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**Description of larval instars of *Dryinus tarraconensis* Marshall, 1868 and *Gonatopus baeticus* (Ceballos, 1927) (Hymenoptera: Chrysidoidea: Dryinidae), parasitoids of the genus *Dictyophara* Germar (Hemiptera: Auchenorrhyncha: Dictyopharidae)**

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**Abstract**

The last immature stage and the mature larva of *Dryinus tarraconensis* Marshall, 1868 and *Gonatopus baeticus* (Ceballos, 1927) are described for the first time. Features of immature and mature larvae of both species are discussed in the context of their implications for characterizing the subfamilies Dryininae and Gonatopodinae.

**Key words:** Dryininae, Gonatopodinae, Fulgoromorpha, postembryonic development, morphology

**Introduction**

Dryinidae are distributed worldwide with approximately 1800 species belonging to 15 subfamilies (Olmí & Virla, 2014; Olmí *et al.*, 2014).

Within Dryinidae, Gonatopodinae (556 species) and Dryininae (342 species) after the Anteoninae (599 species) are the largest subfamilies (Olmí & Virla, 2014). Gonatopodinae include 11 genera, all extant (*Adryinus* Olmí, 1984, *Echthrodelpfax* Perkins, 1903, *Epigonatopus* Perkins, 1905, *Esagonatopus* Olmí, 1984, *Eucamptonyx* Perkins, 1907, *Gonatopus* Ljungh, 1810, *Gynochelys* Brues, 1906, *Haplogonatopus* Perkins, 1905, *Neodryinus* Perkins, 1905, *Pareucamptonyx* Olmí, 1991, *Pentagonatopus* Olmí, 1984). Only two fossil species are known, tentatively attributed to *Gonatopus* and *Neodryinus*, respectively. *Gonatopus cretacicus* Olmí, Rasnitsyn & Guglielmino, 2010, was described from Siberia, Magadan Region, Obeschchayushchiy, in marl deposits from Upper Cretaceous (Cenomanian) (90–95 Ma) and *Neodryinus somniatus* Brues, 1933, was described from Baltic amber (40–45 Ma). Dryininae include at present five genera (*Thaumatomydryinus* Perkins, 1905, *Dryinus* Latreille, 1804, *Megadryinus* Richards, 1953, *Gonadryinus* Olmí, 1991 and *Pseudodryinus* Olmí, 1991) with fossil and extant species, and four fossil genera (*Palaeodryinus* Olmí & Bechly, 2001, *Harpactosphecion* Haupt, 1944, *Hybristodryinus* Engel, 2005 and *Cretodryinus* Ponomarenko, 1975). The fossil Dryininae are known from amber and the oldest ones, *Cretodryinus zherichini* Ponomarenko, 1975 and *Dryinus antiquus* (Ponomarenko, 1981), are attributed to the Cretaceous (Taimyr amber (Siberia): 78–115 Ma) (Olmí *et al.*, 2010).

Dryinidae are parasitoids and predators of Hemiptera Auchenorrhyncha (Guglielmino & Olmí, 1997, 2006, 2007; Guglielmino *et al.*, 2013). Their postembryonic development and biology are still poorly known, and the knowledge on the morphology of the immature and mature larvae is very scarce as well. In respect to the last topic, the major number of data regard three genera of Gonatopodinae: *Gonatopus*, *Haplogonatopus* and *Neodryinus* (for a review until 1998 see Guglielmino & Virla, 1998; further data are published in Guglielmino & Bückle, 2003; Guglielmino *et al.*, 2006; Mangione & Virla, 2004; Virla & Mangione, 2000). In Dryininae, the only biological data regard the genus *Dryinus*: *D. collaris* (Linnaeus, 1767) (Haupt 1932, as *D. (Lestodryinus) formicarius*