

B O C A G I A N A

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NOTES ON THE VEGETATION OF SOME ATLANTIC ISLANDS BASED ON OBSERVATIONS MADE IN 1984

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With 1 figure

RESUMO. Em Agosto e Setembro de 1984 a Selvagem Grande, Selvagem Pequena, Ilhéu de Baixo e Ilhéu de Cima foram visitados. Uma lista das plantas vasculares encontradas em cada ilha é fornecida conjuntamente com comentários gerais sobre a vegetação. Para a Selvagem Grande um mapa dos tipos de vegetação dominantes é fornecido.

During August and September of 1984 an expedition from Manchester University visited the Porto Santo group of islands in the Madeiran archipelago and the Selvagem island group, visiting several small islands. The visits were timed to coincide primarily with the breeding time of the sea birds, the study of which was the main purpose of the expedition. At the same time the vegetation was examined. The low precipitation and presence of rabbits on some of the islands produces a sparse plant cover, especially during summer.

SELVAGENS GROUP

Selvagem Grande

This is the largest of the Selvagens group, lying 290km south of Madeira and 175 km north of the Canaries. Selvagem Grande is 2 km² in area and consists of steep sided cliffs rising to a plateau 80m above sea level. The overall impression is of a barren rocky landscape with low stunted vegetation. Ground hugging plants such as *Mesembryanthemum*

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species predominate with occasional clumps of *Suaeda vera*. The tallest plant found was *Nicotiana glauca* probably introduced as a source of fire wood (Pickering & Hansen 1969) which tends to be concentrated on the cliff sides and in more sheltered gullies.

SPECIES LIST

Urticaceae

Urtica dioica L.

Chenopodiaceae

Chenopodium murale L.

Suaeda vera J.F. Gmelin

Aizoaceae

Aizoon canariense L.

Mesembryanthemum nodiflorum
L.

Mesembryanthemum crystallinum L.

Caryophyllaceae

Herniaria cinerea DC.

Spergularia fallax Lowe

Cruciferae

Lobularia maritima (L.) Desv.
var. *rosula-venti* Svent.

Solanaceae

Lycopersicon esculentum Miller

Nicotiana glauca R.C. Graham

Plantaginaceae

Plantago coronopus L.

Compositae

Senecio incrassatus Lowe

Schizogyne sericea (L. fil.) DC.

Gramineae

Hordeum murinum L.

All the species on the list have been recorded several times for the island except for *Hordeum murinum*, which has only been recorded once by Lowe in 1869 (Pickering & Hansen 1969), and *Lobularia maritima* var. *rosula-venti*, an endemic variety recorded in Hansen & Sunding (1979) but not before 1969 (Pickering & Hansen). Notable omissions from this species list included *Asparagus scoparius* recorded by Baring & Ogilvie Grant (1895) as growing in bushes several feet high. Also *Euphorbia regis-jubae* listed by Chevalier (1934) as collected by Adolpho Noronha in 1922 and *Ricinus communis* listed by Lowe in 1869 (Pickering & Hansen 1969). All of these species are fairly large and would have been expected to be found if present.

Whilst staying on the island the dominant vegetation was mapped out, the map is presented here (Figure 1). Lichens were simply recorded as such and were not identified. The stone sizes were also noted.

Selvagem Pequena

This is a smaller island, 0.2km², situated 20km south west of Selvagem Grande, and very different in appearance. It is low lying and sandy, with a single peak of 49m. The plant cover was much greater than the

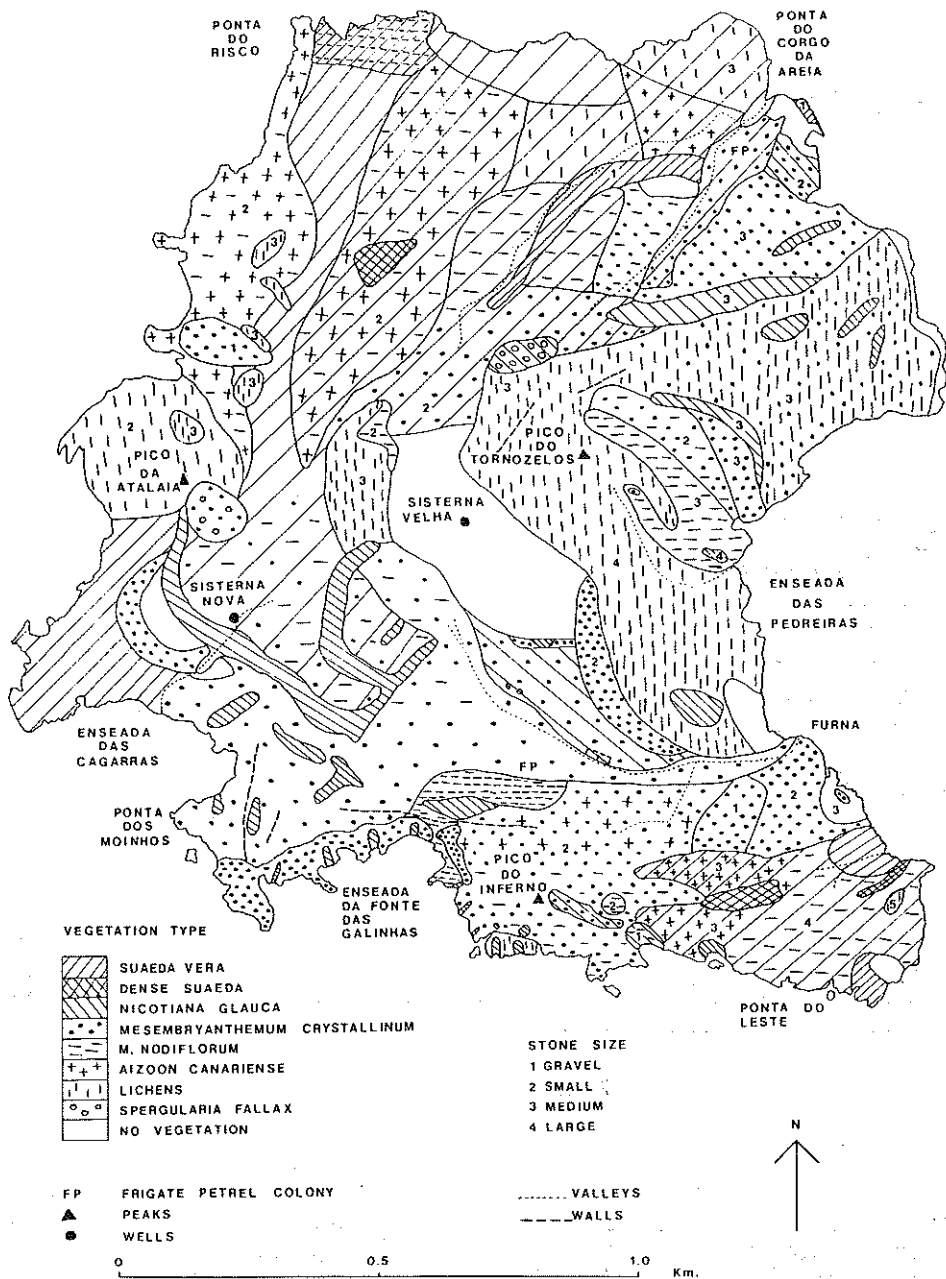


Fig. 1.—Map of Selvagem Grande showing the dominant vegetation.

previous island, probably due to the absence of rabbits, and it was also taller, composed mostly of shrubs, with an area of grass (*Elymus farctus*) to the north end.

SPECIES LIST

Chenopodiaceae

- Chenopodium murale* L.
Patellifolia procumbens (Chr.
 Sm. ex Hornem.) S., F.-L. et W
Chenoleoides tomentosa (Lowe)
 Botsch
Suaeda vera J.F. Gmelin

Aizoaceae

- Mesembryanthemum nodiflorum*
 L.
Mesembryanthemum crystalli-
num L.

Leguminosae

- Lotus glaucus* Alt.

Zygophyllaceae

- Zygophyllum fontanesii* Webb et
 Berth.

Frankeniaceae

- Frankenia laevis* L.

Plumbaginaceae

- Limmonium papillatum* (Webb et
 Berth.) O. Kuntze var. *callibo-*
tryum Svent.

Orobanchaceae

- Cistanche phelypaea* (L.) Couti-
 nho

Plantaginaceae

- Plantago coronopus* L.

Compositae

- Senecio incrassatus* Lowe

Gramineae

- Elymus farctus* (Viv.) Runemark
 ex Melderis

The only species not well recorded previously is *Limmonium papillatum* var. *callibotryum*, an endemic variety not recorded in Pickering & Hansen (1969) as occurring on the Selvages. This was abundant on the island and in flower in August. The *Lotus* species was confirmed as *Lotus glaucus* rather than *Lotus salvagensis* by Prof. Monod of Muséum nationale d'Histoire naturelle, Paris.

PORTO SANTO GROUP

Ilheu de Baixo

Ilheu de Baixo, with an area of 1.33km², lies on the south west tip of Porto Santo and is steep sided, with a plateau rising to 179m. The vegetation was very sparse, the north end being almost devoid of any growth. Towards the south *Nicotiana glauca* was the dominant vegetation. The whole island appeared to be subject to active wind erosion.

SPECIES LIST

Chenopodiaceae

Patellifolia patellaris (Moq.) S.,
F.-L. et W.

Aizoaceae

Mesembryanthemum nodiflorum
L.

Mesembryanthemum crystalli-
num L.

Papaveraceae

Papaver somniferum L.
either ssp *setigerum* (DC.)
Corb.
or ssp *somniferum* (Husse-
not) Corb.

Euphorbiaceae

Euphorbia paralias L.

Frankeniaceae

Frankenia laevis L.

Primulaceae

Anagallis arvensis L.

Labiatae

Ajuga iva (L.) Schreber

Solanaceae

Nicotiana glauca R.C. Graham

Compositae

Phagnalon saxatile (L.) Cass.
Senecio incrassatus Lowe

Ilheu de Cima

Situated off the south east of Porto Santo, Ilheu de Cima has an area of 0.13km². The vegetation was quite dense and diverse probably due, at least in part, to the presence of an inhabited light house. Several species were almost undoubtedly introduced, especially those found close to the path leading to the light house and around the building.

SPECIES LIST

Aizoaceae

Mesembryanthemum nodiflorum
L.

Mesembryanthemum crystalli-
num L.

Caryophyllaceae

Silene vulgaris (Moench) Gar-
cke
ssp *maritima* (With.) A. & D.
Love

Papaveraceae

Papaver somniferum L.
either ssp *setigerum* (DC.)
Corb.
or ssp *somniferum* (Husse-
not) Corb.

Cruciferae

Matthiola maderensis Lowe
Crambe fruticosa L. fil.

Leguminosae

Ononis mitissima L.
Lotus glaucus Ait.

Umbelliferae

Crithmum maritimum L.

Labiatae

Ajuga iva (L.) Schreber

Solanaceae

Solanum nigrum L.*Lycopersicon esculentum* Miller*Nicotiana glauca* R.C. Graham

Scrophulariaceae

Scrophularia lowei Dalgaard
(Probably)

Compositae

Artemisia argentea L'Her.*Cynara cardunculus* L.var. *ferocissima* Lowe*Centaurea melitensis* L.*Scolymus maculatus* L.*Tolpis fruticosa* Schrank*Picris echioides* L.*Sonchus oleraceus* L.

Gramineae

Hordeum murinum L.*Phalaris brachystachys* Link in
Schrader

All the species listed for Ilheu de Cima and Ilheu de Baixo are recorded in Hansen & Sunding (1979) as occurring on Porto Santo, (there is no separate list for the offshore islands on their own).

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Material collected is stored in the Herbarium, Manchester Museum.

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