

Auchenorrhyncha (Insecta, Homoptera) from Sardinia (Italy): A faunistic, ecological and zoogeographical contribution¹

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With 4 figures and 3 tables

Abstract

The composition of the Auchenorrhyncha fauna of Sardinia (Italy) was studied from a faunistic, ecological and zoogeographical point of view, with a special focus on the most significant natural environments of the area. Two intensive field research campaigns carried out in July 1980 and August 1997, gave 103 identified species, 34 of them being new records for Sardinia and two also for Italy. These records increase the taxa known from this island up to 240.

Key words: Rhynchotha, Mediterranean area, check list.

Introduction

Of the three biggest Islands of the West Mediterranean Sea, Corsica and Sardinia are still little known concerning the Auchenorrhyncha fauna. The knowledge of these insects from Sardinia is still not complete despite some comprehensive papers and many occasional reports (Alma 1999, Costa 1882, 1883, 1888a, 1888b, 1888c, 1888d, 1888e, D'Urso 1995, Ferrari 1888, Guglielmino 1999, Meloni 1997, Servadei 1952, 1967, Vidano 1964). Up to now, 204 Auchenorrhyncha species and subspecies (6 of them are doubtful), belonging to 11 families, have been listed from this island.

As attested by many studies concerning a wide range of animal groups, Sardinia and Corsica are territories of particular interest from the faunistic point of view, because of the peculiarity of their paleogeographical history and the presence of a variety of habitats with adequate natural conditions.

The aim of this paper is to summarize the knowledge of the Auchenorrhyncha from Sardinia. Exhaustive knowledge will be useful to better understand the origin of the fauna living on

the territories around the West Mediterranean Basin.

Material and Methods

Two intensive field research campaigns were carried out in Sardinia by D'Urso in July 1980 and Guglielmino and Bückle in August 1997. Several natural environments from sea level up to 1600 m were investigated.

About 3000 specimens from 56 different collection sites were collected, usually by sweeping. The collection sites (Fig. 1) were listed on the basis of the provinces, each being preceded by a progressive number used in the faunistic list in the place of the complete name.

Only the species representing new records from Sardinia are listed and discussed. For each taxon the following data are provided: the present name of the species, the author and the year of publication; the collection site numbers; the chorological category and a Roman numeral (in brackets) indicating the groups of chorological categories; the ecology deduced from personal observations.

In addition, the Auchenorrhyncha fauna from Sardinia is investigated from an ecological and zoogeographical point of view. On the basis of the chorological categories, the species are arranged as follows: introduced species (I), widely distributed species (II), Central-Asiatic or Turanian species (III), Siberian species (IV), Euro-Mediterranean *s.l.* species (V), European *s.l.* species (VI), Mediterranean *s.l.* species (VII). The use of the chorological categories follows that of La Greca (1964, 1975); the terminology is sometimes modified according to Vigna Taglianti *et al.* (1993). The systematic arrangement is that followed by D'Urso (1995).

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