae)

- South Africa (!)

***Gonatopus vulgaris*** Olmi (Gonatopodinae)

- South Africa (!)

***Aconurella compta*** (Naudé)***Deinodryinus paulyi*** (Olmi) (Anteoninae)

- Namibia (!)

***Gonatopus cornutus*** (Benoit) (Gonatopodinae)

- Namibia (!)

***Gonatopus fortis*** Olmi (Gonatopodinae)

- Namibia (!)

***Gonatopus maritimus*** Olmi (Gonatopodinae)

- Namibia (!)

***Gonatopus ochreus*** (Olmi) (Gonatopodinae)

- Namibia (!)

## Macrostelini

***Cicadulina theroni*** Van Rensburg***Gonatopus afer*** (Olmi) (Gonatopodinae)

- South Africa (!)

## Paralimnini

***Elginus saltus*** (Naudé)***Gonatopus cornutus*** (Benoit) (Gonatopodinae)

- South Africa (!)

## Eupelicinae

## Paradorydiini

***Paradorydium spatulatum*** (Naudé)***Gonatopus karibibensis*** Olmi (Gonatopodinae)

- Namibia (!)

***Gonatopus nearcticus*** (Fenton) (Gonatopodinae)

- Namibia (!)

ORIENTAL REGION

CICADOMORPHA

CICADELLIDAE

Deltocephalinae

Athysanini

*Exitianus indicus* (Distant)

*Gonatopus maurus* Kieffer (Gonatopodinae)

- P. R. China (!)

Stenometopiini

*Doratulina* sp.

*Gonatopus schenklengi* Strand (Gonatopodinae)

- P. R. China (!)

NEARCTIC REGION

FULGOROMORPHA

ACANALONIIDAE

*Acanalonia concinnula* Fowler

*Dryinus alatus* (Cresson) (Dryininae)

- Mexico (!)

*Acanalonia conica* (Say)

*Gonatopus testaceus* Cameron (Gonatopodinae)

- U.S.A. (**Guglielmino & Olmi**: 1997, \*\**Gonatopus secundus* (Fenton). **Olmi**: 1998,  
\*\**Gonatopus testaceus* (Cameron)

NEOTROPICAL REGION

CICADOMORPHA

CICADELLIDAE

## Dectocephalinae

## Balcluthini

***Balclutha incisa*** (Matsumura)***Anteon micros*** Olmi (Anteoninae)

- Mexico (!)

***Gonatopus breviforceps*** Kieffer (Gonatopodinae)

- Mexico (!)

## Dectocephalini

***Planicephalus flavicosta*** (Stål)***Gonatopus caraibicus*** (Olmi) (Gonatopodinae)

- Argentina (Virla: 2000)

## FULGOROMORPHA

## DELPHACIDAE

## Delphacinae

***Sogatella kolophon*** (Kirkaldy)***Gonatopus concinnus*** Olmi & Virla (Gonatopodinae)

- Mexico (!)

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PROF. ADALGISA GUGLIELMINO, PROF. MASSIMO OLMI - Dipartimento di Protezione delle Piante, Università della Tuscia, Via San Camillo de Lellis, I-01100 Viterbo, Italia.

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