

Lichen records from La Rioja, Spain

Mustafa Yavuz (*) & Gülşah Çobanoğlu (**)

Abstract: Yavuz, M. & Çobanoğlu, G. Lichen records from La Rioja, Spain. *Lazaroa* 29: 143-145 (2008).

As a by-product of the E.U. Socrates Comenius Project Meeting held in Alfaro, La Rioja Spain in 2006; a list of 35 lichen taxa collected in the region is presented. Nine species are new records for the Comunidad Autónoma de La Rioja: *Buellia aethalea*, *Caloplaca crenularia*, *Caloplaca luteoalba*, *Candelariella aurella*, *Cladonia strepsilis*, *Lecanora dispersa*, *Lecanora piniperda*, *Lecanora saligna* and *Xanthoria polycarpa*. Information on the localities and substrata of the collections made are provided.

Key Words: Ascomycota, Socrates Comenius Project, Iberian Peninsula, Lichenized fungi.

Resumen: Yavuz, M. & Çobanoğlu, G. Algunos líquenes de La Rioja, España. *Lazaroa* 29: 143-145 (2008).

Se presentan en este trabajo algunos de los resultados de la reunión que sobre el proyecto Comenius (proyecto Socrates, U.E.) se celebró en Alfaro, La Rioja en el año 2006. Dichos resultados engloban una lista de 35 líquenes recolectados en dicha región. De ellos, nueve especies son nuevas citas: *Buellia aethalea*, *Caloplaca crenularia*, *Caloplaca luteoalba*, *Candelariella aurella*, *Cladonia strepsilis*, *Lecanora dispersa*, *Lecanora piniperda*, *Lecanora saligna* y *Xanthoria polycarpa*.

Palabras clave: Ascomycota, Proyecto Comenius, Península Ibérica, Hongos liquinizadas.

INTRODUCTION

The study area, the Comunidad Autónoma de La Rioja, is situated in the north-north-east of Spain (Figure 1). According to data from Agoncillo, the Logroño Meteorological Station (period: 1971-2000; altitude: 352 m, Figure 2), the average annual mean temperature is 13.5 °C, and the annual precipitation about 397 mm. The drought period for La Rioja is between June and October.

as the substratum types; full locality information is given below. Determinations were made using standard identification methods with the aid of regional identification manuals (Clauzade & Roux, 1985; Purvis & al., 1992; Wirth, 1995).

The lichen specimens are preserved in the Herbarium, Faculty of Science and Arts, University of Marmara, Istanbul (MUFE); with accession numbers ESP01 - ESP40. These accession numbers belong to a special collection, the *Lichenes España*, in MUFE.

MATERIALS AND METHODS

This study is based on specimens collected by the first author during a EU Socrates Comenius Project Meeting ("Green Days Green Cities") in October 2006, which was hosted by the Instituto de Enseñanza Secundaria Gonzalo de Berceo in Alfaro. The lichen material, including corticolous, saxicolous and terricolous samples, was collected in three localities. Geographic coordinates and elevations were recorded as well

RESULTS

Thirty-five lichen taxa identified in the collections made are listed alphabetically below. In the list, the names of taxa are followed by locality and substratum information and the herbarium accession numbers.

Nine taxa are new records for La Rioja, and are indicated with an asterisk (*). These species were not cited for La Rioja by Feuerer (2007) and Burgaz & al. (2007).

* Pendik Kaynarca Sevket Sabanci Lisesi, Pendik. 34899 Istanbul. Turkey.

** Department of Biology. University of Marmara. Göztepe Campus. 34722 Istanbul. Turkey.

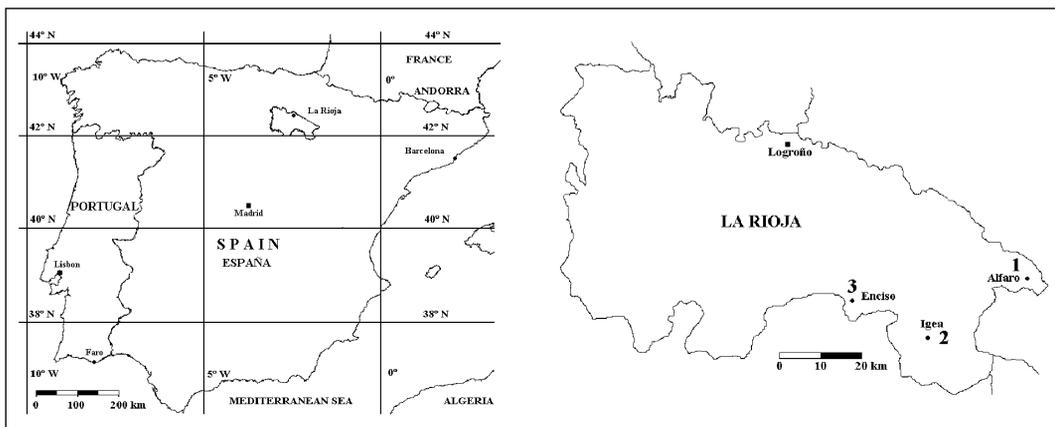


Figure 1. Location of the Comunidad Autónoma de La Rioja in the Iberian Peninsula and sampling locations.

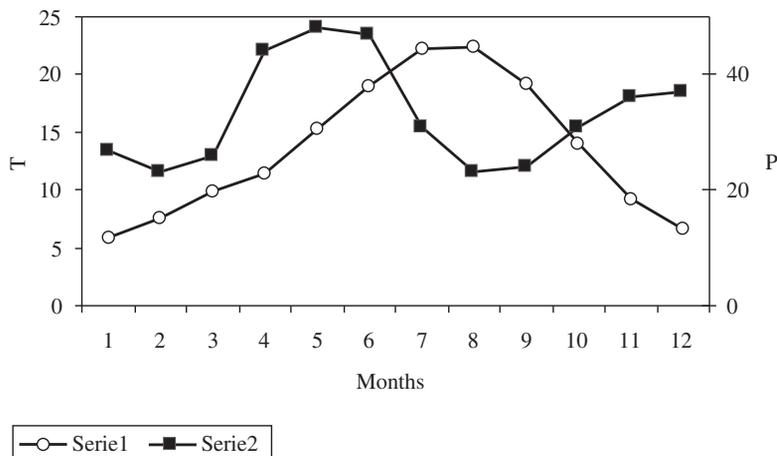


Figure 2. Climatic values from Agoncillo (Logroño Meteorological Station) in the Comunidad Autónoma de La Rioja.

The nomenclature follows Santesson *et al.* (2004), with some subsequent updating. Abbreviations used for substratum-type data in the listare: SR: sliceous rock; TR: terricolous; EP: Epiphytic (*Liquidambar orientalis*, *Populus* sp., or *Salix* sp.). The localities are, LR01: Alfaro, Fields, 280 m, 42°11'22.20"N - 01°44'44.30"W, 29 Oct. 2006. LR02: Igea, Árbol Fósil 655 m, 42°03'05.30"N - 02°01'55.40"W, 30Oct. 2006. LR03: Enciso, Senda de los Dinosaurios de Enciso, 845 m, 42°08'14.58"N - 02°15'21.97"W, 30Oct. 2006.

1. *Aspicilia cinerea* (L.) Körb. LR02, SR (ESP-28).
2. *A. contorta* (Hoffm.) Kremp. LR03, SR (ESP-29).
3. **Buellia aethalea* (Ach.) Th. Fr. LR02, SR (ESP-01).
4. *Caloplaca cerina* (Ehrh. ex Hedw.) Th. Fr. LR01,

- EP on *Salix* sp., *Liquidambar orientalis*, (ESP-02); LR03, on *Populus* sp. (ESP-30).
5. **C. crenularia* (With.) J.R. Laundon LR02, SR (ESP-03).
6. **C. luteoalba* (Turner) Th. Fr. LR01, EP on *Salix* sp., *Liquidambar orientalis* (ESP-04).
7. **Candelariella aurella* (Hoffm.) Zahlbr. LR03, SR (ESP-40).
8. *C. vitellina* (Hoffm.) Müll. Arg. LR02, SR (ESP-05). LR03, SR (ESP-31).
9. *C. xanthostigma* (Pers.) Lettau LR03, EP on *Populus* sp.,(ESP-32).
10. *Cetraria aculeata* (Schreb.) Fr. LR03, TR (ESP-06).
11. *Cladonia convoluta* (Lam.) Cout. LR03, TR (ESP-32).

12. *Cl. furcata* (Huds.) Schrad. subsp. *furcata* LR03, TR (ESP-07).
13. *Cl. rangiformis* (L.) Weber ex F.H. Wigg. LR03, TR (ESP-08).
14. **Cl. strepsilis* (Ach.) Vain. LR02, TR, (ESP-09).
15. *Lecanora argentata* (Ach.) Malme LR01, EP on *Liquidambar orientalis* (ESP-10).
16. *L. chlarotera* Nyl. LR01 on *Salix* sp. (ESP-11).
17. **L. dispersa* (Pers.) Sommerf. LR01, EP on *Liquidambar orientalis* (ESP-12).
18. **L. piniperda* Körb. LR01, EP, on *Liquidambar orientalis* (ESP-13).
19. *L. pulicaris* (Pers.) Ach. LR03, TR, (ESP-14).
20. **L. saligna* (Schrad.) Zahlbr. LR03, TR (ESP-15).
21. *L. symmicta* (Ach.) Ach. LR01, EP on *Salix* sp. (ESP-16).
22. *Lecidella carpathica* Körb. LR03, SR (ESP-33).
23. *L. elaeochroma* (Ach.) M. Choisy LR01, EP on *Salix* sp.; LR03, on bark (ESP-17).
24. *Parmelina pastillifera* (Harm.) Hale LR01, EP, on *Salix* sp., (ESP-18).
25. *Phaeophyscia orbicularis* (Neck.) Moberg LR01, EP on *Liquidambar orientalis* (ESP-20); LR03, EP on *Populus* sp. (ESP-34).
26. *Physcia adscendens* (Th. Fr.) H. Olivier LR03, EP on *Populus* sp. (ESP-35).
27. *P. tenella* (Scop.) DC. LR03, SR (ESP-36).
28. *Rhizocarpon geographicum* (L.) DC. LR02, SR (ESP-21); LR03, SR (ESP-37).
29. *R. simillimum* (Anzi) Lettau LR02, SR (ESP-22).
30. *R. subgeminatum* Eitner LR02, SR, (ESP-23).
31. *Xanthoparmelia pulla* (Ach.) O. Blanco *et al.* var. *pulla* LR02, SR (ESP-24).
32. *X. delisei* (Duby) O. Blanco *et al.* LR03, SR (ESP-38).
33. *X. tinctina* (Maheu & A. Gillet) Hale LR02, SR, (ESP-19).
34. *Xanthoria parietina* (L.) Th. Fr. LR01, EP on *Salix* sp., and *Liquidambar orientalis* (ESP-25); LR02, on bark (ESP-26); LR03, EP on *Populus* sp., (ESP-39).
35. **X. polycarpa* (Hoffm.) Rieber LR01, EP on *Salix* sp., and *Liquidambar orientalis* (ESP-27).

ACKNOWLEDGEMENTS

We would like to thank Carmen Casal Fornos (Jefa del Área de Documentación y Publicaciones, Ministerio de Medio Ambiente) for assistance in obtaining the meteorological data of La Rioja Community; Ana Rosa Burgaz and David L. Hawksworth (Universidad Complutense de Madrid) for their contribution to this list and for reviewing the manuscript; and Manuel Moreno-Marin (IES Gonzalo de Berceo, Alfaro, La Rioja) for his friendly partnership in the Comenius Project "Green Days Green Cities", and for the trips and fieldwork in and around Alfaro city. Also to The Turkish National Agency (Centre for European Union Education and Youth Programme) funded the Turkish Coordinator School with grants 06-TUR01-S2C01-00550-1 and 07-TUR01-CO06-01075-2. The Project partners were Pendik Kaynarca fievket Sabancı Lisesi from İstanbul, IES Gonzalo de Berceo from Alfaro, La Rioja, and Palatul Copiilor Constanța from Constanța, Romania

REFERENCES

- Anónimo —2004— Guía resumida del clima en España 1971-2000 — Centro de Publicaciones, Secretaría General Técnica, Ministerio de Ambiente. Madrid.
- Burgaz, A.R., Argüello, A., Atienza, V., Fernández-Brime, S., Fernández-Salegui, A.B., Figueras-Balague, G., García Otálora, M., Gómez-Bolea, A., Hawksworth, D.L., Hladun, N., Llimona, X., Llop, E., Marcos-Laso, B., Muñiz, D., Pérez-Llamazares A., Paz-Bermúdez, G., Pérez-Ortega, S., Del Prado, R., Rodrigues, S.A. & Terrón, A. —2007— Lichens and lichenicolous fungi of Sierra de San Lorenzo (La Rioja Community, Spain) — *Cryptogamie, Mycologie* 28: 133-153.
- Clauzade, G. & Roux, C. —1985— *Likenoj De Okcidenta Eŭropo* Ilustrita Determinlibro — Bull. Soc. Bot. Centr. — Ouest, Nouv. Sér. Numéro Spécial No. 7.
- Feuerer, T. —2007— Checklists of lichens and lichenicolous fungi — <http://www.checklists.de>
- Purvis, O.W., Coppins, B.J., Hawksworth, D.L., James, P.W. & Moore, D.M. —1992— *The Lichen Flora of Great Britain and Ireland* — Natural History Museum Publications. London.
- Santesson, R., Moberg, R., Nordin, A., Tønberg, T. & Vitikainen, O. —2004— *Lichen-forming and lichenicolous fungi of Fennoscandia* — Museum of Evolution. Uppsala.
- Wirth, V. —1995— *Die Flechten Baden-Württembergs*. 2 vols. — Eugen Ulmer. Stuttgart.

Recibido: 31 marzo 2008

Accepted: 12 mayo 2008