

COMUNICACIONES BOTANICAS DEL MUSEO  
DE HISTORIA NATURAL DE MONTEVIDEO

---

Número 111

1998

Volumen VI

CONTRIBUTION TO THE LICHEN FLORA OF URUGUAY.  
XXX. LICHENS FROM EASTERN URUGUAY.

HÉCTOR S. OSORIO\*

**ABSTRACT:** *Contribution to the lichen flora of Uruguay. XXX. Lichens from Eastern Uruguay.*— Fifty lichens species gathered in Eastern Uruguay are listed. The genus *Mazosia* is added to the known flora of the country. The southernmost stations in South America for seven species are pointed out.

**RESUMEN:** *Contribución a la flora líquénica del Uruguay. XXX. Líquenes del Este de Uruguay.*— Se enumeran cincuenta líquenes colectados en el Este de Uruguay. El género *Mazosia* se cita por primera vez para el país. Para siete especies se mencionan los registros mas australes en América del Sur.

**Key words:** Uruguay - Lichens - Taxonomy - Distribution.

**Palabras claves:** Uruguay - Líquenes - Taxonomía - Distribución.

### Introduction

This contribution is the first step of a long-term planned study of the lichen flora from eastern Uruguay. This region of the country has been very poorly studied from a lichenological point of view in spite of the existence of indications of its potential (OSORIO 1992, 1995).

The area of our study is circumscribed as follows: the northernmost place is the cross of the Meridiane 55°W with the Uruguay-Brazil frontier, nearly 60 km NW from Vichadero town (31°48'S- 54°43'W), on the NE and E the limits are: the Uruguay-Brazil frontier, the Laguna Merim (32°45'S-

---

\* Museo Nacional de Historia Natural, Casilla de Correo 399, 11.000 Montevideo, Uruguay.

52°50'W) and the Barra del Chuy (33°46'S-53°24'W) in the Atlantic coast. The southern limit is the Atlantic coast from Barra del Chuy to Punta del Este City (34°58'S-54°57'W) and on the west, of course, the Meridian 55°W (see Map 1). The area to be studied includes partial- or totally the following Departments: Cerro Largo (CL), Lavalleja (L), Maldonado (M), Rivera (RI), Rocha (RO) and Treinta y Tres (TT).

As a starting point to this project we have identified the collections gathered in Eastern Uruguay housed in the Herbarium of the Museo Nacional de Historia Natural, Montevideo, Uruguay (MVM). Due to the fact that the totality of the specimens here listed were not gathered by lichenologists, the crustose lichen flora is artificially underrepresented.

The numbers between brackets belong to the MVM numbering system.

**Acknowledgements:** The following specialists are thanked for their kind cooperation: Drs. T. AHTI, R. LÜCKING, S. STENROOS AND I. YOSHIMURA. The author is also indebted to the several collectors who placed their gatherings at his disposal.

### List of species

*Bacidia alutacea* (KREMPELH.) ZAHLBR.

RO.: Laguna Negra, 1988, on shrubs, ACHAVAL (17.014).

*Buellia cinereocincta* MÜLL. ARG.

RO.: Cabo Polonio, 1972, on trunk of *Eucalyptus*, MONES (17.504).

*Buellia megapotamica* MALME ap. STEINER

M.: Laguna José Ignacio, 1975, on bark of coniferous tree, ROSENGURT (17.721).

RO.: Laguna Negra, 1988, on shrubs, ACHAVAL (17.012); La Esmeralda (Route 9: km 280), 1997, on *Pyracantha*, MONES (2459); 1998, on trunk of *Pinus*, MONES (2460).

*Caloplaca erythrantha* (TUCK.) ZAHLBR

RO.: Route 9 and Arroyo del Sauce, 1962, on bark, SAN MARTIN (2463).

*Caloplaca granularis* (MÜLL.ARG.) C.SAMBO

L.: Estancia Mautone, (Route 14: km 280), 1983, on wooden fence post, PRIGIONI & BARBOSA (17.113).

*Caloplaca ochraceofulva* (MÜLL. ARG.) JATTA

M.: Rio de la Plata, Isla de Lobos, 1955, on rocks, KLAPPENBACH (16.663,16.664).

*Candelaria concolor* (DICKS.) B. STEIN

L.: Estancia Mautone, (Route 14: km 280), 1983, on bark, PRIGIONI & BARBOSA (17.115).

RO.: Cabo Polonio, 1972, on bark, MONES (17.498).

*Cladia aggregata* (SWARTZ) NYL.

L.: Route 8 and Arroyo Marmarajá, 1976, on rocks, AMARAL, confirm. T. AHTI 1979 (17.731).

M.: Aiguá, Estancia M. MUÑIZ, (7 km E from Aiguá town), 1975, on rocks, AMARAL (2454); Aiguá, Gruta de Salamanca, 1967, on rocks, LAGE (17.221).

T. T.: on soil, PRIGIONI (1620).

*Cladonia ahtii* STENROOS

RO.: Route 16, 1982, on trunk of a palm, ACHAVAL, det. S. STENROOS 1989, (18.280); Castillos, Rincón de Molina, 1988, on trunk of a palm, PAEZ (16.545); Castillos, Estancia El Palmar, 1978, on *Arecastrum romanzoffianum*, RUBIO, det. S. STENROOS 1989, (18.036); 1977, on *Syagrus capitata*, MARCHESI, det. S. STENROOS 1989 (17.750); Parque Santa Teresa, 1985, on *Washingtonia robusta*, ALONSO (17.352).

*Cladonia didyma* (FÉE) VAINIO

RO.: Aguas Dulces, Parque Dirección Forestal, 1990, on sandy soil, PRIGIONI (17.021); La Paloma, 1974, on sandy soil, AMARAL, confirm. S. STENROOS 1989, (17.658); 1993, on sandy soil, *Pinus and Eucalyptus* plantation, IZAGUIRRE et al., confirm. T. AHTI 1994 (2407).

*Cladonia grayi* G.K.MERRILL EX SANDST.

RO.: La Paloma, 1993, on sandy soil, *Pinus and Eucalyptus* plantation, IZAGUIRRE et al., confirm. T.AHTI 1994 (2408).

*Cladonia ramulosa* (WITH.) LAUNDON

RO.: La Paloma, 1993, on sandy soil, *Pinus* and *Eucalyptus* plantation, IZAGUIRRE et al., confirm. T. AHTI 1994 (2409).

*Collema glaucophthalmum* NYL. var. *implicatum* (NYL.) DEGEL.

T.T.: Arroyo de la Lana, (Route 18: km 317), 1997, on *Sebastiania brasiliensis*, ALONSO (2449).

*Concamerella pachyderma* (HUE) W. CULB. & CH. CULB.

T. T.: Cañada del Brujo, (35 km NNW from Treinta y Tres City), 1986, on rocks, PRIGIONI (1616).

*Cryptothecia rubrocincta* (EHRENB.) THOR

RO.: Arroyo Chafalote, Isla Negra, 1977, on trunk of a palm, ACOSTA Y LARA (17.739); Estancia El Palmar, (7 km SE from Castillos City), 1978, on *Arecastrum romanzoffianum*, RUBIO (18.037); 1977, on *Syagrus capitata*, MARCHESI(17.753); Castillos, Rincón de Molina, 1988, on trunk of a palm, PÁEZ (16.544).

*Dirinaria applanata* (FÉE) AWASTHI

RO.: Parque de Santa Teresa, Punta del Cerro Chato, 1976, on bark, NOVICOW (17.878).

*Glyphis cicatricosa* (ACH.) VAINIO f. *confluens* (ZENK.) ZAHLBR.

L.: Route 8 and Río Cebollatí, 1955, on branches, A. OSORIO (17.488).

*Hypotrachyna livida* (TAYLOR) HALE

C.L.: Arroyo de la Mina, Paso Duraznero, (8 km SE from Aceguá town), 1970, XIMÉNEZ, det. M. E. HALE 1975 (17.235).

*Leptogium cyanescens* (ACH.) KÖRBER

C.L.: Río Branco, 1980, on bark, BRESCIA et al., (1631).

T.T.: Río Tacuarí, Paso del Dragón, 1980, on bark, BRESCIA et al. (1930).

*Leptogium megapotamicum* MALME

RO.: Castillos, Estancia El Palmar, 1977, on a tree, MARCHESI (17.752).

*Leptogium phylloctarpum* (PERS.) NYL.

C.L.: Route Melo-Río Branco, Las Graseras, Cañada Cañitas, 1985, on

bark, PRIGIONI (1635).

RO.: Castillos, Estancia El Palmar, 1977, on a tree, MARCHESI (17.752);  
La Esmeralda (Route 9: km 280), 1996, on *Cupressus*, MONES (2433).

*Lobaria conformis* VAINIO

C.L.: Sierra de los Ríos, 1937, on a tree, HERTER 98.383 b. (MVM).

L.: Arroyo Polanco, 1993, on *Pouteria salicifolia*, IZAGUIRRE et al.  
(2406).

*Lobaria erosa* (ESCHW. IN MART.) TREVISAN

L.: Zapiacán, 1960, on *Salix*, SAN MARTÍN, confirm. I. YOSHIMURA 1972  
(17.211).

T.T.: Arroyo de la Lana (Route 18: km 317), 1997 on *Sebastiania  
brasiliensis*, ALONSO (2450); Vergara, 1932, on bark, HERTER 90.813,  
det. C. W. DODGE 1949, confirm. I. YOSHIMURA 1972 (MVM).

*Mazosia phyllosema* (NYL.) ZAHLBR.

RO.: Río Cebollatí, Puerto La Cristina, 1989, on leaves of *Oncidium  
pumilum*, MARCHESI et al., det. R. LÜCKING 1995 (MVM 2464, Herb.  
LÜCKING, Herb. OSORIO).

*Parmelina consors* (NYL.) HALE

T.T.: Cañada del Brujo, (35 km NNW from Treinta y Tres City), 1986,  
on bark, PRIGIONI (1622).

*Parmelina pilosa* (STIZENB.) HALE

RO.: Cabo Polonio, 1972, on bark, XIMÉNEZ (17.499); Aguas Dulces,  
1977, on bark, ACHAVAL (17.799).

T.T.: Cañada del Brujo, (35 km NNW from Treinta y Tres City), 1986,  
on bark, PRIGIONI (1623).

*Parmotrema argentinum* (KREMPELH.) HALE

RO.: Cabo Polonio, 1972, on bark, MONES (17.502).

*Parmotrema eciliatum* (NYL.) HALE

RO.: Fortaleza de Santa Teresa, 1988, on a tree trunk, URETA (17.084);  
Aguas Dulces, 1977, on bark, ACHAVAL (17.804).

*Pertusaria velata* (TURNER) NYL.

RO.: Laguna Negra, 1988, on shrubs, ACHAVAL (17.013).

T.T.: La Charqueada, 1972, on branches, MARCHESI (17.424).

*Phaeographina arechavaletae* MÜLL. ARG.

L.: Route 8 and Río Cebollatí, 1955, on branches, A. OSORIO (17.489).

*Phaeographina caesiopruinosa* (FÉE) MÜLL. ARG.

L.: Río Cebollatí, Paso Averías, 1988, on bark, ACHAVAL (16.537).

*Pseudocyphellaria aurata* (ACH.) VAINIO

C. L.: Route Melo-Río Branco, Las Graseras, Cañada Cañitas, 1985, on bark, PRIGIONI (1636); Río Branco, 1980, on bark, BRESCIA et al. (1632).

RO.: Castillos, Estancia El Palmar, 1977, on a tree, MARCHESI (17.751).

T. T.: Cañada del Brujo, (35 km NNW from Treinta y Tres City), 1986, on bark, PRIGIONI (1617).

*Pseudoparmelia carneopruinata* (ZAHILBR.)HALE

RO.: Camino del Indio, (9 km W from Route 9), 1984, on rocks, CONSENS (2614).

*Pseudoparmelia exornata* (ZAHILBR.)HALE

C. L.: Bañado de Medina, Escuela de Agronomía, 1958, on a tree, ROSENGURT (2462).

*Pseudoparmelia papillosa* (LYNGE EX GYELN.)HALE

C. L.: Arroyo La Tigra, (near Cerro de las Cuentas), 1972, on rocks, MARCHESI & DEL PUERTO (17.436).

RO.: Cabo Polonio, 1972, on rocks, MONES (17.496); 1981, on rocks splashed by seawater, ACHAVAL (18.041).

*Punctelia borrerina* (NYL.) KROG

C. L.: Estancia Santa Inés, (4 km W from Paso del Dragón town), 1974, on bark, GONZÁLEZ (17.656).

*Punctelia canaliculata* (LYNGE) KROG

C. L.: Plácido Rosas, 1997, on *Maytenus iliciifolia*, ALONSO & BASSAGODA (2443).

RO.: Pueblo Cebollatí, 1996, on *Acacia bonariensis*, BRESCIA (2436).

T. T.: La Charqueada, 1995, on branches, MARTÍNEZ MACHIAVELLO (17.412).

*Pyrrhospora russula* (ACH.) HAF.

C. L.: Aceguá, 1985, on wooden fence post, PRIGIONI (1210).

*Ramalina celastri* (SPRENGEL) KROG & SWINSCOW

RO.: Aguas Dulces, 1977, ACHAVAL (17.800); Cabo Polonio, 1972, on branches, MONES (17.497); Bañado La Salina, Kambara, 1988, on wooden fence post, ACHAVAL (17.011); Pueblo Cebollatí, 1977, on *Acacia bonariensis*, BRESCIA (2434); La Esmeralda, (Route 9: km 280), 1980, on wooden fence post, MONES (18.060, 18.061).

T. T.: Puerto La Charqueada, 1993, on *Erythrina crista-galli*, ALONSO (2402); Cañada del Brujo, (35 km NNW from Treinta y Tres City), 1986, on bark, PRIGIONI (1624).

*Ramalina laevigata* FRIES

RO.: Arroyo Valizas, Cerro de la Buena Vista, 1969, on rocks, CHEBATAROFF (17.635, 17.636); 1980, on rocks, MENEGHEL & ACHAVAL (16.651).

*Ramalina peruviana* ACH.

RO.: Cabo Polonio, 1972, on bark, MONES (17.494), Santa Teresa, 1977, on branches, PIAGGIO (18.039).

*Ramalina sprengelii* KROG & SWINSCOW

C. L.: Estancia Santa Inés, (4km W from Paso del Dragón town); 1974, on branches of trees, GONZÁLEZ (17.653); 1974, XIMÉNEZ (17.664).

RO.: Cabo Polonio, Cerro Buena Vista, 1980, on rocks splashed by seawater, MENEGHEL & ACHAVAL (18.045).

*Ramalina usnea* (L.) HOWE

RO.: Valizas, 1988, on branches of shrubs, URETA (16.513).

*Rimelia cetrata* (ACH.) HALE & FLETCHER

C. L.: Arroyo de la Mina, Paso Duraznero, (8 km SE from Aceguá town), 1970, on bark, XIMÉNEZ, det. M. HALE, 1975, (17.234)

RO.: Cabo Polonio, 1972, on bark, MONES (17.501); 1981, on rocks splashed by seawater, ACHAVAL (18.042); Aguas Dulces, 1977, ACHAVAL (17.803), La Esmeralda, (Route 9: km 280), 1980, on trunk of a tree, MONES (18.062).

T. T.: Route 8 and Arroyo Parao, 1987, on *Xylosma pubescens*, ALONSO & BASSAGODA (2452).

*Sticta variabilis* (BORY) ACH.

C. L.: Río Yaguarón, Paso Centurión, 1985, on bark, PRIGIONI (1634).

*Teloschistes chrysophthalmus* (L.) TH. FR.

L.: Route 8 and río Cebollatí, 1955, on branches, A. OSORIO (17.491).

*Teloschistes exilis* VAINIO

L.: Route 8 and Río Cebollatí, 1955, on shrubs, A. OSORIO (17.490).

RO.: La Esmeralda (Route 9: km 280), 1994, on *Citrus*, MONES (2458); Pueblo Cebollatí, 1996, on *Acacia bonariensis*, BRESCIA (2435).

T T.: Puerto La Charqueada, 1993, on *Erythrina crista-galli*, ALONSO (2401); 1972, on branches, MARCHESI (17.425).

*Teloschistes flavicans* (SWARTZ) NORMAN

M.: Punta José Ignacio, 1985, on shrubs, FEMENÍAS (1160).

RO.: Bañados de Laguna Negra, 1988, ACHAVAL (17.010); Camino del Indio, km 45, 1987, on rocks, MONES (17.083); Fortaleza de Santa Teresa, 1988, on trunk of a tree, URETA (17.085); Cabo Polonio, Cerro de la Buena Vista, 1969, CHEBATAROFF (17.640); 1980, on rocks splashed by seawater, MENEGHEL & ACHAVAL (18.044); Santa Teresa, El Chorro, 1977, PIAGGIO (18.040).

*Usnea densirostra* TAYLOR

L.: 15 km SSW from Aiguá town, 1973, ACHAVAL (17.610).

RO.: Camino del Indio, (9 km W from Route 9), 1984, CONSENS (2613); Cabo Polonio, Cerro de la Buena Vista, 1969, CHEBATAROFF (17.639); 1980, MENEGHEL & ACHAVAL (16.650); Valizas, Cerro del Negro, 1973, BAEZA (17.605).

T. T.: Cañada del Brujo, (35 km NNW from Treinta y Tres City), 1986, PRIGIONI (1618). All the specimens of this *Usnea* were collected growing on rocks.

*Usnea sulcata* MOT. var. *neutra* MOT.

C. L.: Estancia Santa Inés, (4 km W from Paso del Dragón town), 1974, on a tree, GONZÁLEZ (17.654).



## Results

The fifty lichen species here listed are a very small and scarcely representative sample of the flora within an area of approximate 36.000 square kilometers.

Despite the reduced number of taxa studied we consider of interest to point out the following findings:

1) The genus *Mazosia* is reported for Uruguay for the first time. In the eastern region of southern South America *Mazosia phyllosema* was formerly known from Argentina: Misiones, Iguazú (FERRARO 1997:60) and in Brazil, Rio Grande do Sul, Gramado (SCHELL & WINKLER 1981:329). The present station enlarges the distribution 500 km southward.

2) *Cladonia ahtii*: This species occurs in the SE of Uruguay (OSORIO 1975:3, 1983:83, STENROOS 1989:253) with a isolated gathering in northern Uruguay (OSORIO 1996:2). All the collections from Montevideo, Canelones and Rivera Departments were found growing on *Eucalyptus robusta* (OSORIO 1983:83, STENROOS 1989:253). Besides this, in Rocha Department this taxon grows exclusively on different palms species (OSORIO 1975:3, 1983:83) forming large red patches (Lic. E. MARCHESI, pers. comm.).

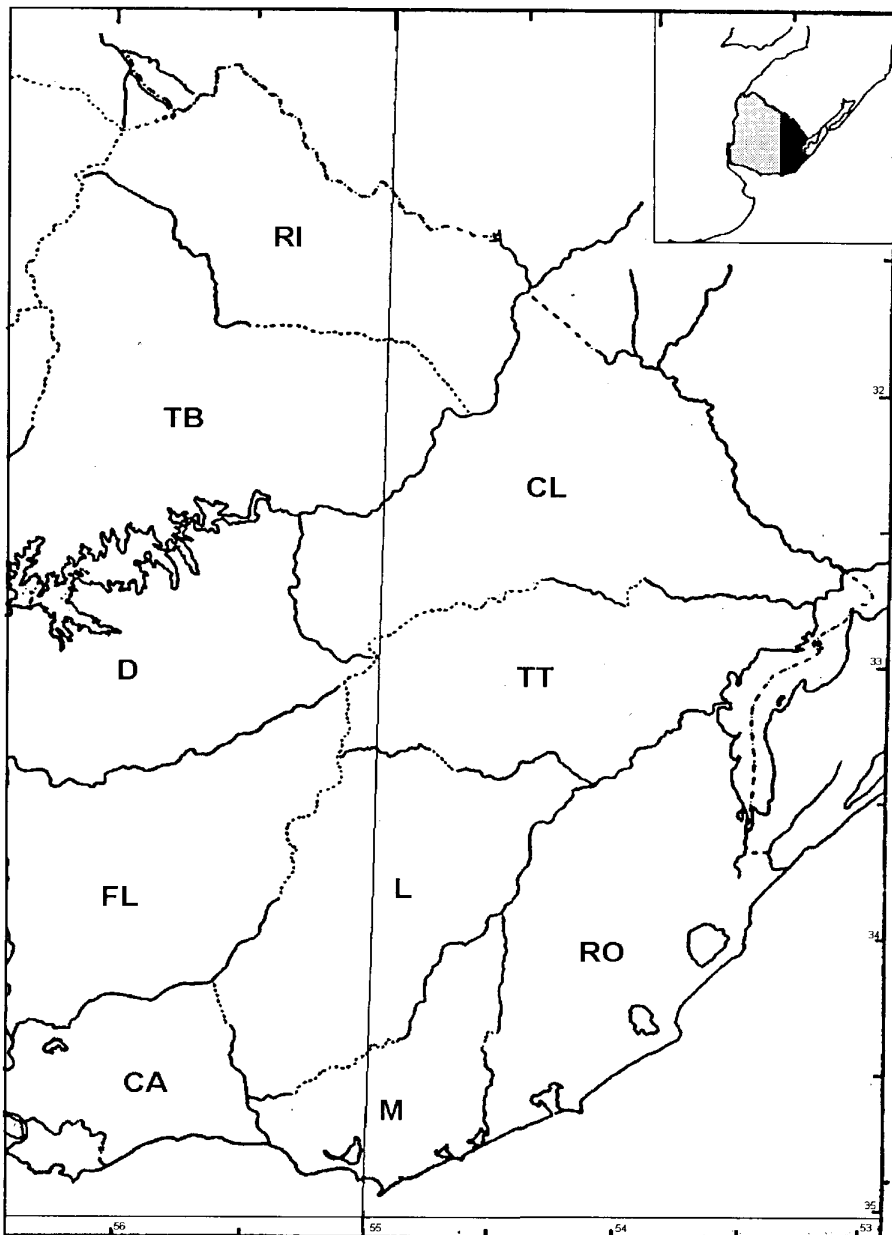
3) This region in Uruguay is the southernmost limit of the distributional range of many species in South America. In a former paper (OSORIO 1992:40) we have listed some taxa belonging to this group. Among the species here reported the following ones can be also included: *Caloplaca ochraceofulva*, *Mazosia phyllosema*, *Phaeographina caesiopruinosa*, *Ramalina usnea*, *R. sprengelii*, *Sticta variabilis* and *Usnea sulcata* var. *neutra*.

## MAP 1

## Key to the names of the Departments

CA: Canelones  
CL: Cerro Largo  
D: Durazno  
FL: Florida  
L: Lavalleja  
M: Maldonado  
RI: Rivera  
RO: Rocha  
TB: Tacuarembó  
TT: Treinta y Tres

The vertical line shows the Meridiane 55°, western limit of this study.



## LITERATURE CITED

- FERRARO, L. D. 1997. Checklist of foliicolous lichenized fungi from North-eastern Argentina (Corrientes and Misiones), with notes on adjacent areas of Paraguay and Brasil. *Abstracta Botanica*, 21(1):53-67, fig. 1-5. Budapest.
- OSORIO, H. S. 1975. Contribution to the lichen flora of Uruguay. VIII. Additions and corrections. *Comunicaciones Botánicas del Museo de Historia Natural de Montevideo*, 4(59):1-12.
- OSORIO, H. S. 1978. Contribution to the lichen flora of Uruguay. XVIII. Taxonomic notes. *Mycotaxon*, 18(1):81-85. Ithaca, NY.
- OSORIO, H. S. 1992. Contribution to the lichen flora of Uruguay. XXIV. Lichens from Sierra San Miguel, Rocha Department. *Boletín de la Sociedad Argentina de Botánica*, 28(1-4):37-40. Buenos Aires.
- OSORIO, H. S. 1995. Contribution to the lichen flora of Uruguay. XXVIII. Lichens from Southern Rocha. *Comunicaciones Botánicas del Museo de Historia Natural de Montevideo*, 5(103):1-12.
- OSORIO, H. S. 1996. Contribution to the lichen flora of Uruguay. XXIX. Lichens from Rivera Department. *Comunicaciones Botánicas del Museo de Historia Natural de Montevideo*, 5(105):1-6.
- SCHIELL, S. & S. WINKLER. 1981. Zur Ökologie und Pflanzengeographie blattbewohnender Flechten von Rio Grande do Sul (Südbrasilien). *Cryptogamie, Bryologie Lichénologie*, 2(3):323-343, fig. 1-11. Paris.
- STENROOS, S. 1989. Taxonomic revision of the *Cladonia miniata* group. *Annales Botanici Fennici*, 26:237-261, fig.1-9, tabl. 1-4. Helsinki.

MUSEO NACIONAL DE HISTORIA NATURAL  
BUENOS AIRES 652  
CASILLA DE CORREO 399  
11.000 MONTEVIDEO, URUGUAY  
FAX: (005982) 917-0213

---

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

Agosto 1998

Depósito Legal N° 310.611/98