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New data about Heterocera of Tuscan Archipelago

(Insecta, Lepidoptera)

by

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Summary: This paper deals with new data on the Macro-Heteroceran fauna of Tuscan Archipelago. Specimens from authors' own collections and from the collections of the museums of Bergamo (MCSN BG), Florence (MZUF) and Rome (MCZR) were examined and 155 species are listed. Among these 67 are new for the area. One species, *Euxoa nigricans* (LINNAEUS, 1761), was erroneously reported for the island of Capraia due to a misidentification of dark specimens of *Agrotis trux* (HÜBNER, 1824).

Zusammenfassung: Die vorliegende Arbeit befaßt sich mit der Macro-Heterocera-Fauna des toskanischen Archipels, zu dem die Inseln Elba, Capraia, Gorgona, Montecristo, Giglio und Giannutri gehören. Falter aus den Sammlungen der Autoren und aus den Sammlungen der Museen in Bergamo (MCSN BG), Florenz (MZUF) und Rom (MCZR) wurden überprüft und hier können 155 Arten aufgeführt werden. Unter diesen sind 67 neu für das Gebiet; in der Liste sind sie mit einem Stern gekennzeichnet. Arten von Capraia, auch wenn sie keine Neufunde darstellen, sind mit einem Kreuz versehen. Eine Art, *Euxoa nigricans* (LINNAEUS, 1761) wurde irrtümlich für Capraia angegeben. Diese Meldung beruht auf einer Verwechslung mit einem dunklen Exemplar von *Agrotis trux* (HÜBNER, 1824).

Introduction

The islands of the Tuscan Archipelago show an interesting Lepidopteran fauna. In fact we can find some species and subspecies typical of the western Mediterranean islands (*Coenonympha corinna trettaui* GROSS, 1970, *Hipparchia neomiris* (GODART, 1822), *Lasiommata pamaegaera* (HÜBNER, 1824), *Stanhelia benesignata* (BELLIER, 1861), *Euchrognophos corsica* (OBERTHÜR, 1913), *Idaea obliquaria* (TURATI, 1913)) and also species with southern and western Mediterranean distribution which were never recorded in the Italian peninsula (*Hyles dahlia* (GEYER, 1827), *Hipparchia aristaeus* (BONELLI, 1826), *Idaea rhodogrammaria* (PÜNGELER, 1913), *Lymantria atlantica* (RAMBUR, 1837)). The Lepidopteran fauna of this area, in particular the Heterocera, is still scarcely known. Capraia is the island whose fauna we know better, especially thanks to the research conducted by the Natural History Museum „E. Caffi“ of Bergamo (VALLE, 1993) by means of light traps. The Noctuidae and Geometridae collected were studied by BERIO (1993) and RAINERI (1993) respectively. The specimens of other Heterocera families and some Noctuidae collected after the death of BERIO have remained unstudied and are conserved in that Museum. More information about Montecristo, Pianosa and Giglio Islands fauna can be found in some other works (ROCCI & TURATI, 1925; FANFANI & GROPPALI, 1979; RAINERI, 1986; BERIO, 1985; BIERMANN, 1990; DAPPORTO et al., 1999). For Elba the data

are very fragmentary and only a few species are reported (GEISLER, 1922; GREENWOOD, 1964; ZANGHERI, 1967; WOLFSBERGER, 1971; BATTISTI et al., 1988; BERIO, 1991; PROVERA, 1992; RAINERI, 1996; FLAMIGNI & BASTIA, 1998; BERTACCINI & FIUMI, 1999). Further information about Heterocera from the Tuscan Archipelago can be found in few other works (DEL GUERCIO, 1899; RAZZAUTI, 1917; BERIO, 1985; ZILLI, 1994; RAINERI, 1994; DAPPORTO et al., 2002; FLAMIGNI et al., 2002).

The data concerning the authors' collecting in Elba, Giglio and Capraia, as well as the not yet published data about Heterocera kept in the Natural History Museum „E. Caffi“ in Bergamo (MCSNBG), in Prola collection (Museo civico di storia naturale di Roma, MCZR) and in Verity collection (Museo Zoologico „La Specola“ di Firenze, MZUF) are listed in this paper.

The species marked with an asterisk, not recorded in the above mentioned papers, are new findings for the Archipelago. Unless otherwise stated, the specimens are deposited in the authors' collections.

For the importance of the study conducted in Capraia by BERIO (1993), RAINERI (1993), and VALLE (1993) we decided to include in this work all the species collected even if not new for the island. These species are marked with a cross.

Psychidae

Phalacropterix apiformis (Rossi, 1790) *

Material. Capraia, sopra porto, 21.X.2002: 1 larva.

Sesiidae

Chamaesphecia aerifrons (ZELLER, 1847) *

Material. Elba, M. Perone, 29.VI.–5.VII.1980: 1 ♂.

Cossidae

Zeuzera pyrina (LINNAEUS, 1767) *

Material. Capraia, 28.VI.1989: 1 ♂, BERERA leg. (MCSNBG).

Sphingidae

Agrius convolvuli (LINNAEUS, 1758) +

Already known for: Elba, Giglio, Capraia.

Material. Capraia, 13.–23.VIII.1989: 3 ♂♂, 18.–23.IX.1989: 2 ♂♂, 1.–7.X.1989: 3 ♂♂, 1.–20.VI.1992: 3 ♂♂, BERERA leg. (MCSNBG).

Hyles livornica (ESPER, 1779) *

Material. Capraia, 3.V.1989: 1 ♂, 24.–27.IV.1992: 3 ♂♂, 2 ♀♀, 24.–27.V.1992: 5 ♂♂, 3 ♀♀, 1.–20.VI.1992: 3 ♂♂, 3 ♀♀, BERERA leg. (MCSNBG).

Deilephila elpenor (LINNAEUS, 1758) *

Material. Elba, M. Perone, 25.–28.VI.1979: 1 ♀.

Drepanidae

Thyatira batis (LINNAEUS, 1758) *

Material. Elba, Bagnaia, 1.–7.X.1980: 1 ♂.

Watsonalla uncinula (BORKHAUSEN, 1790) *

Material. Capraia, 12.VII.1989: 3 ♂♂, BERERA leg. (MCSNBG). Elba, Bagnaia, 1.–7.X.1980: 1 ♂; S. Piero in Campo, 18.IV.2002: 2 ♂♂; Giglio, Porto, 7.X.2001: 1 ♂; Campese, 7.X.2001: 1 ♂; Castello, 7.X.2001: 1 ♂.

Cilix glaucata (SCOPOLI, 1763)

Already known for: Montecristo.

Material. Elba, Marciana Marina, 23.IX.2001: 1 ♂. Capraia, 7.X.1989: 1 ♀, BERERA leg. (MCSNBG).

Geometridae

Macaria alternata (DENIS & SCHIFFERMÜLLER, 1775) *

Material. Elba, Monte S. Martino, 17.IV.2002: 1 ♂.

Rhoptria asperaria (HÜBNER, 1817)

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, Marciana, 23.IX.2001: 1 ♂; S. Piero in Campo, 23.IX.2001: 1 ♀. Giglio, Porto, 7.X.2001: 1 ♂; Campese, 7.X.2001: 1 ♀.

Petrophora binævata (MABILLE, 1869)

Already known for: Montecristo, Capraia.

Material. Elba, Enfola, 20.X.2002: 1 ♀.

Pachycnemia hippocastanaria (HÜBNER, 1799)

Already known for: Montecristo, Capraia.

Material. Elba, Marciana, 23.IX.2001: 1 ♂; Monte S. Martino, 17.IV.2002: 1 ♀. Giglio, Campese, 7.X.2001: 2 ♀♀.

Pachycnemia tibiaria (RAMBUR, 1829) *

Material. Elba, S. Piero in Campo, 23.IX.2001: 2 ♂♂, 1 ♀; Marciana, 19.X.2002: 1 ♀.

Opisthograptis luteolata (LINNAEUS, 1758)

Already known for: Montecristo.

Material. Elba, Marciana, 23.IX.2001: 1 ♀.

Selenia lunularia (HÜBNER, 1788)

Already known for: Capraia.

Material. Elba, Monte S. Martino, 17.IV.2002: 1 ♂.

Crocallis elinguarina (LINNAEUS, 1758) *

Material. Elba, Marciana, 23.IX.2001: 2 ♂♂.

Lycia hirtaria (CLERCK, 1759) *

Material. Elba, IV.1998: 2 ♂♂; S. Piero in Campo: 1 ♂.

Biston strataria (HUFNAGEL, 1767) *

Material. Elba, S. Piero in Campo: 3 ♂♂.

Biston betularia (Linnaeus, 1758) *

Material. Elba, M. Perone, 16.–21.VII.1978: 2 ♂♂, 2 ♀♀.

Agriopis marginaria (FABRICIUS, 1776) *

Material. Elba, Poggio, 16.IV.2002: 2 ♂♂.

Menophra abruptaria (THUNBERG, 1792)

Already known for: Giglio, Pianosa, Montecristo, Capraia.

Material. Elba, Marciana, 23.IX.2001: 1 ♀; 19.X.2002: 1 ♂; Poggio, 16.IV.2002: 1 ♂; Monte S. Martino, 17.IV.2002: 2 ♂♂.

Peribatodes rhomboidaria (DENIS & SCHIFFERMÜLLER, 1775)

Already known for: Montecristo, Capraia.

Material. Giglio, Castello, 7.X.2001: 1 ♂; Porto, 7.X.2001: 1 ♂. Elba, S. Piero in Campo, 17.IV.2002: 2 ♂♂.

Peribatodes umbraria (HÜBNER, 1809)

Already known for: Montecristo, Capraia.

Material. Elba, Bagnaia, 1.–7.X.1980: 2 ♀♀; Marciana 19.X.2002: 1 ♂. Giglio, Castello, 7.X.2001: 1 ♂.

Ascotis selenaria (DENIS & SCHIFFERMÜLLER, 1775)

Already known for: Capraia.

Material. Elba, M. Perone, 16.–21.VII.1978: 1 ♀.

Campaea margaritata (LINNAEUS, 1767) *

Material. Elba, Marciana, 23.IX.2001: 3 ♂♂, 1 ♀.

Campaea honoraria (DENIS & SCHIFFERMÜLLER, 1775)

Already known for: Capraia.

Material. Elba, Bagnaia, 1.–7.X.1980: 1 ♂; Marciana, 23.IX.2001: 4 ♂♂; Monte S. Martino, 17.IV.2002: 5 ♂♂. Giglio, Castello, 7.X.2001: 1 ♂, 1 ♀.

Rhopalognophos glaucinaria (HÜBNER, 1799) *

Material. Elba, Poggio, 500 m, 23.V.1913: 1 ♀, QUERCI leg. (MZUF).

Semiaspilates ochrearia (ROSSI, 1794)

Already known for: Giglio, Pianosa, Capraia.

Material. Elba, S. Piero in Campo, 23.IX.2001: 1 ♂; Fetovaia, 17.IV.2002: 1 ♂; S. Piero in Campo, 17.IV.2002: 1 ♂.

Comptosia opacaria (HÜBNER, 1819) *

Material. Giglio, Campese, 7.X.2001: 1 ♂; Porto, 7.X.2001: 2 ♂♂.

Note. All the specimens collected in Capraia are referred to *C. opacaria* ab. *rubra* (= *aemiliorum* RAINERI, 1994) by RAINERI (1993). The specimens collected in Giglio do not match with the description of ab. *rubra* given by CULOT (1909–1920). One male of *C. aemiliorum* (RAINERI, 1994) has been found in the Maremma Natural Park (DAPPORTO et al., 2002).

Pseudoterpna coronillaria (HÜBNER, 1817)

Already known for: Montecristo, Capraia.

Material. Elba, S. Piero in Campo, 23.IX.2001: 3 ♂♂; Poggio, 19.X.2002: 1 ♂. Giglio, 29.IX.1974: 1 ♂, PROLA leg. (MCZR); Porto, 7.X.2001: 1 ♂.

Hemistola chrysoprasaria (ESPER, 1795) *

Material. Elba, Marciana, 19.X.2002: 1 ♀.

Cyclophora puppillaria (HÜBNER, 1817)

Already known for: Pianosa, Montecristo, Capraia

Material. Elba, S. Piero in Campo, 18.IV.2002: 1 ♂, 1 ♀.

Scopula marginepunctata (GOEZE, 1781)

Already known for: Montecristo.

Material. Elba, Marciana, 23.IX.2001: 1 ♂, 1 ♀.

Scopula imitaria (HÜBNER, 1799)

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, Marciana, 23.IX.2001: 1 ♂, 1 ♀. Giglio, Campese, 7.X.2001: 2 ♂♂.

Scopula minorata (BOISDUVAL, 1833)

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, Marciana Marina, 23.IX.2001: 1 ♂.

Idaea filicata (HÜBNER, 1799)

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, Poggio, 500 m, 23.V.1913: 1 ♀, QUERCI leg. (MZUF). Giglio, Campese, 7.X.2001: 1 ♂.

Idaea typicata (GUENÉE, 1858) *

Material. Elba, Poggio, 28.VIII.1916: 1 ♂, 1 ♀, QUERCI leg. (MZUF).

Idaea seriata (SCHRANK, 1802)

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, S. Piero in Campo, 23.IX.2001: 1 ♂; Marciana, 23.IX.2001: 1 ♂. Giglio, Porto, 7.X.2001: 1 ♂; Castello, 7.X.2001: 1 ♂, 1 ♀; Campese, 7.X.2001: 1 ♂.

Idaea subsericeata (HAWORTH, 1809)

Already known for: Giglio, Capraia.

Material. Elba, Procchio, 15.IV.2002: 1 ♂.

Idaea distinctaria (BOISDUVAL, 1840)

Already known for: Capraia.

Material. Elba, Marciana Marina, 23.IX.2001: 1 ♂; S. Piero in Campo, 23.IX.2001: 1 ♂; Giglio, Porto, 7.X.2001: 1 ♀; Campese, 7.X.2001: 1 ♂, 1 ♀.

Idaea degeneraria (HÜBNER, 1799)

Already known for: Pianosa, Montecristo.

Material. Elba, Marciana, 23.IX.2001: 1 ♀; S. Piero in Campo, 23.IX.2001: 1 ♂, 1 ♀. Capraia, dint. Paese, 28.V.2001: 1 ♀.

Xanthorhoe disjunctaria (DE LA HARPE, 1860) *

Material. Elba, S. Piero in Campo, 23.IX.2001: 1 ♀.

Xanthorhoe fluctuata (LINNAEUS, 1758) *

Material. Elba, Poggio, 16.IV.2002: 2 ♂♂.

Xanthorhoe oxybiata (MILLIÈRE, 1872) *

Material. Giglio, Porto, 7.X.2001: 1 ♂, 3 ♀♀; Castello, 7.X.2001: 1 ♂.

Catarhoe basochesiata (DUPONCHEL, 1831)

Already known for: Pianosa, Capraia.

Material. Giglio, Campese, 7.X.2001: 1 ♀. Elba, Fetovaia, 17.IV.2002: 1 ♂.

Costaconvexa polygrammata (BORKHAUSEN, 1794) *

Material. Elba, Procchio, 15.IV.2002: 1 ♀.

Camptogramma bilineata (LINNAEUS, 1758) *

Material. Elba, Poggio, 3.VI.1916: 3 ♂♂, 1 ♀; QUERCI leg. (MZUF); Marciana, 23.IX.2001: 1 ♂, 1 ♀.

Larentia malvata (RAMBUR, 1833)

Already known for: Capraia.

Material. Elba, Marciana, 19.X.2002: 1 ♀. Giglio, Castello, 7.X.2001: 1 ♀.

Nebula salicata (DENIS & SCHIFFERMÜLLER, 1775)

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, S. Piero in Campo, 18.IV.2002: 1 ♂, 1 ♀; Poggio, 16.IV.2002: 1 ♀.

Chloroclysta siterata (HUFNAGEL, 1767)

Already known for: Capraia.

Material. Elba, S. Piero in Campo, 16.IV.2002: 2 ♂♂; Marciana, 19.X.2002: 1 ♀.

Pennithera firmata (HÜBNER, 1822)

Already known for: Pianosa, Capraia.

Material. Elba, Lacona, 20.X.2002: 1 ♂.

Thera cupressata (GEYER, 1831)

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, Fetovaia, 17.IV.2002: 1 ♀.

Horisme radicularia (DE LA HARPE, 1855) *

Material. Elba, Marciana, 23.IX.2001: 3 ♂♂, 2 ♀♀.

Perizoma bifaciata (HAWORTH, 1809)

Already known for: Montecristo.

Material. Elba, S. Piero in Campo, 23.IX.2001: 1 ♂.

Eupithecia linariata (DENIS & SCHIFFERMÜLLER, 1775) *

Material. Elba, Poggio, 25.V.1916: 1 ♀, QUERCI leg. (MZUF).

Eupithecia centaureata (DENIS & SCHIFFERMÜLLER, 1775)

Already known for: Giglio, Montecristo, Capraia.

Material. Elba, S. Piero in Campo, 23.IX.2001: 1 ♀.

Eupithecia semigraphata BRUAND, 1850 *

Material. Elba, Poggio, 20.VIII.1916: 1 ♀, QUERCI leg. (MZUF); S. Piero in Campo, 23.IX.2001: 1 ♂.

Eupithecia unedonata (MABILLE, 1868)

Already known for: Capraia.

Material. Giglio, Campese, 7.X.2001: 1 ♂. Elba, Marina di Campo, 17.IV.2002: 2 ♂♂, 1 ♀.

Eupithecia ericeata (RAMBUR, 1833)

Already known for: Capraia.

Material. Elba, Marciana, 18.X.2002: 2 ♀♀.

Eupithecia oxycedrata (RAMBUR, 1833) *

Elba, Marina di Campo, 18.IV.2002: 1 ♀.

Chloroclystis v-ata (HAWORTH, 1809) *

Material. Elba, Poggio, 28.V.1913: 1 ♂, QUERCI leg. (MZUF).

Chesias rufata (FABRICIUS, 1775) *

Material. Elba, S. Piero in Campo, 17.IV.2002: 1 ♀.

Notodontidae

Thaumetopoea processionea (LINNAEUS, 1758) *

Material. Capraia, 9.VIII.1989: 1 ♂, BERERA leg. (MCSNBG).

Stauropus fagi (LINNAEUS, 1758) *

Material. Elba, M. Perone, 25.-28.VI.1979: 1 ♂.

Noctuidae

Acrionicta euphorbiae (DENIS & SCHIFFERMÜLLER, 1775) *

Material. Capraia, 1.V.1992: 1 ♂, BERERA leg. (MCSNBG).

Acrionicta rumicis (LINNAEUS, 1758) *

Material. Capraia, l'Anghiale, 24.VI.1993: 1 ♂, BUTTARELLI & VALLE leg. (MCSNBG); sopra paese, 24.VI.1993: 1 ♀, BUTTARELLI & VALLE leg. (MCSNBG).

Cryphia muralis (FORSTER, 1771)

Already known for: Giglio, Montecristo, Capraia.

Material. Elba, M. Perone, 25.-28.VI.1979: 1 ♀.

Nodaria nodosalis (HERRICH-SCHÄFFER, 1851) *

Material. Capraia, sopra porto, 21.X.2002: 1 ♀.

Dysgonia algira (LINNAEUS, 1767)

Already known for: Montecristo, Capraia.

Material. Elba, M. Perone, 25.-28.VI.1979: 1 ♀.

Autophila dilucida (HÜBNER, 1808) *

Material. Capraia, sopra paese, 21.VI.1993: 1 ♀, RAINERI leg. (MCSNBG).

Aedia leucomelas (LINNAEUS, 1758)

Already known for: Capraia.

Material. Elba, Bagnaia, 1.-7.X.1980: 1 ♂.

Hypena proboscidalis (LINNAEUS, 1758) *

Material. Elba, Marciana, 19.X.2002: 1 ♀.

Hypena obsitalis (HÜBNER, 1813)

Already known for: Giglio, Pianosa.

Material. Elba, Marciana, 23.IX.2001: 1 ♀.

Hypena lividalis (HÜBNER, 1796)

Already known for: Capraia.

Material. Elba, Marciana Marina, 23.IX.2001: 1 ♂.

Hypena crassalis (FABRICIUS, 1787) *

Material. Elba, M. Perone, 16.-21.VII.1978: 1 ♂.

Eutelia adulatrix (HÜBNER, 1813)

Already known for: Giglio, Pianosa, Capraia.

Material. Elba, Bagnaia, 1.-7.X.1980: 1 ♂.

Chrysodeixis chalcites (ESPER, 1789)

Already known for: Montecristo, Capraia.

Material. Elba, Val Carene, 20.VII.1978: 1 ♂.

Protodeltote pygarga (HUFNAGEL, 1766) *

Material. Elba, M. Perone, 25.-28.VI.1979: 2 ♂♂.

Eublemma parva (HÜBNER, 1808)

Already known for: Capraia.

Material. Giglio, Castello, 7.X.2001: 1 ♀.

Cucullia verbasci (LINNAEUS, 1758) *

Material. Elba, Monte Capanne, 14.-22.III.1992: 1 ♂, 2 ♀♀ (ex larva).

Calophasia opalina (ESPER, 1793) *

Material. Elba, Poggio, 18.VIII.1916: 1 ♂, QUERCI leg. (MZUF).

Pyrois effusa (BOISDUVAL, 1828) *

Material. Capraia, l'Anghiale, 3.XII.1993: 1 ♂, PANTINI & VALLE leg. (MCSNBG); dint. Paese, 28.V.2001: 1 ♀.

Amphipyra pyramidea (LINNAEUS, 1758) *

Material. Elba, Marciana, 23.IX.2001: 6 ♀♀.

Heliothis peltigera (DENIS & SCHIFFERMÜLLER, 1775)

Already known for: Capraia.

Material. Elba, M. Perone, 25.-28.VI.1979: 1 ♂.

Hoplodrina ambigua (DENIS & SCHIFFERMÜLLER, 1775)

Already known for: Giglio, Pianosa, Montecristo, Capraia.

Material. Elba, Bagnaia, 1.-7.X.1980: 1 ♂.

Spodoptera exigua (HÜBNER, 1808)

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, Poggio, 16.IV.2002: 1 ♂.

Spodoptera littoralis (BOISDUVAL, 1833) *

Material. Capraia, dint Porto, 22.X.2002: 1 ♀.

Proxenus hospes (FREYER, 1831)

Already known for: Montecristo, Capraia.

Material. Elba, M. Perone, 25.-28.VI.1979: 2 ♂♂; S. Piero in Campo, 23.IX.2001: 1 ♂.

Thalpophila matura (HUFNAGEL, 1766)

Already known for: Pianosa, Capraia.

Material. Elba, Poggio, 21.VIII.1916: 1 ♀, QUERCI leg. (MZUF); Bagnaia, 1.-7.X.1980: 1 ♂; S. Piero in Campo, 23.IX.2001: 1 ♂, 1 ♀; Marciana, 23.IX.2001: 1 ♂.

Euplexia lucipara (LINNAEUS, 1758) *

Material. Elba, Marciana, 23.IX.2001: 1 ♂.

Phlogophora meticulosa (LINNAEUS, 1758)

Already known for: Giglio, Pianosa, Capraia.

Material. Elba, Portoferraio, 3.V.1970: 1 ♂; Marciana, 19.X.2002: 1 ♂.

Chloantha hyperici (DENIS & SCHIFFERMÜLLER, 1775)

Already known for: Pianosa, Capraia.

Material. Elba, S. Piero in Campo, 17.IV.2002: 1 ♀.

Callopietria juvenina (STOLL, 1782)

Already known for: Capraia.

Material. Elba, M. Perone, 16.-21.VII.1978: 1 ♀; M. Perone, 25.-28.VI.1979: 1 ♂.

Spudaea ruticilla (ESPER, 1791) *

Material. Elba, S. Piero in Campo, 17.-18.IV.2002: 3 ♂♂, 3 ♀♀.

Jodia croceago (DENIS & SCHIFFERMÜLLER, 1775) *

Material. Capraia, l'Anghiale, 22.IV.1993: 1 ♀, BUTTARELLI, PANTINI, RAINERI & VALLE leg. (MCSNBG).

Conistra rubiginea (DENIS & SCHIFFERMÜLLER, 1775) *

Material. Elba, S. Piero in Campo, 17.-18.IV.2002: 3 ♂♂, 3 ♀♀; Poggio, 16.IV.2002: 1 ♂.

Conistra erythrocephala (DENIS & SCHIFFERMÜLLER, 1775) *

Material. Elba, S. Piero in Campo, 17.IV.2002: 1 ♀.

Aporophyla australis (BOISDUVAL, 1829)

Already known for: Capraia.

Material. Elba, Poggio, 19.X.2002: 1 ♂.

Dryobotodes monochroma (ESPER, 1790)

Already known for: Capraia.

Material. Elba, Bagnaia, 1.–7.X.1980: 2 ♂♂.

Trigonophora flammea (ESPER, 1785)

Already known for: Capraia.

Material. Elba, Marciana, 19.X.2002: 1 ♂.

Mniotype solieri (BOISDUVAL, 1840)

Already known for: Montecristo.

Material. Elba, Bagnaia, 1.–7.X.1980: 2 ♂♂; S. Piero in Campo, 23.IX.2001: 1 ♂; Poggio, 19.X.2002: 1 ♂. Giglio, Campese, 7.X.2001: 1 ♂.

Apamea monoglypha (HUFNAGEL, 1766) *

Material. Elba, M. Perone, 25.–28.VI.1979: 3 ♀♀. Capraia, sopra paese, 28.VI.1993: 1 ♀, BUTTA-RELLI & VALLE leg. (MCSNBG).

Mesapamea secalis (LINNAEUS, 1758)

Already known for: Capraia.

Material. Elba, S. Piero in Campo, 23.IX.2001: 1 ♀.

Luperina dumerilii (DUPONCHEL, 1826)

Already known for: Capraia.

Material. Elba, Bagnaia, 1.–7.X.1980: 1 ♀; S. Piero in Campo, 23.IX.2001: 1 ♀.

Aetheria bicolorata (HUFNAGEL, 1766)

Already known for: Capraia.

Material. Elba, M. Perone, 25.–28.VI.1978: 1 ♂.

Hadena bicruris (HUFNAGEL, 1767) *

Material. Elba, S. Piero in Campo, 17.IV.2002: 1 ♀.

Hadena luteago (DENIS & SCHIFFERMÜLLER, 1775) *

Material. Capraia, 27.V.1992: 1 ♂, 17.V.1989: 1 ♀, BERERA leg. (MCSNBG).

Hadena confusa (HUFNAGEL, 1766)

Already known for: Capraia.

Material. Elba, Fetovaia, 17.IV.2002: 3 ♂♂; S. Piero in Campo, 17.IV.2002: 1 ♂.

Hadena magnolii (BOISDUVAL, 1829) *

Material. Elba, M. Perone, 600 m, 25.–28.VI.1978: 1 ♀.

Hadena sancta (STAUDINGER, 1859) *

Material. Capraia, 21.IV.1992: 1 ♂, 1 ♀, 1.V.1992: 1 ♂, 1 ♀, BERERA leg. (MCSNBG).

Mythimna ferrago (FABRICIUS, 1787)

Already known for: Capraia.

Material. Elba, S. Piero in Campo, 23.IX.2001: 1 ♂.

Mythimna vitellina (HÜBNER, 1808)

Already known for: Pianosa, Capraia.

Material. Elba, M. Perone, 600 m, 16.–21.VII.1979: 1 ♀; Bagnaia, 1.–7.X.1980: 1 ♀.

Mythimna putrescens (HÜBNER, 1824)

Already known for: Capraia.

Material. Elba, Bagnaia, 1.–7.X.1980: 1 ♂; Poggio, 21.VIII.1916: 1 ♂, QUERCI leg. (MZUF). Giglio, Campese, 7.X.2001: 1 ♂.

Mythimna l-album (LINNAEUS, 1767)

Already known for: Giglio, Capraia.

Material. Elba, M. Perone, 16.–21.VII.1978: 1 ♀; 25.–28.VI.1979: 1 ♀.

Mythimna scirpi (DUPONCHEL, 1836)

Already known for: Giglio, Pianosa, Capraia.

Material. Elba, M. Perone, 25.–28.VI.1979: 1 ♂, 1 ♀; S. Piero in Campo, 23.IX.2001: 1 ♀.

Mythimna riparia (RAMBUR, 1829)

Already known for: Capraia.

Material. Elba, S. Piero in Campo, 23.IX.2001: 1 ♂.

Mythimna loreyi (DUPONCHEL, 1827)

Already known for: Montecristo, Capraia.

Material. Giglio, Porto, 7.X.2001: 1 ♀.

Mythimna unipuncta (HAWORTH, 1809)

Already known for: Pianosa, Capraia.

Material. Elba, Marciana Marina, 23.IX.2001: 1 ♀. Giglio, Porto, 7.X.2001: 1 ♂.

Orthosia incerta (HUFNAGEL, 1766) *

Material. Elba, Poggio, 16.IV.2002: 1 ♂.

Orthosia cruda (DENIS & SCHIFFERMÜLLER, 1775) *

Material. Capraia, l'Anghiale, 22.IV.1993: 1 ♀, BUTTARELLI, PANTINI, RAINERI & VALLE leg. (MCSNBG), 19.IV.1993: 1 ♀, leg. PANTINI, RAINERI & VALLE (MCSNBG). Elba, S. Piero in Campo, 17.–18.IV.2002: 2 ♂♂, 3 ♀♀.

Orthosia cerasi (FABRICIUS, 1775)

Already known for: Giglio.

Material. Capraia, l'Anghiale, 22.IV.1993: 1 ♂, BUTTARELLI, PANTINI, RAINERI & VALLE leg. (MCSNBG), 24.IV.1992: 1 ♀, BERERA leg. (MCSNBG). Elba, Monte S. Martino, 17.IV.2002: 2 ♂♂; S. Piero in Campo, 18.IV.2002: 5 ♂♂, 3 ♀♀.

Ochroleura plecta (LINNAEUS, 1761)

Already known for: Montecristo.

Material. Capraia, 20.VI.1992: 1 ♂, BERERA leg. (MCSNBG).

Noctua pronuba LINNAEUS, 1758

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, Bagnaia, 1.–7.X.1980: 1 ♀; Marciana, 23.IX.2001: 1 ♂; S. Piero in Campo, 18.IV.2002: 1 ♂. Giglio, Castello, 7.X.2001: 1 ♂.

Noctua comes HÜBNER, 1813

Already known for: Montecristo, Capraia.

Material. Elba, M. Perone, 25.–28.VI.1979: 1 ♂; Marciana, 23.IX.2001: 2 ♂♂. Giglio, Campese, 7.X.2001: 1 ♂.

Noctua janthe (BORKHAUSEN, 1792)

Already known for: Capraia.

Material. Elba, S. Piero in Campo, 23.IX.2001: 1 ♂.

Noctua interjecta HÜBNER, 1803

Already known for: Capraia.

Material. Elba, M. Perone, 17.VII.1978: 1 ♂.

Lycophotia erythrina (HERRICH-SCHÄFFER, 1852) *

Material. Elba, Poggio, 11.VI.1916: 1 ♂, QUERCI leg. (MZUF); M. Perone, 25.–28.VI.1979: 2 ♀♀.

Xestia xanthographa (DENIS & SCHIFFERMÜLLER, 1775)

Already known for: Capraia.

Material. Elba, Bagnaia, 1.–7.X.1980: 4 ♀♀; S. Piero in Campo, 23.IX.2001: 2 ♂♂, 1 ♀. Giglio, Castello, 7.X.2001: 1 ♀.

Xestia agathina (DUPONCHEL, 1827) *

Material. Elba, Marciana Marina, 18.X.2002: 1 ♀.

Cerastis faceta (TREITSCHKE, 1835)

Already known for: Capraia.

Material. Giglio, Porto, 7.X.2001: 1 ♂.

Peridroma saucia (HÜBNER, 1808)

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, M. Perone, 25.–28.VI.1979: 1 ♀; Marciana, 23.IX.2001: 1 ♂. Giglio, Campese, 7.X.2001: 1 ♂.

Euxoa temera (HÜBNER, 1808) *

Material. Capraia, sopra porto, 21.X.2002: 1 ♂.

Agrotis crassa (HÜBNER, 1803) *

Material. Elba, Poggio, 18.VIII.1916: 1 ♂, leg. QUERCI (MZUF); Marciana, 23.IX.2001: 1 ♀.

Agrotis puta (HÜBNER, 1803)

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, S. Piero in Campo, 18.IV.2002: 2 ♂♂, 1 ♀.

Agrotis gr. puta (predotai) BYTINSKI-SALZ, 1937) *

Material. Giglio, Campese, 7.X.2001: 1 ♂.

Agrotis ipsilon (HUFNAGEL, 1766)

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, Bagnaia, 1.–7.X.1980: 1 ♀; Marciana, 23.IX.2001: 1 ♂. Giglio, Campese, 7.X.2001: 1 ♀.

Agrotis trux (HÜBNER, 1824)

Already known for: Montecristo, Capraia.

Material. Elba, S. Piero in Campo, 23.IX.2001: 1 ♂; Marciana, 19.X.2002: 3 ♀♀. Giglio, Campese, 7.X.2001: 4 ♂♂, 1 ♀; Porto, 7.X.2001: 1 ♀; Castello, 7.X.2001: 1 ♂, 1 ♀.

Note. Dark females of this species are common in thyrrenian islands. Specimens of *Euxoa nigricans* (LINNAEUS, 1761) recorded from Capraia (BERIO, 1993) must be related to this species.

Agrotis segetum (DENIS & SCHIFFERMÜLLER, 1775)

Already known for: Pianosa, Montecristo, Capraia.

Material. Elba, Bagnaia, 1.–7.X.1980: 1 ♂; M. Perone, 25.–28.VI.1979: 1 ♀; Marciana, 23.IX.2001: 1 ♂; S. Piero in Campo, 18.IV.2002: 1 ♂, 1 ♀.

Agrotis spinifera (HÜBNER, 1808)

Already known for: Montecristo.

Material. Capraia, sopra paese, 21.–25.VI.1993: 2 ♂♂, BUTTARELLI & VALLE leg. (MCSNBG).

Pantheidae

Colocasia coryli (LINNAEUS, 1758) *

Material. Elba, S. Piero in Campo, 18.IV.2002: 2 ♂♂.

Lymantriidae

Lymantria dispar (LINNAEUS, 1758)

Already known for: Montecristo.

Material. Elba, VII.1996: 1 ♂. Capraia, 23.VIII.1989: 1 ♂, 23.IX.1989: 1 ♂, BERERA leg. (MCSNBG); sopra paese, 24.–28.VI.1993: 34 ♂♂, BUTTARELLI & VALLE leg. (MCSNBG).

Lymantria atlantica (RAMBUR, 1837)

Already known for: Pianosa.

Material. Elba, Marina di Campo, 23.IX.2001: 1 ♂.

Orgyia antiqua (LINNAEUS, 1758) *

Material. Elba, Val Carene, 20.VII.1978: 1 ♂.

Orgyia rupestris RAMBUR, 1832

Already known for: Elba.

Material. Elba, Monte Capanne, 23.VII.1996: 1 ♂.

Euproctis chrysorrhoea (LINNAEUS, 1758) *

Material. Capraia, 20.–27.V.1992: 51 ♂♂, 6.–28.VI.1989: 59 ♂♂, 1.–20.VI.1992: 171 ♂♂, 7 ♀♀, BERERA leg. (MCSNBG); il Piano, 26.VI.1993: 1 ♂; sopra paese, 21.–28.VI.1993: 33 ♂♂, 3 ♀♀, BUTTARELLI & VALLE leg. (MCSNBG).

Nolidae

Nycteola revayana (SCOPOLI, 1772)

Already known for: Capraia.

Material. Elba, Marciana, 23.IX.2001: 1 ♂.

Bena bicolorana (FUESSLY, 1775) *

Material. Elba, Bagnai, 1.–7.X.1980: 1 ♀.

Arctiidae

Lithosia quadra (LINNAEUS, 1758) *

Material. Capraia, 16.–30.VII.1989: 2 ♂♂, 6.VIII.1989: 3 ♂♂, 23.–28.IX.1989: 5 ♂♂, 1 ♀, 1.–7.X.1989: 1 ♂, 1 ♀, BERERA leg. (MCSNBG).

Eilema caniola (HÜBNER, 1808)

Already known for: Giglio, Pianosa, Montecristo.

Material. Capraia, 1.–24.X.1989: 29 ♂♂, 1 ♀, 7.–28.IX.1989: 12 ♂♂, 26.–30.VIII.1989: 5 ♂♂, 6.–22.VI.1989: 8 ♂♂, 1 ♀, 1.–26.VII.1989: 4 ♂♂, 1 ♀, 22.V.1989: 2 ♂♂, 7.–20.VI.1992: 39 ♂♂, 5 ♀♀, BERERA leg. (MCSNBG); l'Anghiale, 24.–26.VI.1993: 7 ♂♂, 3 ♀♀; il Piano, 25.–28.VI.1993: 28 ♂♂, 9 ♀♀, BUTTARELLI & VALLE leg. (MCSNBG). Elba, Bagnai, 7.VII.1980: 1 ♂, 1 ♀, 1.–7.X.1980: 1 ♂; M. Perone, 25.–28.VI.1979: 4 ♀♀; Val Carene, 20.VII.1978: 1 ♂.

Coscinia cribraria (LINNAEUS, 1758)

Already known for: Elba.

Material. Capraia, 1.X.1989: 1 ♂, BERERA leg. (MCSNBG).

Phragmatobia fuliginosa (LINNAEUS, 1758) +

Already known for: Elba, Pianosa.

Material. Capraia, l'Anghiale, 24.VI.1993: 1 ♂, BUTTARELLI & VALLE leg. (MCSNBG).

Cymbalophora pudica (ESPER, 1784)

Already known for: Giglio, Montecristo.

Material. Elba, Bagnai, 1.–7.X.1980: 1 ♂; Marciana, 23.IX.2001: 2 ♂♂. Capraia, 23.IX.1989: ♂, BERERA leg. (MCSNBG).

Diaphora mendica (CLERCK, 1759) *

Material. Elba, S. Piero in Campo, 17.IV.2002: 1 ♂.

Arctia villica (LINNAEUS, 1758)

Already known for: Giglio.

Material. Capraia, 1.VI.1992: 1 ♂, BERERA leg. (MCSNBG).

Conclusions

As the result of the findings in this work there is a substantial increase of the species recorded in the Tuscan Archipelago. Some of these species are particularly noteworthy. *Lymantria atlantica* was previously collected in Italy only in the islands Pantelleria, Pianosa and Sardinia; *Petrophora binaevata* in Sardinia, Capraia, Montecristo and Maremma. *Hadena sancta* is widespread in the western and eastern Mediterranean area, but absent from the Italian peninsula, where it is replaced by the vicariant *Hadena silenes* (HÜBNER, 1822). *Teia rupestris*, endemic of Sardinia and Corsica, is confirmed for the island Elba, where it was only reported by ZANGHERI (1967) but without a precise localisation. For a discussion about *Agrotis* gr. *puta* (*predotai* BYTINSKI-SALZ, 1937) see DAPPORTO et al. (2002).

Supplement (June 2003)

Please not that *Mythimna impura* HBN. observed from Capraia (BERIO, 1993: 157) has been an error. The specimens belong to *M. congrua* HBN. (2×) and *M. albipuncta* D. & S. (1×). *Mythimna flavicincta meridionalis* BSDV. (BERIO, 1993: 160) is *M. rufocincta* HBN. *Acherontia atropis* is also known from Capraia.

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