

A CHECKLIST OF THE LEPIDOPTERA FROM CORVO ISLAND (AZORES)

Virgílio Vieira & João Tavares

Departamento de Biologia, Universidade dos Açores,
PT-500 Ponta Delgada, São Miguel, Açores, Portugal

ABSTRACT

A list of butterflies and moths collected or observed on Corvo island, Archipelago of the Azores, in July and October 1993, is provided. From that list and from available literature a preliminary checklist of the Lepidoptera of Corvo is elaborated. The families Tineidae, Gracillariidae, Hyponomeutidae, Choreutidae, Tortricidae, Pyralidae, Sphingidae, and Noctuidae, are recorded for the first time for this island. Twenty eight species and subspecies are listed, of which twenty five are new records for Corvo.

RESUMO

No presente estudo é apresentada uma lista das borboletas e traças recolhidas ou observadas em Julho e Outubro de 1993 na ilha do Corvo, Arquipélago dos Açores. A partir desta e da informação bibliográfica disponível foi elaborada a lista preliminar dos Lepidópteros do Corvo. São referidas pela primeira vez as famílias Tineidae, Gracillariidae, Hyponomeutidae, Choreutidae, Tortricidae, Pyralidae, Sphingidae e Noctuidae. Além disso, das vinte e oito espécies e subespécies assinaladas, vinte e cinco constituem primeiras citações para o Corvo.

INTRODUCTION

Corvo is the smallest island of the Azorean Archipelago (17 km²) and is situated 31° 05'W, 36° 40'N. Its geographical position and the comparatively small percentage of its total surface covered with fields are expected to influence the abundance of Lepidoptera species and their hostplants.

The lepidopteran fauna of Corvo was practically unknown; the earliest records (*Pieris brassicae* L. and *Vanessa atalanta* L.) date from last century (Drouët, 1861; Godman, 1870) and provide vague information on the species. Only two confirmed Lepidoptera subspecies, *Pieris brassicae*

azorensis Rebel and *Hipparchia occidentalis minima* (Sousa), were found in recent literature (Sousa, 1985, 1991; Vieira & Pintureau, 1991).

The present paper deals with the lepidopteran fauna data collected during two short visits to Corvo. The faunistic mission to this island intended to provide complementary information on the knowledge of Azorean Lepidoptera, mainly on species considered crop pests (eg. *Mythimna unipuncta* Haworth).

METHODS

Fieldwork was conducted in two visits: 3 July and 18-20 October 1993. Several techniques were used to collect Lepidoptera specimens:

(i) an adapted Pennsylvania light-trap, with TLD 15 W/05 lamp, fed by a 12 V battery coupled with a transformer, was used for noctuids; (ii) entomological net, to capture diurn moths and butterflies; (iii) direct observation of different host plants (in pastures, corn and tomato fields, other vegetable crops and endemic plants), to search for larval instars.

Lepidoptera families and species are listed and named following Leraut (1980). Place, date and number of specimens captured or observed are given for each species. A synonymic list (**Syn.**) and ecological notes are also given. Distributional information on taxa recorded on other islands of the Azores is provided, based on the literature used to elaborate the checklist by Vieira & Pintureau (1991, 1993).

LIST OF SPECIES

Tineidae

Tineinae

Niditinea G. Petersen, 1957

Niditinea fuscipunctella

(Haworth, 1828)

Syn.: *Tinea fuscipunctella* Hw. (Rebel, 1940; Guimarães, 1982; Carvalho, 1982).

Niditinea fuscipunctella (Haw.) Vieira & Pintureau 1991, 1993; (Carvalho, 1992)

Distribution: São Miguel, Terceira, Faial, Flores (Rebel, 1940; Guimarães, 1982; Carvalho, 1982).

CORVO: Vila Nova do Corvo (Matriz), 03.VII.93 and 18-19.X.93, 2 larvae.

Gracillariidae

Gracillariinae

Caloptilia Hübner (1825)

Caloptilia aurantiaca

(Wollaston, 1858)

Syn.: *Caloptilia aurantiaca* (Wollaston) (Carvalho, 1982; 1992; Vieira & Pintureau 1991, 1993).

Distribution: Terceira, Pico, São Jorge, São Miguel (Carvalho, 1982, 1992.; L. Silva, pers. comm.).

CORVO: Calçadas, 18.X.93. Five *C. aurantiaca* larvae were observed mining in *Myrica faya* Aiton (Myricaceae).

Hyponomeutidae

Argyresthiinae

Argyresthia Hübner (1825)

Argyresthia atlanticella

Rebel, 1940

Syn.: *Argyresthia atlanticella* Rebel (Rebel, 1940; Carvalho, 1982, 1992; Vieira & Pintureau, 1991, 1993; Vieira & Silva, in press).

Distribution: Santa Maria, São Miguel, Terceira, Pico, Faial, São Jorge, Flores (Rebel, 1940; Carvalho, 1982, 1992; Vieira & Pintureau, 1991, 1993; Vieira & Silva, in press).

CORVO: Rebentão, 19.X.93, 1 spec.

Plutellinae

Plutella Schrank, 1802

Plutella xylostella Linnaeus,
1758

Syn.: *P. cinerea* Geoffroy in Fourcroy, 1785 (Leraut, 1980). *P. maculipennis* Curtis, 1832 (Leraut, 1980; Carvalho, 1984). *P. cruciferarum* Zeller, 1843 (Real in Balachowsky, 1966; Leraut, 1980). *P. xylostella* L. (Carvalho, 1982; Vieira & Pintureau 1991, 1993.).

Distribution: Terceira, São Jorge, Graciosa, Flores (Carvalho, 1984, 1992; Vieira & Pintureau, 1991).

CORVO: Vila Nova do Corvo (Matriz), 03.VII.93, 3 adults observed on leaves of *Brassicae oleracea* L. (Brassicaceae).

Choreutidae

Tebenna Billberg, 1820

Tebenna bjerkandrella
(Thunberg, 1874)

Syn.: *Choreutis micalis* Mn. (Rebel, 1940). *Choreutis bjerkandrella* T. (Carthy, 1957). *Tebenna bjerkandrella* (T.) (Carvalho, 1982, 1984, 1992; Vieira & Pintureau, 1991, 1993).

Distribution: São Miguel, Faial, Flores, Terceira, Pico, São Jorge (Rebel, 1940; Carthy, 1957; Carvalho, 1982, 1984, 1992).

CORVO: Fojo, 19.X.93. Larval damage was observed in *Mentha suaveolens* Ehrh. (Lamiaceae).

Tortricidae

Olethreutinae

Selania Stephens, 1834

Selania leplastriana Curtis,
1831

Syn.: *S. gueriniana* Duponchel (Leraut, 1980). *S. leplastriana* Curtis (Carvalho, 1982, 1992; Vieira & Pintureau, 1991, 1993).

Distribution: Terceira (Carvalho, 1982).

CORVO: Vila Nova do Corvo (Matriz), 03.VII.93, 1 adult was observed on leaves of *Brassicae oleracea* L. (Brassicaceae).

Cydia Hübner (1825)

Cydia molesta (Busck, 1916)

Syn.: *Grapholita molesta* Busck (Carneiro, 1982). *Cydia molesta* (Busck, 1916) (Carvalho, 1982; Vieira & Pintureau, 1991, 1993).

Distribution: São Miguel, Terceira, Faial, Graciosa (Carneiro, 1982; Carvalho, 1982, 1984; Vieira & Pintureau, 1991).

CORVO: Rebentão, 18.X.93, 3 larvae mining in apple fruit (Rosaceae).

Pyralidae

Pyraustinae

Udea Guenée, 1845

Udea ferrugalis Hübner, 1796

Syn.: *Botys ferruginalis* Hbn (Godman, 1870). *Pionea ferrugalis* Hübner (Rebel, 1940). *Udea ferrugalis* (Hübner) (Carvalho, 1982, 1992; Vieira & Pintureau, 1991, 1993).

Distribution: Santa Maria, São Miguel, Terceira, Pico, Faial, São Jorge, Graciosa, Flores (Godman, 1870; Warren, 1905; Rebel, 1940; Marsden & Wright, 1971).

CORVO: Vila Nova do Corvo (Matriz), 03.VII.93, 18-20.X.93, common. We observed all over the island several adults of this species flying. *U. ferrugalis* larvae feed various Poaceae.

Palpita Hübner [1808]

Palpita unionalis (Hübner, 1796)

Syn.: *Glyphodes unionalis* Hübner (Rebel, 1940). *Palpita unionalis* (Hübner, 1796) (Carvalho, 1982, 1992; Sousa, 1991; Vieira & Pintureau, 1991, 1993).

Distribution: Santa Maria, São Miguel, Terceira, Pico, São Jorge, Flores (Rebel, 1940; Marsden & Wright, 1971; Carvalho, 1982, 1992; Sousa, 1991; Vieira & Pintureau, 1991).

CORVO: Rebentão, 18.X.93, 8 specs.; Amoreira, 19.X.93, 1 spec.

Pieridae

Coliadinae

Colias Fabricius, 1807

Colias crocea (Geoffroy in
Fourcroy, 1785)

Syn.: *Colias edusa* F. (Godman, 1870;

South, 1894; Rebel, 1917). *Colias croceus* Fourc. (Bernardi, 1961). *Colias crocea crocea* Geoff. (Steiniger, 1976). *Colias crocea* Fourc. (Rebel, 1940; Carthy, 1957; Marsden & Wright, 1971). *Colias crocea* Geoff. (Leestmans, 1975; Sousa, 1991; Meyer, 1991a; Vieira & Pintureau, 1991, 1993).

Distribution: São Miguel, Santa Maria, Faial, Graciosa, Pico, Flores, Terceira, São Jorge (Godman, 1870; Rebel, 1940; Carthy, 1957; Steiniger, 1976; Carvalho, 1982; Sousa, 1991; Meyer, 1991a; Vieira & Pintureau, 1991).

CORVO: Vila Nova do Corvo (Airport), 03.VII.93., 1 spec.; Airport and Entre Paredes, 19.X.93, 15 specs. The range of this species is confined at low altitudes, and often at medium altitudes. During the mission pure *C. crocea* was common, but in some areas few individuals of two forms (*f. helice* Hübner and *f. heliciana* Oberthür) might have been flying together.

Pierinae

Pieris Schrank, 1801

Pieris brassicae azorensis

Rebel, 1917

Syn.: *Pieris brassicae* L. (Morelet, 1860; Drouët, 1861; Godman, 1870; South, 1894; Carneiro, 1982). *Pieris brassicae ab. chariclea* Stph. (Warren, 1905). *Pieris brassicae brassicae* L. (Bernardi, 1961). *Pieris brassicae azorensis* Rbl. (Rebel, 1917, 1940; Carthy, 1957; Marsden & Wright, 1971; Leestmans, 1975; Steiniger, 1976; Carvalho, 1982; Sousa, 1991; Meyer, 1991a; Vieira & Pintureau, 1991, 1993).

Distribution: "Habite tout l'archipel. Common." (Drouët, 1861), "eastern, central and western groups" (Godman, 1870), São Miguel, Graciosa, São Jorge, Pico,

Faial, Terceira, Flores, Corvo, Santa Maria (Warren, 1905; Rebel, 1940; Carthy, 1957; Steiniger, 1976; Carvalho, 1982; Fontoura, 1917 in Carneiro, 1982; Sousa, 1991; Meyer, 1991a; Vieira & Pintureau, 1991).

CORVO: Vila Nova do Corvo, 03.07.93., 35 specs; 18-20.X.93. *P. b. azorensis* is very common at low altitudes, often at relatively medium altitudes, and is absent or very rare at high altitudes of Corvo island (maxim altitude: 718 m). The food-plants of the *P. b. azorensis* larva are preferentially *Brassicae oleracea* L. - vars and cvs (Brassicaceae).

Nymphalidae

Nymphalinae

Vanessa Fabricius, 1807

Vanessa atalanta (Linnaeus, 1758)

Syn.: *Pyrameis atalanta* L. (Godman, 1870; South 1894; Rebel, 1917, 1940). *Vanessa atalanta* L. (Bernardi, 1961; Leestmans, 1975; Carvalho, 1982; Sousa, 1991; Meyer, 1991a; Vieira & Pintureau, 1991, 1993).

Distribution: "Found in all the islands I visited" (Godman, 1870), São Miguel, Santa Maria, Faial, Terceira, Flores, São Jorge (Rebel, 1940; Carvalho, 1982; Sousa, 1991; Meyer, 1991a; Vieira & Pintureau, 1991, 1993; Vieira & Silva, in press).

CORVO: During Summer the adults have been observed at Vila Nova do Corvo (Dr. Cardigos, pers. com.). On the other hand, the presence of the larva's preferential hostplant, *Urtica dubia* Forsk. (Urticaceae), probably assures its existence on this island.

Satyridae

Satyrinae

Hipparchia Fabricius, 1807

Hipparchia occidentalis minima (Sousa, 1985)

Syn.: *Hipparchia azorina minima* Sousa (Sousa, 1985; Vieira & Pintureau, 1991). *Hipparchia occidentalis minima* Sousa (Meyer, 1991a; Vieira & Pintureau, 1991, 1993).

Distribution: CORVO (Sousa, 1985). This endemic subspecies was captured at external slope of Caldeirão (between 600—800 m) (Sousa, 1985). The foodplant of the *Hipparchia* larva is *Festuca jubata* Lowe (Poaceae), which grows only in montane regions (Oehmig, 1981).

Sphingidae

Sphinginae

Agrius Hübner (1819)

Agrius convolvuli Linnaeus, 1758

Syn.: *Herse convolvuli* L. (Rebel, 1940; Carthy, 1957). *Sphinx convolvuli* L. (Drouët, 1861; Godman, 1870). *Agrius convolvuli* L. (Carneiro, 1982; Carvalho, 1982; Sousa, 1991; Vieira & Pintureau, 1991, 1993).

Distribution: Santa Maria, Flores, São Jorge, Faial, Terceira, São Miguel (Morelet, 1860; Drouët, 1861; Godman, 1870; Rebel, 1940; Carthy, 1957; Carneiro, 1982; Carvalho, 1982; Sousa, 1991).

CORVO: Vila Nova do Corvo (Matriz and Cascalho), 03.VII.93, 3 specs. *A. convolvuli* larvae were observed attacking *Ipomoea batatas* (L.) (Convolvulaceae).

Noctuidae

Noctuinae

Agrotis Ochsenheimer, 1816

Agrotis segetum (Denis & Schiffermuller, 1775)

Syn.: *Scotia segetum* Schiff. (Carneiro, 1982). *Agrotis segetum* Schiff. (Godman, 1870; South, 1894; Warren, 1905; Rebel, 1917, 1940; Carvalho, 1982; Sousa, 1991; Vieira & Pintureau, 1991, 1993).

Distribution: Flores, Santa Maria, São Miguel, Terceira, São Jorge, Graciosa (Godman, 1870; Warren, 1905; Rebel, 1940; Carvalho, 1982; Carneiro, 1982; Sousa, 1991; Vieira & Pintureau, 1991).

CORVO: Rebentão, 18.X.93, 1 spec.

Noctua Linnaeus, 1758

Noctua atlantica (Warren, 1905)

Syn.: *Agrotis atlantica* Warr. (Warren, 1905; Rebel, 1917, 1940). *Rhyacia atlantica* Warr. (Warren, 1909-1914). *Triphaena atlantica* Warr. (Draudt, 1938). *Noctua atlantica* Warr. (Pinker, 1971; Carvalho, 1982; Meyer, 1991b; Vieira & Pintureau, 1991, 1993).

Distribution: Graciosa, São Jorge, São Miguel, Terceira, Faial, Flores, Pico (Warren, 1905; Carvalho, 1982; Meyer, 1991b; Vieira & Pintureau, 1991).

CORVO: Rebentão, 18.X.93, 2 specs.; Loural, 19.X.93, 2 specs.

Noctua pronuba (Linnaeus, 1758)

Syn.: *Agrotis pronuba* L. (Warren, 1905; Rebel, 1917, 1940). *Triphaena pronuba* L. (Carthy, 1957). *Noctua pronuba* L. (Carneiro, 1982; Carvalho, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991, 1993).

Distribution: Faial, São Jorge, Santa Maria, São Miguel, Pico, Terceira, Flores (Warren, 1905; Rebel, 1940; Carthy, 1957; Carvalho, 1982; Carneiro, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991).

CORVO: Rebentão, 18.X.93, 2 specs.; Loural, 19.X.93, 4 specs.

Peridroma Hübner (1821)

Peridroma saucia (Hübner,
[1808])

Syn.: *Agrotis saucia* HB. (Godman, 1870; South, 1894; Warren, 1905; Rebel, 1917). *Agrotis saucia margaritosa* HW. (Rebel, 1940). *Peridroma saucia* HB. (Carvalho, 1982; Meyer, 1991b; Vieira & Pintureau, 1991, 1993).

Distribution: Faial, São Jorge, São Miguel, Pico, Terceira, Santa Maria, Graciosa, Flores (Godman, 1870; Warren, 1905; Rebel, 1940; Carvalho, 1982; Meyer, 1991b; Vieira & Pintureau, 1991).

CORVO: Vila Nova do Corvo, Rebentão, 18.X.93, 4 specs.; Loural, 19.X.93, 3 specs. Larvae are common on pasture plants.

Xestia Hübner, 1818

Xestia c-nigrum (Linnaeus, 1758)

Syn.: *Agrotis c-nigrum* L. (Warren, 1905; Rebel, 1917, 1940). *Amathes c-nigrum* L. (Carthy, 1957; Carneiro, 1982). *Xestia c-nigrum* L. (Carvalho, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991, 1993).

Distribution: Faial, Flores, Graciosa, São Jorge, Santa Maria, São Miguel, Pico, Terceira (Warren, 1905; Rebel, 1940; Carthy, 1957; Carvalho, 1982; Carneiro, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991).

CORVO: Rebentão, 18.X.93, 300 specs.; Loural, 19.X.93, 100 specs. *X. c-nigrum* larvae may be found on a great variety of plants in cultivated land and pastures of Corvo.

Hadeninae

Mythimna Ochsenheimer, 1816

Mythimna unipuncta (Haworth,
1809)

Syn.: *Leucania extranea* (Godman, 1870;

South, 1894). *Leucania unipuncta* Haw. (Warren, 1905; Rebel, 1917, 1940). *Pseudaletia unipuncta unipuncta* Haw. (Carthy, 1957). *Mythimna unipuncta* Haw. (Carneiro, 1982; Carvalho, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991, 1993).

Distribution: Faial, Flores, Graciosa, São Jorge, Santa Maria, São Miguel, Pico, Terceira (Godman, 1870; Warren, 1905; Rebel, 1940; Carthy, 1957; Carvalho, 1982; Carneiro, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991).

CORVO: Vila Nova do Corvo (03.VII.93), Rebentão (18.X.93), Roças and Loural (19.X.93); 140 specs. *M. unipuncta* larvae attack many plants, mainly from cereal crop areas, pastures and forrages. It is considered the most important pest of pasture grass at the Azores archipelago.

Amphipyriinae

Phlogophora Treitschke, 1825

Phlogophora meticulosa
(Linnaeus, 1758)

Syn.: *Brotomia meticulosa* L. (Warren, 1905; Rebel, 1917, 1940). *Phlogophora meticulosa* L. (Carvalho, 1982; Meyer, 1991b; Vieira & Pintureau, 1991, 1993).

Distribution: Faial, Graciosa, São Jorge, Santa Maria, São Miguel, Terceira, Flores, Pico (Warren, 1905; Rebel, 1940; Carvalho, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991).

CORVO: Rebentão, 18.X.93, 1 spec.

Mesapamea Heinicke, 1959

Mesapamea storai (Rebel, 1940)

Syn.: *Hadena storai* RBL. (Rebel, 1940; Carvalho, 1982; Vieira & Pintureau, 1991). *Mesapamea acorina* (Pinker, 1971: f. *strigata*, f. *i-niger*, f. *oculea*, f. *leucostigma*; Carvalho, 1982). *Mesapamea storai*

RBL (Meyer, 1991b; Vieira & Pintureau, 1993).

Distribution: Flores, São Miguel, Terceira, Faial, São Jorge, Pico (Rebel, 1940; Pinker, 1971; Carvalho, 1982; Meyer, 1991b).

CORVO: Loural, 19.X.93, 1 spec.

Sesamia Guenée, 1852

Sesamia nonagrioides (Lefebvre, 1827)

Syn.: *Sesamia nonagrioides* LEF. (Rebel, 1940; Carneiro, 1982; Carvalho, 1982; Vieira & Pintureau, 1991, 1993).

Distribution: São Miguel, Terceira, Graciosa, Flores, Faial, Pico, São Jorge (Rebel, 1940; Carneiro, 1982; Carvalho (1982); Vieira & Pintureau, 1991, 1993; Vieira & Silva, in press).

CORVO: Rebentão, 18.X.93, 1 pupa in the bark of *Zea mays* L. (Poaceae).

Galgula Guenée, 1852

Galgula partita (Guenée, 1852)

Syn.: *Calgula partita* GN. (Draudt, 1938; Rebel, 1940; Carvalho, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991, 1993).

Distribution: Santa Maria, São Miguel, Terceira, Faial, São Jorge, Graciosa, Flores, Pico (Rebel, 1940; Carvalho, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991, 1993; Vieira & Silva, in press).

CORVO: Rebentão, 18.X.93, 2 specs.; Vila Nova do Corvo, 19.X.93, 1 adult seen under a street light.

Plusiinae

Autographa Hübner (1821)

Autographa gamma
(Linnaeus, 1759)

Syn.: *Plusia gamma* L. (Godman, 1870;

South, 1894; Rebel, 1917, 1940). *Autographa gamma* L. (Carneiro, 1982; Carvalho, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991, 1993).

Distribution: Faial, Flores, Santa Maria, São Miguel, Terceira, São Jorge, Pico (Godman, 1870; Rebel, 1940; Carvalho, 1982; Carneiro, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991).

CORVO: Vila Nova do Corvo (Cascalho), 03.VII.93, 1 adult observed flying over a *B. oleracea* culture. One larva feeding on a leaf of *B. oleracea*, 19.X.93.

Trichoplusia McDunnough, 1944.

Trichoplusia orichalcea
(Fabricius, 1775)

Syn.: *Phytometra orichalcea* F. (Warren, 1909-1914). *Plusia aurifera* HB. (Rebel, 1917; Rebel, 1940). *Chrysodeixis orichalcea* HB. (Carneiro, 1982). *Trichoplusia orichalcea* F. (Carvalho, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991, 1993).

Distribution: Faial, Flores, Santa Maria, São Miguel, Terceira, São Jorge, Pico (Warren, 1909-1914; Rebel, 1940; Carvalho, 1982; Hampson (1907) in Carneiro (1982); Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991, 1993; Vieira & Silva, in press).

CORVO: Vila Nova do Corvo (Cascalho), 20.X.93, 1 spec. Two pupae were observed on *I. batatas*.

Ctenoplusia Dufay, 1970

Ctenoplusia limbirena (Guenée, 1852)

Syn.: *Phytometra limbirena* GN. (Draudt, 1938). *Ctenoplusia limbirena* GN. (Carvalho, 1982); Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991, 1993).

Distribution: Santa Maria, São Miguel, Terceira, Faial, Flores, São Jorge, Pico (Carvalho, 1982; Sousa, 1991; Meyer, 1991b; Vieira & Pintureau, 1991).

CORVO: Vila Nova do Corvo, 19.X.93, 1 adult captured under a street light.

Hypeninae

Hypena Schrank (1802)

Hypena obsitalis (Hübner, 1811-1813)

Syn.: *Hypena obstitalis* (Godman, 1870). *Hypena obsitalis* HB. (South, 1894; Warren, 1905; Rebel, 1917, 1940; Carvalho, 1982; Meyer, 1991b; Sousa, 1991; Vieira & Pintureau, 1991, 1993).

Distribution: Faial, Flores, Graciosa, Santa Maria, São Miguel, Pico, Terceira (Godman, 1870; Warren, 1905; Rebel, 1940; Carvalho, 1982; Meyer, 1991b; Sousa, 1991).

CORVO: Rebentão, 19.X.93, 1 spec.

CHECKLIST

*: Taxa endemic to the Azores, following Vieira & Pintureau (1993).

Niditinea fuscipunctella (Haworth)

Caloptilia aurantiaca (Wollaston)

**Argyresthia atlanticella* Rebel

Plutella xylostella L.

Tebenna bjerkanndrella (Thunberg)

Selania leplastriana Curtis

Cydia molesta (Busck)

Udea ferrugalis Hübner

Palpita unionalis (Hübner)

Colias crocea (Geoffroy in Fourcroy)

**Pieris brassicae azorensis* Rebel

Vanessa atalanta (L.)

**Hipparchia occidentalis minima* (Sousa)

Agrius convolvuli L.

Agrotis segetum (Denis & Schiff.)

**Noctua atlantica* (Warren)

Noctua pronuba (L.)

Peridroma saucia (Hübner)

Xestia c-nigrum (L.)

Mythimna unipuncta (Haworth)

Phlogophora meticulosa (L.)

Mesapamea storai (Rebel)

Sesamia nonagrioides (Lefebvre)

Galgula partita (Guenée)

Autographa gamma (L.)

Trichoplusia orichalcea (Fabricius)

Ctenoplusia limbirena (Guenée)

Hypena obsitalis (Hübner)

DISCUSSION

Twenty-eight species and subspecies of Lepidoptera are listed for Corvo island. Five additional taxa were observed there (Vila Nova do Corvo, Cancelas, Caldeirão), but were not captured and identified. This number can be compared with the total number of Lepidoptera in Azores, which today is of about 161 (Vieira & Pintureau, 1993). Most taxa records have been made in the islands of central and eastern groups of the archipelago. Only *H. o. minima* seems restricted to Corvo. Considering the very small size of the island, the number of species recorded can be considered high relative to the number present at the archipelago, almost double of that previously estimated by Vieira & Pintureau (1993). Since the main scope of the research in which the present work fits is on biological control of agricultural pests, some lepidopteran families have been more prospected than others, what may have influenced the elaboration of the present checklist.

ACKNOWLEDGMENTS

We would like to express our thanks to Dr. João Cardigos (Câmara Municipal do Corvo) and his collaborators, specially Mr Óscar and José Mendonça who, in different practical ways, contributed to the success of the field work in 1993.

The entomological investigations on Corvo island in October 1993 were supported by the University of Azores, STRIDE Program, FEDER and JNICT.

LITERATURE CITED

- BALACHOWSKY, A.S., 1966. *Entomologie appliquée à l'agriculture — Lépidoptères*. Tome II, Vol. I., 1057 pp. Massie et Cie, Paris.
- BERNARDI, G., 1961. *Biogéographie et spéciation des Lépidoptères Rhopalocères des Iles méditerranéennes*. In: Le peuplement des Iles méditerranéennes et le problème de l'insularité, 94.e Colloque International du C.N.R.S. de 1959, Banyuls-sur-Mer, pp.181-215.
- CARNEIRO, M.C., 1982. Pragas das culturas na Ilha de S. Miguel. *Boletim da Sociedade portuguesa de Entomologia*, 7 (Supl. A): 7-33.
- CARTHY, J.D., 1957. Aspects of the fauna and flora of the Azores. XI. Lepidoptera. *Annals and Magazine of Natural History* (ser.12), 10: 209-214.
- CARVALHO, J.P., 1982. Àcerca da inventariação dos Lepidópteros dos Açores. *Boletim da Sociedade Portuguesa de Entomologia*, 7 (Supl. A): 169-198.
- CARVALHO, J.P., 1984. *Notas acerca de pragas de culturas dos Açores*, 47 pp. Universidade dos Açores, Ponta Delgada.
- CARVALHO, J.P., 1992. Notas sobre os microlepidópteros dos Açores. *Boletim da Sociedade Portuguesa de Entomologia*, 1(3): 261-270.
- DRAUDT, M., 1938. Die palaearktischen eulenartigen Nachtfalter. In A. SEITZA: *Die GrossSchmetterlinge der Erde*, Suppl. Bd., 3:1-332.
- DROUET, H., 1861. *Eléments de la faune Açoréenne*, 245 pp. J.-B. Baillièrre & Fils, Librairie de l'Académie de Médecine, Paris.
- GODMAN, F.D-C., 1870. *Natural History of the Azores, Western Islands*, 345 pp. John Van Voorst & Paternoster Row, eds, London.
- GUIMARÃES, J.A.M., 1982. Da fauna acarológica e entomológica associada a produtos armazenados nos Açores. *Boletim da Sociedade Portuguesa de Entomologia*, 7(Supl. A): 53-69.
- LEESTMANS, R., 1975. Etude biogéographique et écologique des Lépidoptères des Iles Canaries (Insecta Lepidoptera). *Vieraea*, 4/1-2: 9-106.
- LERAUT, P., 1980. *Liste Systématique et Synonymique des Lépidoptères de France, Belgique et Corse*, 334 pp. Supplément au Bulletin de la Société entomologique de France, Paris.
- MARSDEN, C.A., & P.L. WRIGHT, 1971. A note on the distribution of the Rhopalocera on the island of São Jorge (Azores). *Entomologist's Record and Journal of Variation*, 83: 179-186.

- MEYER, M., 1991a. Les Lépidoptères de la région macaronésienne. I- *Papilionoidea* des Açores "Checklist" et observations en juillet-août 1990 (Lepidoptera: Rhopalocera). *Linneana Belgica*, 13(3): 99-116.
- MEYER, M., 1991b. Les Lépidoptères de la région macaronésienne. II- Liste des Macro-Hétérocères observés en juillet-août 1990 aux Açores (Lepidoptera: Geometridae, Sphingidae, Noctuidae). *Linneana Belgica*, 13(3): 117-134.
- MORELET, A., 1860. *Notice sur l'Histoire Naturelle des Açores suivie d'une description des Mollusques terrestres de cet archipel*, 216 pp. J.-B. Baillière & Fils, Paris.
- PINKER, R., 1971. Neue und interessante Lepidopteren aus Madeira und den Azoren mit faunistischen Hinweisen auf die Kanaren. *Zeitschrift der Wiener entomologischen Gesellschaft*, 54: 101-131.
- REBEL, H., 1917: Siebenter Beitrag zur Lepidopterenfauna der Kanaren. *Annalen des k.u.k. Naturhistorischen Hofmuseums in Wien*, 31: 1-62.
- REBEL, H., 1940. Die Lepidopterenfauna des Azorischen Archipels. Im Anhang: Eine Lepidopteren-Ausbeute von Madeira. *Societas Scientiarum Fennica, Communicationes Biologicae*, 8(1): 1-59.
- SOUSA, A.B., 1985. Duas novas subespécies de *Hipparchia azorina* (Lepidoptera, Satyridae) dos Açores: *H. azorina barbara* N.SSP. e *H. azorina minima* N.SSP. respectivamente. *Boletim da Sociedade Portuguesa de Entomologia* (Supl. 1): 375-382.
- SOUSA, A. B., 1991. Novas citações de Lepidópteros para os Açores. *Boletim da Sociedade Portuguesa de Entomologia*, 133 (V-1): 1-15.
- SOUTH, R., 1894. Recent Literature: The butterflies and moths of Teneriffe. By A. E. Holt White. Edited by Rashleigh Holt White, London L. Reeve & Co. 1894. *The Entomologist*, 27/371: 155-156.
- STEINIGER, G., 1976. Wanderfalterbeobachtungen auf den Azoren. *Atalanta Würzburg*, 7(1): 35-36.
- VIEIRA, V., & B. PINTUREAU, 1991. Diversité comparée des Lépidoptères (Insecta) dans les îles des Açores. *Arquipélago* (Life and Earth Sciences), 9: 25-35.
- VIEIRA, V., & B. PINTUREAU, 1993. Diversité comparée des Lépidoptères (Insecta) dans les îles des Açores: révision avec de nouvelles données. *Arquipélago* (Life and Ocean Sciences), 11A:107-112.
- VIEIRA, V., & L. SILVA, in press. Rhopalocera and Heterocera (Insecta, Lepidoptera) observed in four islands of the Azores. Museu Municipal do Funchal.
- WARREN, W., 1905. Lepidoptera collected by W. R. Ogilvie-Grant on the Azores and Madeira in 1903. *Novitates zoologicae*, 12: 439-447.
- WARREN, W., 1909-1914 (1915). Volume III: Noctuelles. In SEITZ, A.: *Les Macrolépidoptères du Globe, 1ère partie: Les Macro-épidoptères de la Région Paléarctique*. Stuttgart.