



## Contribution to the knowledge on Typhlocybinae (Hemiptera, Cicadellidae) in Italy with description of two new species

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### Abstract

Variability of populations of the brachypterous *Erythria* taxa in the northern Apennines and Maritime Alps is investigated, figured and discussed in the context of possible hybridization between *E. ferrarii* (Puton) and *E. alpina* (Vidano). *Kybos albitalicus* **sp. nov.**, a species closely related to *K. virgator* (Ribaut) and living together with this species on *Salix alba* (L.), and *Arboridia itangulata* **sp. nov.**, with clear affinity to *A. expansa* Zachvatkin, are described as new. Several *Tamaricella* populations from Italy including Sardinia and Sicily, collected on *Frankenia laevis* L. and *Tamarix* spp. and provisionally classified as *T. cf. ribauti* (Zachvatkin) are compared in genital morphology, measurements and coloration. Taxonomic problems concerning *T. ribauti* and related species are discussed. The aedeagus and pygofer appendage of *Tamaricella* gr. *cypria* (Ribaut) from Pantelleria are figured.

**Key words:** Cicadomorpha, morphology, host plant, hybrid zone, variability

### Introduction

D'Urso (1995a) records for Italy 178 Typhlocybinae species belonging to 41 genera. In subsequent years only about ten further species were added (Alma 1999; D'Urso 1995b; D'Urso & Guglielmino 1995; Mazzoni & Lucchi 2002; Guglielmino *et al.* 2005; Guglielmino & Bückle 2007; Poggi 1996).

The genus *Erythria* Fieber is represented in Italy by eight species, two of them, *Erythria alpina* Vidano and *Erythria ferrarii* (Puton), brachypterous and distributed only in the northern regions. The genus *Kybos* Fieber included up to now ten species in Italy, while the genus *Arboridia* Zachvatkin is represented there by six taxa. For the genus *Tamaricella* Zachvatkin only *T. tamaricis* (Puton) and *T. gr. cypria* (Ribaut) are recorded in Italy.

In this paper initially we figure examples and discuss the variability in the aedeagal morphology of the *Erythria* species of the *ferrarii-alpina* complex in the northern Apennines and Maritime Alps. Furthermore, we describe a new *Kybos* and a new *Arboridia* species. Finally we discuss taxonomic problems in the genus *Tamaricella* based on several populations collected on different host plants during the last decades in Italy.

### Material and methods

Samples were obtained on many collecting trips (1993–2009) at several localities on the Italian mainland and Sardinia. The insects were collected using an entomological net and aspirator.

Abbreviations of depositories of the studied material are as follows:

- Muséum Nationale D'Histoire Naturelle, Paris, France (MNHN)
- Dipartimento di Protezione delle Piante, Università della Tuscia, Viterbo, Italy (collection Guglielmino) (CG)