

A FURTHER CONTRIBUTION TO THE KNOWLEDGE OF THE COLEOPTERA (INSECTA) FROM THE AZORES

By ARTUR R. M. SERRANO * & PAULO A. V. BORGES **

ABSTRACT. The authors present in this account a list of 86 species of Coleoptera. Fifteen of these are reported for the first time for the Azores Archipelago, seven of which are new to Macaronesia. The number of new records for each island are: Santa Maria 16, S. Miguel 3, Terceira 75, S. Jorge 1, Graciosa 2 and Corvo 2.

RESUMO. Os autores apresentam neste trabalho uma lista de 86 espécies de Coleópteros do arquipélago dos Açores. Desta lista, 15 espécies são citadas pela primeira vez para este arquipélago sendo 7 igualmente novas para a Macaronésia. São ainda referenciadas várias espécies pela primeira vez para as ilhas Santa Maria (16), S. Miguel (3), Terceira (75), S. Jorge (1), Graciosa (2) e Corvo (2).

1. INTRODUCTION

This account is the result of the study of specimens collected on the islands of Santa Maria, S. Miguel, Terceira, S. Jorge, Graciosa and Corvo (Azores). The material of the island of Terceira was collected by the latter of the authors during recent years (1982 to 1986). The material of the other islands was collected by D. T. POMBO (Santa Maria, S. Miguel, Graciosa, and Corvo), J. P. CARVALHO (S. Jorge and Graciosa) and B. SOUSA (S. Miguel).

From the study of the vast material collected we report only the novelties. Thus fifteen species were found to be new to this archipelago, 7 of which are new to Macaronesia. The number of new records for each island are Santa Maria (16), S. Miguel (3), Terceira (75), S. Jorge (1), Graciosa (2) and Corvo (2).

* Departamento de Zoologia e Antropologia, R. da Escola Politécnica 1200 Lisboa, Portugal.

** Canada Folhadais, 62 S. Pedro, 9700 Angra do Heroísmo, Terceira — Açores — Portugal.

In the list of the species one asterisc indicates that the species are new to the Azores and two asterisks indicate that the species are new to Macaronesia.

All specimens belonging to the Nitidulidae, were examined by JELINEK (N. M. P.), including the specimens studied by SERRANO (1982). As can be seen in the list of species belonging to this family some corrections were made.

Some specimens of the Staphylinidae and Nitidulidae were captured in a trap with banana refuse. For each species the island(s), the date(s) and the number of specimens collected are given. Ecological and zoogeographical comments are also made.

2. LIST OF SPECIES

CARABIDAE

2.1. *Bembidion (Ocys) harpaloides* Serv.

TERCEIRA: Terra Chã, 5 exs., 8.vii.1983, 18.x.1983, 8.viii.1985, 2.iv.1986.

Subcortical, in *Eucalyptus globulus* and *Pinus* sp..

Madeira, northern Africa, southern Europe, British Isles, Syria and Western Siberia.

2.2. *Tachys micros* (Fish.)

SANTA MARIA: Aeroporto, 1 ex., 30.ix.1985.

Canary Islands, northern Africa, Algeria, Spain, southern Europe, Caucasus.

2.3. *Perigona nigriceps* (Dej.)

TERCEIRA: Terra Chã, 1 ex., 15.viii.1986.

In decaying vegetables.

Madeira, Canary Islands, Cape Verde Islands, northern Africa (?), Iberian Peninsula, almost cosmopolitan.

2.4. *Harpalus (Pseudophonus) rufipes* (Deg.)

CORVO: Without specific localization, 1 ex., 27.iv.1981.

Madeira and Palearctic region.

2.5. *Pterostichus (Lagarus) vernalis* (Panz.)

TERCEIRA: Pico Rachado, 1 ex., 13.iv.1985; Lagoa Ginjal (Achada), 35 exs., 3.iv.1986, 6.viii.1986, 13.viii.1986, 20.viii.1986.

Under stones near the shore of a lake, associated with wet debris and moss.

Palearctic.

2.6. ***Philorhizus melanocephalus* Dej.

SANTA MARIA: Aeroporto, 4 exs., 14.vii.1985, 22.viii.1986.
Under the bark of *Eucalyptus globulus*.
Palearctic.

DYTISCIDAE

2.7. *Agabus bipustulatum* (L.)

TERCEIRA: Pico Rachado, 2 exs., 19.viii.1982; Agualva, 5 exs., 9.viii.1986.
Europe, northern Africa and Asia.

2.8. *Rhantus pulverosus* (Steph.)

TERCEIRA: Agualva, 1 ex., 9.viii.1986; Achada, 1 ex., 20.viii.1986.

Northern Africa, Egypt, Europe (excl. north), Asia, New Zealand, Australia, New Caledonia.

HYDROPHILIDAE

2.9. *Dactylosternum insulare* (Lap.)

TERCEIRA: Terra Chã, 6 exs., 14.viii.1985, 21.viii.1985, 2.viii.1986; Lixeira (Angra do Heroísmo), 3 exs., 16.viii.1986.

In cow dung and in decaying vegetables.

Santa Helena, Algeria, France, Sicily, Syria, Oceania, Mauritius.

2.10. *Cercyon absoletus* (Gyll.)

TERCEIRA: Terra Chã, 2 exs., 18.x.1983; Pau Velho, 10 exs., 20.viii.1985; S. Mateus, 1 ex., 4.iv.1986; Achada, 1 ex., 13.viii.1986.

In cow dung and fruit remains.

Algeria, southern and central Europe and Sweden.

2.11. *Cercyon nigriceps* (Marsh.)

TERCEIRA: Terra Chã, 3 exs., 18.x.1983, 5.viii.1986, 12.viii.1986; Lixeira (Angra do Heroísmo), 5 exs., 16.viii.1986.

In fruit remains and decaying vegetables.

Holarctic region. Almost cosmopolitan.

2.12. *Cercyon haemorrhoidalis* (F.)

TERCEIRA: Pico Rachado, 1 ex., 19.viii.1982; Pico da Urze, 4 exs., 5.viii.1985; Pau Velho (Biscoitos), 28

exs., 14.viii.1985; Terra Chã, 170 exs., 14.viii.1985, 13.iii.1986, 31.iii.1986, 1 - 2.iv.1986, 2.iv.1986, 13.iv.1986, 5.viii.1986, 12.viii.1986, 15.viii.1986; Achada, 18 exs., 3.iv.1986, 13.viii.1986, 20.viii.1986; S. Mateus, 52 exs., 4.iv.1986; Fonte Faneca, 13 exs., 5.iv.1986; Lixeira (Angra do Heroísmo), 1 ex., 1.viii.1986; Pico Alto, 4 exs., 18.viii.1986.

In cow dung, fruit remains and decaying vegetables.
Europe.

2.13. **Cercyon quisquilius* L.

TERCEIRA: Pau Velho, 11 exs., 10.viii.1985, 14.viii.1985; Terra Chã, 3 exs., 31.iii.1986; Pico Alto, 2 exs., 18.viii.1986.

In cow dung.
Palearctic.

2.12. *Enochrus bicolor* (F.)

GRACIOSA: Caldeira, 1 ex., 23.viii.1982.
Canary Islands, Europe.

PTILIIDAE

2.15. *Ptenidium pusillum* (Gyll.)

TERCEIRA: Terra Chã, 32 exs., 28.x.1983, 12.viii.1985, 25.iii.1986, 27.iii.1986, 31.iii.1986, 1 - 2.iv.1986, 15.iv.1986, 7.viii.1986, 15.viii.1986; Angra do Heroísmo, 2 exs., 29.iii.1986; Lixeira (Angra do Heroísmo), 1 ex., 16.viii.1986.

In moss and decaying vegetables.
Europe, Iran, America.

STAPHYLINIDAE (1)

(1) In this family we do not include the *Atheta* spp..

There are great difficulties in the systematics of the group. A taxonomic revision of the entire genus is badly needed and identification of species is very difficult under the present circumstances.

2.16. *Proteinus atomarius* Er.

TERCEIRA: Terra Chã, 92 exs., 28.x.1983, 1 - 2.iv.1986, 5.iv.1986, 15.iv.1986.

In decaying fungi, under dead leaves and in fruit remains.
Mediterranean region, Europe, Caucasus, northern America.

2.17. *Phloeonomus azoricus* Fauv.

TERCEIRA: Terra Chã, 1 ex., 2.viii.1986; Fonte Faneca, 5 exs., 8.viii.1986; Serreta, 2 exs., 10.viii.1986.

In fruit remains and in the Laurisilva.

Endemic.

2.18. *Oxytelus (Anotylus) nitidifrons* Woll.

TERCEIRA: Terra Chã, 53 exs., 18.x.1983, 28.x.1983, 3.xi.1983, 10.ix.1984, 17.ix.1984, 15.x.1984, 3.viii.1985, 9.viii.1985, 12.viii.1985, 14.viii.1985, 2.viii.1986, 5.viii.1986, 7.viii.1986, 15.viii.1986, 16.viii.1986; Pau Velho, 1 ex., 14.viii.1985.

In fruit remains (banana, tomato, apple), in cow dung and in bones. A very common *Oxytelus* associated with material undergoing decomposition.

St.Helena, Africa, Asia, Oceania, Madeira and Canary Islands.

2.19.** *Oxytelus speculifrons* Kr.

TERCEIRA: Terra Chã, 1 ex., 10.v.1982.

In cow dung.

Southern Europe.

2.20. *Stenus guttula* Müll.

TERCEIRA: Agualva, 1 ex., 9.viii.1986; Lagoa Ginjal (Acha-da), 9 exs., 13.viii.1986, 20.viii.1986.

A hygrophilous species.

Mediterranean region, Europe, northern Africa, Madeira and Canary Islands.

2.21. *Stilicus orbiculatus* (Payk.)

TERCEIRA: Terra Chã, 17 exs., 5.x.1984, 12.viii.1985, 25.iii.1986, 31.vii.1986, 5.viii.1986, 7.viii.1986; Lixeira (Angra do Heroísmo), 1 ex., 13.viii.1986.

In fruit remains and decaying vegetables.

Europe, Asia Minor, Caucasus, Australia, Madeira and Canary Islands.

2.22. *Hypomedon propinquus* Bris.

SANTA MARIA: Aeroporto, 2 exs., 31.viii.1985, 30.ix.1985; Miradouro dos Picos, 1 ex., 26.vii.1986.

Under dead leaves of *Acacia* sp..

TERCEIRA: Lixeira (Angra do Heroísmo), 1 ex., 16.viii.1986; Terra Chã, 1 ex., 3.x.1983.

In decaying vegetables.

Algeria, Western Europe, British Isles, Madeira and Canary Islands.

2.23. *Lithocharis ochracea* (Grav.)

SANTA MARIA: Aeroporto, 1 ex., 26.viii.1986.

TERCEIRA: Terra Chã, 2 exs., 9.viii.1983, 14.viii.1985; Lixeira (Angra do Heroísmo), 7 exs., 16.viii.1986.

In decaying vegetables.

Atlantic islands, cosmopolitan of warm and temperate zones.

2.24. *Philonthus politus* (L.)

TERCEIRA: Terra Chã, 4 exs., 25.iii.1986, 12.viii.1986; Lixeira (Angra do Heroísmo), 32 exs., 1.viii.1986, 13.viii.1986, 16.viii.1986.

In decaying vegetables and fruit remains, under *Pinus* sp., in cow and horse dung and dead mice.

Northern Africa, Holarctic region, New Zealand, Australia, Madeira.

2.25. *Philonthus pachycephalus* Nordm.

TERCEIRA: Terra Chã, 4 exs., 31.iii.1986, 7.viii.1986; Lixeira (Angra do Heroísmo), 1 ex., 13.viii.1986.

In dead mice, fruit remains and decaying vegetables.

Holarctic region, Australia, northern Africa, Madeira and Canary Islands.

2.26. *Philonthus umbratilis* (Grav.)

TERCEIRA: Lagoa Ginjal (Achada), 1 ex., 13.viii.1986; Lixeira (Angra do Heroísmo), 1 ex., 13.viii.1986.

In decaying vegetables and under stones near the shore of a lake.

Holarctic region, Madeira and Canary Islands.

2.27. *Philonthus discoideus* (Grav.)

TERCEIRA: Terra Chã, 4 exs., 21.viii.1985; Lixeira (Angra do Heroísmo), 2 exs., 13.viii.1986, 16.viii.1986.

In fruit remains and decaying vegetables.

Cosmopolitan of warm and temperate regions; Atlantic Islands (Madeira, Canaries, Cape Verde).

2.28. *Spatulonthus longicornis* (Steph.)

TERCEIRA: Terra Chã, 10 exs., 28.x.1983, 14.viii.1985, 21.viii.1985, 5.viii.1986, 15.viii.1986; Lixeira (Angra do Heroísmo), 3 exs., 16.viii.1986.

In fruit remains and decaying vegetables.

Cosmopolitan, Madeira and Canary Islands.

2.29. *Staphylinus (Goericus) olens* Müll.

CORVO: Without specific localization, 1 ex., 27.vi.1981.
Western Europe, British Isles, northern Africa, Canary Islands.

2.30. *Creophilus maxillosus* (L.)

TERCEIRA: Terra Chã, 2 exs., 21.viii.1985, 25.iii.1986; Lixeira (Angra do Heroísmo), 26 exs., 13.viii.1986, 16.viii.1986.

Under trunks of *Pinus* sp. and in decaying vegetables.
Holarctic region, Madeira and Canary Islands.

2.31. *Sepedophilus testaceum* (F.)

TERCEIRA: Terra Chã, 9 exs., 9.x.1983, 1 - 2.iv.1986, 10.iv.1986, 2.viii.1986; S. Carlos, 1 ex., 4.iv.1986.

In decaying vegetables and fruit remains.
Holarctic region, northern Africa, Madeira and Canary Islands.

2.32. *Cilea silphoides* (L.)

TERCEIRA: Lixeira (Angra do Heroísmo), 1 ex., 16.viii.1986.
In decaying vegetables.
Holarctic region, Atlantic Islands (Madeira, Canaries, Cape Verde).

2.33. *Cordalia obscura* (Grav.)

TERCEIRA: Terra Chã, 16 exs., 25.iii.1986, 27.iii.1986, 31.iii.1986, 5.viii.1986, 12.viii.1986; Angra do Heroísmo, 1 ex., 29.iii.1986; S. Mateus, 1 ex., 4.iv.1986; Lixeira (Angra do Heroísmo), 8 exs., 1.viii.1986, 13.viii.1986, 16.viii.1986; Achada, 1 ex., 13.viii.1986.

In fruit remains and decaying vegetables, in cow dung and under a trunk of *Pinus* sp..

2.34. *Oxypoda lurida* Woll.

TERCEIRA: Terra Chã, 1 ex., 21.viii.1985; Serreta, 1 ex., 10.viii.1986.

Subcortical, *Pinus* sp..
Mediterranean region, Madeira, Canary Islands (?).

2.35. *Aleochara puberula* Klug.

TERCEIRA: Terra Chã, 1 ex., 15.x.1984; Lixeira (Angra do Heroísmo), 6 exs., 13.viii.1986, 16.viii.1986.

In decaying vegetables.
Cosmopolitan.

BUPRESTIDAE

2.36.* *Buprestis novemmaculata* L.

SANTA MARIA: Aeroporto, 1 ex., 23.viii.1982.
Palearctic.

DERMESTIDAE

2.37. *Dermestes undulatus* Brahm.

TERCEIRA: Lixeira (Angra do Heroísmo), 1 ex., 1.viii.1986;
Terra Chã, 1 ex., 24.viii.1986.

In bones and under stones.

Mediterranean region, Central Europe, Caucasus, Siberia.

NITIDULIDAE

2.38. *Carpophilus hemipterus* (L.)

TERCEIRA: Terra Chã, 46 exs., 20.vii.1983, 10.viii.1984, 15.x.
1984, 10.x.1985, —.vi.1986, 31.vii.1986, 2.viii.1986;
Fonte Faneca, 2 exs., 8.viii.1986; Serreta, 1 ex.,
10.viii.1986; Lixeira (Angra do Heroísmo), 1 ex.,
16.viii.1986.

In fruit remains and decaying vegetables.

Cosmopolitan, Atlantic Islands (Madeira, Canaries, Cape Verde).

2.39.* *Carpophilus quadrisignatus* Er.

TERCEIRA: Terra Chã, 3 exs., 30.ix.1984, 10.viii.1985, 15.viii.
1986; Fonte Faneca, 3 exs., 8.viii.1986; Serreta,
2 exs., 10.viii.1986.

In fruit remains.

Mediterranean region, southern Europe, Asia Minor, western Africa
and eastern Asia, Madeira. Probably this is a species in expansion as a
result of introductions (JELINEK, pers. comm.).

2.40. *Carpophilus fumatus* Boh.

(*C. mutilatus* Er.; SERRANO, 1982)

S. MIGUEL: Ponta Delgada, 7 exs., 3.viii.1979, 2.ix.1979.

TERCEIRA: Terra Chã, 97 exs., 20.iv.1983, 28.x.1983, 3.xi.
1983, 15.x.1984, 7.viii.1985, 14.viii.1985, —.iv.
1986, 22.iv.1986, 23.iv.1986, 31.vii.1986, 2.viii.
1986, 5.viii.1986.

In fruit remains.

Originally afrotropical.

2.41.* *Carpophilus freemani* Dobson[*C. dimidiatus* (F.); SERRANO, 1982]

SANTA MARIA: Aeroporto, 1 ex., 5.ix.1985; Vila do Porto, 1 ex., 8.xi.1985.

S. MIGUEL: Ponta Delgada, 4 exs., 2.ix.1979.

TERCEIRA: Terra Chã, 14 exs., 18.x.1983, 15.x.1984, 1 - 2.iv.1986, 22.iv.1986, 31.vii.1986.

In fruit remains.

Widely distributed through the warmer parts of the world. Also recorded for Madeira, and Canary Islands (ISRAELSON et al., 1981).

2.42.* *Carpophilus marginellus* Motsch.[*C. immaculatus* Lucas; SERRANO, 1982]

SANTA MARIA: Aeroporto, 2 exs., 20.ix.1979.

S. MIGUEL: Ponta Delgada, 10 exs., 2.ix.1979, 13.xi.1985.

TERCEIRA: Terra Chã, 43 exs., 18.x.1983, 10.viii.1984, 10.x.1984, 7.viii.1985, 13.viii.1985, 10.ix.1985, 22.iv.1986, 31.vii.1986, 2.viii.1986, 5.viii.1986, 9.viii.1986; Rocha do Chame, 1 ex., 15.ii.1984; Lixeira (Angra do Heroísmo), 2 exs., 16.viii.1986.

In fruit remains.

Originally in tropical Asia, widely distributed throughout warm and warm-temperate zones of the world, towards the north of U. S. A., Japan and Central Europe. Also recorded for Madeira, and the Canary Islands (ISRAELSON et al., 1981).

2.43.* *Brachypeplus* sp.

TERCEIRA: Terra Chã, 4 exs., 28.x.1983, 22.iv.1986, 2.viii.1986; Agualva, 7 exs., 9.viii.1986.

In fruit remains and subcortical; in *Cryptomeria japonica*.*Brachypeplus* is a large genus with circumtropical distribution. *Brachypeplus* sp. is probably an adventive species (JELINEK, pers. comm.).2.44. *Nitidula carnaria* (Schall.)

TERCEIRA: Lixeira (Angra do Heroísmo), 35 exs., 1.viii.1986; Terra Chã, 1 ex., 15.viii.1986.

In bones.

Northern Africa, Palearctic region.

2.45. *Omosita colon* (L.)

TERCEIRA: Terra Chã, 6 exs., 10.x.1984, 2.iv.1986, 12.viii.1986, 16.viii.1986; Lixeira (Angra do Heroísmo), 23 exs., 1.viii.1986, 13.viii.1986, 16.viii.1986.

In decaying vegetables and fruit remains.
Holarctic.

2.46.* *Omosita discoidea* (F.)

TERCEIRA: Terra Chã, 3 exs., 1.iv.1986, 2.iv.1986, 9.iv.1986.
In fruit remains.
Palearctic.

2.47.** *Lasiodactylus cureitibius* Kr.

TERCEIRA: Terra Chã, 85 exs., 20.vii.1983, 15.viii.1983, 11.viii.1985, 12.viii.1985, —.viii.1986, 2.viii.1986, 5.viii.1986, 11.viii.1986; Fonte Faneca, 1 ex., 8.viii.1986.

In fruit remains.
Probably introduced as an adventive species from West Africa (JELINEK, pers. comm.).

2.48.** *Lasiodactylus maculipennis* (Kr.)

TERCEIRA: Terra Chã, 113 exs., 20.vii.1983, 15.viii.1983, 11.viii.1985, 12.viii.1985, 2.viii.1986, 5.viii.1986, —.viii.1986; Angra do Heroísmo, 1 ex., 10.viii.1985; Fonte Faneca, 1 ex., 8.viii.1986.

In fruit remains.
Probably introduced as an adventive species from West Africa (JELINEK, pers. comm.).

CUCUJIDAE

2.49. *Monotoma spinicollis* Aubé

TERCEIRA: Terra Chã, 1 ex., 5.viii.1986.

In fruit remains.
Northern Africa, Europe, Caucasus, Atlantic Islands (Madeira, Canaries, Cape Verde).

2.50. *Oryzaephilus surinamensis* (L.)

TERCEIRA: Terra Chã, 21 exs., 30.viii.1984.

In shore houses.
Cosmopolitan.

2.51. *Oryzaephilus mercator* (Fauv.)

TERCEIRA: Terra Chã, 8 exs., 30.viii.1984.

In shore houses.
Cosmopolitan.

2.52. *Silvanus unidentatus* (F.)

TERCEIRA: Terra Chã, 1 ex., 25.iii.1986.

Under a trunk of *Eucalyptus globulus*.

Northern Africa, Palearctic region, Cape Verde.

2.53. *Psammoecus personatus* Grouv.

TERCEIRA: Terra Chã, 1 ex., 9.viii.1983.

Madeira, Canary Islands.

CRYPTOPHAGIDAE

2.54. *Cryptophagus laticollis* Lucas

TERCEIRA: Terra Chã, 1 ex., 9.iv.1986.

In decaying vegetables.

Palearctic region, northern America, Madeira and Canary Islands.

2.55.* *Cryptophagus (Micrambe)* sp.TERCEIRA: Lixeira (Angra do Heroísmo), 3 exs., 1.viii.1986,
16.viii.1986; Terra Chã, 2 exs., 8.viii.1986.

In decaying vegetables.

PHALACRIDAE

2.56. *Stilbus testaceus* (Panz.)SANTA MARIA: Aeroporto, 32 exs., 16.vii.1983, 4.v.1985, 28.
viii.1985, 15.x.1985, 2.ii.1986.

TERCEIRA: Terra Chã, 1 ex., 9.viii.1983.

S. JORGE: Urzelina, 1 ex., 16.vi.1984.

Mediterranean region, central and northern Europe, Madeira and
Canary Islands.

LATHRIDIIDAE

2.57. *Lathridius nodifer* West.TERCEIRA: Terra Chã, 13 exs., 1.iv.1986, 2.iv.1986, 13.iv.
1986, 22.iv.1986, 7.viii.1986, 12.viii.1986, 15.viii.
1986; Fonte Faneca, 1 ex., 8.viii.1986.

In fruit remains.

Cosmopolitan, Madeira and Canary Islands.

2.58. *Corticaria fulva* Com.

TERCEIRA: Terra Chã, 1 ex., 17.vi.1982.

In *Rubus ulmifolius*.

Cosmopolitan, Madeira and Canary Islands.

2.59. *Corticaria serrata* (Payk.)

TERCEIRA: Terra Chã, 1 ex., 27.vii.1983.

Cosmopolitan, Atlantic Islands (Madeira, Canaries, Cape Verde).

MYCETOPHAGIDAE

2.60. *Lithargus pilosus* Woll.

TERCEIRA: Terra Chã, 22 exs., 18.x.1983, 28.x.1983, 10.viii.1984, 30.ix.1984, 10.ix.1985, 13.iv.1986, 31.vii.1986; Lixeira (Angra do Heroísmo), 3 exs., 1.viii.1986, 13.viii.1986.

In fruit remains and decaying vegetables.

Madeira and Canary Islands.

COCCINELLIDAE

2.61. *Scymnus haemorrhoidalis* Herbst.

SANTA MARIA: Aeroporto, 1 ex., 14.vii.1985.

Previously recorded for Azores without island reference (BIELAWSKI, 1963).

Europe, Caucasus, Siberia, Morocco, Madeira.

2.62. *Scymnus flavopictus* (Woll.)TERCEIRA: Terra Chã, 2 exs., 25.iii.1983, 28.iv.1984.
Madeira, Salvages, and Canary Islands.2.63. *Coccinella septempunctata* L.

TERCEIRA: Angra do Heroísmo, 1 ex., 14.viii.1982.

Atlantic islands (Madeira, Salvages, Canaries, Cape Verde), northern Africa, Europe, Asia, Indo-Malasian region.

ANOBIIDAE

2.64. *Nicobium hirtum* Ill.

SANTA MARIA: Aeroporto, 1 ex., 15.x.1985.

TERCEIRA: Angra do Heroísmo, 1 ex., 30.vii.1986.
Mediterranean region.2.65. *Ernobius mollis* (L.)

TERCEIRA: Terra Chã, 36 exs., 4.ix.1984, 10.viii.1985, 25.iii.1986, 31.iii.1986, 12.viii.1986, 20.viii.1986; Lixeira (Angra do Heroísmo), 1 ex., 1.viii.1986.

Europe, Siberia, Caucasus.

2.66. *Ptilinus pectinicornis* (L.)

TERCEIRA: Terra Chã, 7 exs., 20.ix.1984, 7.viii.1985.

GRACIOSA: Santa Cruz, 1 ex., 24.vii.1985.

Northern Africa, Europe, Syria.

ANTHICIDAE (2)

(2) In this family we follow BUCCIARELLI (1980) for the systematics of the genus.

2.67. *Cyclodinus humilis* (Germ.)

SANTA MARIA: Aeroporto, 5 exs., 10.iii.1983, 1.viii.1983, 4.v.1985, 14.vii.1985, 12.viii.1985, 15.x.1985.

Europe, Asia, northern Africa, Canary Islands.

2.68. *Omonadus floralis* (L.)

SANTA MARIA: Aeroporto, 5 exs., 26.viii.1985, 15.x.1985.

TERCEIRA: Lixeira (Angra do Heroísmo), 31 exs., 1.viii.1986, 13.viii.1986, 16.viii.1986.

In decaying vegetables.

Cosmopolitan, Madeira and Canary Islands.

2.69. *Hirticomus quadriguttatus* (Rossi)

TERCEIRA: Terra Chã, 5 exs., 20.vii.1983, 30.ix.1984, 7.viii.1985, 27.iii.1986; Lixeira (Angra do Heroísmo), 4 exs., 13.viii.1986, 16.viii.1986.

In decaying vegetables.

Southern Europe, northern Africa.

TENEBRIONIDAE

2.70. *Blaps gigas* (L.)

TERCEIRA: Lajes, 1 ex., 20.vi.1982.

Under stones.

Mediterranean region, Madeira, Salvages, and Canary Islands.

2.71. *Blaps lethifera* Marsh.

TERCEIRA: Porto Judeu, 1 ex., 27.xi.1983.

Under stones.

Europe, Caucasus, western and central Asia, Madeira and Canary Islands.

2.72. *Gonocephalum rusticum* Ol.

TERCEIRA: Biscoitos, 1 ex., 18.viii.1986.

Under stones.

Mediterranean region, central Asia, Caucasus, Madeira and Canary Islands.

2.73. *Gnathocerus cornutus* (F.)

SANTA MARIA: Aeroporto, 5 exs., 10.iii.1983, 2.xii.1984, 14.vii.1985, 30.viii.1985.

In shore houses.

Cosmopolitan, Atlantic islands (Madeira, Canaries, Cape Verde).

2.74. *Tribolium ferrugineum* (F.)

TERCEIRA: Angra do Heroísmo, 1 ex., 27.vii.1983.

In shore houses.

Cosmopolitan, Madeira and Canary Islands.

CERAMBYCIDAE

2.75. *Arhopalus rusticus* (L.)

TERCEIRA: Terra Chã, 1 ex., 11.viii.1982.

In *Pinus* sp..

Paelearctic, Madeira and Canary Islands.

2.76. *Gracilia minuta* (F.)

TERCEIRA: Angra do Heroísmo, 1 ex., 30.vii.1982.

Paelearctic region, northern Africa, eastern part of northern America, Madeira and Canary Islands.

CHRYSOMELIDAE

2.77.***Cryptocephalus sulphureus* Ol.

SANTA MARIA: Aeroporto, 1 ex., 28.ix.1983.
Mediterranean region.

2.78. *Chrysomela banksi* (F.)

TERCEIRA: Terra Chã, 8 exs., 5.viii.1982, 7.viii.1984, 8.viii.1985, 22.iv.1986; Angra do Heroísmo, 3 exs., 7.v.1984, 9.viii.1986; Fonte Faneca, 1 ex., 5.iv.1986; Lagoa Ginjal, 1 ex., 13.viii.1986; Biscoitos, 16 exs., 18.viii.1986.

Under stones, among debris on the ground, on a trunk of *Myrica faya*.

Europe, Madeira and Canary Islands.

2.79. *Epitrix cucumeris* Harris

TERCEIRA: Terra Chã, 8 exs., 10.iv.1986, 31.vii.1986; Angra do Heroísmo, 6 exs., 30.vii.1986.

It is very common on *Solanum nigrum*. The spermatheca is similar to that presented by ISRAELSON (1985) and considered by this author a new synonymy of *E. azorica* Gruev.

America (U. S. A.).

2.80. *Chaetocnema hortensis* (Geoffr.)

TERCEIRA: Terra Chã, 2 exs., 4.ix.1984, 30.ix.1984.

On *Solanum nigrum*.

Europe and Mediterranean region.

BRUCHIDAE

2.81.***Bruchidius foveolatus* Gyll.

SANTA MARIA: Aeroporto, 3 exs., 10.vii.1983, 5.ix.1985.
Southern Europe.

2.82. *Callosobruchus maculatus* (F.)

TERCEIRA: Terra Chã, 3 exs., 9.iv.1986.

In stored rice.

Europe and Asia.

CURCULIONIDAE

2.83. *Apion radiolus chalybeipenne* Woll.

TERCEIRA: Angra do Heroísmo, 1 ex., 30.vii.1986.

On *Malvaceae*.

Mediterranean region, western Asia, Madeira and Canary Islands.

2.84. *Sitophilus oryzae* (L.)

SANTA MARIA: Aeroporto, 3 exs., 12.viii.1985, 8.xi.1985,
30.ii.1986; Pico Alto, 1 ex., 28.ix.1985.

In stored cereals.

Cosmopolitan, Atlantic Islands (Madeira, Canaries, Cape Verde).

2.85. *Calandra abbreviata* (F.)

TERCEIRA: Terra Chã, 1 ex., 9.viii.1983; Achada (Lagoa Ginjal), 3 exs., 3.iv.1986, 6.viii.1986, 13.viii.1986.

Under stones.

Southern and Central Europe, northern Africa.

2.86.* *Deremolus* sp.

TERCEIRA: Terra Chã, 1 ex., 8.viii.1986.

Afrotropical genus widely distributed through warm and temperate zones.

2.87. *Acalles subcarinatus* Isr.

TERCEIRA: Bicas, 2 exs., 5.viii.1983.

On citrous trees.

Endemic.

3. SUMMARY AND DISCUSSION

As we pointed out in a previous publication (SERRANO, 1982) the Coleopterous fauna of the Azores islands is poor when compared with that of Madeira and the Canary islands. There are several reasons for this paucity (geographic, volcanic, climatic), but we think that an insufficient exploration is probably more responsible for this than it has been assumed. The evidence for this is that ISRAELSON (1984 and 1985 a, b) recorded a further 88 species for Santa Maria, 27 species for S. Miguel, 1 species for S. Jorge, 33 species for Pico and 23 species for Flores than had previously been known.

This claim is now further substantiated by our numerous additions of species new to the archipelago, mainly the island of Terceira where we made exhaustive explorations. It is furthermore important to mention that almost all of the species studied also occur in the continental part of Europe or Africa. A few are more or less cosmopolitan. Only two species are endemics of the Azores (*P. azoricus* Fauv. and *A. subcarinatus* Isr.). We also think that some species are more or less recent introductions [*P. melanocephalus* Dej., *O. speculifrons* Kr., *B. novemmaculata* L., *C. quadrisignatus* Er., *Brachypeplus* sp., *L. cureitibius* Kr., *L. maculipennis* (Kr.), *C. sulphureus* Ol., *B. foveolatus* Gyll. and *Deremolus* sp.]. The Nitidulidae [*Brachypeplus* sp., *L. cureitibius* Kr. and *L. maculipennis* (Kr.)] are probably introductions from West Africa.

Seven of the Azorean novelties are also mentioned for the first time for Macaronesia.

The additions for individual islands are: Santa Maria 16, S. Miguel 3, Terceira 75, S. Jorge 1, Graciosa 2 and Corvo 2.

The number for Terceira represents an increase of 60% to the Coleopterous fauna of the island.

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A D D E N D A

STAPHYLINIDAE

Quedius simplicifrons (Fairm.) (= *hispanicus* Bernh.)

TERCEIRA: Achada (Lagoa Ginjal), 2 exs., 3.iv.1986.

S. JORGE: without specific localization, 1 ex., 1.viii.1981.
Under stones.

Western Europe, Madeira.