

F. KOZÁR G. PELLIZZARI SCALTRITI

New Scale-insects (Homoptera Coccoidea) for the Italian fauna collected in the Veneto region

The collection in natural environments in the Veneto region has allowed to find several species of *Coccoidea* some of which have not yet been reported in Italy.

In this study six species new for Italy are reported. Among these the both boreal *Euripersia europaea* (Newstead) and *Phenacoccus interruptus* (Green) are species that are widespread in a large part of Europe: the fact that they have been found in Italy was predictable.

Other specimens such as *Chnaurococcus danzigae* Kozár & Kosztarab, with its not finally known distribution, and the steppic *Phenacoccus evelinae* (Tereznikova) regard species to date only known from Eastern Europe. Another interesting point seems to be the finding of the Mediterranean *Peliococcopsis caucasicus* Borchsenius, which was found in the island of Pellestrina (Venice), and of the rare, boreal *Parafairmaria gracilis* Green.

The identity of two other species collected in Italy, namely two *Phenacoccus*, is still to be cleared. One of them was found on grass in the island of Pellestrina (Venice); it is similar to *P. persimplex* Borchsenius, 1949, but differs from it by having multilocular pores on the dorsum of the head.

The other *Phenacoccus*, which was collected in the Euganean Hills and in Florence on *Rubium*, *Fumaria* and on grass, is near to the *P. avenae* Borchsenius, 1949. The doubts in the identification are due to the fact that the specimens collected have some structures like cerarii on the dorsum, which are absent in both the Ter-Grigorian's description (1973) of *P. avenae* and the recent redescription by Williams & Miller (1985). The identification of the latter two species will be the subject of a deeper study.

Fam. PSEUDOCOCCIDAE

***Chnaurococcus danzigae* Kozár & Kosztarab, 1976**

Chnaurococcus danzigae Kozár & Kosztarab, 1976: 300; Kosztarab & Kozár, 1988: 84.

Specimens of this species were collected at the root crown of a grass in the Euganean Hills (Valle S. Giorgio, 4.V.1989). *C. danzigae* is reported from Hungary where it had been collected on the root crown of *Carex*.

Euripersa europaea (Newstead, 1897)

Ripersia europaea Newstead, 1897: 167. *Euripersia brevispina*, Borchsenius & Ter-Grigorian, 1956: 17; Ter-Grigorian, 1973: 99. *E. europaea*, Williams, 1962: 24; Tereznikova, 1975: 178; Kosztarab & Kozár, 1988: 96.

This species is rather common and has been reported from many, mostly northern, European countries (England, Holland, Germany, Hungary, Poland, The Soviet Union) (Kosztarab & Kozár, 1988); it lives on the roots of grasses but it has also been collected on other plants (*Thymus*, *Trifolium*).

Several specimens of *E. europaea* were collected in the Berici Hills (Barbarano Vicentino, 7.V.1989) on the roots of a grass growing on rocks: this is the most common habitat of this species.

Peliococcopsis caucasicus (Borchsenius, 1939)

Phenacoccus caucasicus Borchsenius, 1939: 45. *Peliococcopsis caucasicus*, Borchsenius, 1948: 954; Ter-Grigorian, 1973: 196.

A single female was collected on an unidentified grass in the island of Pellestrina (lagoon of Venice). This finding appears to be interesting, considering that this species is only known from Armenian areas (Ter-Grigorian, 1973) and Greece (Kozár, 1985). The most common host plants of this species are *Agropyrum* and *Cynodon*.

Phenacoccus evelinae (Tereznikova, 1968)

Paroudablis graminis Tereznikova, (preoccupied) 1968: 472; Ter-Grigorian, 1973: 174. *Phenacoccus evelinae* Tereznikova, 1975: 211; Kosztarab & Kozár, 1988: 126.

This species is considered common and is frequently found in dry habitats and at the road side on grasses; so far it is known in Hungary, Poland and The Soviet Union (Armenia, Ukraine) (Kosztarab & Kozár, 1988). In Italy it was found in the Euganean Hills (Monte Venda, 30.IV.1989) on a grass and wandering on the rocks in Trieste (Villa Opicina, 1.V.1989). To date these localities are the Western limit of *P. evelinae*'s distribution.

Phenacoccus interruptus Green, 1923

Phenacoccus interruptus Green, 1923: 215; Williams, 1962: 35; Tereznikova, 1975: 219; Danzig, 1980: 131; Kosztarab & Kozár, 1988: 130.

This is a common species with a wide distribution from Europe to Korea. It lives on grasses (*Agropyrum*, *Arundinella*, *Elymus*, *Festuca*, *Sieglingia*). A single specimen of *P. interruptus* was collected on *Festuca* in the Berici Hills (Barbarano Vicentino, 7.V.1989).

Fam. COCCIDAE

Parafairmaria gracilis Green, 1916

Parafairmaria gracilis Green, 1916: 24; Schmutterer, 1952: 558; Tereznikova, 1981: 122; Kosztarab & Kozár, 1988: 214.

The characteristic waxy tests which are typical for the genus *Parafairmaria* were collected on the leaves of *Carex* in the Berici Hills (Barbarano Vicentino, 7.V.1989). Inside there were dead females and egg chorions. It is well known that this species overwinters as eggs. In our case the eggs were already hatched at the time of collection. *P. gracilis* is considered a rare boreal species. The first member of this genus, the *Parafairmaria bipartita* (Signoret, 1872) has already been reported in Italy (Goidanich, 1969).

SUMMARY

The paper deals with the presence in Italy of six species of Homoptera Coccoidea, new for the Italian fauna, collected in the Veneto region. They are: *Chnaurococcus danzigae* Kozár & Kosztarab, *Euripersia europaea* (Newstead), *Peliococcopsis caucasicus* (Borchsenius), *Phenacoccus evelinae* (Tereznikova), *Phenacoccus interruptus* Green (Fam. Pseudococcidae), *Parafairmaria gracilis* Green (Fam. Coccidae). Records on host plants, localities and distribution of the above mentioned species are given. Two other species of *Phenacoccus* collected in the same region, *Phenacoccus* sp. and *P. avenae* Borchsenius? need of a deeper study to clarify their identity.

RIASSUNTO

Cocciniglie nuove per l'Italia raccolte nel Veneto

Vengono riportate località, data di raccolta e piante ospiti di Homoptera Coccoidea raccolti nel Veneto e risultati nuovi per la fauna italiana. Essi sono: *Chnaurococcus danzigae* Kozár & Kosztarab, *Euripersia europaea* (Newstead), *Peliococcopsis caucasicus* (Borchsenius), *Phenacoccus evelinae* (Tereznikova), *Phenacoccus interruptus* (Green) (Fam. Pseudococcidae), *Parafairmaria gracilis* Green (Fam. Coccidae). Due altri *Phenacoccus* raccolti, rispettivamente *Phenacoccus* sp. e *Phenacoccus avenae* Borchsenius? sono tuttora oggetto di studio.

Key words: Scale-insects, new records, Italy.

REFERENCES

- BORCHSENIUS N.S., 1949 - Fauna of USSR. Homoptera, Pseudococcidae (in Russian). - Akad. Nauk Zool. Inst. (N.S., 38), 7: 1-383.
GOIDANICH A., 1969 - "Lecaniidi" in Enciclopedia Agraria Italiana, R.E.D.A., 6: 797-805.
KOSZTARAB M., KOZÁR F., 1988 - Scale Insects of Central Europe. - Junk Publ. Dordrecht: 1-456.

- KOZÁR F., 1985 - New data to the knowledge of Scale-insects of Bulgaria, Greece and Rumania (Homoptera: Coccoidea). - Acta Phytopat. Acad. Sci. Hung. 20: 201-205.
- TER-GRIGORIAN M.A., 1973 - Soft and armored scales (Coccoidea), Mealybugs (Pseudococcidae) in: Fauna of Armenian SSR (in Russian). - Izv. Akad. Nauk Armianskoi SSR: 1-246.
- WILLIAMS D.J., MILLER D.R., 1985 - *Phenacoccus avenae* Borchs. (Hemiptera: Pseudococcidae) from The Netherlands and Turkey, intercepted at quarantine on bulbs, corms and rhizomes of ornamental plants. - Bull. ent. Res. 75: 671-674.

DR. FERENC KOZÁR - Plant Protection Institute, Hungarian Academy of Sciences, Herman Ottó ut 15, Budapest.

PROF. GIUSEPPINA PELLIZZARI SCALTRITI - Istituto di Entomologia agraria, Università degli Studi, Via Gradenigo 6, I-35131 Padova.

Ricevuto il 10 ottobre 1989; pubblicato il 31 ottobre 1989.