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## ORTHOPTEROIDEA OF MONTECRISTO ISLAND

### SUMMARY

The checklist of Orthopteroidea of the Montecristo Island include 20 species: Mantidae (1 species), Orthoptera (19 species). *Rhacocleis tyrrhenica* La Greca, 1952 is newly recorded on the island.

*Key words:* Mantidae, Orthoptera, *Rhacocleis thyrrhenica*, Tuscan Archipelago

### RIASSUNTO

L'autore segnala venti specie di Orthopteroidea sull'isola di Montecristo. Una specie, *Rhacocleis thyrrhenica* La Greca, 1952 è nuova per l'isola.

*Parole chiave:* Mantidae, Orthoptera, *Rhacocleis thyrrhenica*, Arcipelago Toscano

### INTRODUCTION

The present material has been collected by Franco Strumia with Malaise traps in 2001 and 2011-2012 in the island of Montecristo (Tuscan Archipelago, Italy); it was preserved in alcohol and sent to my laboratory for the identification. Mantidae (*Mantis religiosa* only) were identified with the key of FONTANA *et al.* (2005), Orthoptera with the key of MASSA *et al.* (2012). In Tab. I the complete list of Orthopteroidea species of Montecristo island is reported with the references by each species. Below some comments are reported on a few collected species during the Malaise trapping.

Table I

*The species of Orthopteroidea till now recorded on the island of Montecristo; of the 20 species listed only one (*Rhacocleis tyrrhenica*) is here reported for the first time*

	Species	References
1	<i>Ameles spallanzania</i> (Rossi, 1792)	FANFANI & GROPPALI, 1979
2	<i>Mantis religiosa religiosa</i> (Linnaeus, 1758)	FANFANI & GROPPALI, 1979; present paper
3	<i>Phaneroptera nana</i> Fieber, 1853	BACCETTI, 1968; FANFANI & GROPPALI, 1979; present paper
4	<i>Tettigonia viridissima</i> Linnaeus, 1758	FANFANI & GROPPALI, 1979; PAVAN, 1989
5	<i>Platycleis intermedia intermedia</i> (Serville, 1839)	BACCETTI, 1968; FANFANI & GROPPALI, 1979; PAVAN, 1989; present paper
6	<i>Yersinella raymondii</i> (Yersin, 1860)	BACCETTI, 1968; FANFANI & GROPPALI, 1979
7	<i>Rhacocleis thyrrhenica</i> La Greca, 1952	present paper
8	<i>Rhacocleis germanica</i> (Herrich Schaeffer, 1840)	BACCETTI, 1968; FANFANI & GROPPALI, 1979
9	<i>Gryllomorpha (Gryllomorpha) dalmatina dalmatina</i> (Ocskay, 1832)	BACCETTI, 1968; FANFANI & GROPPALI, 1979
10	<i>Gryllus bimaculatus</i> De Geer, 1773	FANFANI & GROPPALI, 1979
11	<i>Oecanthus pellucens pellucens</i> (Scopoli, 1763)	BACCETTI, 1968; FANFANI & GROPPALI, 1979
12	<i>Mogoplistes brunneus</i> Serville, 1839	BACCETTI, 1968; FANFANI & GROPPALI, 1979
13	<i>Pseudomogoplistes squamiger</i> (Fischer, 1853)	BACCETTI, 1976; FANFANI & GROPPALI, 1979
14	<i>Myrmecophilus (Myrmecophilus) myrmecophilus</i> (Savi, 1819)	BACCETTI, 1968; FANFANI & GROPPALI, 1979
15	<i>Pezotettix giornae</i> (Rossi, 1794)	BACCETTI, 1968; FANFANI & GROPPALI, 1979
16	<i>Calliptamus barbarus barbarus</i> (O.G. Costa, 1836)	BACCETTI, 1976; FANFANI & GROPPALI, 1979
17	<i>Anacridium aegyptium</i> (Linnaeus, 1764)	BACCETTI, 1958; FANFANI & GROPPALI, 1979; present paper
18	<i>Locusta migratoria cinerascens</i> Fabricius, 1781	BACCETTI, 1968; FANFANI & GROPPALI, 1979
19	<i>Oedipoda caerulescens caerulescens</i> (Linnaeus, 1758)	FANFANI & GROPPALI, 1979; PAVAN, 1989
20	<i>Sphingonotus caeruleans caeruleans</i> (Linnaeus, 1767)	BACCETTI, 1958, 1968; FANFANI & GROPPALI, 1979 ( <i>sub its synonym S. caeruleans exornatus</i> Nedelkov, 1907); PAVAN, 1989

## RESULTS AND COMMENTS

## MANTIDAE

*Mantis religiosa religiosa* (Linnaeus, 1758)

Material examined. La Villa 11.VIII-11.IX.2011 (1♀).

*M. religiosa* is the commonest European mantid. It lives in sunny habitats, where it has a summer-autumn phenology.

## TETTIGONIIDAE

*Phaneroptera nana* Fieber, 1853

Material examined. 22.VII-11.VIII.2011 (2 ♀ nymphs); La Villa 11.VIII-11.IX.2011 (1♂).

*P. nana* is a common species in Europe, Middle East and North Africa, widespread in Italy, islands included, up to high elevations. Its phenology is from late spring to autumn. Its presence in Montecristo Island has been recorded by BACCETTI (1968) and FANFANI & GROPPALI (1979).

It lives on shrubs, herbs and small trees, it is a good flyer and is attracted to lamps. It lays eggs within a leaf in autumn and the egg overwinters. Young emerge in spring and the adult is active in summer. The ovipositor is much laterally flattened, well adapted to oviposition within the leaves (MASSA & RIZZO, 1998). Nowadays, *P. nana* is monotypic, because the Afro-Asiatic taxon *P. sparsa* Stål, 1857 has been raised to species level (RAGGE, 1980).

*Rhacocleis thyrrhenica* La Greca, 1952 (Figs. 1, 2)

Material examined. 22.VII-11.VIII.2011 (1♂, 1♀); La Villa 11.VIII-11.IX.2011 (1♀).

*R. thyrrhenica* was described by LA GRECA (1952) on specimens collected at Zannone Is. (Ponziane Archipelago, Latium), but later it has been found also at Ponza Is. (BACCETTI, 1958), in some areas of Latium, in the Tuscan Archipelago (Elba Is.) and Liguria (SALFI, 1942; NADIG, 1962; GALVAGNI, 1976; HELLER, 1988; FONTANA *et al.*, 2005).

It has summer-autumn phenology. It is very characteristic for the male cerci, that are sub-conical and provided with a robust basal tooth (Fig. 1), and



Fig. 1 — Last abdominal tergites and cerci of the male of *Rhacocleis thyrrhenica* (photo by B. Massa).

for the female sub-genital plate, that is widely divided into two pointed and diverging lobes (Fig. 2).

*Platycleis intermedia intermedia* (Serville, 1839)

Material examined. La Villa 7-22/VII/2001 (1♀ nymph); 22.VII-11.VIII.2011 (2♀); La Villa 11.VIII-11.IX.2011 (1♂); 31.V-15.VI.2011 (1♀ nymph).

*P. intermedia* is the most common *Platycleis* in North Africa, South Europe and Asia. In Italy is very abundant and common everywhere. It is a summer-autumnal xerothermophilous species, widespread in shrubs, margins of agroecosystems, wood clearings, etc. Its identification is rather easy, by male titillators and two transverse reliefs on the 9<sup>th</sup> abdominal sternite of the female. The presence of this species in Montecristo Is. was previously reported by BACCETTI (1968), FANFANI & GROPPALI (1979) and PAVAN (1989).



Fig. 2 — Subgenital plate of the female of *Rhacocleis thyrrhenica* (photo by Leonardo Forbicioni).

#### *Anacridium aegyptium* (Linnaeus, 1764)

Material examined. La Villa 7-22/VII/2001 (5 nymphs); La Villa 11.VIII-11.IX.2011 (2♀ nymphs); 6-26.VI.2012 (1♀); 31.V-15.VI.2011 (♀).

Mediterranean and euro-asiatic species very common and widespread in Italy; it has been accidentally introduced in North Europe with vegetables. This xerophilous species lives on shrubs, herbs and trees; adults are active from July and overwinter as adults. Young emerge in April and live on herbs and shrubs. It is one of the biggest Italian species of Orthoptera, very characteristic for its undulated pronotum keel, eyes with vertical lines and its prosternum tubercle. Young are very common in summer and are characterized by many white dots on the pronotum sides and may be green or grey. The presence of this species in Montecristo Is. was previously reported by BACCETTI (1958) and FANFANI & GROPPALI (1979).

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