

C u r r i c u l u m V i t a e

Blanka Aguero (Shaw, Buryová)

Address: Duke University Herbarium
Department of Biology, Box 90338
Duke University
Durham, NC 27708-0338
<https://scholar.google.com/citations?hl=en&user=W7BXsG4AAAAJ>
<http://expeditions.fieldmuseum.org/test/blanka-shaw-phd>

Phone: 919 660-7308
Fax: 919 660-7293
email: blanka@duke.edu

Degrees

- Ph.D. Department of Botany, Charles University, Prague, thesis: Morphological and genetic variation in selected species of the genus *Philonotis* (Bartramiaceae, Bryopsida), 2004
- RNDr. Department of Botany, Charles University, Prague, Czech Republic, 2001
- MSc. Department of Botany, Charles University, Prague, Czech Republic, 1996

Professional experience

- 10/2004-present: Herbarium Data Manager, Department of Biology, Duke University, Durham, NC, USA
- 1998-2004: Junior research fellow, graduate student, Department of Taxonomy and Biosystematics, Institute of Botany, Academy of Sciences of the Czech Republic, Průhonice (bryology)
- 1996-1999: Graduate student, Charles University in Prague, Department of Botany (teaching assistant, course on Systematics and evolution of non-vascular plants and fungi)

Research interests

Systematics of bryophytes; Ecological bioinformatics; Bryophyte ecology, diversity and dynamics in montane and alpine ecosystems, wetlands, and hyperoceanic environments; Natural history collections management.
Field experience: temperate and boreal regions of Europe, North America and Asia; Australia; South Africa; southern South America; Fiji & New Caledonia.

Research projects financed by grant agencies in the United States

National Science Foundation Award 1146168 - **ARTS: Collaborative Research: A model systematic treatment of a hyper-diverse lineage descended from early land plants (*Frullania*, Frullaniaceae, Marchantiophyta)**, principal investigator, 2012-2015

National Science Foundation Award 0918998 - **Systematics and Evolution of the "Pacific Rim Clade" of Sphagnum section Subsecunda**, Co-principal Investigator, PI: A.J. Shaw, 2009-2012

National Geographic Society Foundation - ***Sphagnum* of Alaska**, Co-principal Investigator, PI: A.J. Shaw, 2004-2006

Research projects financed by grant agencies in the Czech Republic

GACR 206/01/0411 A synthesis of bryological data from the selected biodiversity centers of two mountain ranges in the High Sudetes – Co-principal investigator, PI: M. Zmrhalová, 2001-2003

GACR 206/99/1416 Diversity and dynamics of vegetation and soil organisms in spruce forests of the Šumava National Park – Co-principal investigator, PI: Z. Neuhäuslová, 1999-2001

GAUK 101/1998/B BIO/PrF Study of phenotypic plasticity in *Philonotis* (Bryophyta) – Co-principal investigator, PI: J. Váňa, 1998-1999

Courses and stays abroad

2005 Duke University, USA, Introduction to PCR, with Duncan Talbot, KT Biotech (1 day)

2003-2004 Duke University, USA; study of phenotypic plasticity and genetic diversity in bryophytes with A. J. Shaw (8 months)

1996-2003 University of Zurich, Switzerland; bryophyte determination courses (*Schistidium*, *Andreaea*, *Leskeaceae*, *Dicranum*)

1999 Charles University, Prague, Czech Republic; Stereology in Plant Anatomy, 28.6.-2.7. (1 week)

1999 Jagelonian University, Cracow, Poland; learning methods of chromosome staining in bryophytes with E. Kuta (1 week)

1998 Reading, UK; Advance course on Molecular Biology of Plants (2 weeks)

1997 University of Helsinki, Finland (1 week), Course on Peatland and Aquatic Bryophytes (2 weeks)

1995 Charles University, Prague, Course on molecular methods in fungi (1 week)

Development and administration of special courses

2010, 2013, 2017 Liverworts and Liverwort Ecology, Humboldt Field Research Institute, Maine

2012 Peatmosses of North America, with A.J. Shaw, Field Research Institute, Maine

2010 Field Identification and Ecology of Mosses and Liverworts, with A.J. Shaw, McCarthy, Alaska

2010 Workshop on Identification of Peatland Bryophytes, with A.J. Shaw, University of Fairbanks, Alaska

2009 Sphagnum Mosses and Other Wetland Bryophytes, with A.J. Shaw, Field Research Institute, Maine

2008 Acrocarpous Mosses of the North Woods, with A.J. Shaw, Field Research Institute, Maine

1998-2003 Field excursions of Czech Botanical Society, Dept. of Botany Charles University, Prague, Czech Rep.

1996-2003 Field excursions of Bryological Lichenological Section of Czech Botanical Society in Czech Rep.

1997 Identification course on the genus *Philonotis* (University of Zurich, Switzerland).

Professional activities and memberships

Associate Editor of the *Bryologist* (2011-now)

Treasurer of the International Association of Bryologists (2005-2009)

Secretary of Bryological Lichenological Section of the Czech Botanical Society (2003-2006)

Editor of the Czech bryological and lichenological bulletin *Bryonora* (1999-2006)

American Bryological and Lichenological Society

Botanical Society of America

British Bryological Society

Schweizerische Vereinigung für Bryologie und Lichenologie

International Association of Bryologists

Czech Botanical Society

Presentations at conferences

Botany 2015, Edmonton, Alberta, Canada, July 25-29, 2015 (lecture ‘Diversification across continents and within islands in a southern hemisphere liverwort clade’)

Botany 2012, Columbus OH, July 7-11, 2012 (Poster The national bryophyte web portal of the Consortium of North American Bryophyte Herbaria)

3rd International Conference on Molecular Systematics of Bryophytes, NY Botanical Garden, June 20-22, 2012 (Poster The national bryophyte web portal of the Consortium of North American Bryophyte Herbaria)

International Botanical Congress, Melbourne, Australia, July 25-30, 2011 (lecture ‘Liverwort Tree of Life - A multigene phylogeny of liverworts’)

International Association of Bryologists 2009 Conference, Cape Town, South Africa, Aug 16-21, 2009 (poster ‘Liverwort Tree of Life – an NSF Funded Collaborative Research Project’)

ELPT TO EOL: Early Land Plants to Encyclopedia of Life Meeting, May 26-29, 2009 (talk ‘Liverwort Tree of Life – an NSF Funded Collaborative Research Project’)

The IXth Australasian Bryophyte Workshop, Maydena, Tasmania, Dec 3-8, 2007 (poster ‘Phylogeny and biogeography of the cosmopolitan moss genus *Philonotis* (Bartramiaceae)’)

West Siberian Peat and Carbon Cycle: Past and Present, Yugra State University, Khanty-Mansiysk, Russia, August 26-30, 2007 (poster ‘Testing species differences in peatmosses (*Sphagnum*) using microsatellite markers’)

Botany 2006, California State University – Chico, July 28-August 2, 2006 (poster ‘Databasing Bryophytes from the Southeastern U.S. in the DUKE Herbarium: an NSF funded project’)

International Botanical Congress, Vienna, Austria, 17 - 23 July 2005 (lecture ‘Local scale genetic structure of bryophytes’)

International Conference of the natural history museums and museums in nature employees, 26.-28.5.2003, Liptovský Mikuláš, SK (lecture, poster)

IXth Congress of the Czech Botanical Society, Lednice, CZ, August 19-23, 2002 (lecture, poster)

4. International Conference of European Committee for Conservation of Bryophytes (ECCB), Průhonice, CZ, 1.-2.7.2001 (organizing committee, poster)

Geoecological problems of the Giant Mountains (4), Svoboda nad Úpou, CZ, 19.-21.9.2000 (poster)

Publications in English

von Konrat, M.J., Campbell, T., Carter, B., Greif, M., Bryson, M., Larraín, J., Trouille, L., Cohen, S., Gaus, E., Qazi, A., Ribbens, E., Livschultz, T., Suwa, T., Peterson, T., Rodriguez, Y., Caitlyn, V., Yang, C., Aburahmen, S., Carstensen, B., de Lange, P.J., Delavoi, C., Strauss, K., Drag, J., **Aguero, B.**, Snyder, C., Martinec, J., & Smith, A. (2018). Using citizen science to bridge taxonomic discovery with education and outreach. *Applications in Plant Sciences*, 6 (2), pp. 1-12 / e1023. doi:10.1002/aps3.1023.

MO Kyrkjeeide, K Hassel, **B Shaw**, J Shaw, EM Temsch, KI Flatberg . 2018. *Sphagnum incundum* a new species in *Sphagnum* subg. *Acutifolia* (*Sphagnaceae*) from boreal and arctic regions of North America. *Phytotaxa* 333 (1), 1-21.

BE Carter, J Larraín, A Manukjanová, **B Shaw**, AJ Shaw, J Heinrichs, P de Lange, M Suleiman, L Thouvenot, M von Konrat. 2017. Species delimitation and biogeography of a southern hemisphere liverwort clade, *Frullania* subgenus *Microfrullania* (*Frullaniaceae*, *Marchantiophyta*). *Molecular Phylogenetics and Evolution* 107: 16-26.

- AJ Shaw, N Devos, Y Liu, CJ Cox, B Goffinet, KI Flatberg, **B Shaw**. 2016. Organellar phylogenomics of an emerging model system: *Sphagnum* (peatmoss). *Annals of Botany* 118(2): 185-196.
- BE Carter, **B Shaw**, AJ Shaw. 2016. Endemism in the moss flora of North America. *American Journal of Botany* 103(4): 769-779.
- B Laenen, A Machac, SR Gradstein, **B Shaw**, J Patiño, A Désamoré, B Goffinet, CJ Cox, AJ Shaw, A Vanderpoorten. 2016. Increased diversification rates follow shifts to bisexuality in liverworts. *New Phytologist* 210(3): 1121–1129.
- LR Perrie, LD Shepherd, PJ Brownsey, J Larraín, **B Shaw**, L Thouvenot, M von Konrat. 2016. Rediscovery and reinstatement of the New Caledonian endemic filmy fern *Hymenophyllum pumilio* Rosenst. *New Zealand Journal of Botany* 54(1): 1-10.
- W Ye, SR Gradstein, AJ Shaw, **B Shaw**, BC Ho, A Schäfer-Verwimp, T Pócs, J Heinrichs, R-L Zhu. 2015. Phylogeny and classification of Lejeuneaceae subtribe Cheilolejeuneinae (Marchantiophyta) based on nuclear and plastid molecular markers. *Cryptogamie, Bryologie* 36 (4), 313-333.
- B Laenen, A Machac, SR Gradstein, **B Shaw**, J Patiño, A Désamoré, B Goffinet, CJ Cox, AJ Shaw, A Vanderpoorten. 2015. Geographical range in liverworts: does sex really matter? *Journal of Biogeography*, doi:10.1111/jbi.12661.
- B Shaw**, B Crandall-Stotler, J Váňa, RE Stotler, M von Konrat, JJ Engel, EC Davis, DG Long, P Sova, AJ Shaw. 2015. Phylogenetic Relationships and Morphological Evolution in a Major Clade of Leafy Liverworts (Phylum Marchantiophyta, Order Jungermanniales): Suborder Jungermanniineae. *Systematic Botany* 40(1): 27-45.
- AJ Shaw, **B Shaw**, MG Johnson, N Devos, HK Stenøien, KI Flatberg, BE Carter. 2015. Phylogenetic structure and biogeography of the Pacific Rim clade of *Sphagnum* subgen. Subsecunda: haploid and allotetraploid taxa. *Biological Journal of the Linnean Society* 116 (2): 295-311.
- J Larraín, B Carter, **B Shaw**, J Hentschel, LS Strozier, T Furuki, J Heinrichs, B Crandall-Stotler, JJ Engel, M von Konrat. 2015. The resurrection of *Neohattoria* Kamim.(Jubulaceae, Marchantiophyta): a six decade systematic conflict resolved through a molecular perspective. *PhytoKeys* 98: 101-122.
- Shaw AJ, **B Shaw**, HK Stenøien, GK Golinski, K Hassel, KI Flatberg. 2015. Pleistocene survival, regional genetic structure and interspecific gene flow among three northern peat-mosses: *Sphagnum inexpectatum*, *S. orientale* and *S. miyabeianum*. *Journal of Biogeography* 42(2): 364-376.
- Laenen, B., **B Shaw**, H Schneider, B Goffinet, E Paradis, A Désamoré, J Heinrichs, JC Villarreal, SR Gradstein, SF McDaniel, DG Long, LL Forrest, ML Hollingsworth, B Crandall-Stotler, EC Davis, J Engel, M Von Konrat, ED Cooper, J Patiño, CJ Cox, A Vanderpoorten, AJ Shaw, 2014. Extant diversity of bryophytes emerged from successive post-Mesozoic diversification bursts. *Nature communications*. 5 vol. (5134).
- Shaw AJ, GK Golinski, EG Clark, **B Shaw**, HK Stenøien & KI Flatberg. 2014. Intercontinental genetic structure in the amphi-Pacific peatmoss *Sphagnum miyabeianum* (Bryophyta: Sphagnaceae). *Biological Journal of the Linnean Society* 111: 17-37.
- SR Gradstein, B Laenen, JP Frahm, U Schwarz, BJ Crandall-Stotler, JJ Engel, M Von Konrat, RE Stotler, **B Shaw**, AJ Shaw. 2014. On the taxonomic status of the enigmatic Phycolepidioziaceae (Marchantiophyta: Jungermanniales) with description of a new species, *Phycolepidiozia indica*. *Taxon* 63 (3): 498-508.
- M Konrat, P Lange, J Larraín, J Hentschel, B Carter, AJ Shaw, **B Shaw**. 2013. A small world: Uncovering hidden diversity in Frullania—A new species from AoteAroA-New Zealand. *Polish Botanical Journal* 58(2): 437-447.
- Shaw AJ, **B. Shaw**, M.J. Johnson, M. Higuchi, T. Arikawa, T. Ueno & N. Devos. 2013. Origins, genetic structure, and systematics of the narrow endemic peatmosses (*Sphagnum*): *S. guwassanense* and *S. triseriporum* (Sphagnaceae). *American Journal of Botany* 100: 1202–1220.
- Shaw A.J., **B. Shaw**, M. Higuchi, T. Arikawa, Y. Hirayama, N. Devos. 2012. *Climaciaceae*: species relationships and biogeographic implications. *Bryologist* 115(1): 23-30.

- Heinrichs J, A. Bombosch, K. Feldberg, H.P. Kreier, J. Hentschel, J. Eckstein, D. Long, R.L. Zhu, A. Schafer-Verwimp, A. R. Schmidt, **B. Shaw**, A.J. Shaw, J. Vana. 2012. A phylogeny of the northern temperate leafy liverwort genus *Scapania* (Scapaniaceae, Jungermanniales). *Molecular Phylogenetics and Evolution*: 62(3): 973-985.
- Damayanti L., J. Munoz, S. Wicke, L. Symmank, **B. Shaw**, J.-P. Frahm & D. Quandt. 2012. Common but new: *Bartramia rosamrosiae*, a "new" widespread species of apple mosses (Bartramiaceae, Bryophytina) from the Mediterranean and western North America. *Phytotaxa* 73: 37–59.
- Johnson M.G., **B. Shaw**, P. Zhou, and A.J. Shaw. 2012. Genetic analysis of the peatmoss *Sphagnum cymbifolium* (Sphagnaceae) indicates independent origins of an extreme infra-specific morphology shift. *Biological Journal of the Linnean Society* 106: 137-153.
- Shaw A.J., Ricca M., **Shaw B.** & K.I. Flatberg. 2012. A phylogenetic monograph of the *Sphagnum subsecundum* complex (Sphagnaceae) in eastern North America. *Bryologist* 115: 128-152.
- Shaw A.J., Flatberg, K.I., Szövényi, P., Ricca,M., Johnson, M.G., Stenøien, H.K. & **Shaw, B.** 2012. Systematics of the *Sphagnum fimbriatum* complex: phylogenetic relationships, morphological variation, and allopolyploidy. *Systematic Botany* 37: 15-30.
- Wickett NJ, Forrest LL, Budke JM, **Shaw B**, Goffinet, B. 2011. Frequent pseudogenization and loss of the plastid-encoded sulfate-transport gene *cysA* throughout the evolution of liverworts. *American Journal of Botany* 98(8): 1263-1275.
- Fuselier LC, **Shaw B**, Engel JJ, von Konrat M, Costa DP, Devos N, Shaw AJ. 2011. The status and phylogeography of the liverwort genus *Apometzgeria* Kuwah. (Metzgeriaceae). *Bryologist* 114(1): 92-101.
- Heinrichs J., Kreier H.-P., Feldberg K., Schmidt A.R., Zhu R.-L., **Shaw B.**, Shaw A.J.& Wissemann V. 2011. Formalizing morphologically cryptic biological entities: New insights from DNA taxonomy, hybridization, and biogeography in the leafy liverwort *Porella platyphylla* (Jungermanniopsida, Porellales). *American Journal of Botany* 98(8): 1252-1262.
- Cooper ED, Shaw AJ, **Shaw B**, Henwood MJ, Heslewood MM, Brown EA. 2011. A multi-locus molecular phylogeny of the Lepidoziaceae: Laying the foundations for a stable classification. *Molecular Phylogenetics and Evolution*: 59(2): 489-509.
- Fuselier, L., **B. Shaw**, J. J. Engel, M. von Konrat, D. P. da Costa, N. Devos & A. J. Shaw. 2011. The status and phylogeography of the liverwort genus *Apometzgeria* Kuwah. (Metzgeriaceae). *Bryologist* 114(1): 92–101.
- Shaw, A. J., P. Szovényi & **B. Shaw**. 2011. Bryophyte diversity and evolution: windows into the early evolution of land plants. *American Journal of Botany* 98(3): 352–369.
- Stenøien, H. K., A. J. Shaw, **B. Shaw**, K. Hassel & U. Gunnarsson. 2011. North American origin and recent European establishments of the amphi-Atlantic peat moss *Sphagnum angermanicum*. *Evolution* 65(4): 1181–1194.
- Ramaiya M., Johnson M.G., **Shaw B.**, Heinrichs J., Hentschel J., von Konrat M., Davison P.G., Shaw A.J. 2010. Morphologically cryptic biological species within the liverwort *Frullania asagrayana*. *American Journal of Botany* 97(10): 1707-1718.
- Heinrichs J., Hentschel J., Bombosch A., Fiebig A., Reise J., Edelmann M., Kreier H.P., Schafer-Verwimp A., Caspari S., Schmidt A.R., Zhu R.L., von Konrat M., **Shaw B.** & Shaw A.J. 2010. One species or at least eight? Delimitation and distribution of *Frullania tamarisci* (L.) Dumort. s. l. (Jungermanniopsida, Porellales) inferred from nuclear and chloroplast DNA markers. *Molecular Phylogenetics and Evolution* 56(3): 1105-1114.
- Shaw A.J., Devos N., Cox C.J., Boles S.B., **Shaw B.**, Buchanan A.M., Cave L., Seppelt R. 2010. Peatmoss (*Sphagnum*) diversification associated with Miocene Northern Hemisphere climatic cooling? *Molecular Phylogenetics and Evolution* 55(3): 1139-1145.
- Shaw A.J., Cox C.J., Buck W.R., Devos N., Buchanan A.M., Cave L., Seppelt R., **Shaw B.**, Larraín J., Andrus R., Greilhuber J. & Temsch E.M. 2010. Newly resolved relationships in an early land plant lineage: Bryophyta class Sphagnopsida (peat mosses). *American Journal of Botany* 2010 97: 1511-1531.

- Kreier, H.-P., Feldberg K., Mahr F., Bombosch A., Schmidt A. R., Zhu Rui-liang, von Konrat M., Shaw B., Shaw A. J. & Heinrichs J. 2010. Phylogeny of the leafy liverwort *Ptilidium*: cryptic speciation and shared haplotypes between Northern and Southern Hemispheres. *Molecular Phylogenetics and Evolution* 57(3): 1260–1267.
- Fuselier L., Davison P.G., Clements M., **Shaw B.**, Devos N., Heinrichs J., Hentschel J., Sabovljevic M., Szovenyi P., Schuette S., Hofbauer W., Shaw A.J. 2009. Phylogeographic analyses reveal distinct lineages of the liverworts *Metzgeria furcata* (L.) Dumort. and *Metzgeria conjugata* Lindb. (Metzgeriaceae) in Europe and North America, *Biological Journal of the Linnean Society*, vol. 98(4): 745-756.
- Kucera J., Zmrhalova M., **Shaw B.**, Kosnar J., Plásek V., Vana J. 2009: Bryoflora of selected localities of the Hrubý Jeseník Mts summit regions. *Casopis Slezského Muzea*, serie A, 58: 115-167.
- Hájek M., Hájková P., Apostolova I., Horsák M., Plášek V., **Shaw B.** & Lazarova M. 2009. Disjunct occurrences of plant species in the refugial mires of Bulgaria. *Folia Geobotanica* 44: 365–386.
- Anderson L.E., Shaw A.J. & **Shaw B.** 2009. Peatmosses (*Sphagnum*) of the Southeastern United States. New York Botanical Garden Press.
- Shaw B.**, Terracciano S. & Shaw A.J. 2009. A genetic analysis of two new peat moss species, *Sphagnum atlanticum* and *S. bergianum* (Sphagnaceae), *Systematic Botany* 34(1): 6-12.
- Shaw A.J., Andrus R. & **Shaw B.** 2008. *Sphagnum beringiense* sp. nov. (bryophyta) from Arctic Alaska, Based on Morphological and Molecular Data. *Systematic Botany* 33(3): 469- 477.
- Shaw A.J., Boles S. & **Shaw B.** 2008. A phylogenetic delimitation of the "Sphagnum subsecundum" complex (Sphagnaceae, Bryophyta). *American Journal of Botany* 95(6): 731-744.
- Shaw, A.J., T. Cao, L-S. Wang, K. I. Flatberg, B. Flatberg, **B. Shaw**, S. B. Boles, P. Zhou, & S. Terracciano 2008. Genetic variation in three Chinese peat mosses (*Sphagnum*) based on microsatellite markers, with primer information and analysis of ascertainment bias. *Bryologist* 111(2): 271-281.
- Hájková P., **Shaw B.**, Hájek M., Hinterlang D. & Plášek V. 2007. The role of base saturation and altitude in habitat differentiation within *Philonotis* in springs and mires of three different European regions. *Bryologist* 110(4): 776-787.
- Hájková P., Plášek V., Hájek M., **Shaw B.**, Hradílek Z. 2007. Records 1-32. In Natcheva R. (ed.), New bryophyte records in the Balkans: 2. *Phytol. Balcan.* 13 (2) 277-289.
- Buryová B.**, Hradílek Z. (2006): Clonal structure, habitat age, and conservation value of the moss *Philonotis marchica* in Kotouč quarry (Czech Republic). *Cryptogamie Bryologie* 27 (3): 375-382.
- Buryová B.** & Shaw A.J. (2005): Phenotypic plasticity in *Philonotis fontana* (Bryopsida: Bartramiaceae). – *Journal of Bryology* 27:12-23.
- Buryová B.** (2004): Genetic variation in two closely related species of *Philonotis* based on isozymes. – *Bryologist* 107: 316-327.
- Kucera J., **Buryová B.**, Plásek V., Vána J. Zmrhalová M. (2004): Bryophytes of the glacial cirques in the Giant Mountains and Hrubý Jeseník Mts. (the Czech Republic). In: Sturza J. et al. (eds.), *Geoekologické problémy Krkonos. Sborn. Mez. Ved. Konf.*, November 2003, Sklarska Poreba. *Opera Corcontica* 41: 170-184.
- Kucera J., Zmrhalová M., **Buryová B.**, Kosnar J., Plásek V., Vána J. (2004): Bryoflora of the glacial cirques of the Western Krkonose Mts. *Casopis Slezského Muzea*, serie A, 53: 1-47
- Kucera J., Zmrhalová M., **Buryová B.**, Kosnar J., Plásek V., Vána J. (2004): Bryoflora of the Upska jama cirque and adjacent localities of the Eastern Krkonoše Mts. *Casopis Slezského Muzea*, serie A, 53: 143-173.
- Suková M., Scheuer Ch. et **Buryová B.** (2003): New records and ecology of *Naeviopsis carneola* in Central Europe with notes on other fungi growing on *Juncus filiformis*. – *Czech Mycology* 55: 223-239.
- Kučera J., Hradílek Z., **Buryová B.** et Hájek P. (2003): *Hypnum sauteri* and *Lescurea patens*, two additions to the moss flora of the Czech Republic. – *Preslia* 75: 255-262.
- Kučera J. et **Buryová B.** (2001): Bryofloristic survey of the summit region of the Eastern Krkonoše Mts. (Czech Republic). – *Opera Corcontica* 36, 1999, 105-132.

Buryová B. et Kučera J. (1999): Two interesting bryofloristic records from the Krkonoše Mts - *Racomitrium macounii* subsp. *alpinum* and *Grimmia reflexidens*. – *Preslia* 71: 21-26.