

NEW BRYOPHYTE RECORDS FOR MAJORCA (BALEARIC ISLANDS)

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SUMMARY: New localities for several unknown and poorly-recorded bryophyte species from Majorca are here reported. *Riccia bicarinata* Lindb. is a new record for Majorca and *Grimmia dissimulata* E. Maier constitutes a new report for the Balearic archipelago. The distribution area of the following taxa in the Balearic Islands is enlarged: *Acaulon mediterraneum* (Hedw.) Mitt., *Campylopus introflexus* (Hedw.) Brid., *Crossidium laevipilum* Thér. & Trab., *Ditrichum gracile* (Mitt.) Kuntz., *Drepanocladus aduncus* (Hedw.) Warnst., *Entosthodon attenuatus* (Dicks.) Bryhn, *Eurhynchium striatum* (Hedw.) Schimp., *Gongylanthus ericetorum* (Raddi) Nees, *Grimmia lisae* De Not., *Hygrohypnum luridum* (Hedw.) Jenn., *Orthothecium intricatum* (C. Hartm.) Schimp., *O. striatum* Hedw., *Pseudoleskea incurvata* (Hedw.) Loeske, *Pterygoneurum ovatum* (Hedw.) Dixon, *P. sampaianum* (Guim.) Guim., *Schistidium brunnescens* Limpr., *Sematophyllum substrumulosum* (Hampe) E. Britton, *Taxiphyllum wissgrillii* (Garov.) Wijk & Margad., *Tortella inclinata* (R. Hedw.) Limpr., *Tortula pallida* (Lindb.) R.H. Zander. **Key words:** Bryophytes, Floristic, chorology, Majorca, Balearic Islands, Western

RESUMEN: Se indican nuevas localidades para diversas especies de briófitos que eran consideradas raras en Mallorca o en todo el archipiélago balear. *Riccia bicarinata* Lindb. es citada por primera vez de Mallorca y *Grimmia dissimulata* E. Maier constituye novedad para la flora briológica de Baleares. El área de distribución en Baleares de los siguientes táxones se ve incrementada: *Acaulon mediterraneum* (Hedw.) Mitt., *Campylopus introflexus* (Hedw.) Brid., *Crossidium laevipilum* Thér. & Trab., *Ditrichum gracile* (Mitt.) Kuntz., *Drepanocladus aduncus* (Hedw.) Warnst., *Entosthodon attenuatus* (Dicks.) Bryhn, *Eurhynchium striatum* (Hedw.) Schimp., *Gongylanthus ericetorum* (Raddi) Nees, *Grimmia lisae* De Not., *Hygrohypnum luridum* (Hedw.) Jenn., *Orthothecium intricatum* (C. Hartm.) Schimp., *O. striatum* Hedw., *Pseudoleskea incurvata* (Hedw.) Loeske, *Pterygoneurum ovatum* (Hedw.) Dixon, *P. sampaianum* (Guim.) Guim., *Schistidium brunnescens* Limpr., *Sematophyllum substrumulosum* (Hampe) E. Britton, *Tortella inclinata* (R. Hedw.) Limpr., *Taxiphyllum wissgrillii* (Garov.) Wijk & Margad., *Tortula pallida* (Lindb.) R.H. Zander. **Palabras clave:** briófitos, florística, corología, Mallorca, Islas Baleares, Mediterráneo occidental.

INTRODUCTION

The bryophyte flora of the Balearic Islands has received increasing interest since the first reliable records of CAMBES-SÈDES (1827). Since then a considerable floristic knowledge has been gained and two check-lists of the Balearic flora have been published (VIVES, 1976; CROS & al., 2008). However, these compilations, seem far to provide a definitive account of the bryological flora of the Balearic archipelago. In this work we provide several interesting results of extensive field prospections conducted in Majorca that allow to increase the bryological knowledge of the island.

ADDITIONS

Acaulon mediterraneum Limpr.

MAJORCA: 31SEE1722, Pollença, Formentor, Pla de les Basses, 160 m, carbonate-poor soils, 28-II-2009, *J. Pericàs & J.A. Rosselló* (UIB-Brief 1118).

Previously recorded by PERICÀS & ROSSELLÓ (2009) from Puig d'en Galileu (Escorca) at 1.000 m.

Campylopus introflexus (Hedw.) Brid.

MAJORCA: 31SDE8708, Escorca, towards Torrent de Pareis, 620 m, epiphyte on the carpophore of an undetermined aphyllorphal fungus, 9-11-2008, *J. Pericàs & J.A. Rosselló* (UIB-Brief 241); 31SDE9008, *Ibid.*, Lluc, 500 m, epiphyte on the carpophore of an undetermined aphyllorphal fungus, 6-XII-2007, *J. Pericàs* (UIB-Brief 247).

Previously reported from the neighborhoods of N'Alí (SÁEZ & al., 1998).

Crossidium laevipilum Thér. & Trab.

MAJORCA: 31SDD8557, Lluçmajor, Cala Pi, 30 m, clearings of the littoral scrub, 12-V-2009, *J. Pericàs & J.A. Rosselló* (UIB-Brief 1285).

CANO & al. (2001) provided the first record of this species from the Balearic Islands (Majorca, Lluçmajor, Pas de sa Senyora).

Ditrichum gracile (Mitt.) Kuntz.

MAJORCA: 31SDE8706, Escorca, Puig d'en Galileu, 1000 m, northern exposures, 29-1-2009, *J. Pericàs & J.A. Rosselló* (UIB-Brief 1109).

Previously known from Puig Tomir (SÁEZ & al., 2002).

Drepanocladus aduncus (Hedw.) Warnst.

MAJORCA: 31SDE7501, Sóller, towards Font de S'Olla, 60 m, wet rocks on artificial waterways, 8-II-2008, *J.A. Rosselló* (UIB-Brief 982).

Previously reported from the neighborhoods of Torrent d'Almadrà (ROSSELLÓ, 1984) where it has not been found again.

Entosthodon attenuatus (Dicks.) Bryhn

MAJORCA: 31SDD8557, Lluçmajor, Cala Pi, 15 m, on wet slopes, 12-V-2009, *J. Pericàs & J.A. Rosselló* (UIB-Brief 1309).

Previously recorded from Majorca at Puig Roig (Escorca) by ROSSELLÓ (1985).

Eurhynchium striatum (Hedw.) Schimp.

MAJORCA: 31SDE8002, Escorca, Pla de Cúber, towards L'Ofre, 840 m, on shady and humid soils in *Pinus halepensis* woodland, on northern exposures, 8-12-2008, *J. Pericàs* (UIB-Brief 850).

Previously recorded in the Balearic archipelago by BLOCKEEL & CRUNDWELL (1987) near Son Torrella, in a *Quercus ilex* woodland.

Gongylanthus ericetorum (Raddi) Nees

MAJORCA: 31SEE1722, Pollença, Formentor, Pla de les Basses, 160 m, carbonate-poor soils, 28-II-2009, *J. Pericàs & J.A. Rosselló* (UIB-Brief 1114).

The species is very rare in Majorca, where it was previously known from a single locality at higher altitudes (Escorca, Nus de Sa Corbata; CANO & al., 2001).

Grimmia dissimulata E. Maier

MAJORCA: 31SDE8410, Escorca, Torrent de Pareis, 250 m, 12-VII-2006, *J. Pericàs*

(UIB-Brief 1258); 31SDE9310, *Ibíd.*, Puig Tomir, 875 m, 28-XII-2006, *J. Pericàs* (UIB-Brief 1259); 31SDE8206, *Ibíd.*, Puig Major towards Coma Fosca, 1360 m, 11-V-2006, *J. Pericàs* (UIB-Brief 1261); 31SDE8102, Bunyola, Sa Rateta, 1,000 m, 17-I-2008, *J. Pericàs* (UIB-Brief 1267); 31SDE8202, *Ibíd.*, alzinar de Comasema, 740 m, 17-01-2008, *J. Pericàs* (UIB-Brief 1273); 31SDE8002, Escorca, L'Ofre, 840 m, 18-XI-2007, *J. Pericàs* (UIB-Brief 1279).

MAIER (2002) included Majorca within the range of distribution of the species. However, no voucher specimens from the Balearic Islands were included in the paper.

Grimmia lisae De Not.

MAJORCA: 31SDE8609, Escorca, towards Torrent de Pareis, 300 m, on triassic rocks, 6-XII-2007, *J. Pericàs* (UIB-Brief 865); 31SDE8908, *Ibíd.*, Clot d'Albarca, 370 m, on triassic rocks 30-XII-2007, *J. Pericàs* (UIB-Brief 1238); 31SDE9214, *Ibíd.*, Mortitx, near Torrent de s'Hort des Molí, 320 m, on triassic rocks 14-V-2009, *J. Pericàs & J.A. Rosselló* (UIB-Brief 1239).

The species was previously known from the neighbourhoods of Valldemossa (WERNER, 1995) and from a few localities at the central part of the Serra de Tramuntana (GREVEN, 1995).

Hygrohypnum luridum (Hedw.) Jenn.

MAJORCA: 31SEE0016, Pollença, Torrent de Ternelles, 300 m, 5-XII-2006, *J. Pericàs* (UIB-Brief 299); 31SDE8002, Escorca, Cúber, artificial waterway, 840 m, 10-VI-2006, *J. Pericàs* (UIB-Brief 895); *ibidem*, 12-X-2008, *J. Pericàs* (UIB-Brief 899).

Previously recorded from a single population (Escorca, Gorg Blau; CASAS DE PUIG, 1956; CANO & al., 2001).

Orthothecium intricatum (C. Hartm.) Schimp.

MAJORCA: 31SDE8708, Escorca, Avenc de Sa Font de S'Espinal, 415 m, wet rocks on north facing exposures, 30-I-2009, *À. Ginés, J. Pericàs & J.A. Rosselló* (UIB-Brief 1282).

This finding constitutes the second

known locality of the species in the Balearic Islands (ROSSELLÓ & GINÉS, 1980; ROSSELLÓ 1981).

Orthotrichum striatum Hedw.

MAJORCA: 31SDE8002, Escorca, L'Ofre, 840 m, epiphyte on *Pinus halepensis* with *O. acuminatum* H. Philib and *O. lyellii* Hook. & Taylor, 5-XI-2006, *J. Pericàs* (UIB-Brief 203).

Previously recorded from Puig Major (PERICÀS, 2008) on *Acer opalus* subsp. *granatense* (Boiss.) Font Quer & Roth. branches.

Pseudoleskea incurvata (Hedw.) Loeske

MAJORCA: 31SDE8206, Escorca, Puig Major towards Coma Fosca, 1360 m, 8-II-2006, *J. Pericàs & J.A. Rosselló* (UIB-Brief 25); 31SDE8206, *Ibíd.*, *Ibíd.*, Clotades, 1330 m, 8-VIII-2008, *À. Ginés, J. Pericàs & J.A. Rosselló* (UIB-Brief 871); 31SDE8206, *Ibíd.*, Puig Major, Clot des Teixos, 1330 m, 8-VIII-2008, *À. Ginés, J. Pericàs & J.A. Rosselló* (UIB-Brief 979).

This finding constitutes the second known locality of the species in the Balearic Islands (SÁEZ & al., 2002).

Pterygoneurum ovatum (Hedw.) Dixon

MAJORCA: 31SDD7986, Marratxí, Sa Cabaneta, Es Puig Blanc, 145 m, clay soils in clearings of the scrub, with *Acaulon triquetrum* (Spruce) Müll. Hal., 11-4-2006, *J. Pericàs* (UIB-Brief 957).

In Mallorca the species was previously known from Andratx (KOPPE, 1965).

Pterygoneurum sampaiianum (Guim.) Guim.

MAJORCA: 31SEE1722, Pollença, Formentor, Pla de les Basses, 160 m, carbonate-poor soils, 28-II-2009, *J. Pericàs & J.A. Rosselló* (UIB-Brief 1224).

This finding constitutes the second known locality of the species in the Balearic Islands (CÁNO & al., 2001).

Riccia bicarinata Lindb.

***MAJORCA:** 31SEE1722, Pollença, Formentor, Pla de les Basses, 160 m, carbonate-

poor soils, 28-II-2009, *J. Pericàs & J.A. Rosselló* (UIB-Brief 1235).

New record from the flora of Majorca. Previously known from a single site in the Balearic Islands (Minorca, Ciutadella de Menorca; MONTSERRAT, 1953).

Schistidium brunnescens Limpr.

MAJORCA: 31SDE8206, Escorca, Puig Major, 1360 m, 26-IV-2006, *J. Pericàs* (UIB-Brief 149).

This species was previously recorded from a single site in the Balearic Islands (Majorca, Escorca, Gorg Blau; BLOM, 1996).

Sematophyllum substrumulosum (Hampe) E. Britton

MAJORCA: 31SDE8002, Escorca, Pla de Cúber, towards L'Ofre, 840 m, epiphyte on *Pinus halepensis*, 20-11-2007, *J. Pericàs* (UIB-Brief 887).

Previously recorded in Mallorca from Coanegra stream by ROSSELLÓ (1987) but it has not been found there again.

Taxiphyllum wissgrillii (Garov.) Wijk & Margad.

MAJORCA: 31SDE8206, Escorca, Puig Major, Clot des Teixos, 1330 m, 8-VIII-2008, *À. Ginés, J. Pericàs & J.A. Rosselló* (UIB-Brief 978).

This finding constitutes the second known locality of the species in the Balearic Islands (ROSSELLÓ & GINÉS, 1980; ROSSELLÓ, 1981).

Tortella inclinata (R. Hedw.) Limpr.

MAJORCA: 31SDE8206, Escorca, Puig Major towards Coma Fosca, 1360 m, 11-V-2006, *J. Pericàs* (UIB-Brief 367).

BLOCKEEL & CRUNDWELL (1987) and SÁEZ & al. (2006) provided the first records of this species from the Balearic Islands.

Tortula pallida (Lindb.) R.H. Zander

MAJORCA: 31SDD9256, Campos, S'Estanyol, 0 m, 28-II-2007, *J. Pericàs* (UIB-Brief 1201).

In the Balearic Islands the species was previously known from a single population (Majorca, Lluçmajor, S'Arenal; SÁEZ & al., 2002).

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