

COMUNICACIONES BOTANICAS

MUSEOS NACIONALES DE HISTORIA NATURAL Y ANTROPOLOGIA

Número 117

2001

Volumen VI

CONTRIBUTION TO THE LICHEN FLORA OF URUGUAY. XXXIV. LICHENS FROM ISLA DE FLORES, RIO DE LA PLATA.

HÉCTOR S. OSORIO*

ABSTRACT: *Contribution to the lichen flora of Uruguay. XXXIV. Lichens from Isla de Flores, Río de la Plata.*- Some lichens gathered in Isla de Flores, Río de la Plata, Uruguay, are listed. Three species are added to the Marsden Square 413. *Usnea amblyoclada* is reported from a maritime habitat for the first time.

RESUMEN: *Contribución a la flora líquénica del Uruguay. XXXIV. Líquenes de la Isla de Flores, Río de la Plata.*- Se enumeran líquenes colectados en Isla de Flores, Río de la Plata, Uruguay. Tres especies se incorporan a la flora del Marsden Square 413. *Usnea amblyoclada* se cita por primera vez para el ambiente marítimo.

Key words: Uruguay - Isla de Flores - Lichens - Distribution.

Palabras clave: Uruguay - Isla de Flores - Líquenes - Distribución.

Introduction

Isla de Flores is a small island 2000 m in length (E to W) and 300-500 m width (N to S). It is situated in the Río de la Plata (34°56'S-55°55'W) and slightly raised above the average sea level. A remarkable feature in the present island's landscape is the great amount of ruins of the lazaret built in the year 1868. A well documented information about this lazaret and also of the flora and fauna from the island has been recently published (LANGGUTH & VARESE, 2000). Several expeditions made quarantine in this lazaret.

* Museo Nacional de Historia Natural, Montevideo, Uruguay.

Postal address: Instituto Félix de Azara, Casilla de Correo 168, 11000 Montevideo, Uruguay.

E-mail: mnhn@internet.com.uy

The present knowledge of the lichen flora of the island is almost exclusively based on samples gathered during three expeditions: Mission Scientifique du Cap Horn (1882-83) and the Regnell Expeditions I and II (1892-94 and 1901-03).

In the literature at our disposal we have found the following taxa collected in Isla de Flores:

MÜLLER ARGAU (1888:58) reported *Parmelia conspersa* var. *rugulosa* n. var. This taxon has very recently been placed as a synonym of *Xanthoparmelia farinosa* (HALE, 1990:113 and NASH et al., 1995:50).

ZAHLBRUCKNER (1912:382) described *Caloplaca felipponei* n.sp. MALME visited the island during the two quarantines of the REGNELL Expeditions I and II (MALME, 1897:7 and 1904:107).

Among the numerous papers dealing with the lichens gathered during the REGNELL Expeditions we have only found two taxa from Isla de Flores: *Buellia testacea* and *B. montevidensis* n.sp. (MALME, 1928:29, 31).

MAGNUSSON (1950) listed six species collected by MALME during the First Regnell Expedition as follows: *Buellia atrofuscata*, *B. montevidensis*, *Lecidea exigua*, *Pertusaria cinerella*, *P. testacea* and *Rinodina dispersa*.

MARBACH (2000:297) arranged *Buellia atrofuscata*, already reported by MAGNUSSON (1950:236), as a synonym of *Sculptolumina japonica*.

In October 2000 the author participated in a short field trip to Isla de Flores with the leadership of Profs. JUAN ANTONIO VARESE AND ERNESTO DARAGNÉS. Due to the lack of time the area sampled was restricted to the central part of the island and the northern shore next to the pier.

In this first paper we list some interesting findings while many gatherings of the large crustose genera will be published in the future. In each of the taxa below listed a detailed account of the known distribution within the Marsden Square 413 (30°-40°S/50°-60°W) is given.

The zonation scheme (aerohalin and hygrophalin zones) used in the present paper is based on DU RIETZ (1932).

The numbers between brackets belong to the author numbering system and are housed in his private herbarium.

Acknowledgements: The author gratefully acknowledges the enthusiastic assistance of Profs. JUAN ANTONIO VARESE and ERNESTO DARAGNÉS during the field work.

List of species

Caloplaca americana (MALME) ZAHLBR.

On rocks, central part of the island (9405), on rocks in a meadow next to the pier (9418). Already reported from maritime habitats in Montevideo Department (OSORIO, 1983:280, 1985:464). In Rio Grande do Sul, Brazil, is known from a similar habitat in the locality of Torres (OSORIO & FLEIG, 1984a:275, 1984b:2).

Caloplaca felipponei ZAHLBR.

On rocks in the northern shore of the island next to the pier (9404). Isla de Flores is the type locality of this taxon (ZAHLBRUCKNER, 1912:382). It is recorded from two Rio de la Plata islands: Isla Gorriti (OSORIO et al., 1984:2) and Isla del Mono (OSORIO, 1985:464) and from several localities along the uruguayan coast (OSORIO, 1992:47). This taxon is the main component of the Orange Lichen Belt in the locality of Mar del Plata, Buenos Aires Province, Argentina (OSORIO & RANTA, 1985:2) and in the Uruguayan coast (OSORIO, 1992:47). At present it has not been recorded yet from the Brazilian State of Rio Grande do Sul.

Duplicata of this number will be distributed in “Dupla Graecensia Lichenum”.

Caloplaca ochraceofulva (MÜLL. ARG.) JATTA

On perpendicular N exposed rocks, 50 m S from the pier (9407). This taxon is already recorded from two Rio de la Plata islands: Isla Gorriti (OSORIO, 1989:2) and Isla de Lobos (OSORIO, 1998:3). There are two records from the Uruguayan Rio de la Plata coast (OSORIO, 1989:2) and also from Torres, Rio Grande do Sul State (OSORIO & FLEIG, 1990:2). Duplicata of this number will be distributed in “Dupla Graecensia Lichenum”.

Flavoparmelia papillosa (LYNGE EX GYELN.) HALE

On rocks, central part of the island (9416). Already reported from one Rio de la Plata island: Isla Gorriti (OSORIO, 1967:6) and from several localities along the Uruguayan coast (OSORIO, 1983:281, 1985:465 and 1998:6).

In Argentina it is known from Mar del plata, Buenos Aires Province (OSORIO & RANTA, 1985:3).

Physcia aipolia (HUMB.) FÜRNRÖHR.

On rocks, central part of the island, very scarce (9406).

This species is formerly known from Torres in the Brazilian Atlantic coast (OSORIO & FLEIG, 1984:4).

Pertusaria straminella MALME

On root of a palm tree (9409).

Rimelia reticulata (TAYLOR) HALE & FLETCHER

On rocks, central part of the island (9415). Reported from the Rio de la Plata coast in the Department of Colonia, Uruguay (OSORIO, 1992:63).

Usnea amblyoclada (MÜLL. ARG.) ZAHLBR.

On rocky outcrop in the central part of the island (9402).

Observed only in this collection site but with a luxurious growth. Duplicata of this number will be distributed in "Lichenes Selecti Exsiccati Upsaliensis".

Xanthoria parietina (L.) TH. FR.

On root of a palm tree (9408).

Results

Some of the species above listed deserve the following considerations: *Caloplaca felipponei* is recollected from its type locality.

Pertusaria straminella, *Usnea amblyoclada* and *Xanthoria parietina* are added to the maritime lichen flora of the Marsden Square 413.

Usnea amblyoclada is reported from a maritime habitat for the first time.

Caloplaca felipponei is the only species growing in the hygrophalin zone.
The other taxa listed were collected within the aerohalin zone.

LITERATURE CITED

- DU RIETZ, G. E. 1932. Zur Vegetationsökologie der ostschwedischen Küstenseen. Beihefte Botanischen Centralblatt 49:61-112, Tab. 1-3. Dresden.
- HALE, M. E. 1990. A synopsis of the lichen genus *Xanthoparmelia* (VAINIO) HALE (Ascomycotina, Parmeliaceae). Smithsonian Contributions to Botany, 74:1-250, fig. 1-75. Washington.
- LANGGUTH, E. & J. A. VARESE. 2000. Historias y Leyendas de Isla de Flores. Pp. 1-300, pls., figs. Ediciones Torre del Vigía, Montevideo.
- MAGNUSSON, A. H. 1950. Lichens from Uruguay. Meddelanden från Göteborgs Trädgård 18:213-237.
- MALME, G. O. A. 1897. Die Flechten der ersten REGNELL'SCHEN Expedition I. Einleitung. Bihang till Kungliga Svenska Vetenskaps Akademiens Handlingar 23(III):13:1-12. Stockholm.
- MALME, G. O. A. 1904. Reseberättelse af Regnellske stipendiaten doktor G. O. MALME för åren 1901-1903. Kungliga Svenska Vetenskaps Akademiens Årsbok 1904:105-115, Stockholm.
- MALME, G. O. A. 1928. *Buelliae* itineris Regnelliani primi. Arkiv för Botanik, 21A (14):1-42, 1 fig. Stockholm.
- MARBACH, G. 2000. Corticole and lignicole Arten der Flechtengattung *Buellia* sensu lato in den Subtropen und Tropen. Bibliotheca Lichenologica 74:1-384, fig. 1-163, pl. 1-6. Berlin-Stuttgart.
- MÜLLER ARG. J. 1888. Lichenes. Mission Scientifique du Cap Horn 1882-1883. Botanique, 5:141-172. Paris.
- NASH III, T. H., C. GRIES & J. A. ELIX. 1995. A revision of the lichen genus *Xanthoparmelia* in South America.- Bibliotheca Lichenologica, 56:1-159, fig. 1-26. Berlin-Stuttgart.

- OSORIO, H. S. 1967. Contribution to the lichen flora of Uruguay. III. Some additional new localities. *Comunicaciones Botánicas del Museo de Historia Natural de Montevideo*, 4(46):1-10.
- OSORIO, H. S. 1983. Contribution to the lichen flora of Uruguay. XIX. Lichens from Rio de la Plata coast. *Phytologia*, 54(4):279-282. Plainfield.
- OSORIO, H. S. 1985. Contribution to the lichen flora of Uruguay. XXI. Additions to the Rio de la Plata lichen flora. *Mycotaxon*, 24:463-466. Ithaca.
- OSORIO, H. S. 1989. Contribution to the lichen flora of Uruguay. XXIII. New or additional records. *Comunicaciones Botánicas del Museo de Historia Natural de Montevideo*, 5(90):1-5.
- OSORIO, H. S. 1992. Contribución a la flora líquénica del Uruguay. XXV. Líquenes publicados entre 1972-1991. *Anales del Museo Nacional de Historia Natural de Montevideo*, (2)8:43-70.
- OSORIO, H. S. 1998. Contribution to the lichen flora of Uruguay. XXX. Lichens from eastern Uruguay. *Comunicaciones Botánicas del Museo de Historia Natural de Montevideo*, 6(111):1-11, 1 map.
- OSORIO, H. S. & M. FLEIG. 1984a. Contribution to the lichen flora of Brazil. XIII. Maritime lichens from Torres, Rio Grande do Sul State. *International Journal of Mycology and Lichenology*, 1(3):273-279. Stuttgart.
- OSORIO, H. S. & M. FLEIG. 1984b. Contribution to the lichen flora of Brazil. XV. Lichens from Torre Sul and Morro Itapeva, Torres, Rio Grande do Sul State. *Comunicaciones Botánicas del Museo de Historia Natural de Montevideo*, 4(67):1-7.
- OSORIO, H. S. & M. FLEIG. 1985. Contribution to the lichen flora of Brazil. XVI. Lichens from the vicinity of Rio Grande City, Rio Grande do Sul State. *Comunicaciones Botánicas del Museo de Historia Natural de Montevideo*, 4(70):1-7.
- OSORIO, H. S. & M. FLEIG. 1990. Contribution to the lichen flora of Brazil. XXVII. Additions and corrections to the Rio Grande do Sul lichen flora. *Comunicaciones Botánicas del Museo de Historia Natural de Montevideo*, 5(94):1-6.
- OSORIO, H. S. & PERTTIRANTA. 1985. Contribution to the lichen flora of Argentina. XV. Maritime lichens from Mar del Plata, Buenos Aires Province. *Comunicaciones Botánicas del Museo de Historia Natural de Montevideo*,

4(69):1-4.

OSORIO, H. S., S. SILVA & A. HAREAU. 1984. Contribution to the lichen flora of Uruguay. XX. Lichens from Isla Gorriti, Maldonado Department. *Comunicaciones Botánicas del Museo de Historia Natural de Montevideo*, 4(66):1-4.

ZAHLBRUCKNER, A. 1912. Neue Flechten. VI. *Annales Mycologici*, 10:359-384. Berlin.

MUSEOS NACIONALES DE HISTORIA NATURAL Y ANTROPOLOGÍA
CASILLA DE CORREO 399
11.000 MONTEVIDEO, URUGUAY
FAX: (005982) 917-0213
E-MAIL: MNHN@INTERNET.COM.UY
[HTTP://WWW.MEC.GUB.UY/MUSEUM/MUS_NAT/MUSEUM.HTM](http://www.mec.gub.uy/museum/mus_nat/museum.htm)

Comisión del Papel - Edición amparada en el Art. 79 de la Ley 13349
Imprenta Copygraf S.R.L., Ituzaingó 1478. 11.000 Montevideo, Uruguay.

Edición de 1.200 ejemplares

Mayo 2001

Depósito Legal N° 320.844/01