

B O C A G I A N A

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CONTRIBUTIONS TO THE FLORA OF THE ARCHIPELAGO OF MADEIRA

By Alfred Hansen *

With 2 figures

The present paper records a number of floristic observations made in Madeira during visits in 1976, 1977 and 1978, as well as the results of studies in some collections of Madeira-plants received for determination or verification. In 1978 I had the opportunity of going through a comprehensive herbarium belonging to the Seminário Maior do Funchal, abbreviated MADS in the «Index Herbariorum», 5. edit. 1964. This herbarium was started in 1882 and contains mainly the collections of higher plants, mosses and lichens of the following botanists: J. Y. Johnson (1820-1900), N. H. Mason (dates unknown), C. A. de Menezes (1863-1928), C. J. de Gouveia Barreto (1887-1963), J. Gonçalves da Costa (1899-1967), D. de Gois (1905-1978) and M. de Nóbrega (1928 —). At present it is stored temporarily in the Museu de Arte Sacra in Funchal and is not accessible for loans. Some interesting and hitherto unpublished records were found in this herbarium, and they are mentioned below. Further some nomenclatural considerations as to Madeira-plants are made in this paper.

My best thanks are due to G. E. Maul, the Municipal Museum of Funchal (herb. MADM) for working-facilities there, to Eng. Agr. R. Vieira, director of the Botanical Garden, Funchal (herb. MADJ), to P. Rocha da Silva, A. da Costa Neves and L. Franquinho, all of Funchal, for valuable help in many respects.

Species new to Madeira:

AIZOACEAE

Dorotheanthus gramineus (Haw.) Schwant.

Madeira: Terreiro da Luta, north of Monte, 1977, A. Hansen

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and Loreto, 1969, M.-L. Nilsson, in both places as garden-escapes. Annual from the Cape Province, S. Africa.

AMARANTHACEAE

Amaranthus palmeri S. Wats.

Madeira: Funchal Harbour, in waste place at the new quay-construction, a single, female specimen, 1978, A. Hansen. Annual from the southwestern states of USA, introduced in several countries in Europe.

CAMPANULACEAE

Jasione montana L.

Madeira: Santo da Serra, as a weed in plant-nursery belonging to the Forestry Department's local station, 1978, A. Hansen, most likely introduced with some foreign plants or seeds. Perennial or biennial plant, wide-spread in Europe and the Mediterranean region.

CARYOPHYLLACEAE

Silene armeria L.

Madeira: Porto do Moniz, on rock-wall, 1972, T. Furängen, Helsinki. Annual or biennial from C. and S. Europe, widely cultivated and naturalized elsewhere, as for instance the Azores.

COMPOSITAE

Centaurea diluta Dryander ex Aiton

Madeira: Ribeira dos Socorridos, W. of Funchal, in dry river-bed near a football-ground, 1976, A. Hansen. Annual or biennial plant from NW. Africa and S. Spain, in recent years introduced as a weed of waste places in many European countries, most likely as ingredients of bird-seeds; found also in the Canary Islands in 1976 as a plant new to these islands (Mendez & Wildpret 1978).

CRASSULACEAE

Kalanchoe fedtschenkoi Hamet & Perr.

Madeira: Faial, in dry river-bed near the north coast, 1978, A. Hansen. Perennial from Madagascar.

Kalanchoe tubiflora (Harv.) Hamet

Madeira: Naturalized and flowering on road-slope near Calheta Harbour, south coast, 1977, A. Hansen. Perennial from S. Africa. — Both Kalanchoes are well-known ornamental plants.

Sedum forsteranum Sm.

Madeira: Funchal, on road-side, 1972, T. Furängen, Helsinki. Perennial from W. Europe, often cultivated and naturalized, known as such also from the Azores.

CRUCIFERAE

Lunaria annua L.

Madeira: Monte, on road-side as a garden-escape, 1976, A. Hansen. Biennial herb, a native of SE. Europe, but commonly naturalized or a casual elsewhere.

Sisymbrium irio L.

Porto Santo: Vila, in waste place, 1973, A. Hansen. Annual from S. Europe, wide-spread as a cosmopolitan species, also in the Canary Islands and the Azores.

CYPERACEAE

Eleocharis palustris (L.) R. Br.

Madeira: A sheet in herb. MADS, Funchal, states that this plant was collected at Porto do Moniz in 1930 by the late J. G. da Costa. A nearly cosmopolitan perennial, known also from the Azores.

FILICES

Dicksonia antarctica Labill.

During my stay in Madeira in September 1978 my attention was drawn to the fact that a mysterious fern had recently been discovered in a locality called Pico do Tapeiro or Chão do Alecrim, east of Encumeada. On a slope covered with Laurel-forest, not very far from the path running between Encumeada and Pico Ruivo, in about 1300 m, a stand of about 100 specimens of a Tree-Fern grows in a quite natural habitat giving the visitor the impression of a true native plant! One of the largest and oldest specimens seen has a cylindrical trunk of about 80 cm in height and about 25 cm in diameter and bears at the top 32 living fronds up to 1.30 m in length, with a large amount of sori at the time it was observed (24.IX.1978). As is well known the only native «Tree-Fern» or Tree-Fern-like plant in Madeira is the very rare «Feto Abrum» (*Culcita macrocarpa* C. Presl, earlier also named *Dicksonia culcita*, belonging to the Dicksoniaceae or Culcitaceae). However, this plant could at once be left out of consideration, and after closer examination of the material brought back to Copenhagen I have come to the conclusion that the fern in question is identical with *Dicksonia antarctica* Labill., a native of SE. Australia and the Isle of Tasmania. This fern is often cultivated in gardens in many parts of the world, and according to Grabham (1942) known also from gardens in Madeira. Grabham lists 3 species of Tree-Ferns known as ornamental plants on the island, viz. *Dicksonia fibrosa*, *D. lanata* and *Cyathea meridensis* (a fourth species is also present, though not mentioned by Grabham: *Sphaeropteris* or *Alsophila cooperi*), and *Dicksonia antarctica* is most likely hidden under the name *Dicksonia fibrosa*, as this species

from New Zealand has been mistaken for *D. antarctica*, which species does not occur in New Zealand, at least not as a wild plant (Allan 1961).

The stand of *Dicksonia antarctica* at Pico do Tapeiro must be rather old and may have escaped notice of botanists because of its well hidden and remote location. It is an excellent example of a perfect naturalization in Madeira of a plant from abroad. Some specimens from the above mentioned stand have already been «carried back» again to gardens in Madeira, thus specimens are grown in the Forest Service Stations in Ribeira Brava Village, in Encumeada and Ribeiro Frio (Forest Reserve), but it is sincerely hoped that it will be able to survive on Pico do Tapeiro.

My informant and guide in the mountains of Madeira, S. P. Rocha da Silva, who at present probably knows the higher regions of the island better than any one else, told me that *D. antarctica* also used to grow at Caldeirão Verde. Unfortunately all specimens from that locality have been dug up by people, probably for transplantation into private gardens.

GRAMINEAE

Avena occidentalis Dur.

Madeira: Collected in a single locality in the eastern part of the island, but exact locality not known, most likely in the Santo da Serra-area, 31st May 1971, leg. G. Kjellson, material in herb. C. Annual, native to the Azores, Madeira, Canary Islands, Portugal, NE. Africa and Saudi Arabia, introduced into N. America; mentioned from Madeira by Baum (1977).

Pennisetum clandestinum Hochst. ex Chiov.

Fig. 1.

Madeira: Commonly distributed at Porto do Moniz and Ponta do Pargo, western part of the island, 1977, R. Vieira. Most likely escaped from cultivation as a forage grass. The so-called «Kikuyu Grass», a perennial species native to East Tropical Africa, but now cultivated in many parts of the world as a fodder plant.

LABIATAE

Plectranthus fruticosus l' Hérít.

Madeira: Santana, common in stone-fences as a garden-escape, 1976, A. Hansen. A shrub from S. Africa.

LEGUMINOSAE

Ornithopus sativus Brot.

Madeira: Queimadas, ca. 860 m, 1957, M. Malmberg, Helsinki. Annual, a native of SW. Europe, often cultivated as a fodder plant and sometimes naturalized; known also from the Azores.

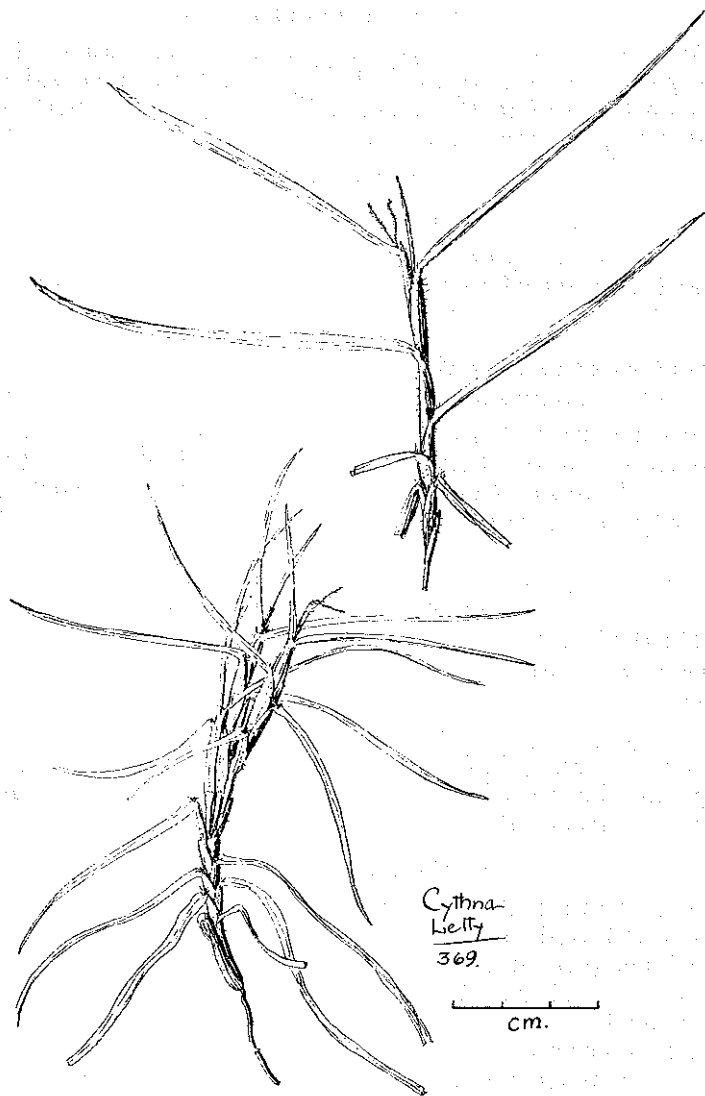


Fig. 1. — *Pennisetum clandestinum* Hochst. ex Chiov. (from D. Meredith: The grasses and pastures of South Africa, part 1, 1959).

MALVACEAE

Abutilon striatum Dicks.

Madeira: On slope near a monastery above Funchal, most likely a garden-escape, 1895, O. Paulsen (a Danish botanist who visited Madeira on his way to the West Indies, specimen in herb. C.). A native of Guatemala, Central America.

PLUMBAGINACEAE

Limonium sinuatum (L.) Miller

Madeira: Funchal, on road-side in Rua do Favila, most likely a garden-escape. Perennial, a native of the Mediterranean Region.

RESEDACEAE

Sesamoides canescens (L.) O. Kuntze ssp. **fruticosa** (Lange) Heywood
or var. **suffruticosa** (Lange) Abdallah & de Wit (1978).

Madeira: Santo da Serra, on lawns in the Junta Garden, 1975. J. Duvigneaud, most likely introduced; found again in the same area in 1978, A. Hansen. Woody perennial or subshrub, distributed in the Iberian Peninsula, France and NW. Africa.

SCROPHULARIACEAE

Linaria maroccana Hook. f.

Madeira: Funchal, in waste place near the Stadium, 1976, A. Hansen, most likely a garden-escape. Annual plant and a native of Morocco.

Verbascum thapsus L.

Madeira: Chão da Ribeira above Seixal, a single specimen on slope at the river-bed, 1978, A. Hansen. Biennial plant distributed in most of Europe, also in the Azores.

Veronica officinalis L.

Madeira: According to a sheet in herb. MADS, Funchal, this plant was collected at Pico Jorge on October 4th, 1948, by M. Nóbrega, who was not sure of its identity, as the plant was observed very late in the season and therefore in poor state. In 1978 it was rediscovered in the same locality by P. Rocha da Silva, who further communicates that he has observed the same plant also at Passada do Porco near Pico Canário. Some specimens are at present in cultivation in the Botanical Garden of Funchal. The Madeira-plant is glabrous except for a few hairs on the leaf-stalks.

SOLANACEAE

Withania somnifera (L.) Dunal

Madeira: This plant seems to have been found in Madeira

before, thus in the Copenhagen Botanical Museum (herb. C.) there is a sheet with a collection of this plant made by the Norwegian Danish botanist Chr. Smith, who stayed in Madeira from April 22nd to April 30th 1815, on his way to the Canary Islands. It has not been mentioned by Lowe (1872), and it is so far not known to have been observed again in Madeira. A shrub and a native of the Mediterranean Region, known also from the Canary Islands.

UMBELLIFERAE

Smyrnium olusatrum L.

This perennial herb from SW. Europe, the Mediterranean Region and the Canary Islands may have existed once in Madeira, as there is a specimen in herb. MADS from a garden in Rua das Maravilhas, Funchal (it is not known if it occurred there as a weed or as a pot-plant), 1875, leg. J. Y. Jahnsen.

Some remarkable new finds and observations:

ARACEAE

Arum italicum Miller

Ma de ira: Cural das Freiras, near the village, 1977, A. Hansen. A rare plant in Madeira.

BORAGINACEAE

Borago officinalis L.

Ma de ira: Serra d'Água, a field-weed near Pousada dos Vinháticos, 1976, A. Hansen. A rare plant in Madeira.

CAMPANULACEAE

Legousia falcata (Ten.) Fritsch

Ma de ira: Ribeira do Colmeal, Cural das Freiras, 1951, M. Nóbrega (herb. MADS.), Serra d'Água, Ribeira Brava, on road-side near Pousada dos Vinháticos, 1976, A. Hansen. A rare plant in Madeira.

CAPRIFOLIACEAE

Sambucus nigra L.

Besides the endemic *Sambucus lanceolata* R. Brown in Buch (*S. maderensis* Lowe) and the naturalized *S. ebulus* L. (once introduced as a medical plant) a third species, *S. nigra* L., also occurs in Madeira as an originally introduced garden plant, but sometimes escapes from gardens, and as such it was found in Monte above Funchal in 1976, A. Hansen.

CARYOPHYLLACEAE

Sagina apetala Ard.

Madeira: Serra d'Água, on roadside near Pousada dos Vinháticos, 1976, A. Hansen. A rare plant in Madeira, mostly found in Funchal.

COMPOSITAE

Arctium minus (Hill) Bernh.

Madeira: Near the restaurant at the Encumeada pass, on slope with waste, several specimens observed in 1977, A. Hansen. A rare plant in Madeira, originally introduced but mentioned already by Lowe (1868).

Aster squamatus (Spreng.) Hier.

This plant which quite evidently is at present spreading in Madeira, see Hansen (1970 and 1974), has now reached Funchal. Thus, in September 1978 it was observed as a weed in the garden belonging to hotel Quinta do Sol, Rua Dr. Pita, near the Country Club Garden. In 1977 it was observed in a waste place at Calheta Harbour west of Madalena do Mar.

Centaurea sphaerocephala L.

Correct name for this introduced and established plant in Madeira, at present known only from a single locality, viz. road-side at Camacha (Hansen 1969), seems to be *C. sphaerocephala* L. ssp. *lusitanica* (Boiss. & Reut.) Nyman, a ssp. of distribution in Central and South Portugal only. *C. sonchifolia* L. is not a synonym of *C. sphaerocephala*, but represents an independent species native of the Central and Eastern Mediterranean Regions.

Coleostephus myconis (L.) Cass. (*Chrysanthemum* m. L.)

Madeira: A field-weed near Santana, north coast, 1976, A. Hansen. While Lowe (1868) gives it as a rather common plant in Madeira it seems now to have become much rarer.

Gnaphalium cf. **calviceps** Fernald or **Gamochaeta c.** (Fernald) Cabrera.

Madeira: Serra d'Água, Ribeira Brava Valley, near the Power Station, on road-side and among paving-stones of the road itself, abundant in 1976 and 1977, A. Hansen (see Hansen 1974).

Lactuca virosa L.

Madeira: Cural das Freiras, 10 specimens observed near the village, 1977, A. Hansen (see Hansen 1970 and 1974).

Phagnalon bennettii Lowe, Manual Flora of Madeira 1: 441, 1868 (Syn.: *Conyza calycina* auct. mad., non Cav., *C. rupestris* Masson nom. nud., *Phagnalon calycinum* auct. mad., non (Cav.) DC., *P. scariosum* DC. nom. nud., *P. lowei* DC. nom. nud., *P. rupestre* auct. mad., non (L.) DC.).

This plant endemic to Madeira and Porto Santo seems at present to be rather rare; some recent localities are: Calheta 1970, W. Hecker, Pico do Castelo (Porto Santo) 1969 and 1973, A. Hansen, Cabo Girão 1973, A. Hansen, Levada do Bom Sucesso 1973, V. Dalgaard, Ribeira Brava, on rocks, near its mouth, south coast, 1976, A. Hansen. A more detailed account of this misunderstood and neglected taxon, generally known as *P. calycinum* (Cav.) DC. will be published later. *P. calycinum* (Cav.) DC. is most likely identical with *P. rupestre* (L.) DC. ssp. *mauretanicum* Pignatti (var. *mauretanicum*) published recently (Pignatti 1969); this ssp. is distributed in South Spain and NW. Africa. *P. rupestre* (L.) DC. hardly belongs to the Madeira-flora.

Senecio auritus (l' Hérít.) Lowe

Senecio auritus (l' Hérít.) Lowe based on *Cineraria aurita* l' Hérít., Sert. Angl. 26, 1789, seems to be the correct name for this endemic plant, generally given as *S. maderensis* DC. Both *Cineraria aurita* Andr., Bot. Rep. 1, 24: 1789, and *Senecio auritus* Willd., Sp. Pl. 3: 1982, 1803, are younger homonyms.

CONVOLVULACEAE

Calystegia sepium (L.) R. Br.

Ma de i ra : Santo da Serra, in the Junta Geral park-area, and near the Queimadas Resthouse above Santana, both 1976, A. Hansen. A rare plant in Madeira.

CRASSULACEAE

Crassula tillaea Lest.-Garl.

Ma de i ra : Abundant on road-sides near the Power Station at Serra d'Água, Ribeira Brava, 1976, A. Hansen. A rare but possibly overlooked species in Madeira.

Sedum sediforme (Jacq.) Pau

This Mediterranean plant was recorded as new to Madeira by the author (1970). However, this is due to a mistake, as the plant in question has turned out to be identical with *Crassula tetragona* L., a subshrub from the Cape Province, S. Africa.

CRUCIFERAE

Isatis tinctoria L.

Ma de i ra : Ribeira dos Socorridos, near its mouth, west of

Funchal, 1976, A. Hansen. Formerly a commonly cultivated plant used for blue dye, but now out of use and only a naturalized but rare plant.

CYPERACEAE

Cyperus difformis L.

Madeira: Funchal Harbour, in waste place at the new quay-construction, 1978, A. Hansen. This plant has been known from Madeira since at least 1924, when it was collected in Funchal by J. G. da Costa (Menezes 1926). Probably naturalized in the Funchal area, but owing to its very late-flowering time (September-October) not much seen or collected. Caespitose annual from tropical Africa and Asia, widely introduced and spread in other regions, naturalized in rice-fields in South Europe and known also from the Azores.

ERICACEAE

Erica maderensis (DC.) Bornm.

Madeira: Pico do Areiro, near the Meteorological Station, 1977, A. Hansen. A somewhat rare species endemic to Madeira and always found only in the highest parts of the island. It was first published by De Candolle (1839) as *Erica cinerea* L. var. *maderensis* DC., later, as *E. cinerea* L. by Lowe (1872), and finally Bornmüller (1903) referred it to an independent species, easily recognizable by its low, creeping stature and with the flowers always placed at the ends of the shoots.

EUPHORBIACEAE

Euphorbia nutans Lag.

Madeira: Machico, in waste place at the harbour, 1977, on road-side near the Power Station at Serra d'Água, Ribeira Brava Valley 1977, Curral das Freiras, near the village, 1978, and as a garden-weed at hotel Gorgulho, Funchal, 1978, all A. Hansen.

FILICES

Adiantum raddianum C. Presl, recently also called **A. cuneipinnulum** Naer & Ghosh (*A. cuneatum* Langsd & Fisch).

Madeira: On shady rocks along the levada east of Monte (to Choupana), 1977, A. Hansen (see Hansen 1974).

FUMARIACEAE

Fumaria sepium Boiss. & Reut.

Madeira: Eira do Serrado, near the tunnel; a second find of this plant recorded from Madeira for the first time in 1973 (Hansen 1974).

GERANIACEAE

Geranium madeirense P. F. Yeo

When the original description of this species was published by Yeo in 1969 as a plant new and endemic to Madeira it was stated by the author, that it was known only from the type-locality: Levada do Mouro near Bica da Cana, W. of Encumeada. The same statement was made by Yeo (1973). Actually it is also known from Boca do Buraco near Pico do Areeiro (5 specimens observed in 1978, P. Rocha da Silva), very fortunately not accessible there without equipment for alpinism! Furthermore, according to a sheet in herb. MADs in Funchal it was present at least in 1934 and 1935 (leg. J. da Costa) also in Achadas da Cruz near Porto do Moniz: «Nas rochas escarpadas do litoral». This find is mentioned and a description of the plant was given by *E. Pereira*, the author of the work «Ilhas de Zargo», 3. edit., p. 390, 1966, who was well aware of the fact that this plant was new both to science and to Madeira. There is a picture of the plant cultivated in the Seminary-Garden, Funchal, on page 391.

Pelargonium glutinosum (Jacq.) l' Hér. ex Aiton

Madeira: Larano east of Porto da Cruz, forming dense thickets along a field-road, quite naturalized, 1978, A. Hansen. A very viscid subshrub from the Cape Province, South Africa, in Grabham (1934) given as a commonly cultivated plant in gardens of Madeira.

GRAMINEAE

Lolium parabolicae Sennen ex Sampalo

Madeira: Prainha, S. Lourenço Peninsula, 1976, A. Hansen and S. K. Gangwere, Detroit, USA. Earlier known from the Funchal area and from Porto Santo, see Hansen (1971 and 1974).

Poa pratensis L.

Madeira: Paul da Serra, near the resthouse, 1976, A. Hansen, and in Monte above Funchal, 1976, A. Hansen. A rare grass in Madeira.

Setaria geniculata (Lam.) PB.

Madeira: Machico, in waste place at the harbour, 1977, A. Hansen; Cavão above Câmara de Lobos, on road-sides, 1976, A. Hansen; common along the road from Estreito de Câmara de Lobos to Jardim da Serra 1978.

Setaria viridis (L.) PB.

Madeira: Funchal, a garden-weed at hotel Madeira Palácio, 1978, A. Hansen. This annual grass with cosmopolitan distribution in the temperate regions of the world was published as new to Madeira in 1974 (Hansen 1974) based on a single find in Funchal 1936, leg. J.

da Costa. In the years 1936-1978 it was not reported again from the island, so that it is uncertain whether it is established or not. Hotel Madeira Palácio with garden is only a few years old.

***Stipa neesiana* Trin. & Rupr.**

Madeira: Ribeira da Fundoa near Funchal, in dry river-bed, 1976, A. Hansen (see Hansen 1974).

JUNCACEAE

***Juncus capitatus* Weigel**

Madeira: Paul da Serra, in wet road-slope, 1976, A. Hansen. A rare plant in Madeira.

***Juncus conglomeratus* L.**

This species was published as new to Madeira in 1974 with a single record from 1963 (Hansen 1974). In 1978 it was observed near Poiso, Madeira, with a single stand in grassland with scattered *Pteridium aquilinum*.

***Luzula seubertii* Lowe**

Madeira: Along the levada from Balcões eastwards, 1977, A. Hansen, a very rare species endemic to Madeira. By mistake it has been united by some authors with *L. purpureo-splendens* Seub., an endemic to the Azores, but actually the two species are clearly distinct.

LABIATAE

***Lavandula viridis* l' Hérit.**

Madeira: Ribeira do Serrado above Caniçal, in grassy ground with *Erica scoparia*, *Myrica faya* and *Myrtus communis*, 1976, G. E. Maul. A rare plant in Madeira.

LEGUMINOSAE

Adenocarpus complicatus* (L.) J. Gay ssp. *complicatus

Madeira: Santo da Serra, on road-side in the Junta Geral park-area, possibly planted, 1976, A. Hansen.

***Lathyrus angulatus* L.**

Madeira: Fajã da Nogueira Valley, near the Power Station, 1976, A. Hansen.

***Lotus ornithopodioides* L.**

Madeira: Ribeira Brava, near its mouth, south coast, and in Serra d'Água (same valley) near the Pousada dos Vinháticos, 1976, A. Hansen. A rare plant in Madeira.

Scorpiurus vermiculata L.

Madeira: Field-weed at Santana, north coast; hitherto known only from the Funchal area, from Caniço and between Machico and Caniçal.

Trifolium cernuum Brot.

Madeira: Terreiro da Luta, on road-side, 1977, A. Hansen, and near the Resthouse in Ribeira Brava Valley, likewise on road-sides, 1976, A. Hansen. A rare plant in Madeira.

Trifolium pratense L.

Madeira: Santo da Serra, on road-side in the the Junta General park-area, 1976, A. Hansen.

Vicia benghalensis L.

Madeira: Ponta da Cruz, W. of Funchal, on road-side near the Saw-Mill, 1976, A. Hansen.

Vicia disperma DC.

Madeira: Serra d'Água, Ribeira Brava Valley, on road-side near Pousada dos Vinháticos, 1976, A. Hansen.

Vicia pubescens (DC.) Link

Madeira: Serra d'Água, Ribeira Brava Valley, near Pousada dos Vinháticos; Jardim da Serra, both in 1976, A. Hansen.

LILIACEAE

Ruscus streptophyllus P.F. Yeo

Madeira: Câmara de Carga above Fajã da Nogueira Valley, 1976, A. Hansen.

OENOTHERACEAE

Fuchsia magellanica Lam.

Madeira: Jardim da Serra, a garden-escape, 1976, A. Hansen.

ORCHIDACEAE

Orchis scopulorum Summerh.

This rare orchid endemic to Madeira was described in 1961 after having been collected for the first time in 1959 by G. E. Maul, Funchal. Yet, if we look into the paper by *E. Cosson*: *Catalogue des plantes recueillies par G. Mandon en 1865 et 1866 dans les îles de Madère et de Porto Santo (1868)* — in many respects a very remarkable, profound and exhaustive checklist for Madeira at that time, with the Lowe-flora still a torso, as far as the higher plants are concerned — we will see the orchid *Orchis mascula* L. mentioned as found in Madeira (*O. foliosa*

is mentioned too). However, *Orchis mascula* certainly does not exist in Madeira and never has, but as *O. mascula* and *O. scopulorum* are much alike it may very well have been *O. scopulorum* that Mandon observed already in 1865-66. See also Sündermann (1977). Specimens are not contained in the Madeira-exsiccate of Mandon-plants that was issued by Cosson et al.

PLANTAGINACEAE

Plantago myosurus Lamk.

Madeira: Arco de S. Jorge, on road-sides at the southern entrance of the big road-tunnel, 1976, A. Hansen. This alien from South America was reported for the first time from Madeira in 1969 (Hansen 1970), when it was observed in Funchal. Owing to its capacity of being spread by means of traffic agencies it seems now to have started its conquest of the Madeira rural districts!

POLYGONACEAE

Polygonum convolvulus L.

Madeira: Cavão above Câmara de Lobos, as a field-weed, 1976, A. Hansen. A rare plant in Madeira.

SCROPHULARIACEAE

Bellardia trixago (L.) All.

Madeira: Santana, north coast, a field-weed. There is an old record of this plant from Santana mentioned by Menezes (1909), but strangely enough not given by this author in his *Madeira-Flora* (1914). In the Madeira Archipelago otherwise known only from Porto Santo.

Verbascum virgatum Stokes in With.

Madeira: Jardim da Serra above Estreito de Câmara de Lobos, a field-weed, 1978, A. Hansen. New to Madeira itself, but there is an old record from Porto Santo.

Veronica persica Poir.

According to a sheet in herb. MADS this plant was collected in Madeira (Porto do Moniz) already in April 1922 by J. da Costa. In my paper (Hansen 1970) the first record of this plant could be dated back only to 1933. A new record from 1976 is: Cavão above Câmara de Lobos.

SOLANACEAE

Nicotiana tabacum L.

Madeira: Funchal, in waste place, 1976, A. Hansen.

Salpichroa origanifolia (Lam.) Baill.

Further records of this plant published as new to Madeira in 1971 (Hansen 1971) are: Monte above Funchal, in waste place, 1976,

A. Hansen, and on a road-slope along the road to Curral das Freiras, NW. of Pico dos Barcelos, 1976, A. Hansen.

Solanum patens Lowe, Manual Flora of Madeira 2: 74, 1872.

In my «Checklist» (1969) this taxon was included in *Solanum nigrum* L., but after having had the opportunity of seeing this plant in abundance in a dry river-bed at Chão da Ribeira above Seixal late in September 1978 I feel quite convinced that it represents its own well defined and distinct species deviating in many respects from the true *Solanum nigrum*, above all in being a much bigger plant in all parts (also in the flower-size, contrary to what Lowe states (l. c.)). A very distinctive character shows the corolla to have each petal supplied longitudinally with a narrow, violet-purple line. Undoubtedly *S. patens* represents a taxon endemic to Madeira just as *Solanum trisectum* Dunal, but at the same time it is a rare species not much collected owing to its rather late occurrence. A photo of the type-material, Lowe No. 547, Ribeira de Santa Luzia above Funchal, 1833, in the British Museum (Natural History), London, has been distributed by the Missouri Botanical Garden, USA.

UMBELLIFERAE

Monizia edulis Lowe.

Fig. 2.

Madeira: A single specimen was observed as a cultivated plant in a garden situated at the road running from S. António to Eira do Serrado, NW. of Funchal, in 1977 by A. da Costa and L. Franquinho, Funchal. This very rare and endemic plant was described originally from the eastern slope of Deserta Grande, found for the first time in 1855 (Lowe 1856). It may still be present in Deserta Grande, but more recent information is lacking. Later, it was found also on Selvagem Grande, the largest of the Salvage Islands (Lowe 1869), now extinct there, and at Pico do Cidrão in Madeira itself (Menezes 1914). There is no recent information about its possible existence at the latter locality at present, but the above mentioned garden-specimen may very well originally have been taken from there. In herb. MADS, Funchal, there is a sheet with the following statement of locality: Levada do Castelejo Curral, num lugar conhecido por «Rocha Alta» um pedaço antes do córrego que desce do Serrado, March 1953, M. Nóbrega leg. The label of another sheet in herb. MADS states that the plant on this sheet was cultivated in Estreito de Câmara de Lobos, August 1958, M. Nóbrega leg.

Peucedanum lowei (Coss.) Mnzs. or **Imperatoria lowei**
Coss. (l. ostruthium auct. mad., non L.)

Madeira: Curral das Freiras, near the village, on rocks with dripping water, 1977, A. Hansen; in flower and fruiting later, in Septem-



ber-October, of the same year, leg. A. da Costa and L. Franquinho. This plant is very rarely collected with ripe fruits because of its very late flowering and fruiting season. So Lowe apparently never saw its ripe fruits, and it may be for that reason that he completely misunderstood this plant and identified it with *Imperatoria ostruthium* L. of Central Europe (and elsewhere as a cultivated, medical plant). But Lowe's description of the so-called *I. ostruthium* in his flora (1864) is clearly that of *I. lowei*, and Cosson (1868) understood this fact and created the name *I. lowei*, carefully citing *I. ostruthium* Lowe, Manual Flora of Madeira, non L. as the basic description, which name therefore should be legitimate. In his paper Cosson (p. 18) mentions that a paper by him under the title «Note sur la flore et la géographie botanique de l'archipel de Madère» would appear in a later issue of «Bulletin Soc. Bot. France»; yet this paper was never published, but most likely he had in mind to comment there on this *Peucedanum lowei* and on *Chrysanthemum mandonianum* Coss. sp. nov., *Helichrysum mandonianum* Coss. sp. nov. and *Tolpis maderensis* Coss. sp. nov., all nomina nuda in his paper of 1868.

URTICACEAE

Soleirolia soleirolii (Req.) Dandy

M a d e i r a : Ribeiro Frio, along the levada from «The Old Trout Inn», in great abundance and perfectly naturalized, 1977, A. Hansen; in road-ditches along the road Funchal - S. Gonçalo, 1971, C. Simon, herb. MADM.

VALERIANACEAE

Valerianella locusta (L.) Betcke

M a d e i r a : Fajã da Nogueira Valley, near the Power Station, 1976, A. Hansen. A rare plant in Madeira.

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Fig. 2. — *Monizia edulis* Lowe (from Curtis Bot. Mag. vol.94, tab. 5724, 1868).
 1: Reduced view of whole, 2: Portion of caudex, 3: Branch of umbel,
 4: Portion of leaf, 5: Flower, 6: Fruit, 7: Transverse section of mericarp.

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