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CONTRIBUTION TO THE LICHEN FLORA OF ARGENTINA. XX. LICHENS FROM THE PROVINCE OF JUJUY

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ABSTRACT: *Contribution to the lichen flora of Argentina. XX. Lichens from the Province of Jujuy.*— Twenty lichen species gathered in Jujuy Province, NW Argentina, are listed. 90% out of them are new provincial records. All the taxa published from 1950 to 2000 from this Province are enumerated.

RESUMEN: *Contribución a la flora líquénica de Argentina. XX. Líquenes de la provincia de Jujuy.*— Se enumeran 20 líquenes colectados en la Provincia de Jujuy, NW de Argentina. El 90% de los mismos son nuevos registros para la Provincia. Se incluye la lista de las especies citadas para Jujuy desde 1950 a 2000.

Key words: Argentina - Lichens - Taxonomy - Distribution.

Palabras clave: Argentina - Líquenes - Taxonomía - Distribución.

Introduction

The present paper is based on lichens gathered in November 1974 by the junior author in two Departments of the Province of Jujuy, NW Argentina.

In spite of the smallness of this collection the scarce knowledge that presently exists about the lichen flora of this Province encouraged the authors to publish this list.

The Catalogue of the Argentinian lichen flora (GRASSI, 1950) includes 129 bibliographical references, and records 16 genera and 49 species from

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Jujuy Province. Of this amount of species the 69% was gathered by ROBERT ELIAS FRIES in 1901 during the Swedish Chaco-Cordillera Expedition (TIBELL, 1999:84).

Between 1950 and 2000 three papers listed nearly 450 titles with reports of Argentinian lichens (CALVELO & LIBERATORE, 2000, OSORIO, 1987, 1996). After the revision of publications above mentioned we have found 49 taxa from Jujuy. The list of the 49 taxa and its bibliographical references is included in this paper.

All the collections studied by the authors were divided in two series: one deposited in CTES and the other in the senior author's private herbarium.

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List of species

Bacidia millegrana (TAYLOR) ZAHLBR.

Depto. Capital, Lagunas de Yala, on bark, FERRARO 463 & SCHININI.

Everniastrum cirrhatum (FR.) HALE ex SIPMAN

Depto. Ledesma, Abra de las Cañas, forming numerous cushions, 1600 m.s.m., FERRARO 565. This collection was already published by SIPMAN (1980:345).

Everniastrum vexans (Z AHLBR.) HALE ex SIPMAN

Depto. Capital, route 29, road Lozano to Tiraxi, FERRARO 486 pr.p.

Heterodermia boryi (FÉE) KR. P. SINGH & S. R. SINGH

Depto. Capital, route 29, road Lozano to Tiraxi, FERRARO 486 pr.p.

Heterodermia casarettiana (MASSAL.) TREVISAN

Depto. Capital, route 29, road Lozano to Tiraxi, on rocks, with *Parmelia*, FERRARO 489.

Parmotrema andinum (MÜLL.ARG.) HALE

Depto. Ledesma, Cuesta de las Lajitas, road to Ingenio Ledesma, on forest, FERRARO 624 et al.

Parmotrema austrosinense (Z AHLBR.) HALE

Depto. Ledesma, Cuesta de las Lajitas, road to Ingenio Ledesma, on

branches, FERRARO 621.

Parmotrema crinitum (ACH.) M. CHOISY

Depto. Capital, route 29, road Lozano to Tiraxi, FERRARO 504.

Pseudocyphellaria aurata (ACH.) VAINIO

Depto. Capital, route 29, road Lozano to Tiraxi, on bark, FERRARO 472 & SCHININI.

Punctelia microsticta (MÜLL. ARG.) KROG

Depto. Ledesma, Cuesta de las Lajitas, road to Ingenio Ledesma, on branches, FERRARO 620.

Punctelia semansiana (W. CULB. & CH. CULB.) KROG

Depto. Capital, Pueblo Yala, FERRARO 652 & SCHININI.

Peltigera austroamericana ZAHLBR.

Depto. Capital, route 29, road Lozano to Tiraxi, FERRARO 474, det. O. VITIKAINEN 2000.

Peltigera laciniata (RIDDLE) GYELN.

Depto. Ledesma. Abra de las Cañas, 1600 m.s.m., FERRARO 562, det. O. VITIKAINEN 2000.

Stereocaulon ramulosum (SWARTZ) RÄUSCH.

Depto. Capital, Pueblo Yala, on rocks, slope of a hill, FERRARO 605.

Sticta fuliginosa (DICKS.) ARN.

Depto. Capital, route 29, road Lozano to Tiraxi, on bark, FERRARO 487.

Strigula smaragdula FR.

Depto. Ledesma, road to Valle Grande, 15 km from Gral. San Martín, on Lauraceae, FERRARO 586, 587, 588 & SCHININI.

Teloschistes flavicans (Swartz) Norm.

Depto. Capital, route 29, road Lozano to Tiraxi, FERRARO 499.

Umbilicaria krempehuberi MÜLL. ARG.

Depto. Capital, route 29, road Lozano to Tiraxi, on rocks, with *Parmelia*, FERRARO 616.

Usnea neutra (MOTYKA) RIZZINI

Depto. Capital, route 29, road Lozano to Tiraxi, on trunks, FERRARO 483. This species was already reported as *Usnea sulcata* var. *neutra* (OSORIO, 1990:4).

Usnea poliotrix KREMPH.

Depto. Capital: route 29, road Lozano to Tiraxi, FERRARO 484.

Species published from 1950 to 2000 from Jujuy Province:

- Anaptychia comosa* (ESCHW.) MASSAL.: KUROKAWA (1962:103).
Calenia monospora VEZDA: FERRARO (2000:131).
Catapyrenium andicum BREUSS: BREUSS (1993:20).
Catapyrenium ruiz leali (RÄSÄNEN) BREUSS: BREUSS (1993:30).
Catapyrenium squamulosum (ACH.) BREUSS var. *squamulosum*: BREUSS (1993:30).
Collema conglomeratum HOFFM. var. *corynesporum* (MALME)DEGEL: DEGELIUS (1974:45).
Cladia aggregata (SW.) NYL.: AHTI (2000:32).
Cladonia didyma (FÉE) VAIN.: AHTI (2000:193).
Cladonia furcata (HUDS.) SCHRAD.: AHTI (2000:167).
Cladonia grayii MERR. ex SANDST.: AHTI (2000:119).
Cladonia melanopoda AHTI: AHTI (1997:8; 2000:133).
Dirinaria applanata (FÉE) AWASTHI: AWASTHI (1975:78).
Dirinaria aspera (H. MAGN.) AWASTHI: AWASTHI (1975:69).
Everniastrum cirrhatum (FR.) HALE: SIPMAN (1980:345).
Gyalectidium imperfectum VEZDA: FERRARO & LÜCKING (2000:67).
Hypotrachyna endochlora (LEIGHT.) HALE: ADLER & ELIX (1992:283).
Hypotrachyna leiophylla (KUROK.) HALE: ADLER & ELIX (1992:284).
Hypotrachyna livida (TAYLOR) HALE: ADLER & ELIX (1992:285).
Hypotrachyna revoluta (FLÖRKE) HALE: ADLER & ELIX (1992:286).
Lecanora coronulans NYL.: LUMBSCH et al. (1996:277).
Lyromma ornata LÜCKING, KALB & SÉRUS.: FERRARO & LÜCKING (2000:68).
Lyromma palmae (CAVAL. & A. A. SILVA) LÜCKING & SÉRUS.: FERRARO & LÜCKING (2000:69).
Mycocalicium americanum (R. SANT.) TIBELL: TIBELL (1996:49).
Parmelia rigida LYNGE: HALE (1965:338).
Parmelia subcaperata KREMP.: HALE (1965:314).
Parmelia tinctorum NYL.: HALE (1965:264).
Parmelinopsis afrorevoluta (KROG & SWINSC.) ELIX & HALE: ADLER & ELIX (1992:286).
Parmelinopsis minarum (VAIN.) ELIX & HALE: ADLER & ELIX (1992:287).
Pseudoparmelia carneopruinata (Z AHLBR.) HALE: HALE (1976:22).
Strigula elegans(FÉE) MÜLL. ARG.: SANTESSON (1952:160).
Tapellaria phyllophila (STIRT.) R. SANT.: FERRARO & LÜCKING (2000:69).
Toninia hosseusiana GYELN.: TIMDAL (1991:66).
Usnea sulcata MOTYKA var. *neutra* MOTYKA: OSORIO (1990:4).
Xanthoparmelia callifolioides ADLER, ELIX & J. JOHNST.: NASH et al.

(1995:37).

Xanthoparmelia cordillerana (GYELN.) HALE: NASH et al. (1995:45).

Xanthoparmelia farinosa (VAIN.) T. H. NASH, ELIX & J. JOHNST.: NASH et al., 1995:50).

Xanthoparmelia ferraroiana T. H. NASH, ELIX & J. JOHNST.: NASH et al. (1995:52).

Xanthoparmelia lineola (BERRY) HALE: NASH et al. (1995:64).

Xanthoparmelia microspora (MÜLL. ARG.) HALE: NASH et al. (1995:71).

Xanthoparmelia neotaractica HALE: NASH et al. (1995:82).

Xanthoparmelia punctulata (GYELN.) HALE: NASH et al. (1995:90).

Xanthoparmelia scabrosa (TAYLOR) HALE: NASH et al. (1995:94).

Xanthoparmelia subplittii HALE: NASH et al. (1995:105).

Xanthoparmelia substenophylloides HALE: NASH et al. (1995:110).

Xanthoparmelia succedans ELIX & J. JOHNST.: NASH et al. (1995:115).

Xanthoparmelia taractica (KREMP.) HALE: NASH et al. (1995:117).

Xanthoparmelia tasmanica (J. D. HOOK. & TAYLOR) HALE: NASH et al. (1995: 119).

Xanthoparmelia ulcerosa (Z AHLBR.) HALE: NASH et al. (1995:121).

Xanthoparmelia wrightiana T. H. NASH, ELIX & J. JOHNST.: NASH et al. (1995:127).

Results

The study of these 20 gatherings (mostly macrolichens) led us to include 18 taxa to the known flora of Jujuy.

A list of all the taxa reported in the literature from Jujuy during 1950-2000 is included with the aim to update the knowledge of the lichen flora of this Province.

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