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CONTRIBUTION TO THE LICHEN FLORA OF ARGENTINA. XVI. LICHENS FROM SIERRA DE LA VENTANA, BUENOS AIRES PROVINCE.

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ABSTRACT: Thirty two lichen species collected in Sierra de la Ventana, Buenos Aires Province, Argentina, are listed. Ten species are added to the known flora of Argentina and five to the Buenos Aires Province flora.

Punctelia punctilla is collected in the New World for the second time.

RESUMEN: Se enumeran treinta y dos especies de líquenes colectados en la Sierra de la Ventana, Provincia de Buenos Aires, Argentina. Diez especies se citan por primera vez para la Argentina y otras cinco se incorporan a la flora de la Provincia.

Punctelia punctilla se cita por segunda vez para el Nuevo Mundo.

During March 1975 the author gathered lichens in the locality of Sierra de la Ventana, Buenos Aires Province. This town, well known from a touristical point of view, is located 500 km SW from Buenos Aires City. It is surrounded by very large hills systems which spread many hundreds of square kilometers. The highest elevation of this region is Cerro Tres Picos 1243 m high.

The study of the fern flora of the hill systems of Buenos Aires Province (Sierra de la Ventana and Tandil) demonstrates (SOTA 1967:107) that both regions are excellent intermediate stations for migrations routes between the South Brazilian flora and those of the Andean and Pampean or Austral-Antartic regions. Unfortunately there are so many gaps in our knowledge of the lichen floras of this parts of South America that it is necessary to be extremely careful with phytogeographical considerations.

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Unexpectedly, the rainy weather limited our field work to the proximities of the town, thus the collection sites can summarized as follows:

(C.C.): Cerro Ceferino, a small hill placed just on the edge of the urbanized area of the town.

(Q/1): a small ravine located 1 km E from Cerro Ceferino.

(C/3): a unnamed hill 3 km E from Cerro Ceferino.

(P.S.): some rocky outcrops in the vicinity to a Pisciculture Station placed very close to Sierra de la Ventana town provided some interesting gatherings too.

All the collection sites are treeless and only the ravine has a very low shrubby vegetation. The few corticolous lichens gathered were found growing on cultivated trees within the urbanized area of the town.

If nothing else is stated the collections below listed were gathered growing on rocks. Others substracts are specifically pointed out.

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

The list of the lichen species already reported in the literature from Sierra de la Ventana is included as a small appendix.

The author greatly appreciates the assistance of THEODORE L. ESSLINGER, MASON E. HALE, HILDUR KROG, JOHN W. THOMSON and WILLIAM WEBER in species identifications.

Acarospora lorentzii (MÜLL. ARG.) HUE

C.C.: foot of the hill, locally common (7073).

Q/1.: W slope (7124, 7126).

C/3.: W slope (7157). Already known from Buenos Aires Province (OSORIO 1980:219).

Acarospora schleicheri (ACH.) MASS.

C.C.: top of the hill, vid. W. WEBER (7110).

C/3.: top of the hill, with *Acarospora lorentzii*, vid. W. WEBER (7163). New for the Province. Formerly known from Chubut Province (C. SAMBO 1930:35).

Caloplaca americana (MALME) ZAHLBR.

C.C.: foot of the hill, (7071, 7076), N faced side of a boulder near hill's top (7114).

Q/1.: E. slope (7138), W slope (7122, 7125). Reported in Buenos Aires Province from the locality of Punta Lara (OSORIO 1976:358).

Caloplaca cinnabarina (ACH.) ZAHLBR.

Q/1.: W slope, very scarce (7121).

C/3.: W slope, very scarce (7159). Known in Buenos Aires Province from the locality of Tandil (OSORIO 1980:219).

Caloplaca microphyllina (TUCK.) HASSE.

C.C.: on wooden fence post, foot of the hill (7053).

C/3.: on wooden fence post (7149). New to Argentina. In South America this species is known only from a single collection from southern Brazil (MALME 1926:34).

Caloplaca puiggarii (MÜLL. ARG.) ZAHLBR.

C.C.: locally common (7087, 7097, 7116).

Q/1.: W slope (7127). New to Argentina. Formerly known from Brazil (MALME 1926:23, MÜLLER ARG. 1881:514) and Uruguay (OSORIO 1972:8).

Candelaria concolor (DICKS.) STEIN.

C.C.: S slope (7103), foot of the hill (7061), trunk of *Populus*, foot of the hill (7059).

Q/1.: E slope (7134). This is a species with a world-wide distribution.

Diploschistes actinostomus (PERS.) ZAHLBR.

Q/1.: E slope, only specimen seen (7145). New to Argentina. Cosmopolitan in temperate regions.

Diploschistes cinereocaesius (SW.) VAIN.

C/3.: on soil, top of the hill, (7165). New for the Province. MÜLLER ARG. (1889a:65) reported this taxon from Argentina without indication of locality.

Diploschistes ochraceus (ANZI) STEIN.

C.C.: locally common (7062, 7065, 7111). New to Argentina. Formerly known from southern Brazil (OSORIO 1978:452) and Uruguay (OSORIO 1972:14).

Hyperphyscia syncolla (TUCK.) KALB.

C.C.: on trunk of *Populus*, foot of the hill (7058). Reported from southern South America and United States (LYNGE 1924:33, THOMSON 1963:25).

Lecanora farinacea FÉE.

C.C.: foot of the hill (7060, 7069).

Q/1.: E slope (7137), W slope (7140). New to Argentina. It is known from West Indies and South America (IMSHAUG & BRODO 1966:37).

Lecanora fusca MÜLL. ARG.

C.C.: foot of the hill (7075, 7078), S exposed perpendicular rocks, top of the hill (7106, 7107).

Q/1.: W slope (7123).

C/3.: W slope (7156). Already in Buenos Aires Province from the locality of TANDIL (OSORIO 1980:219).

Lecidea montevidensis MÜLL. ARG.

C.C.: foot of the hill (7063, 7070, 7072). New to Argentina. Already reported from southern Brazil (MALME 1936:17) and Uruguay (OSORIO 1972:19).

Lecidea oreinodes (KÖRB.) WEBER & HERTEL

C.C.: foot of the hill (7084), S slope (7099).

Q/1.: E slope (7132, 7135).

C/3.: W slope (7155). New for the Province. Formerly known in Argentina from Entre Ríos Province as *Lecidea tessellina* (MÜLLER ARG. 1889b:511). This taxon is largely distributed in tropical and subtropical regions (HERTEL 1971:238, 1973:493).

Neofuscelia squamans (STIZB.) ESSL.

C.C.: Foot and S slope of the hill, det. TH. L. ESSLINGER (7085, 7098).

Q/1.: E slope, locally common (7142). New for the Province. This species is largely distributed in the southern Hemisphere (ESSLINGER 1977:145, 1986:90).

Parmotrema austrosinense (Zahlbr.) Hale

C.C.: on wooden fence post, foot of the hill (7057). It is a pantropical species. This gathering is the southernmost record in South America.

Parmotrema reticulatum (Tayl.) Choisy.

P.S.: mossy rocks along a road, very scarce (7168). Almost cosmopolitan taxon.

Parmotrema uruguense (Krempplh.) Hale

C.C.: on wooden fence post, foot of the hill (7056). At present this taxon seems to be restricted to Argentina (Hale 1965:342) and Uruguay (Osorio 1975:8).

Pseudoparmelia papillosa (Lynge ex Gyeln.) Hale

C.C.: S slope (7101)

Q/1.: W slope (7129). The range of this species extends from Santa Catarina State in South Brazil to Buenos Aires Province in Argentina (Hale 1976:41).

Psora icterica (Mont.) Müll. Arg.

C/3.: on soil, top of the hill, scarce (7164). Already reported from Sierra de la Ventana by Müller Arg. (1889b:510).

Punctelia hypoleucites (Nyl.) Krog

C.C.: wooden fence post, foot of the hill, det. M. Hale (7055). Already reported from Buenos Aires Province (Osorio 1980:219).

Punctelia punctilla (Hale) Krog

C.C.: S slope, det. M. Hale (7104). In Argentina is already known from Mendoza Province (Ferraro 1986:196). This taxon is largely distributed in South and East Africa (Krog & Swinscow 1977:172). This gathering is the second record of this species for the New World.

Punctelia rudecta (Ach.) Krog

P.S.: mossy rocks along a road, det. M. Hale (7169). Widely distributed but a great number of the old records are surely misidentifications.

Ramalina celastri (SPRENG.) KROG & SWINSC.

C.C.: wooden fence post, foot of the hill (7054). Very common in many South American countries.

Rhizocarpon disporum (NAEG. ex HEPP.) MÜLL. ARG.

C.C.: foot of the hill, vid J. W. THOMPSON (7064, 7090).
New for the Province. Already reported from localities in southern Argentina (GRASSI 1950:100).

Teloschistes chrysophthalmus (L.) TH. FR. var. *cinereus* MÜLL. ARG.

C.C.: wooden fence post, foot of the hill (7052). This variety is largely distributed in southern South America.

Umbilicaria haplocarpa NYL. var. *subhirsuta* FREY.

C.C.: on perpendicular S faced rocks, near hill top, not common, vid. H. KROG (7118). Already known from this locality (FREY 1949:449, LLANO (1950:67). Until a recent date this variety was only known from Argentina (LLANO 1950:67) but KROG and SWINSCOW (1986:81) pointed out that this taxon may be synonymous to *Umbilicaria propagulifera*. The confirmation of this fact would extend the range of this taxon to South Africa (FREY 1949:455) and East Africa (KROG & SWINSCOW 1986:82).

Usnea amblyoclada (MÜLL. ARG.) ZAHLBR.

C.C.: top of the hill, locally common (7117 a & b).
Q/1.: E slope, locally common (7130 a & b, 7143, 7144).
Already known from this locality (MÜLL. ARG. 1889:509).

Xanthoparmelia microspora (MÜLL. ARG.) HALE

C.C.: foot of the hill, det. M. HALE (7089).
Q/1.: E slope, det. M. HALE (7136). New to Argentina.

Xanthoparmelia tinctina (MAH. & GILL.) HALE

P.S.: damp rocks along a road, det. M. HALE (7166). New to Argentina.

Xanthoparmelia ulcerosa (ZAHLBR.) HALE

C.C.: foot of the hill, det. M. HALE (7082). New to Argentina.

C O M M E N T S .

Among the species above listed five are new records for Buenos Aires Province and ten more species are added to the known flora of Argentina. It is remarkable also the second gathering of *Punctelia punctilla* for the New World.

Many specimens of the large crustose genera: *Buellia*, *Caloplaca*, *Pertusaria* among others, remain without specific identification awaiting further monographic studies.

In spite of the smallness of this collection and taking account of the considerations made in the initial part of this paper three groups can be determined tentatively:

a) Which comprises the species with a very large distribution including out of America: *Acarospora schleicheri*, *Caloplaca cinnabarina*, *Candelaria concolor*, *Diploschistes actinostomus*, *Lecidea oreinodes* among others.

b) Species which distributional range extends from South Brazil through Uruguay having in Sierra de la Ventana its southernmost record: *Acarospora lorentzii*, *Caloplaca puiggarii*, *Lecanora fusca*, *Lecidea montevidensis*, *Pseudoparmelia papillosa*.

c) Species very scarcely collected, at least in South America, and which distributional area cannot be precised at present: *Caloplaca microphyllina*, *Punctelia punctilla*, *Xanthoparmelia microspora*, *X. tinctina* and *X. ulcerosa*.

Further and more extensive field work are needed to give a more complete and representative idea of the lichen flora of such interesting region.

SPECIES ALREADY REPORTED IN THE LITERATURE
FROM SIERRA DE LA VENTANA.

Agyrophora haplocarpa (NYL.) LLANO var. *subhirsuta* (FREY)
LLANO 1950:67.

Cladonia coccifera (L.) WILLD. var. *pleurota* (FLK.) SCHAER.
MÜLLER ARG. 1889:508.

Cladonia pyxidata (L.) FR. var. *chlorophaea* FLK.

MÜLLER ARG. 1889:509.

Cladonia pyxidata (L.) FR. f. *macra* (FLK.) MÜLL. ARG.

MÜLLER ARG. 1889:508.

Leprocaulon gracilescens (NYL.) LAMB & WARD

LAMB & WARD 1974:525.

Psora icterica (MONT.) MÜLL. ARG.

MÜLLER ARG. 1889:510.

Thalloidima coeruleonigricans (LIGHTF.) POETSCH.

MÜLL. ARG. 1889:510.

Umbilicaria haplocarpa NYL. emend. FREY var. *subhirsuta* FREY

FREY 1949:449.

Umbilicaria krempelhuberi MÜLL. ARG.

LLANO 1950:185.

Usnea barbata (L.) WIGG. var. *amblyoclada* MÜLL. ARG.

HOWE 1915:42.

MÜLLER ARG. 1889:509.

Usnea barbata (L.) WIGG. var. *densirostra* (TAYL.) MÜLL. ARG.

MÜLLER ARG. 1889:509.

Usnea densirostra TAYL.

MOTYKA 1936/38:317.

Usnea fruticulus MOT.

GYELNIK 1938:86.

Usnea miliaria TAYL.

OSORIO 1968:286.

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