

## NEW RECORDS TO THE APHID FAUNA OF THE ARCHIPELAGO OF MADEIRA (HOMOPTERA, APHIDOIDEA)

by Fernando Albano Ilharco \*

With 4 figures

This paper publishes the scientific results of a second aphidological expedition to the Archipelago of Madeira. The author is very grateful to the Calouste Gulbenkian Foundation, Lisbon, Portugal, for the grant conceded towards the realization of the expedition.

In 1981, I spent 21 days in Madeira, the first 11 days concerned with the 2nd International Congress of the Portuguese Entomological Society, the last 10 days collecting aphids for the 2nd Aphidological Expedition to the Archipelago of Madeira.

Besides myself Mr. Júlio Pinto, of Estação Agronómica Nacional, and my friend Mr. A. van Harten, then of Research Institute for Plant Protection (IPO), Wageningen, Holland, collaborated in the expedition.

The 65 samples collected revealed 87 aphid records, including 59 different species 23 of which are now reported from the Archipelago of Madeira for the first time. Of these 23 species, 11 are new to Macaronesia. Three species, viz. *Aphis? brunellae*, *Dysaphis crithmi* and *Pemphigus bursarius* are the first records of aphids from the Desertas, the group of small islands near Madeira, of which only the largest, Deserta Grande, was visited. In this island we spent about six hours. A Moericke trap mounted during the visit collected no aphids. The vegetation of the island is generally very scanty, and in October practically not a single green plant was to be seen in Deserta Grande. However, the three plant species seen, *Tolpis fruticosa*, *Crithmum maritimum* and *Micromeria varia*, contained aphids.

With the results of the present contribution and taking into account the previous papers by Ilharco (1973, 1974, 1981) and Eastop & Hille Ris Lambers (1976) the aphid fauna of the Archipelago of Madeira amounts now to 126 known species, 122 of which from Madeira proper, 29 from Porto Santo and 3 from Deserta Grande. Considering the published records of Ilharco (1976, 1982) and Nieto Nafria, Carnero Hernandez & Mier Durante (1977), the aphid fauna of the other Macaronesian islands amounts to 150

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species for the Azores and 87 for the Canary Islands. In all, 176 species of aphids are now known from Macaronesia.

For this paper, 204 slides were mounted, but of the samples which contain a large amount of specimens some of the material remains in alcohol, specially the nymphs. In all, I have studied 888 specimens, of which 566 are apterous viviparous females, 219 are alate females, 20 are oviparous females, 13 are males and 78 are nymphs.

The entire material belongs to the Aphid Collection of the Estação Agronómica Nacional (CAEAN), where it is registered under numbers 3768-3832.

The species are listed alphabetically. The following details of information concerning each record are given: locality, date of collecting, register number, host plant and collector, the latter, however, not being indicated for samples collected by F. A. Ilharco, A. van Harten & J. Pinto. Sample no. 3827 contains an *Aphis* sp. (*gossypii* group) from *Erica arborea*. This record is not considered here.

#### LIST OF SPECIES

##### FROM THE DESERTA ISLANDS

##### 1. *Aphis* ? *brunellae* Schouteden

*A. brunellae* is a European aphid of the difficult group of *Aphis* that lives on Labiatae. Its typical host plant is *Prunella vulgaris* L. The aphids from Deserta Grande fed on the underside of the leaves of *Micromeria varia* Benth. (= *Satureja thymoides* Soland.) where they formed large populations. The aphids are green, a little pulverulent, attended by ants. Only apterous viviparous females were collected, and all the specimens are very small. The sample was made by A. van Harten at an altitude of about 300 m. The same plants at sea level had no aphids.

In order to try a reliable identification I have seen material of *Aphis brunellae* from England most kindly loaned me by Dr. Stroyan, Plant Pathology Laboratory, Harpenden. A slide with material from *Micromeria* was also sent to the same specialist, but no conclusive answer has been obtained. I therefore prefer to ascribe the aphids to *A. brunellae*, although as a tentative identification. I have never seen a similar small *Aphis* species from a Labiatae either from Madeira or even from Continental Portugal.

If the identification is right, *A. brunellae* is new to Macaronesia. It is also unknown in the Iberian Peninsula.

## 2. *Dysaphis crithmi* (Buckton)

Already known in Macaronesia from Madeira proper (Ilharco, 1974). The host plant, *Crithmum maritimum*, was very abundant in Deserta Grande when visited by us. The sample was collected by A. van Harten at an altitude of about 300 m. Almost all the aphids were mummified by an aphelinid wasp.

Deserta Grande (8.10.1981, No. 3813, *Crithmum maritimum*, col. A. van Harten).

## 3. *Pemphigus bursarius* (Linné)

This is the first record of *P. bursarius* in Macaronesia. The sample from Deserta Grande was collected at sea level on the roots of a seedling of *Tolpis fruticosa*.

Deserta Grande (8.10.1981, No. 3814, *Tolpis fruticosa*, col. F. A. Ilharco).

## FROM MADEIRA PROPER

### 1. *Acyrtosiphon ilka* (Mordwilko)

A large sample of this species has been collected by this expedition. The previous record by Ilharco (1974) was based on three apterous females. *A. ilka* was already known in Macaronesia also from the Canary Islands (Nieto Nafria, Carnero Hernandez & Mier Durante, 1977).

Poiso (4.10.1981, No. 3790a, *Hypochaeris* sp.).

### 2. *Acyrtosiphon malvae* (Mosley) s. str.

This species is already known from Madeira (Ilharco, *op. cit.*), the Azores (Ilharco, 1976) and the Canary Islands (Nieto Nafria, Carnero Hernandez & Mier Durante, *op. cit.*). However, the material reported now is the first I have seen from that island.

Ribeiro Frio (4.10.1981, No. 3792, *Geranium* sp.; 9.10.1981, No. 3818, *Geranium maderense*).

### 3. *Acyrtosiphon spartii* (Koch)

My previous record of this species from Madeira was based on a single apterous viviparous female. Now we have collected a large population of the species which when alive is quite distinct from *Acyrtosiphon pisum*. I do not believe therefore that *A. pisum* and *A. spartii* are the same species the latter name being a synonym of the former as considered by Eastop & Hille Ris Lambers (1976).

*A. spartii* lives along the stems of several species of brooms, in Madeira on *Sarothamnus scoparius* and *Spartium junceum*. *A. pisum* lives on herbaceous Leguminosae, early hidden on the young leaves, later also on the stems. The colour in *A. spartii* when alive is dark green whereas in *A. pisum* it is green to yellowish-green. The body is smaller and the appendices shorter and more pigmented in *A. spartii* than in *A. pisum*. The broom aphid bears a slight wax pulverulence on body. *A. pisum* is devoid of pulverulence on some host plants (*Pisum sativum*, *Vicia faba*, etc.) and pulverulent on others (*Vicia sativa*, for instance). The alate forms of *A. spartii* have wings with dark veins which is not the case in *A. pisum*.

Poiso (4.10.1981, No. 3791a, *Spartium junceum*).

#### 4. *Amphorophora idaei* (Börner)

Already known in Macaronesia from Madeira and the Azores (Ilharco, 1976).

Faial (5.10.1981, No. 3796a, *Rubus ulmifolius*).

#### 5. *Anoecia vagans* (Koch)

Now for the first time reported from Macaronesia where it is the second species of the genus to be known, the first was *A. corni* from the Azores (Ilharco, 1980). In Madeira proper *A. vagans* is anholocyclic on roots of Gramineae.

Santana (5.10.1981, No. 3799a, *Digitaria sanguinalis*; 5.10.1981, No. 3800, *Poa annua*).

#### 6. *Aphis citricola* van der Goot

Widespread in Macaronesia.

Funchal (26.9.1981, No. 3773a, *Centranthus ruber*, col. F. A. Ilharco & J. Pinto); Pico do Arieiro (9.10.1981, No. 3815a, *Vaccinium maderense*; 9.10.1981, No. 3816a, *Erica arborea*, col. A. van Harten & J. Pinto).

#### 7. *Aphis fabae* Scopoli

Widespread in Macaronesia.

Funchal (26.9.1981, No. 3769a, *Plumeria tricolor*, col. F. A. Ilharco & J. Pinto); Santana (5.10.1981, No. 3797c, *Foeniculum vulgare*); Canhas (10.10.1981, No. 3826, *Zea mays*).

**8. Aphis gossypii** Glover

Widespread in Macaronesia.

Funchal (26.9.1981, No. 3769b, *Plumeria tricolor*, col. F. A. Ilharco & J. Pinto); Poiso (4.10.1981, No. 3789b, *Erica arborea*); Pico do Arieiro (9.10.1981, No. 3815b, *Vaccinium maderense*).

**9. Aphis paralius** Hille Ris Lambers

This species, already known from Madeira proper (Ilharco, 1974), remains undescribed (Hille Ris Lambers, pers. communic.). It is known nowadays from France (Stary, Remaudière & Leclant, 1971), Yugoslavia (Ilharco, 1974) and Madeira.

Machico (5.10.1981, No. 3794, *Euphorbia piscatoria*).

**10. Aphis parietariae** Theobald

Now for the first time recorded from the Archipelago of Madeira, however, already known from the Azores and the Canary Islands (Ilharco, 1976).

Funchal (26.9.1981, No. 3771, *Parietaria punctata*, col. F. A. Ilharco & J. Pinto); 29.9.1981, No. 3775, *P. punctata*, col. A. van Harten).

**11. Aphis ruborum** (Börner)

Widespread in Macaronesia.

Faial (5.10.1981, No. 3796b, *Rubus ulmifolius*).

**12. Aphis sarothamni** Franssen

If *A. sarothamni* and *A. cytisorum* Hartig are different species then, in Macaronesia, the former is only known from Madeira proper (Ilharco, 1974), the latter from the Canary Islands (Nieto Nafria, Carnero Hernandez & Mier Durante, 1977).

Poiso (4.10.1981, No. 3791b, *Spartium junceum*).

**13. Aulacorthum solani** (Kaltenbach)

Widespread in Macaronesia.

Rabaçal (10.10.1981, No. 3829a, *Mentha pulegium*).

#### 14. *Capitophorus hippophaes* (Walker)

Already known in Macaronesia from Madeira proper (Ilharco, 1974), the Azores (Ilharco, 1976) and the Canary Islands (Nieto Nafria, Carnero Hernandez & Mier Durante, 1977). However, the subspecies from Madeira and the Canary Islands is *C. hippophaes* s. str., from the Azores it is *C. hippophaes dubius* Ilharco.

Funchal (2.10.1981, No. 3788, *Polygonum persicaria*, col. A. van Harten).

#### 15. *Cavariella aegopodii* (Scopoli)

Widespread in Macaronesia.

Santana (5.10.1981, No. 3797a, *Foeniculum vulgare*).

#### — *Cerataphis lataniae* (Boisduval)

This species is to be deleted from the list of aphids from the Archipelago of Madeira according to the comments presented in *Cerataphis palmae*.

#### 16. *Cerataphis palmae* (Ghesquière)

According to Eastop & Hille Ris Lambers (1976) *C. palmae* is the valid name of the aphid up till now known as *C. variabilis* Hille Ris Lambers. The finding of this species is an important step to clarify the number of species of *Cerataphis* present in Madeira. Vieira (1951) records *C. lataniae* from a number of palms, orchids and the Musaceae *Strelitzia augusta* in Funchal (Madeira). In my previous paper on the aphids from Madeira (Ilharco, 1974) I wrote: «However, *C. lataniae* does not feed on orchids and on palms another species may be implied, *C. variabilis* Hille Ris Lambers. From orchids the species is *C. orchidearum* (Westwood), which I have collected on *Cymbidium lowianum* in Funchal. The *Cerataphis* from palms may or may not be *C. lataniae* but I do not see any reason to exclude *C. lataniae* in favour of *C. variabilis*. Therefore, I believe the records by Vieira may well be correct». At this moment, from the finding of *C. palmae* I think that it is better to delete *C. lataniae* from the list of Madeira aphids, considering only two species in the Archipelago, *C. orchidearum* on orchids and *C. palmae* on palms.

*C. palmae* is new to Macaronesia. It is known from the tropical and subtropical regions but its actual distribution is not very well known since it has been confused with the other species of the genus. I do not know of any record of *C. palmae* from Europe.

Funchal (23.9.1981, No. 3768, *Howea forsteriana*, col. F. A. Ilharco, Rui Vieira & J. Pinto).

17. **Chromaphis juglandicola** (Kaltenbach)

Now for the first time recorded from Madeira. Already known in Macaronesia from the Azores and the Canary Islands (Ilharco, 1976).

Santo da Serra (7.10.1981, No. 3807, *Juglans regia*).

18. **Cinara pilicornis** (Hartig)

New to Macaronesia and also unknown in the Iberian Peninsula. It is a European species, also known from Japan, Australia and North America (Eastop, 1972; Smith & Parron, 1978). It feeds on *Picea*. The sample collected contained oviparous females only.

Bica da Cana (10.10.1981, No. 3823b, *Picea excelsa*).

19. **Coloradoa rufomaculata** (Wilson)

This species was only known in Macaronesia from the Azores (Ilharco 1976).

Funchal (26.9.1981, No. 3774b, *Chrysanthemum indicum*, col. F. A. Ilharco & J. Pinto); Santana (1.10.1981, No. 3787, *C. indicum*, col. A. van Harten & J. Pinto).

20. **Dysaphis apiifolia** (Theobald)

New to Madeira proper. Already known in Macaronesia from the island of Porto Santo (Ilharco, 1973) and the Azores (Ilharco, 1976).

Santana (5.10.1981, No. 3797d, *Foeniculum vulgare*).

21. **Dysaphis crithmi** (Buckton)

Porto Moniz (1.10.1981, No. 3786, *Crithmum maritimum*, col. A. van Harten & J. Pinto).

22. **Dysaphis plantaginea** (Passerini)

In Macaronesia already known from Madeira and the Azores (Ilharco 1974, 1976).

Funchal (12.10.1981, No. 3832, *Plantago* sp.).

23. **Elatobium abietinum** (Walker)

This species has hitherto never been found in Macaronesia and there is no published record from Continental Portugal. It lives on *Picea* and *Abies* and it is known from almost the whole of Europe, Siberia,

North America, Chile, Australia and New Zealand (Heie, 1964; Szelegiewicz, 1968; Shaposhnikov, 1964; Smith & Parron, 1978; Smith & Cermeli, 1979; Eastop, 1966).

Bica da Cana (10.10.1981, No. 3823a, *Picea excelsa*).

#### 24. *Eulachnus tuberculostemmatus* (Theobald)

Not previously reported from the Arquipelago of Madeira. Already known in Macaronesia from the Canary Islands (Tambs-Lyche, 1971).

Queimadas (5.10.1981, No. 3801, *Pinus pinaster*).

#### 25. *Hyadaphis coriandri* (Das)

Now for the first time reported from Madeira. In Macaronesia already known from the Canary Islands (Nieto Nafria, Carnero Hernandez & Mier Durante, 1977).

*H. coriandri* feeds mainly on Umbelliferae but also on Compositae, Convolvulaceae, Chenopodiaceae, etc. It is known from India, Pakistan, Iraq, Israel, Egypt, the Sudan, Kenya, Rhodesia, Angola, Mozambique, Nigeria, South Africa and Spain (Mier Durante & Nieto Nafria, 1979; Mier Durante, 1981). It has recently been found in Portugal (sample no. 3835, at Aljustrel, on *Foeniculum vulgare*, 26.11.1981, col. J. Pinto).

Funchal (29.9.1981, No. 3778, *Coriandrum sativum*, col. A. van Harten).

#### 26. *Hyadaphis foeniculi* (Passerini)

Already known from Madeira and the Canary Islands (Ilharco, 1974; Nieto Nafria, Carnero Hernandez & Mier Durante, 1977).

Santana (5.10.1981, No. 3797b, *Foeniculum vulgare*).

#### 27. *Hyperomyzus picridis* (Börner & Blunck)

Previously recorded from Madeira proper by Ilharco (1974) under the name of *H. picridis* (Börner). In Macaronesia not known up till now from any of the other islands.

Canhas (10.10.1981, No. 3819, *Picris echioides*).

#### 28. *Hysteroneura setariae* (Thomas)

Van Harten (1982) reports the presence of this species in Madeira proper from the samples collected by the expedition. This American aphid is now widespread in Africa, Asia and Australia (van Harten, *op. cit.*), not being known from the Azores and the Canary Islands.



Funchal (29.9.1981, No. 3777, *Paspalum dilatatum*, col. A. van Harten; 29.9.1981, No. 3781, *Agrostis castellana*, col. A. van Harten); Machico (5.10.1981, No. 3795, *A. castellana*).

### 29. *Idiopterus nephrolepidis* Davis

Now for the first time reported from the Archipelago of Madeira. In Macaronesia only known up till now from the Canary Islands (Nieto Nafria, Carnero Hernandez & Mier Durante, 1977). The aphids have been collected by A. van Harten from an *Adiantum* sp. growing out of doors in Funchal.

*I. nephrolepidis* feeds on ferns especially of the genus *Adiantum*. It has been recorded from cultivated violets (Essig, 1911) and *Crocus* (Hille Ris Lambers, 1949) and I have seen it in Portugal feeding on African violets (sample no. 3657, at Carcavelos, on *Saintpaulia* sp., 1.7.1980), a record also reported by Iglisch (1963). It is a Cosmopolitan species.

Funchal (29.9.1981, No. 3779, *Adiantum* sp., col. A. van Harten).

### 30. *Illinoia azaleae* (Mason) s. str.

According to Eastop & Hille Ris Lambers (1976) the aphid previously named *Masonaphis azaleae* must be ascribed to the genus *Illinoia* Wilson, 1910. This genus includes four subgenera, *Illinoia* s. str., *Amphorinophora* MacGillivray, 1958, *Masonaphis* Hille Ris Lambers, 1939 and *Oestlundia* Hille Ris Lambers, 1949. The species *I. azaleae* is placed by the same authors in *Illinoia* s. str.

*I. azaleae* s. str. is now for the first time reported from the Archipelago of Madeira. It was already known from the Azores (Ilharco, 1976).

Queimadas (5.10.1981, No. 3802, *Rhododendron simsii*); Ribeiro Frio (9.10.1981, No. 3817, *R. simsii*).

### 31. *Macrosiphoniella millefolii* (De Geer)

Not previously reported from Macaronesia. There is no published record from Continental Portugal either.

*M. millefolii* feeds on Compositae Anthemideae. It is known from Europe and North America.

Funchal (30.9.1981, No. 3784, *Leucanthemum myconis*, col. A. van Harten); Pico das Pedras (7.10.1981, No. 3808, *Anthemis cotula*); Bica da Cana (10.10.1981, No. 3821, *Achillea millefolium*, col. J. Pinto).

### 32. *Macrosiphoniella sanborni* (Gillette)

Already known from all the Archipelagos of Macaronesia (Ilharco, 1976).

Funchal (26.9.1981, No. 3774a, *Chrysanthemum indicum*, col. F. A. Ilharco & J. Pinto); Santana (5.10.1981, No. 3798b, *C. indicum*).

33. **Macrosiphum rosae** (Linné)

Widespread in Macaronesia.

Funchal (26.9.1981, No. 3770, *Centranthus ruber*; col. F. A. Ilharco & J. Pinto).

34. **Metopolophium festucae** (Theobald)

New to the Archipelago of Madeira. Already reported from the Azores and the Canary Islands (Ilharco, 1976; Nieto Nafria, Carnero Hernandez & Mier Durante, 1977).

Bica da Cana (10.10.1981, No. 3822, Gramineae, col. A. van Harten).

35. **Myzaphis bucktoni** Jacob

Previously recorded in Macaronesia from the Azores (Ilharco, 1976) only.

Funchal (30.9.1981, No. 3785, *Rosa* sp., col. A. van Harten).

36. **Myzocallis boernerii** Stroyan

Previously reported from Madeira and the Azores (Ilharco, 1974, 1976) under the wrong name of *M. komareki* (Pasek), actually a different species.

Canhas (10.10.1981, No. 3825c, vagrants).

37. **Myzocallis castanicola** Baker

Widespread in Macaronesia.

Queimadas (5.10.1981, No. 3803b, *Quercus robur*; 5.10.1981, No. 3806b, *Castanea crenata*); Canhas (10.10.1981, No. 3825b, *Castanea crenata*).

38. **Myzocallis coryli** (Goetze)

This is the first record of *M. coryli* from Macaronesia. This aphid lives on *Corylus avellana* and has been known from Continental Portugal since 1965 (Ilharco, 1968). The sample from Madeira contained males and sexual females.

Queimadas (5.10.1981, No. 3804, *Corylus avellana*).

**39. Myzocallis kuricola (Matsumura) (Figs 1-4)**

The record of this Far Eastern aphid from Madeira is very interesting and very unexpected. In effect, this is the first time that *M. kuricola* is recorded from outside its area of origin, which is Japan, Korea, China, Taiwan and Cheju Island (Higuchi, 1972; Tao, 1964; Paik, 1965; Richards, 1968; Paik, Lee, Woo & Park, 1969). Its introduction into Madeira should have accompanied the introduction of its main host, *Castanea crenata*, a tree used in experimental hybridizations against a disease of the European *Castanea sativa*. It is supposed that the Japanese chestnuts have been imported from a nursery gardener of Oporto, Portugal, about 20 years ago (Rui Vieira, pers. communic.). If this is true then *M. kuricola* might well exist also in the Continent.

*M. kuricola* has been ascribed to the genus *Nippocallis* Matsumura. I follow Eastop & Hille Ris Lambers (1976), considering *Nippocallis* a subgenus of *Myzocallis* Passerini.

From the bibliography previously indicated and also Paik & Choi (1969), I extract the following list of host plants of *M. kuricola*: *Castanea crenata*, *C. henryi*, *Castanopsis mollissima*, *Quercus acutissima*, and *Q. serrata*.

The samples from Madeira contained alate viviparous females, many of them brachypterous, alate males, apterous oviparous females and nymphs. Some material in alcohol has been sent at his request to Dr. Hille Ris Lambers, Bennekom, Holland.

Queimadas (5.10.1981, No. 3806a, *Castanea crenata*); Canhas (10.10.1981, No. 3825a, *C. crenata*).

**40. Myzus cymbalariae Stroyan**

In Macaronesia already reported from Madeira and the Azores (Ilharco, 1974, 1976).

Poiso (4.10.1981, No. 3790b, *Hypochaeris* sp.); Rabaçal (10.10.1981, No. 3829b, *Mentha pulegium*; 10.10.1981, No. 3830, *Cerastium* sp.).

**41. Myzus persicae (Sulzer)**

Widespread in Macaronesia.

Funchal (26.9.1981, No. 3772, *Mirabilis jalapa*, col. F. A. Ilharco & J. Pinto; 26.9.1981, No. 3773b, *Centranthus ruber*, col. F. A. Ilharco & J. Pinto).

**42. Nasonovia ribisnigri (Mosley)**

New to the Archipelago of Madeira, although already known from

the Azores (Ilharco, 1976) and the Canary Islands (Nieto Nafria, Carnero Hernandez & Mier Durante, 1977).

Rabaçal (10.10.1981, No. 3831a, *Leontodon* sp.).

43. **Ovatus crataegarius** (Walker)

The first record of *O. crataegarius* in Madeira is due to Eastop (1966). In my first expedition to the Archipelago of Madeira, however, that species was not collected but now a sample was taken. *O. crataegarius* is known from the Azores.

Ribeiro Frio (4.10.1981, No. 3793, *Mentha pulegium*).

44. **Plectrichophorus chrysanthemi** (Theobald)

In Macaronesia only recorded from Madeira (Ilharco, 1974).

Santana (5.10.1981, No. 3798a, *Chrysanthemum indicum*).

45. **Rhopalosiphum insertum** (Walker)

This species, widespread in the Azores and unknown in the Canary Islands, is now for the first time reported from Madeira.

Queimadas (5.10.1981, No. 3805a, vagrants); Bica da Cana (10.10.1981, No. 3824, Gramineae).

46. **Rhopalosiphum padi** (Linné)

Widespread in Macaronesia.

Queimadas (5.10.1981, No. 3805b, vagrant).

47. **Rhopalosiphum rufiabdominalis** (Sasaki)

Already recorded in Macaronesia from Madeira and the Azores (Ilharco, 1976).

Santana (5.10.1981, No. 3799b, *Digitaria sanguinalis*).

48. **Schizaphis graminum** (Rondani)

The present record is the first from Madeira proper, since the species was only known in the archipelago from the Island of Porto Santo (Ilharco, 1973). It is also present in the Azores (Ilharco, 1976).

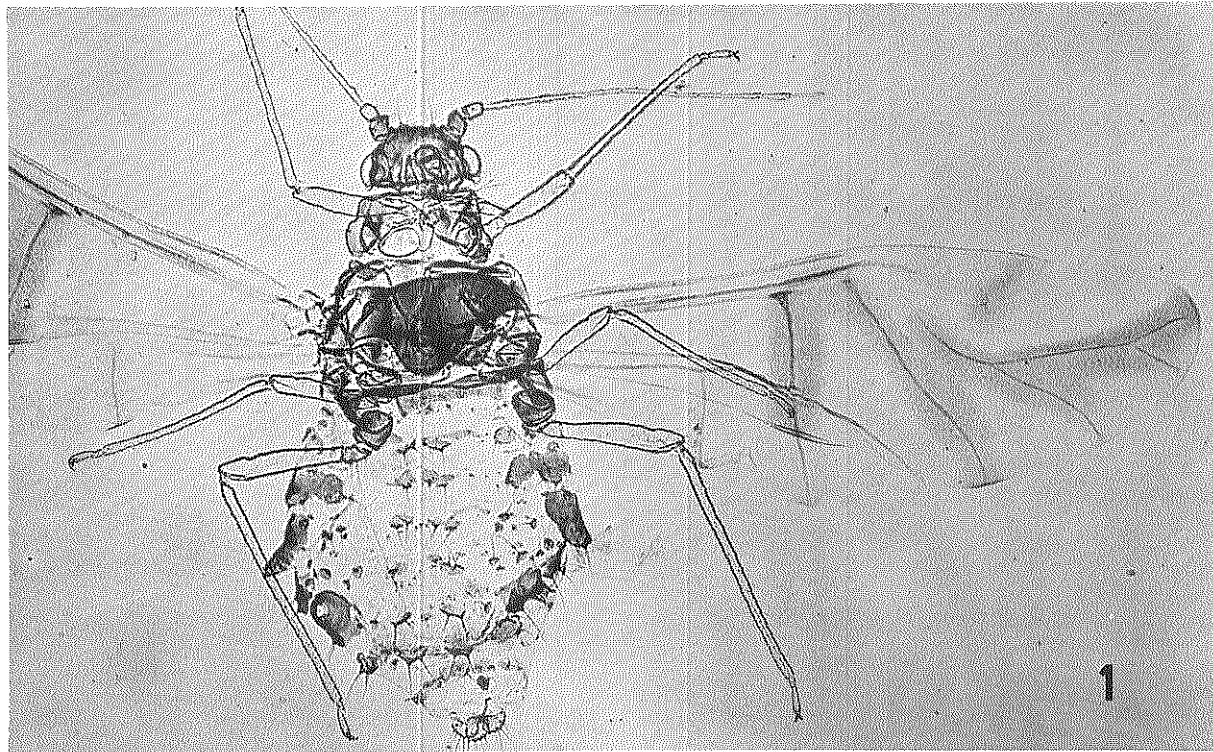
Rabaçal (10.10.1981, No. 3828, *Poa annua*, col. A. van Harten).

PLATES I, II AND III

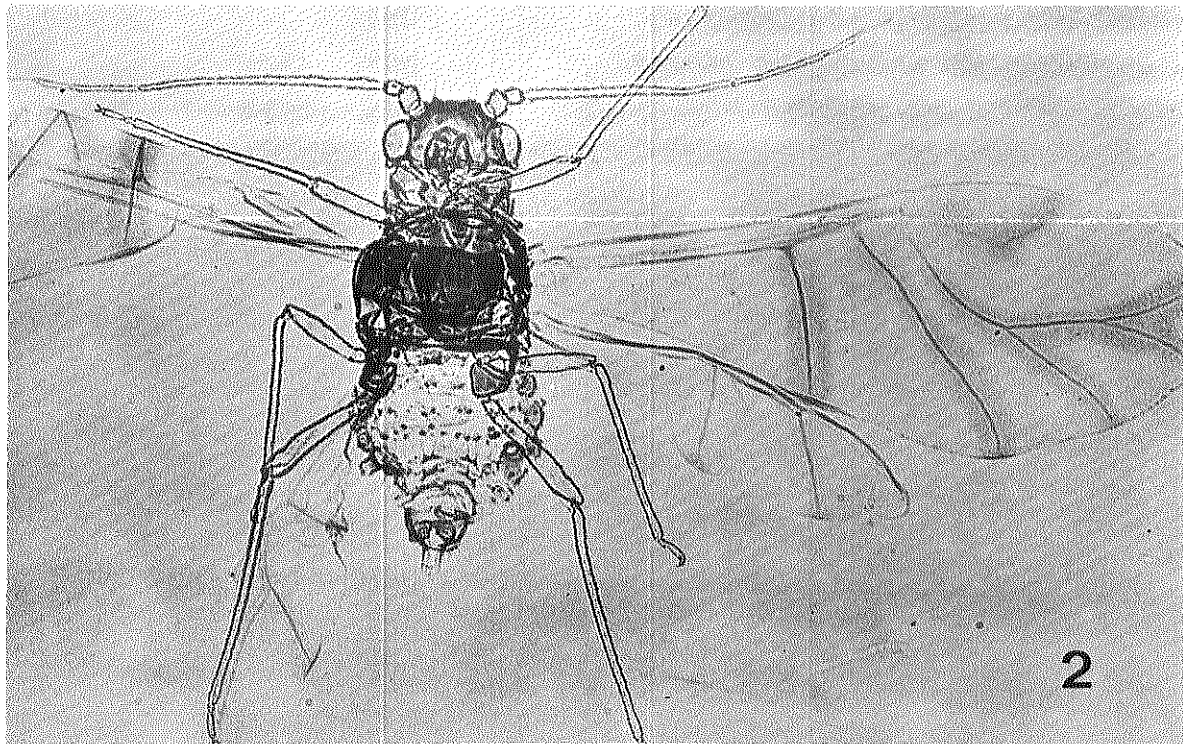
*Myzocallis kuricola* (x 40) a far eastern aphid now for the first time found in the West.

*Myzocallis kuricola* (x 40), *um afideo do Oriente, agora pela primeira vez encontrado no Ocidente.*

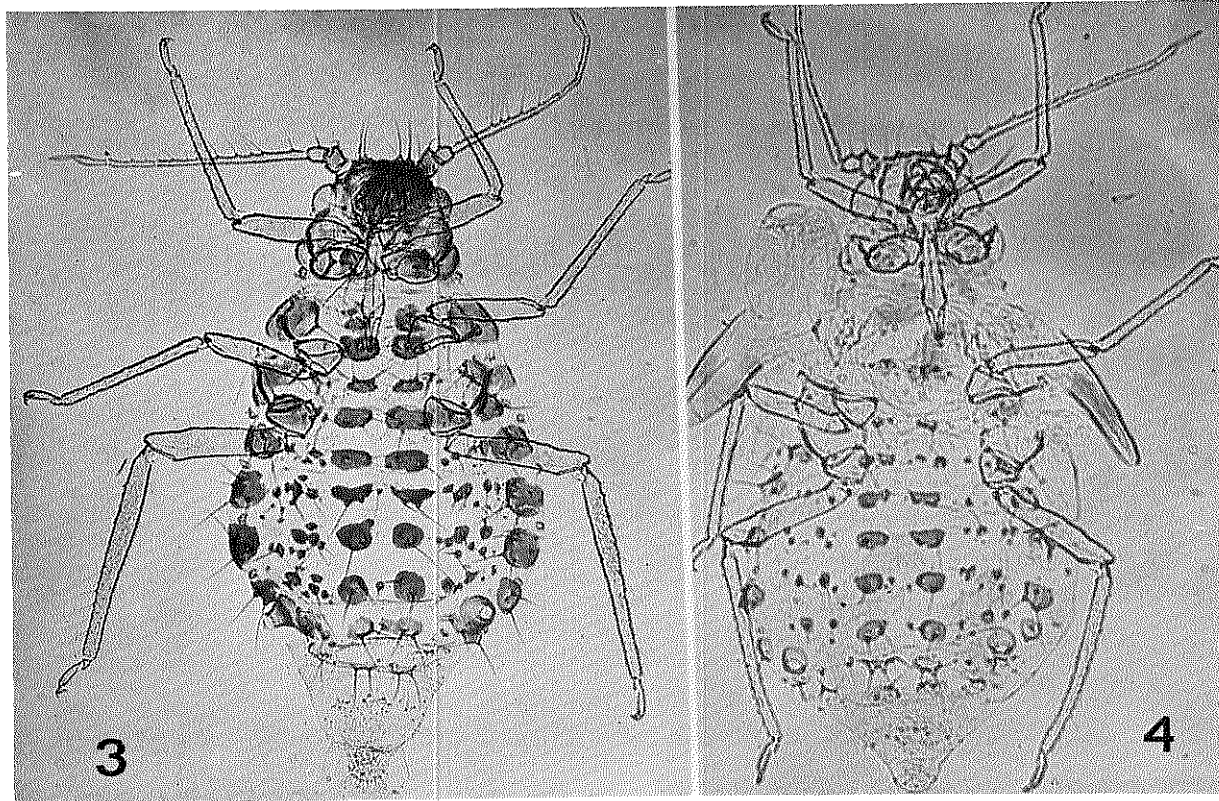
Photographs by J. M. Gonçalves Passos



1. Alete viviparous female. *Fêmia alada vivípara*.



2. Alate male. *Macho alado*.



3. Oviparous female. *Fêmea ovípara.*

4. 4th instar nymph of alate female. *Ninfa do 4.º instar de fêmea alada.*



**49. Schizaphis rotundiventris** (Signoret)

This aphid had hitherto never been found in Macaronesia. It is known from Asia, Australia, Africa and, in Europe, from Portugal, France and Italy (Hille Ris Lambers, 1967; Ilharco, 1970; van Harten, 1974). It lives on *Cyperus*.

Funchal (29.9.1981, No. 3782, *Cyperus esculentus*, col. A. van Harten).

**50. Sitobion fragariae** (Walker)

Present in all the Archipelagos of Macaronesia (Ilharco, 1976; Nieto Nafria, Carnero Hernandez & Mier Durante, 1977).

Funchal (29.9.1981, No. 3776, Gramineae, col. A. van Harten).

**51. Therioaphis trifolii** (Monell)

In the Macaronesian Archipelagos this aphid species was not only known from Madeira (Nieto Nafria, Carnero Hernandez & Mier Durante, *op. cit.*).

Funchal (29.9.1981, No. 3780, *Medicago sativa*, col. A. van Harten).

**52. Toxoptera aurantii** (Boyer de Fonscolombe)

Widespread in Macaronesia.

Poiso (4.10.1981, No. 3789a, *Erica arborea*); Queimadas (7.10.1981, No. 3810, *Vaccinium maderense*).

**53. Tubaphis ranunculina** (Walker)

This species continues to be known in Macaronesia only from Madeira proper (Ilharco, 1974).

Queimadas (7.10.1981, No. 3809, *Ranunculus repens*).

**54. Tuberculoides annulatus** (Hartig)

Already known from both the Portuguese archipelagos of Macaronesia (Ilharco, 1974, 1976). Sample No. 3803a contains an oviparous female and that of No. 3820 a male.

Queimadas (5.10.1981, No. 3803a, *Quercus robur*); Paul da Serra (10.10.1981, No. 3820, *Quercus robur*).

55. **Uroleucon erigeronensis** (Thomas)

The Canadian fleabane aphid is a North American species discovered in 1952 in France by Remaudière (1954). In 1962 it was collected in Poland by Szelegiewicz (1964) and later the same author (Szelegiewicz, 1968) adds Holland, Hungary, Czechoslovakia and Germany to the distribution area of this aphid. In 1972 Müller studies *U. erigeronensis* and suggests that its introduction into Europe «was almost certainly the result of air travel». Nieto Nafria (1974) records the Canadian fleabane aphid from Spain and now it is for the first time reported from Madeira. It is also unknown in the rest of Macaronesia and in Continental Portugal.

*U. erigeronensis* feeds on *Conyza canadensis* and, sometimes, on several species of *Erigeron*, mainly *E. annuus*, *E. pulchellus*, *E. subtrivernus* and *E. superbis* (Müller, 1972).

Funchal (30.9.1981, No. 3783, *Conyza canadensis*, col. A. van Harten).

56. **Uroleucon picridis** (Fabricius)

Widespread in Madeira and also known from the Canary Islands (Nieto Nafria, Carnero Hernandez & Mier Durante, 1977).

Rabaçal (10.10.1981, No. 3831b, *Leontodon* sp.).

57. **Wahlgreniella arbuti** (Davidson)

Never recorded from any other Macaronesian island other than Madeira (Ilharco, 1974).

Camacha (7.10.1981, No. 3811, *Arbutus unedo*); Pico do Arleiro (9.10.1981, No. 3816b, vagrants, col. A. van Harten & J. Pinto).

## LIST OF HOST PLANTS

Considering the three islands from which aphids are known, Madeira proper, Porto Santo and Deserta Grande, and the papers by Ilharco (1973, 1974, 1981) the following is the complete list of plants parasitized by aphids in the Archipelago of Madeira:

*Abutilon* sp.

*Aphis fabae*

*Aphis gossypii*

*Myzus persicae*

*Acacia melanoxylon* R. Br.

? *Aphis craccivora*

*Acer pseudoplatanus* L.

*Aulacorthum solani*

*Achillea millefolium* L.

*Macrosiphoniella millefolii*

*Adiantum* sp.

*Idiopterus nephrolepidis*

*Agrostis castellana* Bss. & Reut.

*Hysteroneura setariae*

- Ammi majus* L.  
   Dysaphis apiifolia  
   Hyadaphis foeniculi  
   Myzus ornatus  
*Andryala varia* (Lowe) DC.  
   Uroleucon picridis  
**Anthemideae**  
   Brachycaudus helichrysi  
   Macrosiphum euphorbiae  
   Myzus ornatus  
   Myzus persicae  
*Anthemis cotula* L.  
   Macrosiphoniella millefolii  
*Anthurium* sp.  
   Aulacorthum solani  
   Myzus persicae  
   Neomyzus circumflexus  
*Antirrhinum majus* L.  
   ? Myzus persicae  
*Arbutus unedo* L.  
   Wahlgreniella arbuti  
*Arundo donax* L.  
   Melanaphis donacis  
*Asclepias curassavica* L.  
   Aphis nerii  
*Avena barbata* Pott  
   Metopolophium dirhodum  
*Avena* sp.  
   Rhopalosiphum padi  
   Sitobion avenae  
   Sitobion fragariae  
*Bambusa vulgaris* Wendland  
   Melanaphis bambusae  
*Betula pubescens* Ehrhart  
   Calaphis flava  
*Bidens pilosa* L.  
   Aphis fabae  
   Brachycaudus cardui  
**Bignoniaceae**  
   Aulacorthum solani  
   Neomyzus circumflexus  
*Bougainvillea* sp.  
   Myzus ornatus  
   Myzus persicae  
*Brassica oleracea* L.  
   Brevicoryne brassicae  
   Myzus persicae  
*Briza maxima* L.  
   Metopolophium dirhodum  
*Briza minor* L.  
   Longiunguis pyrarius  
 «Broom»  
   Aphis sarothamni  
*Buxus sempervirens* L.  
   Toxoptera aurantii  
*Cakile maritima* Scop.  
   Brevicoryne brassicae  
*Camellia japonica* L.  
   Toxoptera aurantii  
*Capsella bursa-pastoris* (L.) Med.  
   Aphis capsellae  
   Aphis craccivora  
   Aphis fabae  
   Myzus persicae  
*Carduus pycnocephalus* L.  
   Brachycaudus cardui  
*Carica papaya* L.  
   Aphis fabae  
**Caryophyllaceae**  
   Myzus persicae  
*Cassia* sp.  
   Aphis gossypii  
   Myzus persicae  
*Castanea crenata* Sieb. & Zucc.  
   Myzocallis castanicola  
   Myzocallis kuricola  
*Castanea sativa* Mill.  
   Aulacorthum solani  
   Myzocallis castanicola  
*Cattleya* sp.  
   Cerataphis orchidearum  
*Centaurea millitensis* L.  
   Uroleucon jaceae  
*Centranthus ruber* (L.) DC.  
   Aphis citricola  
   Macrosiphum rosae  
   Myzus persicae  
*Cerastium* sp.  
   Myzus cymbalariae  
*Ceratochloa unioloides* (Willd.) P. Beauv.

- Metolophium diirhodum*  
*Chelidonium majus* L.  
   *Aphis fabae*  
   *Macrosiphum euphorbiae*  
*Chenopodium album* L.  
   *Aphis fabae*  
   *Macrosiphum euphorbiae*  
   *Myzus persicae*  
*Chorisia speciosa* St. Hill.  
   *Aphis gossypii*  
   *Macrosiphum euphorbiae*  
   *Myzus persicae*  
*Chrysanthemum coronarium* L.  
   *Brachycaudus helichrysi*  
   *Macrosiphoniella tapuskae*  
*Chrysanthemum indicum* L.  
   *Aphis fabae*  
   *Aphis gossypii*  
   *Brachycaudus helichrysi*  
   *Colopoda rufomaculata*  
   *Macrosiphoniella sanborni*  
   *Myzus persicae*  
   *Plectrochophorus chrysanthemi*  
*Chrysanthemum sylvaticum* Hoffgg. & Link  
   *Brachycaudus cardui*  
   *Brachycaudus helichrysi*  
*Chrysanthemum* sp.  
   *Aphis citricola*  
   *Aphis fabae*  
   *Aphis gossypii*  
   *Aphis solanella*  
   *Brachycaudus cardui*  
   *Macrosiphoniella sanborni*  
   *Macrosiphum euphorbiae*  
   *Myzus persicae*  
*Cineraria* sp.  
   ? *Acyrtosiphon malvae*  
*Citrus deliciosa* Ten.  
   *Aphis citricola*  
   *Myzus ornatus*  
   *Toxoptera aurantii*  
*Citrus limon* (L.) Burm. f.  
   *Toxoptera aurantii*  
*Citrus sinensis* (L.) Osbeck  
   *Aphis citricola*
- Toxoptera aurantii*  
*Citrus* sp.  
   *Aphis fabae*  
   *Aphis gossypii*  
   *Myzus persicae*  
   *Toxoptera aurantii*  
*Coelogyne cristata* Lindl.  
   *Cerataphis orchidearum*  
*Compositae*  
   *Aphis citricola*  
   *Aphis fabae*  
   *Brachycaudus cardui*  
*Conyza canadensis* (L.) Cronq.  
   *Uroleucon erigeronense*  
*Coriandrum sativum* L.  
   *Hyadaphis coriandri*  
*Corylus avellana* L.  
   *Myzocallis coryli*  
*Crithmum maritimum* L.  
   *Dysaphis crithmi*  
   *Macrosiphum ? centranthi*  
*Cruciferae*  
   *Myzus ornatus*  
   *Myzus persicae*  
*Cucumis melo* L.  
   *Aphis gossypii*  
*Cucurbita* sp.  
   *Aphis gossypii*  
*Cydonia oblonga* Mill.  
   *Aphis citricola*  
   *Aphis gossypii*  
   *Aphis pomi*  
*Cymbidium lowianum* Reichb. f.  
   *Aphis fabae*  
   *Cerataphis orchidearum*  
   *Myzus persicae*  
*Cynara cardunculus* L.  
   *Brachycaudus cardui*  
*Cynara scolymus* L.  
   *Brachycaudus cardui*  
*Cyperus esculentus* L.  
   *Schizaphis rotundiventris*  
*Digitaria sanguinalis* (L.) Scop.  
   *Anoecia vagans*  
   *Rhopalosiphum rufiabdominalis*

- Echium nervosum* Ait.  
*Brachycaudus bicolor*  
*Myzus ornatus*  
*Myzus persicae*
- Epidendron* sp.  
*Aphis citricola*
- ? *Epilobium* sp.  
*Aphis diphaga*
- Erica arborea* L.  
*Aphis citricola*  
*Aphis gossypii*  
*Aphis* sp.  
*Toxoptera aurantii*
- Erica scoparia* L.  
*Aphis citricola*  
*Aphis fabae*
- Eriobotrya japonica* (Thunb.) Lindl.  
*Aphis gossypii*  
*Aphis pomi*  
*Myzus persicae*
- Escallonia* sp.  
*Aphis citricola*
- Eupatorium adenophorum* Spreng.  
*Aphis fabae*  
*Aphis gossypii*  
*Aulacorthum solani*
- Euphorbia helioscopia* L.  
*Aphis tirucallis*  
*Myzus persicae*
- Euphorbia piscatoria* Ait.  
*Aphis paralios*  
*Aphis tirucallis*
- Fagus sylvatica* L.  
*Phyllaphis fagi*
- Foeniculum vulgare* Mill.  
*Aphis fabae*  
*Cavariella aegopodii*  
*Dysaphis apiifolia*  
*Hyadaphis foeniculi*
- Fragaria vesca* L.  
*Myzus ornatus*
- Fragaria* sp.  
*Pentatrichopus fragaefolii*
- Fumaria* sp.  
*Aphis gossypii*  
*Macrosiphum euphorbiae*
- Galactites tomentosa* Moench  
*Aphis gossypii*  
*Brachycaudus cardui*  
*Capitophorus elaeagni*
- Geranium maderense* P. F. Yeo  
*Acyrtosiphon malvae* s. str.
- Geranium* sp.  
*Acyrtosiphon malvae* s. str.  
*Aphis gossypii*
- Gerbera jamesonii* Hook.  
*Aphis gossypii*  
*Brachycaudus cardui*  
*Brachycaudus helichrysi*  
*Myzus cymbalariae*  
*Myzus ornatus*
- Gomphocarpus fruticosus* (L.) R. Br.  
*Aphis nerii*
- Gramineae*  
*Longiunguis pyrarius*  
*Metopolophium dirhodum*  
*Metopolophium festucae*  
*Rhopalosiphum insertum*  
*Sitobion fragariae*
- Hedera canariensis* Willd.  
*Aphis hederæ*
- Hedera helix* L.  
*Aphis hederæ*
- Hibiscus abelmoscus* Medic.  
*Aphis gossypii*
- Hibiscus rosa-sinensis* L.  
*Aphis gossypii*  
*Myzus ornatus*  
*Myzus persicae*  
*Neomyzus circumflexus*
- Hordeum* sp.  
*Metopolophium dirhodum*  
*Rhopalosiphum padi*  
*Sitobion avenae*  
*Sitobion fragariae*
- Howea forsteriana* F. Mueller  
*Cerataphis palmae*
- Hypericum grandifolium* Choisy  
*Aphis fabae*  
*Macrosiphum euphorbiae*
- Hypochoeris* sp.  
*Acyrtosiphon ilka*

- Myzus cymbalariae*  
*Ilex ? aquifolium* L.  
     *Toxoptera aurantii*  
*Ilex canariensis* Poir.  
     *Toxoptera aurantii*  
*Impatiens holstii* Engl. & Warb.  
     *Myzus ornatus*  
     *Myzus persicae*  
     *Neomyzus circumflexus*  
*Iris albicans* Lgl.  
     *Dysaphis tulipae*  
     *Macrosiphum euphorbiae*  
*Iris* sp.  
     *Dysaphis tulipae*  
*Jacaranda mimosifolia* D. Don.  
     *Aphis citricola*  
     *Aphis gossypii*  
     *Myzus persicae*  
     *Toxoptera aurantii*  
*Jasminum ? sambac* Ait.  
     *Toxoptera aurantii*  
*Juglans regia* L.  
     *Chromaphis juglandicola*  
*Juniperus communis* L.  
     *Cinara juniperi*  
*Juniperus oxycedrus* L.  
     *Cinara cupressi*  
*Juniperus phoenicea* L.  
     *Cinara cupressi*  
     *Cinara tujafilina*  
*Juniperus* sp.  
     *Cinara tujafilina*  
*Lactuca sativa* L.  
     *Acyrtosiphon lactucae*  
*Lactuca serriola* L.  
     *Acyrtosiphon lactucae*  
*Lagerstroemia indica* L.  
     *Aphis fabae*  
     *Aphis gossypii*  
     *Myzus persicae*  
*Lathyrus odoratus* L.  
     *Acyrtosiphon pisum*  
     *Aphis gossypii*  
     *Macrosiphum ? centranthi*  
*Laurus azorica* (Seub.) Franco  
     *Brachycaudus prunicola*  
     *Lavatera* sp.  
         *Aphis umbrella*  
         *Brachycaudus helichrysi*  
         *Myzus ornatus*  
*Leontodon rothii* Ball  
     *Acyrtosiphon ilka*  
     *Aulacorthum solani*  
     *Myzus cymbalariae*  
*Leontodon* sp.  
     *Nasonovia ribisnigri*  
     *Uroleucon picridis*  
*Leucanthemum myconis* (L.) Giraud  
     *Macrosiphoniella millefolii*  
*Lonicera etrusca* Santi  
     *Aulacorthum solani*  
     *Hyadaphis foeniculi*  
*Lycopersicum esculentum* Mill.  
     *Macrosiphum euphorbiae*  
*Malus domestica* Borkh.  
     *Aphis citricola*  
     *Aphis gossypii*  
     *Aphis pomi*  
     *Dysaphis plantaginea*  
     *Eriosoma lanigerum*  
     *Toxoptera aurantii*  
*Malva parviflora* L.  
     *Aphis umbrella*  
*Medicago sativa* L.  
     *Therioaphis trifolii*  
*Melanoseelinum decipiens* (Schrad. & Wendl.) Hoffm.  
     *Cavariella aegopodii*  
     *Dysaphis foeniculus*  
*Mentha pulegium* L.  
     *Aulacorthum solani*  
     *Myzus cymbalariae*  
     *Ovatus crataegarius*  
*Mesembryanthemum crystallinum* (L.)  
     *Dysaphis emicis*  
*Mesembryanthemum nodiflorum* L.  
     *Dysaphis emicis*  
*Micromeria varia* Benth.  
     *Aphis ? brunellae*  
*Mirabilis jalapa* L.  
     *Myzus persicae*  
*Muehlenbeckia* sp.

- Aphis gossypii*  
*Brachycaudus rumexicolens*  
*Myzus persicae*  
*Neomyzus circumflexus*  
*Musa cavendishii* Lambert  
*Pentalonia nigronervosa*  
*Myoporium acuminatum* R. Br.  
*Aphis gossypii*  
*Myzus persicae*  
*Myrica faya* Ait.  
*Tuberculooides annulatus*  
*Nerium oleander* L.  
*Aphis citricola*  
*Aphis fabae*  
*Aphis gossypii*  
*Aphis nerii*  
*Nicotiana glauca* Grahm.  
*Aphis citricola*  
*Aphis gossypii*  
*Myzus persicae*  
*Nymphaea alba* L.  
*Rhopalosiphum nymphaeae*  
*Nymphaea caerulea* Savig.  
*Rhopalosiphum nymphaeae*  
*Odontioda* sp.  
*Aphis citricola*  
 «Orchid»  
*Cerataphis orchidearum*  
*Oxalis pes-caprae* L.  
*Macrosiphum euphorbiae*  
*Myzus persicae*  
 «Palm»  
*Cerataphis palmarum*  
*Papaver dubium* L.  
*Aphis fabae*  
*Papaver somniferum* L.  
*Aphis solanella*  
*Myzus persicae*  
*Parietaria punctata* Willd.  
*Aphis parietariae*  
*Paspalum dilatatum* Poiret  
*Hysteroneura setariae*  
*Sitobion avenae*  
*Sitobion fragariae*  
*Pelargonium peltatum* Ait.  
*Brachycaudus helichrysi*  
*Pelargonium* sp.  
*Acyrtosiphon malvae* s. str.  
*Aphis gossypii*  
*Myzus persicae*  
*Picea excelsa* (Lam.) LK.  
*Cinara pilicornis*  
*Elatobium abietinum*  
*Picris echioides*  
*Hyperomyzus picridis*  
*Pinus canariensis* Spreng.  
*Cinara maritimae*  
*Eulachnus rileyi*  
*Pinus pinaster* Ait.  
*Cinara maritimae*  
*Eulachnus rileyi*  
*Eulachnus tuberculostemmatum*  
*Pinus pinea* L.  
*Cinara maritimae*  
*Pinus radiata* D. Don  
*Cinara maritimae*  
*Pinus silvestris* L.  
*Pineus sylvestris*  
*Pisum sativum* L.  
*Acyrtosiphon pisum*  
*Aphis fabae*  
*Macrosiphum euphorbiae*  
*Myzus persicae*  
*Pittosporum coriaceum* Ait.  
*Toxoptera aurantii*  
*Pittosporum undulatum* Vent.  
*Toxoptera aurantii*  
*Plantago lagopus* L.  
*Dysaphis plantaginea*  
*Plantago* sp.  
*Aphis craccivora*  
*Aphis gossypii*  
*Dysaphis plantaginea*  
*Myzus ornatus*  
*Platycladus orientalis* (L.) Franco  
*Cinara tujafilina*  
*Plumeria tricolor* Ruiz & Pav.  
*Aphis fabae*  
*Aphis gossypii*  
*Poa annua* L.  
*Anoecia vagans*  
*Schizaphis graminum*

? *Polygonaceae*

Aphis gossypii

Aphis solanella

*Polygonum persicaria* L.

Aulacorthum solani

Capitophorus hippophaes s. str.

*Poncirus trifoliata* (L.) Raf.

Aphis citricola

Aphis gossypii

Toxoptera aurantii

*Populus deltoides* Marsh.

Chaitophorus leucomelas

*Populus nigra* L.

Chaitophorus leucomelas

Pterocomma populeum

*Populus ? tremula* L.

Chaitophorus leucomelas

Pemphigus populitransversus

*Populus yunnanensis* Dode

Chaitophorus leucomelas

*Prunus amygdalus* Batsch

Aphis citricola

Aphis gossypii

Brachycaudus prunicola

Toxoptera aurantii

*Prunus armeniaca* L.

Aphis citricola

Aphis gossypii

Brachycaudus prunicola

*Prunus avium* (L.) L.

Aulacorthum solani

Brachycaudus prunicola

Myzus cerasi

*Prunus domestica* L.

Brachycaudus prunicola

*Prunus persica* (L.) Batsch

Brachycaudus prunicola

Myzus persicae

*Prunus* sp.

Aulacorthum solani

Brachycaudus prunicola

Myzus persicae

*Punica granatum* L.

Aphis citricola

Aphis gossypii

Aphis punicae

*Pyrus communis* L.

Aphis citricola

Aphis gossypii

Aphis pomi

Dysaphis pyri

? *Eriosoma lanigerum**Quercus borealis* Michx f.

Aulacorthum solani

Myzocallis castanicola

Toxoptera aurantii

*Quercus ilex* L.

Thelaxes suberi

*Quercus robur* L.

Myzocallis castanicola

Tuberculoides annulatus

*Quercus suber* L.

Myzocallis boernerii

Myzocallis castanicola

Thelaxes suberi

*Ranunculus repens* L.

Tubaphis ranunculina

*Raphanus raphanistrum* L.

Brevicoryne brassicae

Myzus persicae

*Rhododendron simsii* Planch.

Illinoia azaleae s. str.

*Rosa* sp.

Aphis gossypii

Macrosiphum rosae

Myzaphis bucktoni

Myzaphis rosarum

Myzus persicae

Rhodobium porosum

Wahlgreniella arbuti

*Rubus ulmifolius* Schott

Amphorophora idaei

Aphis ruborum

*Rubus* sp.

Amphorophora idaei

Aphis ruborum

*Rumex* sp.

Aphis fabae

Aphis gossypii

Aphis nasturtii

Aphis solanella

Brachycaudus rumexicolens



- Macrosiphum euphorbiae  
 Myzus ornatus  
 Myzus persicae  
*Salix alba* X *viminalis*  
 Aphis citricola  
 Aphis farinosa  
 Aphis gossypii  
 Cavariella theobaldi  
 Toxoptera aurantii  
 Tuberosiphum salignus  
*Salix* ? *babylonica* L.  
 Aphis farinosa  
 Cavariella aegopodii  
 Cavariella theobaldi  
*Salix canariensis* Ch. Smith  
 Aphis farinosa  
 Tuberosiphum salignus  
*Salix* sp.  
 Aphis fabae  
 Aphis farinosa  
 Cavariella aegopodii  
*Salvia splendens* Ker-Gawl.  
 Aphis gossypii  
 Myzus ornatus  
*Sanguisorba maderensis* (Bornm.) Nordb.  
 Aphis citricola  
 Aphis gossypii  
 Aulacorthum solani  
 Myzus ornatus  
 Neomyzus circumflexus  
 Schizaphis pyri  
*Sarothamnus scoparius* (L.) Wimmer  
 Acyrthosiphon spartii  
 Aphis sarothamni  
*Scrophulariaceae*  
 Aphis citricola  
 Myzus persicae  
*Sedum japonicum* Sieb.  
 Aphis sedi  
*Sinapidendron rupestre* Lowe  
 Brevicoryne brassicae  
*Solanum jasminoides* Paxt.  
 ? Aulacorthum solani  
*Solanum nigrum* L.  
 Aphis fabae  
 Aphis gossypii  
 Aphis solanella  
 Macrosiphum euphorbiae  
 Myzus ornatus  
 Myzus persicae  
*Solanum tuberosum* L.  
 Aphis citricola  
 Aphis fabae  
 Aphis gossypii  
 Macrosiphum euphorbiae  
 Myzus ornatus  
 Myzus persicae  
 Neomyzus circumflexus  
*Sonchus oleraceus* L.  
 Aphis gossypii  
 Hyperomyzus lactucae  
 Macrosiphum euphorbiae  
 Myzus persicae  
 Uroleucon sonchi  
*Sonchus squarrosus* DC.  
 Aphis gossypii  
 Hyperomyzus lactucae  
 Macrosiphum euphorbiae  
 Myzus ornatus  
 Uroleucon picridis  
*Sonchus* sp.  
 Aphis gossypii  
 Hyperomyzus lactucae  
 Uroleucon picridis  
 Uroleucon sonchi  
*Spartium junceum* L.  
 Acyrthosiphon spartii  
 Aphis sarothamni  
*Spiraea cantoniensis* Lour.  
 Aphis citricola  
 «Stock»  
 Brevicoryne brassicae  
*Strelitzia augusta* Thunb.  
 ? Cerataphis palmarum  
*Strelitzia nicolai* Regel & Koernicke  
 Rhopalosiphum padi  
*Tecomaria capensis* Seem.  
 Aphis gossypii  
 Myzus persicae  
 «Thistle»  
 Brachycaudus cardui  
 Capitophorus elaeagni

<i>Uroleucon jaceae</i>	<i>Aphis tirucallis</i>
<i>Thuya</i> sp.	<i>Aphis umbrella</i>
<i>Cinara tujafilina</i>	<i>Aulacorthum solani</i>
<i>Tilia tomentosa</i> Moench	<i>Cavariella aegopodii</i>
<i>Eucallipterus tiliae</i>	<i>Dysaphis emicis</i>
<i>Toxoptera aurantii</i>	<i>Dysaphis plantaginea</i>
<i>Tolpis fruticosa</i> Schrank	<i>Hyperomyzus lactucae</i>
<i>Pemphigus bursarius</i>	<i>Hyperomyzus picridis</i>
<i>Trifolium campestre</i> Schreb.	<i>Melanaphis bambusae</i>
<i>Acyrtosiphon pisum</i>	<i>Myzocallis boeneri</i>
<i>Triticum vulgare</i> Host	<i>Myzocallis castanicola</i>
<i>Metopolophium dirhodum</i>	<i>Pemphigus populitransversus</i>
<i>Rhopalosiphum padi</i>	<i>Rhopalosiphum insertum</i>
<i>Triticum</i> sp.	<i>Rhopalosiphum padi</i>
<i>Diuraphis noxia</i>	<i>Rhopalosiphum rufiabdominalis</i>
<i>Schizaphis graminum</i>	<i>Sitobion avenae</i>
<i>Tulipa</i> sp.	<i>Wahlgreniella arbuti</i>
<i>Dysaphis tulipae</i>	<i>Vicia faba</i> L.
<i>Ulex europaeus</i> L.	<i>Aphis craccivora</i>
<i>Aphis ulicis</i>	<i>Aphis fabae</i>
<i>Unknown host plants</i>	<i>Vicia sativa</i> L.
<i>Acyrtosiphon pisum</i>	<i>Acyrtosiphon pisum</i>
<i>Aphis gossypii</i>	<i>Aphis craccivora</i>
<i>Myzus ornatus</i>	<i>Visnea mocanera</i> L. f.
<i>Myzus persicae</i>	<i>Toxoptera aurantii</i>
<i>Ovatus crataegarius</i>	<i>Vitis vinifera</i> L.
<i>Urtica dubia</i> Forsk.	<i>Aphis fabae</i>
<i>Aphis fabae</i>	<i>Viteus vitifolii</i>
<i>Macrosiphum euphorbiae</i>	<i>Vitis</i> sp.
<i>Myzus persicae</i>	<i>Viteus vitifolii</i>
<i>Vaccinium maderense</i> LK.	<i>Zantheschia aethiopica</i> (L.) Spreng.
<i>Aphis citricola</i>	<i>Aulacorthum solani</i>
<i>Aphis gossypii</i>	<i>Zea mays</i> L.
<i>Toxoptera aurantii</i>	<i>Aphis fabae</i>
<i>Vagrants</i>	<i>Rhopalosiphum maidis</i>
<i>Aphis pomi</i>	<i>Rhopalosiphum padi</i>

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### New records to the aphid fauna from the Archipelago of Madeira (Homoptera, Aphidoidea)

**SUMMARY.** This paper presents the scientific results of a second aphidological expedition to the Archipelago of Madeira. Besides Madeira proper only the largest island of the group of 3 small ones near the main island, i. e., Deserta Grande, has been visited. The aphids collected on this island (the first ever) are: *Aphis* ? *brunellae*, *Dysaphis crithmi* and *Pemphigus bursarius*, the first and the last species being new to Macaronesia. In Madeira proper the following nine species have been collected for the first time in Macaronesia: *Anoecia vagans*, *Cerataphis palmae*, *Cinara pilicornis*, *Elatobium abietinum*, *Macrosiphoniella millefolii*, *Myzocallis coryli*, *Myzocallis kuricola*, *Schizaphis rotundiventris*, and *Uroleucon erigeronensis*. The following species are new to the Archipelago of Madeira: *Aphis parietariae*, *Chromaphis juglandicola*, *Coloradoa rufomaculata*, *Eulachnus tuberculostem-matus*, *Hyadaphis coriandri*, *Idiopterus nephrolepidis*, *Illinoia azaleae*, *Metopolophium festucae*, *Myzaphis bucktoni*, *Nasonovia ribisnigri*, *Rhopalosiphum insertum*, and *Therioaphis trifolii*. Two species were not known from Madeira proper, *Dysaphis apiifolia* and *Schizaphis graminum*. From material collected by the expedition, van Harten (1982) records *Hysteroneura setariae* for the first time from Macaronesia.

The name *Cerataphis lataniae* is deleted from the list of Madeira aphids. *Hyadaphis coriandri* is also recorded from Continental Portugal. The Far Eastern aphid *Myzocallis kuricola* is found in the west for the first time.

A list of plants which in the Archipelago of Madeira are parasitized by aphids is presented.

### Novos registos na afidofauna do Arquipélago da Madeira (Homoptera, Aphidoidea)

**RESUMO.** Este trabalho publica os resultados científicos de uma segunda expedição afidológica ao Arquipélago da Madeira. Além da ilha da Madeira apenas a maior das ilhas Desertas, a Deserta Grande, foi visitada. Para

esta ilha foram colhidos os primeiros afídeos, *Aphis ? brunellae*, *Dysaphis crithmi* e *Pemphigus bursarius*, a primeira e a última espécie sendo novas para a Macaronésia. Na ilha da Madeira colheram-se pela primeira vez na Macaronésia, as seguintes nove espécies: *Anoecia vagans*, *Cerataphis palmae*, *Cinara pilicornis*, *Elatobium abietinum*, *Macrosiphoniella millefolii*, *Myzocallis coryli*, *Myzocallis kuricola*, *Schizaphis rotundiventris* e *Uroleucon erigeronensis*. As seguintes espécies são novas para o Arquipélago da Madeira: *Aphis parietariae*, *Chromaphis juglandicola*, *Coloradoa rufomaculata*, *Eulachnus tuberculostemmatum*, *Hyadaphis coriandri*, *Idiopterus nephrolepidis*, *Illinoia azaleae*, *Metopolophium festucae*, *Myzaphis bucktoni*, *Nasonovia ribisnigri*, *Rhopalosiphum insertum* e *Therioaphis trifolii*. Duas espécies não eram conhecidas da ilha da Madeira: *Dysaphis apiifolia* e *Schizaphis graminum*. A partir de material colhido durante a expedição, van Harten (1982) citou *Hysteroneura setariae* pela primeira vez para a Macaronésia.

O nome *Cerataphis lataniae* é riscado da lista de afídeos da Madeira. *Hyadaphis coriandri* é também citado para Portugal Continental. O afídeo do Oriente *Myzocallis kuricola* é pela primeira vez encontrado no Ocidente.

Apresenta-se por fim a lista de plantas que no Arquipélago da Madeira serve de substrato a afídeos.

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