

New checklist and the Red list of the hornworts (Anthocerotophyta) and liverworts (Marchantiophyta) of Slovenia

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Key words: Checklist, Red list, hornworts, liverworts, threatened species, Slovenia.

Ključne besede: Seznam, Rdeči seznam, rogovnjaki (Anthocerotophyta), jetrenjaki, (Marchantiophyta), ogrožene vrste, Slovenija.

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Abstract

The new Checklist of hornworts (Anthocerotophyta) and liverworts (Marchantiophyta) of Slovenia within current political boundaries comprises 181 species, additional 4 subspecies and 2 varieties. Additional 5 species are denoted by a question mark since reports are considered questionable. An alphabetically arranged tabular presentation of genera, species and lower taxa shows their presence in the phytogeographical units of Slovenia. The records from the periods before and after 1958 are marked with different symbols. Each species also has a new Red List status in Slovenia. The checklist includes the data from the literature and Herbarium Lju. Annotations to selected species give a critical evaluation of the literature and herbarium data. A list of taxa that should be excluded from the flora of Slovenia, the synonyms and the used literature with floristic data not cited in this article are also added.

Izvleček

Novi Seznam rogovnjakov (Anthocerotophyta) in jetrenjakov (Marchantiopyta) Slovenije v današnjih političnih mejah obsega 181 vrst, dodatne 4 podvrste in 2 varieteti. Nadaljnih 5 vrst je označenih z vprašajem, ker gre za navedbe, ki so iz kakršnega koli vzroka dvomljive. Po abecedi urejen tabelarni prikaz rodov in vrst ter nižjih taksonov prikazuje prisotnost v posameznih fitogeografskih enotah. Z ustreznim znakom so prikazani podatki pred letom 1958 in po njem. Vsaka vrsta ima oznako statusa iz Rdečega seznama za Slovenijo. Seznam vključuje podatke iz literature in herbarija Lju. Pripombe kritično vrednotijo določene literaturne in herbarijske podatke. Dodan je spisek taksonov, ki jih je treba črtati iz flore Slovenije, sinonimi in uporabljeni literaturi s florističnimi podatki za Slovenijo, ki ni bila citirana v tekstu.

Introduction

The work by Scopoli entitled »Flora carniolica« (1st edition 1760, 2nd edition 1772) marks the beginning of research of the bryophyte flora of Slovenia. It was followed by numerous works which, however, gave information, also in the form of floras, only for particular regions of Slovenia within the present-day political boundaries.

Thirteen years after the publication of the Checklist of hornworts and liverworts of Slovenia (Martinčič, 2011; in Slovenian), it is necessary to provide a new, updated checklist. Over the last period, a substantial increase in floristic data has occurred, mainly due to intensive field work and the processing of herbarium material in the Herbarium Lju. Another reasons for the updated Checklist are recent taxonomical and nomenclatural changes in the European bryophytes flora (Ros et al., 2007; Hodgetts & Lockhart, 2020; Hodgetts et al., 2020).

Methods

The new checklist is based on data from literature sources published before 2024, the collection of Herbarium Lju, and the author's previously unpublished data. It considers all floristic works and a part of published phytosociological relevés in which we assume liverworts were correctly identified. We critically evaluated data from older floristic literature related to the border areas between Slovenia and Italy. After the collapse of the Austro-Hungarian Monarchy, a part of these areas was added to Italy, and the data from these parts (mainly the vicinity of Gorizia and Trieste) was reported both by Pavletić (1955) and Düll et al. (1999). In the absence of appropriate herbaria specimens, it was impossible to review the accuracy of all data reported in the literature. The only exception was the herbarium material kept in Lju. In the last decades of the 19th century, it was obtained mainly from S. Robič, J. Šafer, J. Breidler and A. Paulin. The material contributed by the first two authors was revised or reclassified by J. Breidler and J. Głowacki. F. Dolšak collected liverwort samples in the early 20th century.

The reports that are in any way questionable but could not be revised because there is no herbarium material available were marked with a question mark. Some of the floristic data obtained from literature dates back to the period before 1915 and a part comes from the period between 1958 and 2023. Most of the herbarium material in Lju was collected after 1960, predominantly by the author of this paper.

The nomenclature and taxonomy used in the checklist follow Hodgetts et al. (2020).

To present the distribution of particular taxa, we used the phytogeographical division of Slovenia according to M. Wraber (1969), which was slightly modified (Martinčič, 2003). The central Soča Valley was therefore excluded from the sub-Mediterranean region – or Adriatic province sensu Zupančič & Žagar (1995) as proposed by Dakskobler (1996) – and included in the pre-Alpine region. Similarly, we divided the so far uniform subregion of the Alpine region of Pohorje into three parts: Pohorje in the strict sense, Dravski Kozjak – the region north of the Drava river, and Mežiško-Mislinska dolina with Strojna – in the west of Pohorje. The phytogeographical units are presented in Figure 1 with the following abbreviations:

- AJ – Alpine region: Julijske Alpe
- AK – Alpine region: Karavanke
- AS – Alpine region: Kamniško-Savinjske Alpe
- AP – Alpine region: Pohorje
- AZ – Alpine region: Dravski Kozjak
- AM – Alpine region: Mežiško-Mislinska dolina-Strojna
- DN – Dinaric region
- PA – pre-Alpine region
- PD – pre-Dinaric region
- SM – Submediterranean region
- SP – sub-Pannonic region

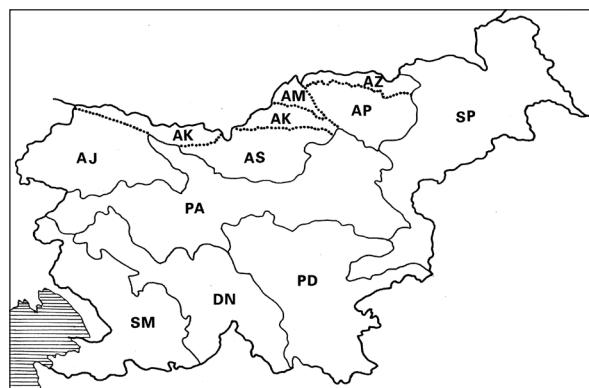


Figure 1: Phytogeographic division of Slovenia (according to M. Wraber (1969), modified).

Slika 1: Fitogeografska razdelitev Slovenije (po M. Wraberju (1969), spremenjeno).

The accompanying Red List is added to the checklist (Table 1), although the categories are mostly based on the previously published Red List (Martinčič, 2016a). The species were classified into the Red List categories using the IUCN criteria 3.1 (IUCN 2001). Their application to bryophytes follows Hallingbäck et al. (1998). However, the only realistic threat assessment criterion is **criterion B**, which is expressed with the number of currently known localities: 1 (CR), 2–5 (EN), 6–10 (VU). The year of the last record was added for the taxa under DD category.

SLO RED LIST – Status of taxon in Red List of Slovenia
Status taksona v Rdečem seznamu za Slovenijo

RE – Regionally extinct – izumrla v Sloveniji
 CR – Critically endangered – skrajno ogrožena vrsta
 EN – Endangered – prizadeta vrsta
 VU – Vulnerable – ranljiva vrsta
 NT – Near threatened – potencialno ogrožena vrsta
 DD – Data deficient – premalo znana vrsta, stari podatki
 DD-n – Data deficient, new – premalo znana vrsta, recentni podatki
 LC – Least concern – neogrožena vrsta

List of taxa with distribution in phytogeographic regions of Slovenia

The following symbols were used:

- – Literature or herbarium report after 1958
Literaturni ali herbarijski podatek po letu 1958
- – Literature or herbarium report before 1958
Literaturni ali herbarijski podatek pred letom 1958
- ? – Questionable report – dvomljiv podatek

Table 1: List of taxa with their distributions in phytogeographic regions of Slovenia.
Tabela 1: Seznam taksonov s prikazom razširjenosti v fitogeografskih enotah Slovenije.

| | SLO RED LIST | AJ | AK | AS | AP | AZ | AM | DN | PA | PD | SM | SP |
|--|------------------------------------|----|----|----|----|----|----|----|----|----|----|----|
| <i>Anastrophyllum</i> (Spruce) Steph. (Anastrophyllaceae) <i>michauii</i> (F. Weber) H. Buch | LC | ○ | ● | ● | | | | | | | | |
| <i>Aneura</i> Dumort. (Aneuraceae) <i>pinguis</i> (L.) Dumort. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ○ |
| <i>Anthelia</i> (Dumort.) Dumort. (Antheliaceae) <i>juratzkana</i> (Limpr.) Trevis. | LC | ● | ● | | | | | | | | | |
| <i>Anthoceros</i> L. (Anthocerotaceae) <i>agrestis</i> Paton <i>punctatus</i> L. (1) | LC DD-1913 | | | ○ | | | | ● | | ● | | ● |
| <i>Apopellia</i> (Grolle) Nebel & D. Quandt. (Pelliaceae) <i>endiviifolia</i> (Dicks.) Nebel & D. Quandt. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>Arnellia</i> Lindb. (Arnelliaceae) <i>fennica</i> (Gottsche) Lindb. | DD-1905 | | ○ | | | | | | | | | |
| <i>Asterella</i> P. Beauv. (Aytoniaceae) <i>lindenbergiana</i> (Corda ex Nees) Lindb. ex Arnell (2) | VU | | ● | | | | | | | | | |
| <i>Barbilophozia</i> Loeske (Anastrophyllaceae) <i>barbata</i> (Schmidel ex Schreb.) Loeske <i>hatcheri</i> (A. Evans) Loeske <i>lycopodioides</i> (Wallr.) Loeske <i>sudetica</i> (Nees ex Huebener) L. Söderstr. | LC LC LC EN | ● | ● | ● | ○ | ○ | | ● | ● | ● | | |
| <i>Bazzania</i> Gray (Lepidoziaceae) <i>flaccida</i> (Dumort.) Grolle (3) <i>tricrenata</i> (Wahlenb.) Lindb. <i>trilobata</i> (L.) Gray var. <i>trilobata</i> var. <i>depauperata</i> (Müll. Frib.) Grolle (4) | DD-n-1999 LC LC DD-n 2010 | | ● | ○ | ● | ○ | | ○ | ○ | | | |
| <i>Blasia</i> L. (Blasiaceae) <i>pusilla</i> L. | LC | ○ | ● | ○ | ● | ● | ● | | ○ | | | ● |
| <i>Blepharostoma</i> (Dumort.) Dumort. (Blepharostomataceae) <i>trichophyllum</i> (L.) Dumort. subsp. <i>trichophyllum</i> subsp. <i>brevirete</i> (Bryhn. & Kaal.) R. M. Schust. | LC LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | | ● |
| <i>Calypogeia</i> Raddi (Calypogeiacae) <i>arguta</i> Nees & Mont. <i>azurea</i> Stotler & Crotz | LC LC | | | | ● | ● | ● | ● | ● | ● | ● | ○ |

| | SLO RED LIST | AJ | AK | AS | AP | AZ | AM | DN | PA | PD | SM | SP |
|---|--------------|----|----|----|----|----|----|----|----|----|----|----|
| <i>fissa</i> (L.) Raddi | LC | ● | ● | | ● | ● | ● | ● | ● | ● | ○ | ● |
| <i>integratipula</i> Steph. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | | |
| <i>mulleriana</i> (Schiffn.) Müll. Frib. | LC | ● | ● | ● | | ● | ● | ● | ○ | ● | | |
| <i>neesiana</i> (C. Massal. & Carestia) Müll. Frib. | LC | ● | ● | ● | ● | | | ● | | | | ● |
| <i>suecica</i> (Arnell & J. Perss.) Müll. Frib. | LC | ● | ● | | | | | ● | | ● | | |
| <i>Cephalozia</i> (Dumort.) Dumort. (Cephaloziaceae) | | | | | | | | | | | | |
| <i>ambigua</i> C. Massal. | VU | ● | ● | | | | | | | | | |
| <i>bicuspidata</i> (L.) Dumort. subsp. <i>bicuspidata</i> | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ○ | ○ |
| subsp. <i>lammersiana</i> (Huebener) R. M. Schust. | VU | | | | ● | | | | | | | |
| <i>lacinulata</i> (J. B. Jack ex Gottsche & Rabenb.) Spruce | LC | ● | ● | | | ● | | | ○ | | | |
| <i>Cephaloziella</i> (Spruce) Schiffn. (Cephaloziellaceae) | | | | | | | | | | | | |
| <i>baumgartneri</i> Schiffn. (5) | DD-n 1999 | | | | | | | | ● | | | |
| <i>divaricata</i> (Sm.) Schiffn. | DD-1913 | | ○ | ○ | | | ○ | ○ | | | | |
| <i>elachista</i> (J. B. Jack ex Gottsche & Rabenb.) Schiffn. | DD-1908 | | | | ○ | | | | | | | |
| <i>hampeana</i> (Nees) Schiffn. ex Loeske (6) | EN | | | | | | | | | | ● | |
| <i>integerrima</i> (Lindb.) Warnst. (7) | DD-1912 | | | | | | | | ○ | | | |
| <i>rubella</i> (Nees) Warnst. | LC | ● | ○ | | | ● | ○ | ● | ● | | | ○ |
| <i>spinigera</i> (Lindb.) Jørg. (8) | DD-n 2021 | | ● | | | | | | | | | |
| <i>Chiloscyphus</i> Corda (Lophocoleaceae) | | | | | | | | | | | | |
| <i>pallescens</i> (Ehrh.) Dumort. var. <i>pallescens</i> | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>polyanthos</i> (L.) Corda var. <i>polyanthos</i> | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| var. <i>rivularis</i> (Schrad.) Lindb. & Arnell | LC | | ● | ○ | ● | ● | ● | ○ | ○ | ○ | | |
| <i>Clevea</i> Lindb. (Cleveaceae) | | | | | | | | | | | | |
| <i>hyalina</i> (Sommerf.) Lindb. | LC | ● | ● | | | | | | ● | | | |
| <i>Cololejeunea</i> (Spruce) Steph. (Lejeuneaceae) | | | | | | | | | | | | |
| <i>calcarea</i> (Lib.) Steph. | LC | ● | ● | ● | ● | | | ○ | ● | ● | ● | ○ |
| <i>rossetiana</i> (C. Massal.) Schiffn. | DD-1912 | ○ | ○ | | | | | | | | | |
| <i>Conocephalum</i> Hill (Conocephalaceae) | | | | | | | | | | | | |
| <i>conicum</i> (L.) Dumort. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>salebrosum</i> Szweyk., Buczk. & Odrzyk. | LC | | | | | ● | ● | ● | ● | ● | | |
| <i>Corsinia</i> Raddi (Corsiniaceae) | | | | | | | | | | | | |
| <i>coriandrina</i> (Spreng.) Lindb. (9) | DD-1841 | | | | | | | ? | | | | |
| <i>Crossocalyx</i> Meyl. (Anastrophyllaceae) | | | | | | | | | | | | |
| <i>hellerianus</i> (Nees ex Lindenb.) Meyl. | DD-1913 | | | | | | | ○ | | ○ | ○ | |
| <i>Diplophyllum</i> (Dumort.) Dumort. (Scapaniaceae) | | | | | | | | | | | | |
| <i>albicans</i> (L.) Dumort. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | | ● |
| <i>obtusifolium</i> (Hook.) Dumort. | LC | ○ | ● | ● | ○ | ● | ● | ● | ○ | ○ | ● | |
| <i>taxifolium</i> (Wahlenb.) Dumort. | VU | ○ | ● | ● | | | | | | | | |
| <i>Fossombronia</i> Raddi (Fossombroniaceae) | | | | | | | | | | | | |
| <i>foveolata</i> Lindb. (10) | DD-1917 | | | | | | | | | ○ | | |
| <i>pusilla</i> (L.) Nees | DD-1912 | | ○ | ○ | | | | | | ○ | | ○ |
| <i>wondraczekii</i> (Corda) Dumort. ex Lindb. | VU | | ○ | | | | | | ● | ○ | | ● |
| <i>Frullania</i> Raddi (Frullaniaceae) | | | | | | | | | | | | |
| <i>cleistostoma</i> Schiffn. & W. Wollny (11) | DD-n 2007 | | | | | | | | | | | ● |
| <i>dilatata</i> (L.) Dumort. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>fragilifolia</i> (Taylor) Gottsche, Lindenb. & Nees | LC | ● | ○ | ● | | | | ● | ● | ● | ● | ○ |
| <i>jackii</i> Gottsche | VU | ● | ○ | ○ | | | | | | | | |
| <i>riparia</i> Hampe | VU | ○ | ● | ● | | | | | | | | ● |

| | SLO RED LIST | AJ | AK | AS | AP | AZ | AM | DN | PA | PD | SM | SP |
|--|--------------|----|----|----|----|----|----|----|----|----|----|----|
| <i>tamarisci</i> (L.) Dumort. | LC | ● | | ● | ● | | ● | ● | ● | ● | ● | ● |
| <i>teneriffae</i> (F. Weber) Nees (12) ? | | | | | | | | | | | | |
| <i>Fuscocephaloziopsis</i> Fulford (Cephaloziaceae) | | | | | | | | | | | | |
| <i>catenulata</i> (Huebener) Vaňa & L. Söderstr. | LC | ● | ● | ● | ● | ○ | ● | ● | ● | ● | | |
| <i>connivens</i> (Dicks.) Vaňa & L. Söderstr. | LC | ● | | ○ | ● | | | | | | | |
| <i>leucantha</i> (Spruce) Vaňa & L. Söderstr. | LC | ● | ● | ● | ● | | | | ● | | | |
| <i>loitlesbergeri</i> (Schiffn.) Vaňa & L. Söderstr. | EN | | | | | | | | ● | ● | | |
| <i>lunulifolia</i> (Dumort.) Vaňa & L. Söderstr. | LC | ● | ● | ● | ● | | ● | ● | ● | ● | | |
| <i>pleniceps</i> (Austin) Vaňa & L. Söderstr. | VU | ● | ● | | | | | ○ | | | | |
| <i>Geocalyx</i> Nees (Geocalycaceae) | | | | | | | | | | | | |
| <i>graveolens</i> (Schrad.) Nees (13) | EN | | | | | | | | ● | | | |
| <i>Gymnocolea</i> (Dumort.) Dumort. (Anastrophyllaceae) | | | | | | | | | | | | |
| <i>inflata</i> (Huds.) Dumort. | LC | ● | | ○ | ● | | | | ○ | | | |
| <i>Gymnomitrion</i> Corda (Gymnomitriaceae) | | | | | | | | | | | | |
| <i>concinnatum</i> (Lightf.) Corda (14) | DD-1894 | | | | | | | ○ | | | | |
| <i>coralliooides</i> Nees (15) | DD-1894 | | | | | | | ○ | | | | |
| <i>Harpanthus</i> Nees (Harpanthaceae) | | | | | | | | | | | | |
| <i>flotovianus</i> (Nees) Nees | EN | ● | | | | ○ | | | | | | |
| <i>scutatus</i> (F. Weber & D. Mohr) Spruce | DD-1912 | | ○ | | | | | ○ | | | | |
| <i>Isopaches</i> H. Buch (Anastrophyllaceae) | | | | | | | | | | | | |
| <i>bicrenatus</i> (Schmidel ex Hoffm.) H. Buch | NT | | | ○ | | | ● | ○ | | | ○ | |
| <i>Jungermannia</i> L. (Jungermanniaceae) | | | | | | | | | | | | |
| <i>atrovirens</i> Dumort. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>polaris</i> Lindb. | VU | ● | | | | | | | | | | |
| <i>pumila</i> With. | LC | ● | | ● | ● | ● | | | | | | |
| <i>Kurzia</i> G. Martens (Lepidoziaceae) | | | | | | | | | | | | |
| <i>pauciflora</i> (Dicks.) Grolle | LC | ○ | ○ | ● | | | ● | ○ | ● | | | |
| <i>Lejeunea</i> Lib. (Lejeuneaceae) | | | | | | | | | | | | |
| <i>cavifolia</i> (Ehrh.) Lindb. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>patens</i> Lindb. (16) | | | ? | | | | | | | | | |
| <i>Lepidozia</i> (Dumort.) Dumort. (Lepidoziaceae) | | | | | | | | | | | | |
| <i>reptans</i> (L.) Dumort. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | | ● |
| <i>Lioclaena</i> Nees (Jungermanniaceae) | | | | | | | | | | | | |
| <i>lanceolata</i> Nees | LC | ● | ● | ● | ○ | ● | ● | ● | ● | ● | | ○ |
| <i>subulata</i> (A. Evans) Schljakov | LC | ● | ● | ● | | | ● | ● | ● | | | |
| <i>Lophocolea</i> (Dumort.) Dumort. (Lophocoleaceae) | | | | | | | | | | | | |
| <i>bidentata</i> (L.) Dumort. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>coadunata</i> (Sw.) Mont. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>heterophylla</i> (Schrad.) Dumort. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>minor</i> Nees | LC | ○ | ● | ● | ● | ● | ● | ● | ○ | ● | | ○ |
| <i>Lophozia</i> (Dumort.) Dumort. (Lophoziaeae) | | | | | | | | | | | | |
| <i>ascendens</i> (Warnst.) R. M. Schust. (17) | EN | | ● | | | | | | | | | |
| <i>guttulata</i> (Lindb. & Arnell) A. Evans | LC | ○ | | ○ | ● | | | | ○ | | | |
| <i>longiflora</i> (Nees) Schiffn. (18) | EN | | ● | | | | | | | | | |
| <i>ventricosa</i> (Dicks.) Dumort. | LC | ● | ● | ● | ● | | | | ● | ○ | | |
| <i>Lophozipsis</i> Konstant. & Vilnet (Lophoziaeae) | | | | | | | | | | | | |
| <i>excisa</i> (Dicks.) Konstant. & Vilnet (19) | VU | ? | | ● | | | | | | ● | | |
| <i>polaris</i> (R. M. Schust.) Konstant. & Vilnet. (20) ? | | | | | | | | | | | | |

| | SLO RED LIST | AJ | AK | AS | AP | AZ | AM | DN | PA | PD | SM | SP |
|--|--------------|----|----|----|----|----|----|----|----|----|----|----|
| Lunularia Adans. (Lunulariaceae) | | | | | | | | | | | | |
| <i>cruciata</i> (L.) Dumort. ex Lindb. | LC | | | | | | | | ● | ● | ● | ● |
| Mannia Corda (Aytoniaceae) | DD-1901 | | | | | | | ○ | ○ | ○ | | |
| <i>fragrans</i> (Balb.) Frye. & L. Clark | VU | ● | ● | | | ○ | | | | | | |
| <i>gracilis</i> (F. Weber) D. B. Schill & D. G. Long | LC | ● | | ○ | ○ | | | ○ | ○ | | | |
| <i>triandra</i> (Scop.) Grolle (21) | | | | | | | | | | | | ○ |
| Marchantia L. (Marchantiaceae) | | | | | | | | | | | | |
| <i>polymorpha</i> L. subsp. <i>polymorpha</i> | LC | ● | ● | ● | | | | | ● | ● | ● | |
| subsp. <i>montivagans</i> Bischl. & Boissel.-Dub. | LC | ● | ● | ○ | | ● | | | | | | |
| subsp. <i>ruderalis</i> Bischl. & Boissel.-Dub. | LC | ● | ● | ○ | | ● | ● | ● | ● | ● | ● | |
| <i>quadrata</i> Scop. (22) | LC | ● | ● | ● | ● | ● | | ● | ● | ● | ● | |
| Marsupella Dumort. (Gymnomitriaceae) | DD-n 2006 | | | | | | | | | | | |
| <i>apiculata</i> Schiffn. (23) | LC | ● | | | ● | ○ | | | | | ○ | |
| <i>emarginata</i> (Ehrh.) Dumort. | LC | ● | | | ○ | ○ | | | ○ | ○ | ○ | |
| <i>funckii</i> (F. Weber & D. Mohr) Dumort. | DD-1908 | | | | ○ | | | | ○ | ○ | ○ | ○ |
| <i>sprucei</i> (Limpr.) Bernet | | | | | | | | | | | | |
| Mesoptrychia (Lindb.) A. Evans (Jungermanniaceae) | | | | | | | | | | | | |
| <i>badensis</i> (Gottsche ex Rabenh.) L. Söderstr. & Váňa | VU | ○ | ● | | | | | ○ | ○ | | | |
| <i>bantriensis</i> (Hook.) L. Söderstr. & Váňa | VU | | ● | | | ● | | ● | | | | |
| <i>collaris</i> (Nees) L. Söderstr. & Váňa | LC | ● | ● | ● | ○ | ● | ● | ● | ● | ● | ● | |
| <i>heterocolpos</i> (Thed. ex Hartm.) L. Söderstr. & Váňa | LC | ● | ● | ● | ○ | | ● | ● | ● | | | |
| <i>turbinata</i> (Raddi) L. Söderstr. & Váňa | DD-1912 | ○ | ○ | | | | | ○ | | ○ | ○ | |
| Metzgeria Raddi (Metzgeriaceae) | | | | | | | | | | | | |
| <i>conjugata</i> Lindb. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | |
| <i>furcata</i> (L.) Corda | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | |
| <i>pubescens</i> (Schrank) Raddi | LC | ● | ● | ● | ● | | | ● | ● | ● | ● | |
| <i>simplex</i> Lorb. ex Müll. Frib. | EN | ● | | | | | | | ● | ● | | |
| <i>violacea</i> (Ach.) Dumort. (24) | DD-n 2006 | | | | | | | | | | | |
| Microlejeunea (Spruce) Steph. (Lejeuneaceae) | | | | | | | | | | | | |
| <i>ulicina</i> (Taylor) Steph. | LC | | | | | | | | ● | ● | ● | ● |
| Moerckia Gottsche (Moerckiaceae) | | | | | | | | | | | | |
| <i>flotowiana</i> (Nees) Schiffn. (25) | DD-1905 | | | | | | | | | ○ | | |
| <i>hibernica</i> (Hook.) Gottsche | DD-1912 | ○ | ○ | | | | | | | | | |
| Mylia Gray (Myliaceae) | | | | | | | | | | | | |
| <i>anomala</i> (Hook.) Gray | LC | ● | ● | | ● | | | | | | | |
| <i>taylorii</i> (Hook.) Gray | LC | ● | ● | ● | ● | ● | | | ● | ○ | ● | |
| Nardia Gray (Gymnomitriaceae) | | | | | | | | | | | | |
| <i>geoscyphus</i> (De Not.) Lindb. | DD-1908 | ○ | | | ○ | | | | | | | |
| <i>scalaris</i> Gray | LC | ● | ● | ● | ● | ● | | ● | ● | ● | | ● |
| Neoorthocaulis L. Söderstr. (Anastrophyllaceae) | | | | | | | | | | | | |
| <i>attenuatus</i> (Mart.) L. Söderstr., De Roo & Hedd. | LC | ● | ● | | ● | | | | ● | | | |
| <i>florkei</i> (F. Weber & D. Mohr) L. Söderstr., De Roo & Hedd. | LC | ● | ● | | ● | | | ○ | | ● | | |
| Nowellia Mitt. (Cephaloziaceae) | | | | | | | | | | | | |
| <i>curvifolia</i> (Dicks.) Mitt. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ○ |
| Odontoschisma (Dumort.) Dumort. (Cephaloziaceae) | | | | | | | | | | | | |
| <i>denudatum</i> (Mart.) Dumort. | LC | ● | ● | ● | ● | ○ | ○ | ● | ● | ● | ● | |
| <i>fluitans</i> (Nees) L. Söderstr. & Váňa | EN | ● | | | ● | | | | | | | |
| <i>sphagni</i> (Dicks.) Dumort. | DD-1915 | ○ | ○ | | | | | | | ○ | | |

| | SLO RED LIST | AJ | AK | AS | AP | AZ | AM | DN | PA | PD | SM | SP |
|--|--------------|----|----|----|----|----|----|----|----|----|----|----|
| Pedinophyllum Lindb. ex Nordst. (Plagiochilaceae) | | | | | | | | | | | | |
| <i>interruptum</i> (Nees) Kaal. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Pellia Raddi (Pelliaceae) | | | | | | | | | | | | |
| <i>epiphylla</i> (L.) Corda | LC | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>neesiana</i> (Gottsche) Limpr. | LC | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Peltolepis Lindb. (Cleveaceae) | | | | | | | | | | | | |
| <i>quadrata</i> (Saut.) Müll. Frib. | VU | ● | ● | | | | | | | | | |
| Phaeoceros Prosk. (Notothyladaceae) | | | | | | | | | | | | |
| <i>carolinianus</i> (Michx.) Prosk. (26) | DD-1884 | | | | | | | | | | ○ | |
| <i>laevis</i> (L.) Prosk. (27) | DD-1908 | | ○ | ○ | | | | ○ | ○ | | | |
| Plagiochila (Dumort.) Dumort. (Plagiochilaceae) | | | | | | | | | | | | |
| <i>asplenoides</i> (L.) Dumort. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>poreloides</i> (Torr. ex Nees) Lindenb. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Porella L. (Porellaceae) | | | | | | | | | | | | |
| <i>arboris-vitae</i> (Vith.) Grolle | LC | ● | | ○ | ○ | ● | | ● | ● | ● | ● | ● |
| <i>baueri</i> (Schiff.) C. E. O. Jensen | VU | ● | | | | | | ● | ● | | | |
| <i>cordaeana</i> (Huebener) Moore | LC | ● | ● | ● | ○ | | ● | ● | ● | | ● | ● |
| <i>obtusata</i> (Taylor) Trevis. | LC | | ● | | | | ● | | ● | | | |
| <i>platyphylla</i> (L.) Pfeiff. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Protolophozia (R. M. Schust.) Schljakov (Cephaloziellaceae) | | | | | | | | | | | | |
| <i>elongata</i> (Steph.) Schljakov | VU | ● | | | ● | | | ○ | | | | |
| Ptilidium Nees (Ptilidiaceae) | | | | | | | | | | | | |
| <i>ciliare</i> (L.) Hampe | LC | ● | ● | ○ | ● | ● | | ○ | ● | | ○ | |
| <i>pulcherrimum</i> (Weber) Vain. | LC | ● | ● | ● | ● | ○ | ● | ● | ● | | ○ | |
| Radula Dumort. (Radulaceae) | | | | | | | | | | | | |
| <i>complanata</i> (L.) Dumort. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>lindenbergiana</i> Gottsche ex C. Hartm. | LC | ● | ● | ● | ● | ○ | | ● | | | | |
| Reboulia Raddi (Aytoniaceae) | | | | | | | | | | | | |
| <i>hemisphaerica</i> (L.) Raddi | LC | ● | ● | ● | ● | ○ | ● | | ● | ○ | ● | ○ |
| Riccardia Gray (Aneuraceae) | | | | | | | | | | | | |
| <i>chamaedryfolia</i> (With.) Grolle | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | | |
| <i>latifrons</i> (Lindb.) Lindb. | LC | ○ | ● | ○ | ○ | ○ | ● | ○ | ● | ● | | |
| <i>multifida</i> (L.) Gray | LC | ● | | ● | ○ | ● | ● | ● | ● | ● | ○ | ○ |
| <i>palmata</i> (Hedw.) Carruth. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | |
| Riccia L. (Ricciaceae) | | | | | | | | | | | | |
| <i>bifurca</i> Hoffm. | VU | | | | | | | ● | ● | | ● | |
| <i>canaliculata</i> Hoffm. (28) | EN | | | | | | | | ● | | ● | |
| <i>cavernosa</i> Hoffm. (29) | EN | | | | | | | | | | ● | |
| <i>ciliata</i> Hoffm. (30) | DD-1894 | | | | | | ○ | | | | | |
| <i>fluitans</i> L. | NT | | | | | | | | ● | | ● | |
| <i>glauca</i> L. | LC | ○ | ○ | ○ | ○ | | | ○ | ● | ○ | ○ | ● |
| <i>huebeneriana</i> Lindenb. (31) | EN | | | | | | | | | | ● | |
| <i>sorocarpa</i> Bisch. | VU | | ○ | ○ | | ○ | ● | ● | ● | | ● | |
| Ricciocarpus Corda (Ricciaceae) | | | | | | | | | | | | |
| <i>natans</i> (L.) Corda (32) | EN | | | | | | | | | | ● | |
| Saccobasis H. Buch (Scapaniaceae) | | | | | | | | | | | | |
| <i>polita</i> (Nees) H. Buch (33) | DD-1908 | | | | | | | ○ | | | | |

| | SLO RED LIST | AJ | AK | AS | AP | AZ | AM | DN | PA | PD | SM | SP |
|---|--------------|----|----|----|----|----|----|----|----|----|----|----|
| <i>Sauteria</i> Nees (Cleveaceae) | | | | | | | | | | | | |
| <i>alpina</i> (Nees) Nees (34) | LC | ● | ○ | ○ | | | | ? | ? | | | |
| <i>Scapania</i> (Dumort.) Dumort. (Scapaniaceae) | | | | | | | | | | | | |
| <i>aequiloba</i> (Schwagr.) Dumort. | LC | ● | ● | ● | ○ | ○ | | ● | ● | ○ | ● | ○ |
| <i>apiculata</i> Spruce (35) ? | | | | | | | | | | | | |
| <i>aspera</i> M. Bernet & Bernet | LC | ● | ● | ○ | ○ | | | ● | ○ | ● | | ○ |
| <i>calcicola</i> (Arnell & J. Perss.) Ingham | VU | ● | | | | | | ● | | | | ● |
| <i>compacta</i> (Roth) Dumort. (36) | DD-n 2007 | | | | | | | | | | | |
| <i>crassiretis</i> Bryhn (37) | DD-1921 | ○ | | | | | | | | | | |
| <i>curta</i> (Mart.) Dumort. | LC | ● | ● | ● | ○ | | | ● | ○ | | | ○ |
| <i>cuspiduligera</i> (Nees) Müll. Frib. | VU | ● | | | | | | | | | | |
| <i>helvetica</i> Gottsche | LC | ● | ● | | | | | ○ | ○ | ○ | | |
| <i>irrigua</i> (Nees (Nees | LC | ● | ● | ● | | | | ● | ○ | | ● | |
| <i>nemorea</i> (L.) Grolle | LC | ● | ● | ● | ● | ● | | ● | ● | ● | ● | ● |
| <i>paludicola</i> Loeske & Müll. Frib. (38) | CR | | | | ● | | | | | | | |
| <i>subalpina</i> (Nees ex Lindenb.) Dumort. | LC | ● | ● | ● | ● | | | ● | | | | |
| <i>umbrosa</i> (Schrad.) Dumort. | LC | ● | ● | ● | ● | | | ○ | ● | | | |
| <i>undulata</i> (L.) Dumort. | LC | ● | ● | ● | ● | ● | | | | ○ | ○ | |
| <i>verrucosa</i> Heeg | VU | ● | | ● | ○ | | | | | | | |
| <i>Schistochilopsis</i> (N. Kitag.) Konstant. (Scapaniaceae) | | | | | | | | | | | | |
| <i>incisa</i> (Schrad.) Konstant. | LC | ● | ● | ● | ● | | | ● | ○ | ● | | |
| <i>Schljakovianthus</i> Konstant. & Vilnet (Anastrophyllaceae) | | | | | | | | | | | | |
| <i>quadrilobus</i> (Lindb.) Konstant. & Vilnet | VU | ● | | | ○ | | | ● | | ● | | |
| <i>Solenostoma</i> Mitt. (Solenostomataceae) | | | | | | | | | | | | |
| <i>confertissimum</i> (Nees) Schljakov | LC | ● | ● | ○ | ○ | | | | | | | |
| <i>gracillimum</i> (Sm.) R. M. Schust. | LC | ○ | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| <i>hyalinum</i> (Lyell) Mitt. | LC | ○ | ● | ○ | ● | ● | ● | ● | ● | ● | ● | ○ |
| <i>obovatum</i> (Nees) C. Massal. | NT | | | | ● | ● | ● | | | | | ● |
| <i>sphaerocarpum</i> (Hook.) Steph. | LC | ● | ● | ● | ○ | ● | ○ | | ● | ● | | |
| <i>subellipticum</i> (Lindb. ex Heeg) R. M. Schust. | DD-1908 | | | | ○ | | | | | | | |
| <i>Southbya</i> Spruce (Southbyaceae) | | | | | | | | | | | | |
| <i>topacea</i> (Spruce) Spruce (39) | EN | | | | | | | | | | ● | |
| <i>Sphenolobus</i> (Anastrophyllaceae) | | | | | | | | | | | | |
| <i>minutus</i> (Schreb. ex D. Crantz) Berggr. | LC | ● | ● | ● | ● | ● | | ● | ● | ○ | | |
| <i>Syzygiella</i> Spruce (Adelanthaceae) | | | | | | | | | | | | |
| <i>autumnalis</i> (DC.) D. Feldberg, Váňa, Hentschel & Heinrichs | LC | ○ | | ● | ○ | | | ? | | | ○ | |
| <i>Trichocolea</i> Dumort. (Trichocoleaceae) | | | | | | | | | | | | |
| <i>tomentella</i> (Ehrh.) Dumort. | LC | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | |
| <i>Trilophozia</i> (R. M. Schust.) Bakalin (Lophoziaaceae) | | | | | | | | | | | | |
| <i>quinquedentata</i> (Huds.) Bakalin | LC | ● | ● | ● | ● | ● | ○ | | ● | ○ | ● | |
| <i>Tritomaria</i> Schiffn. ex Loeske (Lophoziaaceae) | | | | | | | | | | | | |
| <i>exsecta</i> (Schmidel) Schiffn. ex Loeske | LC | ● | ● | ● | ● | ● | | ● | | ○ | | |
| <i>exsectiformis</i> (Breidl.) Schiffn. ex Loeske | EN | ○ | ● | | | | | | | ○ | | |

Annotations

- 1 Düll et al. (1999) suspect that we are actually dealing with species *Anthoceros agrestis* Paton. For the time being, however, this supposition cannot be verified as there is no herbarium material available.
Düll et al. (1999) domnevajo, da gre v resnici za vrsto *Anthoceros agrestis* Paton. Domneve za sedaj ni mogoče preveriti, ker ni na voljo herbarijskega materiala.
- 2 The only recent locality is in AJ-Na Jezeru pod Rokavi (Martinčič, 2016b).
Edino recentno nahajališče je AJ-Na Jezeru pod Rokavi (Martinčič, 2016b).
- 3 Only reported by Düll (1999) for the AJ-Možnica valley.
Edina navedba je AJ-dolina Možnice (Düll, 1999).
- 4 Only reported for AM-valley of Strojnska reka river under Zeleni breg (Martinčič, 2012).
Edina navedba je AM-dolina Strojnske reke pod Zelenim bregom (Martinčič, 2012).
- 5 The only reliable locality is at DN-Rakov Škocjan: Zelške lame near Rakek (Sguazin & Polli, 1999). The locality reported by Schiffner (1906, leg. Loitlesberger) and later Pavletić (1955) for the banks of the river Soča near the town Gorica is currently situated within Italian territory.
Edino zanesljivo nahajališče je DN-Rakov Škocjan – Zelške lame pri Rakeku (Sguazin & Polli, 1999). Lokaliteta »ob Soči pri Gorici« (Schiffner, 1906, leg. Loitlesberger; Pavletić, 1955) je sedaj v Italiji.
- 6 The only recent locality is in PD-Kočevski Rog: Rajhnavski virgin forest (Ódor & van Dort, 2002).
Edino recentno nahajališče je PD-Kočevski Rog: Rajhnavski pragozd (Ódor & van Dort, 2002).
- 7 The only site reported by Główacki (1912) is at PA-Žovnek near the town of Braslovče.
Edino nahajališče je v PA-Žovnek pri Braslovčah (Główacki, 1912).
- 8 The only site reported by Lobnik Cimerman (2022) is at AP-south of Lovrenška jezera lakes.
Edino nahajališče je v AP-južno od Lovrenških jezer (Lobnik Cimerman, 2022).
- 9 The species is reported only for Morež in the Julian Alps (Pokorný, 1860, leg. Sendtner 1841). This record was later considered also by Pavletić (1955), Düll et al. (1999), Söderström et al. (2002), Sabovljević & Natcheva (2006)

and Ros et al. (2007). In Europe, this species is a Mediterranean element that only occasionally reaches further into Submediterranean regions, so the above mentioned locality in the subalpine or alpine belt is highly doubtful.

Vrsta je navedena samo za Morež v Julijskih Alpah (Pokorný, 1860, leg. Sendtner 1841). Podatek so upoštevali še Pavletić (1955), Düll et al. (1999), Söderström et al. (2002), Sabovljević & Natcheva (2006) in Ros et al. (2007). Ker je vrsta v Evropi mediteranski element, ki le tu in tam sega v submediteranske predele, je navedeno nahajališče v subalpinskem ali alpinskem pasu, močno dvomljivo.

- 10 The species is reported only for the PA-marsh at the foothills of Šišenski hrib hill in Ljubljana. The locality was referred in collection »Cryptogamae exsiccatae« - editae a Museo Hist. Nat. Vindobonensi, No 3779 (legit K. Loitlesberger, 1917).

Vrsta je navedena samo za močvirje na vznožju Šišenskega hriba v Ljubljani. Nahajališče je bilo objavljeno v zbirki »Cryptogamae exsiccatae« - editae a Museo Hist. Nat. Vindobonensi, No. 3779 (legit. K. Loitlesberger, 1917).

- 11 The only locality is SM-Steske at village Dornberk (Martinčič, 2007). The species is reported for Slovenia also by Sabovljević & Natcheva (2006) and Ros et al. (2007) – without stated locality or source.

Edino nahajališče so SM-Steske pri Dornberku (Martinčič, 2007). Vrsto navajajo za Slovenijo tudi Sabovljević & Natcheva (2006) in Ros et al. (2007); v obeh primerih brez vira ali lokalitete.

- 12 The species is reported from Slovenia by Sabovljević & Natcheva (2006) – without locality or source. As this species is a West-Mediterranean-Atlantic element the above mentioned report is doubtful.

Vrsto navajata za Slovenijo Sabovljević & Natcheva (2006), vendar gre le za splošno navedbo brez vira ali lokalitete. Ker je vrsta zahodnomediteransko-atlantski element, je navedba dvomljiva.

- 13 Only reported by Martinčič (2017) for DN-Kobilji curek at settlement Rob in vicinity of Velike Lašče.

Navedena samo za DN-Kobilji curek pri Robu pri Velikih Laščah (Martinčič, 2017).

- 14 The only locality is in the mountain Pohorje – at the stream Plešiščica above settlement Lovrenc na Pohorju (Breidler, 1894).

Edino nahajališče vrste je na Pohorju – graben potoka Plešiščica nad Lovrencem na Pohorju (Breidler, 1894).

- 15 The only locality is in the mountain Pohorje – at the stream Plešiščica above settlement Lovrenc na Pohorju (Breidler, 1894).

Edino nahajališče vrste je na Pohorju – graben potoka Plešiščica nad Lovrencem na Pohorju (Breidler, 1894).

- 16 In his manuscript list of mosses collected in the vicinity of Bohinj and Bled, Wallace (1980) refers also to *L. patens*. However, as it is an Atlantic-Mediterranean element, its occurrence in the phytogeographical region Julian Alps is doubtful.

Wallace (1980) navaja v rokopisnem seznamu mahov, ki jih je nabiral v okolici Bohinja in Bleda, tudi vrsto *L. patens*. Ker je vrsta atlantsko-mediteranski element, je njeno nastopanje v fitogeografskem območju Julijske Alpe zelo dvomljivo. Verjetno gre za vrsto *L. cavifolia*.

- 17 The only locality is on the AK-mountain Olševa, north slope (leg. R. Čas, det. A. Martinčič, LJK, 2003) and reported for AK-Olševa, Zadnji travnik by Ž. Lobnik Cimerman (In Strgulc Krajšek S. (ed.) et al., 2023).

Edino nahajališče vrste je v Karavankah, na Olševi, severno pobočje (Martinčič, LJK, 2003), navedena tudi za AK-Olševa, pri Zadnjem travniku (Lobnik Cimerman Ž. v Strgulc Krajšek S. (ed.) et al., 2023).

- 18 The only locality is on the AS-mountain Veliki Travnik (Martinčič, LJK, 1996).

Edino nahajališče vrste je v Kamniško-Savinjskih Alpah: VK. Travnik v Smrekovškem pogorju (Martinčič, LJK, 1996).

- 19 Loitlesberger (1905) reported for Mangart (2100 m s. m.) *Lophozia excisa* as »eine ihr nahestehende Pflanze«, but after Głowacki (1910) this record is doubtful.

Loitlesberger (1905) navaja vrsto za Mangart s pripombo »eine ihr nahestehende Pflanze«, vendar Głowacki (1910) dvomi v pravilnost podatka.

- 20 The species is reported from Slovenia by Sabovljević & Natcheva (2006) and Ros et al. (2007) – without locality or source. As this species is an Arctic element, not found in Europe outside the Arctic, above mentioned report is highly improbable.

Vrsto navajajo za Slovenijo Sabovljević & Natcheva (2006) in Ros et al. (2007), vendar gre le za splošno navedbo, brez vira ali lokalitete. Ker je vrsta arktični element, ki v Evropi ni bila najdena južno od arktičnih predelov, je navedba povsem neverjetna.

- 21 The species was described by Scopoli: in the first edition of the renowned Flora carniolica (1760) with a descriptive name »*Marchantia pileo hemisphaerica integro triloculari*«, and in the second edition (1772) already with the binary name of »*Marchantia triandra*«. Its locus classicus is situated in Slovenia between towns Idrija and Spodnja Idrija.

Vrsto je opisal Scopoli: v 1. izdaji znamenite Flora Carniolica (1760) še z opisnim imenom »*Marchantia pileo hemisphaerica integro triloculari*«, v drugi izdaji (1772) pa že z binarnim imenom »*Marchantia triandra*«. Locus classicus je med Idrijo in Spodnjo Idrijo.

- 22 The species was described by Scopoli: in the first edition of the renowned Flora carniolica (1760) with the descriptive name »*Marchantia pileo hemisphaericum, semiquadrifido, quadriloculari*«, in the second edition (1772) already with the binary name »*Marchantia quadrata*«.

Vrsto je opisal Scopoli: v 1. izdaji znamenite Flora carniolica (1760) še z opisnim imenom »*Marchantia pileo hemisphaericum, semiquadrifido, quadriloculari*«, v drugi izdaji (1772) pa že z binarnim imenom »*Marchantia quadrata*«.

- 23 The species is reported from Slovenia by Sabovljević & Natcheva (2006) and Ros et al. (2007) – without locality or source.

Vrsto navajajo za Slovenijo Sabovljević & Natcheva (2006) in Ros et al. (2007), v obeh primerih pa gre le za splošno navedbo.

- 24 The species is reported from Slovenia by Sabovljević & Natcheva (2006) and Ros et al. (2007) – without locality or source.

Vrsto navajajo za Slovenijo Sabovljević & Natcheva (2006) in Ros et al. (2007), v obeh primerih gre za splošno navedbo, brez vira ali lokalitete.

- 25 Only reported by Loitlesberger (1905) for DN-Trnovski gozd: Paradana (Paradanastrasse)

Navedena samo za DN-Trnovski gozd: ob cesti v Paradano (Loitlesberger, 1905).

- 26 The only site is in PD-Debeli hrib at Lavrica – vicinity of town Ljubljana (LJK, A. Paulin sub *Anthoceros laevis*, 1884; det. Martinčič: *Phaeoceros laevis* subsp. *carolinianus*; Kerner: *Schedae ad floram exsiccatam austro-hungaricam No.1933*, 1888, sub *Anthoceros laevis*, leg. A. Paulin).

Edino nahajališče je v PD-Debeli hrib nad Lavrico blizu Ljubljane (LJK, A. Paulin kot *Anthoceros laevis*,

- 1884; det. Martinčič – *Phaeoceros laevis* subsp. *carolinianus*; Kerner: Schedae ad floram exsiccatam austro-hungaricam No. 1933, 1888, kot *Anthoceros laevis*, leg. A. Paulin).
- 27 On the base of literature data only (Robič, 1893; Breidler, 1894; Głowacki, 1908; Paulin mscr.), without herbarium specimens, it is not possible to decide, if this records belong to *Phaeoceros laevis* or to *P. carolinianus*?
 Samo na podlagi navedb v literaturi (Robič, 1893; Breidler, 1894; Głowacki, 1908; Paulin mscr.), brez herbarijskega materiala, ni mogče opredeliti, ali ti starci podatki pripadajo vrsti *Phaeoceros laevis* ali *P. carolinianus*?
- 28 Recently only reported for PA-Šmartno pod Šmarno goro in the vicinity of town Ljubljana at river Gračenica (Strgulc Krajšek & Lobnik Cimerman, 2021) and for SP-Radvanje in the vicinity of town Maribor (Lobnik Cimerman in Strgulc Krajšek (ed.) et al., 2023).
 Edini recentni navedbi sta za PA-Šmartno pod Šmarno Goro, ob Gračenici (Strgulc Krajšek & Lobnik Cimerman, 2021) in za SP-Radvanje pri Mariboru, na vznožju Pohorja (Lobnik Cimerman v Strgulc Krajšek (ed.) et al., 2023).
- 29 Only reported by Lobnik Cimerman & Strgulc Krajšek (2022) for SP-Zrkovci at town Maribor and by Lobnik Cimerman et al. (2023) for SP-Prekmurje: Beltinci, S from the settlement Dokležovje.
 Edini navedbi sta za SP-Zrkovci pri Mariboru (Lobnik Cimerman & Strgulc Krajšek, (2022) in za SP-Beltinci, južno od Dokležovja (Lobnik Cimerman et al., 2023)).
- 30 Only reported by Breidler (1894) for AZ-Kozjak: Srednje above settlement Brestrnica.
 Edina navedba je za AZ-Kozjak: Srednje nad Brestrnico (Breidler, 1894).
- 31 The only locality is on SP-right bank of river Mura, north of settlement Mota (Trčak, herb., 2013).
 Edino nahajališče je v SP-desni breg reke Mure, severno od naselja Mota (Trčak, herb., 2013).
- 32 Only reported by Babij & Jogan (2001) for SP-Prekmurje: near the village Mali Bakovci and by Lobnik & Šabeder (in Martinčič (ed.) et al., 2020) for SP-Prekmurje: west of village Petišovci.
 Vrsta je navedena samo za SP-Prekmurje: zahodno od vasi Mali Bakovci, v opuščeni gramoznici (Babij & Jogan, 2001) in zahodno od vasi Petišovci, v mrvici reke Mure (Lobnik Cimerman & Šabeder v Martinčič (ed.) et al., 2020).
- 33 Only reported by Głowacki (1908) for Pohorje Mts.: Rakovec above settlement Vitanje
 Vrsta je navedena samo za Pohorje: Rakovec nad Vitanjem (Głowacki, 1908).
- 34 Both data outside the Alpine phytogeographical region are questionable. The first (PA: Šklendovec under Kum – Paulin mscr.) owing to the very low altitude of the locality at ca. 500 m s. m. – all other localities are in the subalpine and alpine belt. The second data (DN: the Trnovski gozd plateau, Smrekova draga, 1100 m – Grom, 1969) is questionable due to the uncertainty of author in determination and absence of herbarium specimens.
 Oba podatka zunaj alpskega fitogeografskega območja sta dvomljiva. Prvi (PA: Šklendovec pod Kumom – Paulin mscr.) zaradi zelo nizke nadmorske višine nahajališča, ok. 500 m) – vsa druga nahajališča so v subalpinskem ali alpinskem pasu. Drugi podatek (DN: Trnovski gozd, Smrekova draga, 1100 m – Grom, 1969) je dvomljiv zaradi nezanesljivosti avtorja pri določanju, manjkajo pa tudi herbarijski primerki.
- 35 Reported only for DN: Trnovski gozd – Mrzla Draga near the village of Lokve by Grom (1969). The report is to be considered uncertain since it is not supported by herbarium specimens.
 Navedena samo za DN: Trnovski gozd, Mrzla Draga pri Lokvah (Grom, 1969). Podatek je dvomljiv, ker ni herbarijskega materiala.
- 36 The species is reported from Slovenia by Söderström et al. (2002), Saboljević & Natcheva (2006) and Ros et al. (2007) – without locality or source.
 Vrstvo navajajo za Slovenijo Söderström et al. (2002), Saboljević & Natcheva (2006) in Ros et al. (2007) – v vseh primerih gre za splošno navedbo, brez vira ali lokalitete.
- 37 The only locality is in the Julian Alps: The Kot valley (LJU – leg. F. Dolšak, 1921, det. A. Martinčič). The reports by Grom (1963) for AJ-Pokljuka and DN-Trnovski gozd were excluded since they were erroneously identified.
 Edino nahajališče je v Julijskih Alpah: dolina Kot (LJU – leg. F. Dolšak 1921, det. A. Martinčič). Navedbe Groma (1963) za Pokljuko in Trnovski gozd temeljijo na napačni determinaciji.

38 Only reported by Martinčič (2017) for Pohorje Mts.-
Stegnetovo močvirje.

Navedena samo za Pohorje-Stegnetovo močvirje
(Martinčič, 2017).

39 In this year the species was collected the first time in
Slovenia, on the Littoral (Simonov zaliv near Izola –
pers. comm. by Aljaž Jakob).

Letos je bila vrsta prvič najdena v Sloveniji, na Obali
(Simonov zaliv pri Izoli - osebno sporočilo Aljaža
Jakoba).

Excluded Taxa

Mannia pilosa (Hornem.) Frye & Clark

Pavletić (1955) reports that the species thrives in Slovenia as well, i.e. in the Julian Alps. This reference is based on F. Kern (1910) and was later taken up by Düll et al. (1999), Söderström et al. (2002), Sabovljević & Natcheva (2006) and Ros et al. (2007). Today, however, the locality – Mt. Viš (Iof Fuart) in the Western Julian Alps – is situated in Italy.

Pavletić (1955) navaja, da uspeva vrsta tudi v Sloveniji, v Julijskih Alpah. Navedba temelji na podatku F. Kerna (1910). Temu so sledili kasneje tudi Düll et al. (1999), Söderström et al. (2002), Sabovljević & Natcheva (2006) ter Ros et al. (2007). Vendar je nahajališče – gora Viš (Iof Fuart) v Zahodnih Julijskih Alpah, sedaj v Italiji.

Marchantia paleacea Bertol.

Based on Loitlesberger's reference (1905), Pavletić reports the species also for Slovenia. This was later taken up by Düll et al. (1999), Söderström et al. (2002), Sabovljević & Natcheva (2006) and Ros et al. (2007). Nevertheless, its only locality – Stračice in Gorizia – is today situated in Italy (comp. Martinčič, 2007).

Na podlagi navedbe Loitlesbergerja (1905) navaja Pavletić (1955) vrsto tudi za Slovenijo. Temu so sledili kasneje tudi Düll et al. (1999), Söderström et al. (2002), Sabovljević & Natcheva (2006) in Ros et al. (2007). Vendar je edino nahajališče, Stračice v Gorici, sedaj v Italiji (prim. Martinčič, 2007).

Fuscocephaloziopsis albescens (Hook.) Váňa & Söderstr.

The only report by Grom (1963) for DN-Trnovski gozd, Mrzla Draga near the village of Lokve is based on erroneous determination.

Edini podatek daje Grom (1963) za DN-Trnovski gozd, Mrzla Draga pri Lokvah, vendar temelji na napačni določitvi.

Riccia bicarinata Lindb.

Based on reference in Bischler & Jovet-Ast (1973), Söderström et al. (2002) reported the species from Slovenia as well. This was later taken up by Sabovljević & Natcheva (2006) and Ros et al. (2007). Nevertheless, the locality i.e. Valica in Istria, is situated in Croatia.

Na podlagi navedbe v Bischler & Jovet-Ast (1973) navajajo Söderström et al. (2002) vrsto tudi za Slovenijo. Temu so sledili kasneje tudi Sabovljević & Natcheva (2006) in Ros et al. (2007). Vendar je nahajališče, Istra: Valica v Hrvaški.

Southbya nigrella (De Not.) Henriq.

Based on Loitlesberger's reference (1905), Pavletić (1955) reports species from Slovenia as well. This was later taken up by Düll et al. (1999), Söderström et al. (2002), Sabovljević & Natcheva (2006) and Ros et al. (2007). However, its only locality – »along the Soča River near the town Gorizia« is today situated in Italy.

Na podlagi navedbe Loitlesbergerja (1905) navaja Pavletić (1955) vrsto tudi za Slovenijo. Temu so sledili kasneje Düll et al. (1999), Söderström et al. (2002), Sabovljević & Natcheva (2006) in Ros et al. (2007). Vendar je edino nahajališče »vzdolž reke Soče pri Gorici« sedaj v Italiji.

Targionia hypophylla L.

Pavletić (1955) reports the species for Slovenia, although without any specific locality, but only with a general description »along the Austrian border«. This description is based on a misinterpretation in »Die Lebermoose Steiermarks« (Breibler, 1894). In this work, Breibler does not refer to the species as belonging to the territory of the former Styria, but merely notes that among other species, *Targionia hypophylla* could also thrive in these parts. This incorrect reference was later taken up by Söderström et al. (2002), Sabovljević & Natcheva (2006) and Ros et al. (2007).

Za Slovenijo navaja vrsto Pavletić (1955), vendar brez točnega nahajališča, le s splošno označo »vzdolž avstrijske meje«. Navedba temelji na napačnem razumevanju pripombe v delu »Die Lebermoose Steiermarks« (Breibler, 1894). Breibler v tem delu ne navaja vrste za ozemlje nekdajne Štajerske, temveč le pripominja, da bi med drugimi vrstami tudi *Targionia hypophylla* lahko uspevala v teh predelih. Tej napačni navedbi so sledili kasneje Söderström et al. (2002), Sabovljević & Natcheva (2006) in Ros et al. (2007).

Discussion

The New Checklist

Based on the current taxonomy and nomenclature (Hodgetts et al., 2020), the New Checklist of hornworts (Anthocerotophyta) and liverworts (Marchantiophyta) of Slovenia comprises 181 species, 4 additional subspecies and 2 varieties, which is an increase compared to the previous List (Martinčič, 2011). A significant increase is also evident in the number of species in individual geographic-phytogeographic units (Table 2).

Table 2: Number of taxa by geographic-phytogeographic units of Slovenia

Tabela 2: Število taksonov v posameznih geografsko-fitogeografskih enotah Slovenije

| | SLO | AJ | AK | AS | AP | AZ | AM | DN | PA | PD | SM | SP |
|-------|-----|-----|-----|-----|-----|----|----|-----|-----|----|----|----|
| spp | 181 | 130 | 101 | 111 | 114 | 68 | 57 | 108 | 111 | 83 | 56 | 65 |
| subsp | 4 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| var | 2 | | | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | |
| ? | 5 | | | | | | | | | | | |

The differences in the number of species between geographic-phytogeographic units are relatively large. This is partly associated with differences in the intensity of floristic research in particular areas and, even more importantly, with the ecological diversity of habitats and elevation ranges, which are the most notable in the Alpine region. Compared with other European countries, the total number of taxa indicates that the bryophyte flora of Slovenia is relatively rich despite its small territory (20,273 km²). On the other hand, there are 19 (10.5%) species with a single known locality, half found in the period before 1915. This year marks the end of the first intensive research of the bryophyte flora of Slovenia, followed only by a few short papers between 1920 and 1945. Not earlier than after 1958, the research of the bryophyte flora has started up again.

Red List

Under different threat categories, 38 (20.99%) species and subspecies are listed: 1 (0.5%) of them CR, 14 (7.7%) as EN and 23 (12.7%) as VU. Furthermore, 3 (1.6%) species are listed as near threatened (NT), while 33 (18.2%) species are data deficient (DD and DD-n). There are currently 111 (61.3%) species and subspecies in the Least Concern (LC) category. The number and percentage of species in the various threat categories in the Slovenian Red List are not entirely comparable with some other countries, although the IUCN 3.1 (2001) and Hal-

lingbäck et al. (1998) serve as the basis for categorisation. The main reason is that authors tend to adapt these criteria, to some extent, to the specific situation in their countries, especially regarding the number of recently reported localities. Floristic research available for a particular country also has an impact on the species categorisation.

Povzetek

Uvod

Scopolijsko delo z naslovom »Flora carniolica« (1. izdaja 1760, 2. izdaja 1772) označuje začetek raziskovanja mahovne flore v Sloveniji. Sledila so številna dela za posamezne predele, pa tudi za celotno ozemlje Slovenije. Po trinajstih letih od zadnjega dela »Seznam jetrenjakov (Marchantiophyta) in rogovnjakov (Anthocerotophyta) Slovenije (Martinčič, 2011)« je napočil čas za nov, posodobljen Seznam, saj je v tem obdobju močno naraslo število florističnih podatkov. Drugi vzrok za Novi posodobljen Seznam pa so velike taksonomske in nomenklaturne spremembe v evropski mahovni flori (Hodgetts & Lockhart, 2020; Hodgetts et al., 2020).

Metode

Novi Seznam temelji na podatkih iz literature, objavljenih do leta 2024, herbarijske zbirke LJP ter avtorjevih neobjavljenih podatkov. Upoštevali smo vsa floristična dela in tisti del objavljenih fitocenoloških popisov, za katere smo menili, da so bili v njih mahovi pravilno določeni. V starejši floristični literaturi smo kritično ovrednotili tiste podatke, ki se nanašajo na mejne predele med Slovenijo in Italijo. Po razpadu Avstroogrške monarhije je del omenjenega ozemlja pripadel Italiji, podatki iz teh predelov (predvsem okolica Gorice in Trsta) pa so objavljeni tako pri Pavletiču (1955) kakor tudi v Düll et al. (1999). Revizija točnosti vseh navedb v literaturi sicer ni bila mogoča, ker nam niso bili dostopni ustrezni herbariji. Izjema je material v Herbariju LJP. V zadnjih desetletjih 19. stoletja so ga prispevali v glavnem S. Robič, J. Šafer, J. Breidler in A. Paulin. Material prvih dveh sta revidirala oz. nanovo določila J. Breidler in J. Głowacki. Na začetku 20. stoletja je nabiral mahovni material F. Dolšak. Herbarijski material v LJP nam je omogočil tudi, da smo opravili revizijo enega dela literaturnih podatkov amaterskega briologa S. Groma, ki je deloval v letih 1958–1969. Navedbe, ki so iz kakršnega koli vzroka dvomljive, vendar ni herbarijskega materiala za revizijo, smo v pregledu označili z vprašajem. En del florističnih podatkov v literaturi izvira iz obdobja pred letom 1915, drugi del pa

iz obdobja 1958–2023. Herbarijski material v LJU je bil nabran zlasti po letu 1960, največji del je prispeval avtor tega prispevka.

Nomenklatura in taksonomija, uporabljeni v Novem Seznamu, sledita delu Hodgetts et al. (2020).

Za prikaz razširjenosti posameznih taksonov smo uporabili fitogeografsko razdelitev Slovenije po M. Wraberju (1969), a smo jo nekoliko spremenili (Martinčič, 2003). Tako smo srednje Posočje izločili iz submediteranskega območja, kot je predlagal že Dakskobler (1996) in ga priključili predalpskemu območju. Prav tako pa smo razdelili enotno podobmočje alpskega območja – Pohorje, v tri dele: Pohorje v ožjem pomenu, Dravski Kozjak – ozemlje severno od reke Drave in Mežiško-Mislinska dolina s Strojno – zahodno od Pohorja. Razpored enot je razviden na sliki 1, kratice pa so naslednje:

- AJ – alpsko območje: Julijске Alpe
- AK – alpsko območje: Karavanke
- AS – alpsko območje: Kamniško-Savinjske Alpe
- AP – alpsko območje: Pohorje
- AM – alpsko območje: Mežiško-Mislinska dolina-Strojna
- AZ – alpsko območje: Dravski Kozjak
- DN – dinarsko območje
- PA – predalpsko območje
- PD – preddinarsko območje
- SM – submediteransko območje
- SP – subpanonsko območje

Vsakemu taksonu je dodana še oznaka ogroženosti, čeprav temelji v največji meri na Rdečem seznamu, ki je že bil objavljen (Martinčič, 2016a). Za opredelitev pripadnosti taksonov posameznim kategorijam smo upoštevali IUCN kriterije 3.1 (IUCN 2001). Njihovo uporabo za mahove smo povzeli po Hallingbäck et al. (1998). Vendar smo mnenja, da je v našem primeru edini realni kriterij za oceno ogroženosti – **kriterij B**, ki se izraža s številom trenutno poznanih recentnih nahajališč: 1 (CR), 2-5 (EN), 6-10 (VU). Pri taksonih iz kategorije DD je dodana tudi letnica zadnjega podatka.

V Rdečem seznamu smo uporabili naslednje kategorije:

- Regionalno izumrla vrsta (RE)
- Skrajno ogrožena vrsta (CR)
- Prizadeta vrsta (EN)
- Ranljiva vrsta (VU)
- Potencialno ogrožena vrsta (NT)
- Premalo znana vrsta, stari podatki (DD)
- Premalo znana vrsta, recentni podatki (DD-n)
- Neogrožena vrsta (LC)

Rezultati

Novi Seznam

Novi Seznam rogovnjakov (Anthocerotophyta) in jetrenjakov (Marchantiophyta) Slovenije obsega na podlagi trenutne taksonomije in nomenklature (Hodgetts et al., 2020) 181 vrst, nadalje 4 podvrste in 2 varieteti. Dvomljivih vrst, ki so bile navedene v literaturi in podatkov ni mogoče revidirati, ker ni herbarijskega materiala, je 5. Izločenih vrst je 6. Razpored po posameznih fitogeografskih enotah je razviden v tabeli 1.

Razlike v številu vrst med posameznimi fitogeografskimi enotami so razmeroma velike (Tabela 1). Deloma je to povezano z razlikami v intenzivnosti florističnih raziskovanj posameznih predelov. Predvsem pa so razlike, tako kot pri listnatih mahovih, pogojene z ekološko pestrostjo habitatov, vključno z razponom nadmorskih višin, kar je najbolj razvidno v alpskem območju. Primerjava števila taksonov z nekaterimi sosednjimi državami kaže, da je mahovna flora Slovenije kljub površinski majhnosti (20.273 km^2) relativno bogata.

Rdeči seznam

V kategorije, ki kažejo na ogroženost taksonov, je uvrščeno 37 (20,1%) vrst in podvrst: 1 (0,5%) vrsta je v CR kategoriji, 13 (7,1%) vrst je v kategoriji EN in 23 (12,5%) v kategoriji VU. 3 (1,6%) vrste so v kategoriji NT, 33 (17,9%) vrst je v kategorijah DD in DD-n. V kategoriji LC-neogrožene vrste je 111 (60,3%) vrst in podvrst. Število vrst in procentna razmerja v kategorijah Rdečega seznama Slovenije niso enostavno primerljive z različnimi drugimi državami – čeprav je tudi pri njih podlaga za kategorizacijo IUCN 3.1 in delo Hallingbäck et al. (1998). Razlog za to je, da avtorji prilagajajo kriterije do določene mere specifičnim razmerah v svojih državah. Vpliv pa imata tudi stopnja floristične raziskanosti in ohranjenost biotopov.

Synonyms

- Alicularia minor* (Nees) Limpr = *Nardia geoscyphus*
- Alicularia scalaris* (Schrad.) Corda = *Nardia scalaris*
- Anastrophyllum cavifolium* (H. Buch et S. W. Arnell) Lamex = *Orthocaulis cavifolium*
- Anastrophyllum hellerianum* (Nees ex Lindenb.) R. M. Schust. = *Crossocalyx hellerianus*
- Anastrophyllum minutum* (Schreb.) R. M. Schust. = *Sphenolobus minutus*
- Anastrophyllum minutum* var. *weberi* (Mart.) Kartt. = *Sphenolobus minutus*

- Aneura latifrons* Lindb. = *Riccardia latifrons*
Aneura multifida (L.) Dumort. = *Riccardia multifida*
Aneura palmata (Hedw.) Dumort. = *Riccardia palmata*
Anthoceros laevis L. = *Phaeoceros laevis*
Aplozia amplexicaulis (Dumort.) Dumort. = *Solenostoma sphaerocarpum*
Aplozia autumnalis (DC.) Heeg = *Syzygiella autumnalis*
Aplozia crenulata (Mitt.) Lindb. = *Solenostoma gracillimum*
Aplozia lanceolata auct. = *Lioclaena lanceolata*
Aplozia lurida (Dumort.) Dumort. = *Solenostoma sphaerocarpum*
Aplozia nana (Nees) Breidl. var. *confertissima* (Nees) Heeg = *Solenostoma confertissimum*
Aplozia pumila (With.) Dumort. = *Jungermannia pumila*
Aplozia riparia (Tayl.) Dumort. = *Jungermannia atrovirens*
Aplozia riparia var. *potamophila* Müller Arg. ex Bernet = *Jungermannia atrovirens*
Aplozia sphaerocarpa (Hook.) Dumort. = *Solenostoma sphaerocarpum*
Apometzgeria pubescens (Schrack.) Kuwah. = *Metzgeria pubescens*
Asterella gracilis (F. Weber) Underw. = *Mannia gracilis*
Asterella hemisphaerica (L.) P. Beauv. = *Reboulia hemisphaerica*
Athalamia hyalina (Sommerf.) S. Hatt. = *Clevea hyalina*
Athalamia hyalina var. *suecica* (Lindb.) S. Hatt. = *Clevea hyalina*
Barbilophozia attenuata (Mart.) Loeske = *Neoorthocaulis attenuatus*
Barbilophozia gracilis (Schleich. ex Steph.) Müll. Frib. = *Neoorthocaulis attenuatus*
Barbilophozia floerkei (F. Weber & D. Mohr) Loeske = *Neoorthocaulis floerkei*
Barbilophozia quadriloba (Lindb.) Loeske = *Schljakovianthus quadrilobus*
Bazzania triangularis (Schleich. ex Steudel) Loeske = *Bazzania tricrenata*
Bellincinia laevigata O. Kuntze = *Porella arboris-vitae*
Bellincinia platyphylla O. Kuntze = *Porella platyphylla*
Bellincinia rivularis O. Kuntze = *Porella cordaeana*
Blepharozia ciliaris (L.) Dumort. = *Ptilidium ciliare*
Blepharozia pulcherrima (G. Weber) Lindb. = *Ptilidium pulcherrimum*
Cephalozia bicuspidata var. *alpicola* (C. Massal.) C. Massal. & Carestia = *Fuscocephaloziopsis pleniceps*
Cephalozia catenulata (Huebener) Lindb. = *Fuscocephaloziopsis catenulata*
Cephalozia connivens (Dicks.) Lindb. = *Fuscocephaloziopsis connivens*
Cephalozia divaricata (Sm.) Spruce = *Cephaloziella divaricata*
Cephalozia integrerrima Lindb. = *Cephaloziella integrerrima*
Cephalozia jackii Limpr. = *Cephaloziella rubella*
Cephalozia leucantha Spruce = *Fuscocephaloziopsis leucantha*
Cephalozia loitlesbergeri Schiffn. = *Fuscocephaloziopsis loitlesbergeri*
Cephalozia lunulifolia (Dumort.) Dumort. = *Fuscocephaloziopsis lunulifolia*
Cephalozia media Lindb. = *Fuscocephaloziopsis lunulifolia*
Cephalozia myriantha Lindb. = *Cephaloziella rubella*
Cephalozia pleniceps (Austin) Lindb. = *Fuscocephaloziopsis pleniceps*
Cephalozia reclusa (Tayl.) Dumort. = *Fuscocephaloziopsis catenulata*
Cephalozia starkei (Nees) Breidl. = *Cephaloziella divaricata*
Cephalozia symbolica (Gottsche) Breidl. = *Fuscocephaloziopsis lunulifolia*
Cephaloziella bifida (Lindb.) Schiffn. = *Cephaloziella rubella*
Cephaloziella byssacea (Roth) Warnst. = *Cephaloziella hampeana*
Cephaloziella leucantha Spruce = *Fuscocephaloziopsis leucantha*
Cephaloziella myriantha (Lindb.) Schiffn. = *Cephaloziella rubella*
Cephaloziella raddiana (C. Massal.) Schiffn. = *Cephaloziella rubella*
Chiloscyphus coadunatus (Sw.) J. J. Engel & R. M. Schust. = *Lophocolea coadunata*
Chiloscyphus coadunatus var. *rivularis* Loeske = *Lophocolea bidentata*
Chiloscyphus minor (Nees) J. J. Engel & R. M. Schust. = *Lophocolea minor*
Chiloscyphus polyanthos var. *pallescens* (Ehrh. ex Hoffm.) C. Hartm. = *Chiloscyphus pallescens*
Chiloscyphus profundus (Nees) J. J. Engel & R. M. Schust. = *Lophocolea heterophylla*
Cladopodiella fluitans (Nees) H. Buch = *Odontoschisma fluitans*
Corsinia marchantiooides Raddi = *Corsinia coriandrina*
Diplophylla albicans (L.) Trev. = *Diplophyllum albicans*
Diplophylla obtusifolia (Hook.) Trev. = *Diplophyllum obtusifolium*
Diplophylla taxifolia (Wahlenb.) Trev. = *Diplophyllum taxifolium*
Duvalia rupestris Nees = *Mannia triandra*
Eucalyx hyalinus (Lyell) Carrington = *Solenostoma hyalinum*
Eucalyx subellipticus (Lindb. ex Kaal.) Breidl. = *Solenostoma subellipticum*
Eucephalozia media Schiffn. = *Fuscocephaloziopsis lunulifolia*
Fimbriaria lindenbergiana Corda = *Asterella lindenbergiana*

- Fossombronia cristata* Lindb. = *Fossombronia wondraczekii*
Fossombronia dumortieri Hueben. et Genth. ex Lindb. =
Fossombronia foveolata
Frullania cesatiana De Not. = *Frullania riparia*
Frullania inflata Gottsche = *Frullania cleistostoma*
Grimaldia barbifrons Bischl. = *Mannia fragrans*
Grimaldia triandra (Scop.) Lindb. = *Mannia triandra*
Haplozia crenulata (Sm.) Dumort. = *Solenostoma gracilium*
Haplozia lanceolata (Schrad.) Dumort. = *Liochlaena lanceolata*
Haplozia pumila (With.) Dumort. = *Jungermannia pumila*
Haplozia schiffneri (Loitl.) K.M. = *Jungermannia polaris*
Haplozia sphaerocarpa (Hook.) Dumort. = *Solenostoma sphaerocarpum*
Haplozia sphaerocarpa var. *nana* (Nees) K. Müll. = *Solenostoma sphaerocarpum*
Hypenantron lindenbergianum (Corda) Glow. = *Asterella lindenbergiana*
Hypenantron pilosum O. Kuntze = *Mannia gracilis*
Jamesoniella autumnalis (DC.) Steph. = *Syzygiella autumnalis*
Jungermannia acuta Lindenb. = *Mesoptchia collaris*
Jungermannia alpestris Schleich. ex F. Weber = *Lophozia collaris*
Jungermannia badensis Gottsche = *Mesoptchia badensis*
Jungermannia bantriensis Hook. = *Mesoptchia bantriensis*
Jungermannia barbata Schmidel ex Schreb. = *Barbilophozia barbata*
Jungermannia birenata Schmidel ex Hoffm. = *Isopaches birenatus*
Jungermannia bicuspidata L. = *Cephalozia bicuspidata*
Jungermannia catenulata Hueben. = *Fuscocephaloziopsis catenulata*
Jungermannia confertissima Nees = *Solenostoma confertissimum*
Jungermannia connivens Dicks. = *Fuscocephaloziopsis connivens*
Jungermannia crenulata Sm. non Schmidel = *Solenostoma gracillimum*
Jungermannia excisa Dicks. = *Lophozia excisa*
Jungermannia curvifolia Dicks. = *Nowellia curvifolia*
Jungermannia erecta Schrad. = *Tritomaria erecta*
Jungermannia erectiformis Breidl. = *Tritomaria erectiformis* subsp. *erectiformis*
Jungermannia floerkei F. Weber & D. Mohr = *Neoorthocaulis floerkei*
Jungermannia gracilis Schleich. ex Steph. = *Neoorthocaulis attenuatus*
Jungermannia gracillima Sm. = *Solenostoma gracillimum*
Jungermannia helleriana Nees ex Lindenb. = *Crossocalyx hellerianus*
Jungermannia heterocolpos Thed. ex Hartm. = *Mesoptchia heterocolpos*
Jungermannia hyalina Lyell = *Solenostoma hyalinum*
Jungermannia incisa Schrad. = *Schistochilopsis incisa*
Jungermannia inflata Huds. = *Gymnocolea inflata*
Jungermannia lanceolata L. = *Jungermannia atrovirens*
Jungermannia leiantha Grolle = *Liochlaena lanceolata*
Jungermannia lycopodioides Wallr. = *Barbilophozia lycopodioides*
Jungermannia michauxii F. Weber = *Anastrophyllum michauxii*
Jungermannia minuta Schreb. = *Sphenolobus minutus*
Jungermannia müllerri Nees ex Lindenb. = *Mesoptchia collaris*
Jungermannia obovata Nees = *Solenostoma obovatum*
Jungermannia quinquedentata Huds. = *Trilophozia quinquedentata*
Jungermannia riparia Taylor = *Jungermannia atrovirens*
Jungermannia sphaerocarpa Hook. = *Solenostoma sphaerocarpum*
Jungermannia starkii (Funck) Nees = *Cephaloziella divaricata*
Jungermannia subulata A. Evans = *Liochlaena subulata*
Jungermannia tamarisci L. = *Frullania tamarisci*
Jungermannia taylori Hook. = *Mylia taylori*
Jungermannia trichophylla L. = *Blepharostoma trichophyllum* subsp. *trichophyllum*
Jungermannia turbinata Raddi = *Mesoptchia turbinata*
Jungermannia ventricosa Dicks. = *Lophozia ventricosa*
Kantia arguta (Nees & Mont.) Lindb. = *Calypogeia arguta*
Kantia calypogeia Lindb. = *Calypogeia fissa*
Kantia suecica Arnell & J. Perss. = *Calypogeia suecica*
Kantia trichomanis auct. = *Calypogeia azurea*
Kantia trichomanis var. *neesiana* Massal. & Carest. = *Calypogeia neesiana*
Kantia trichomanis var. *repanda* Nees = *Calypogeia fissa*
Leiocolea alpestris (Schleicher ex F. Weber) Isov. = *Mesoptchia collaris*
Leiocolea badensis (Gottsche) Jörg. = *Mesoptchia badensis*
Leiocolea bantriensis (Hook.) Jörg. = *Mesoptchia bantriensis*
Leiocolea collaris (Nees) Schljakov = *Mesoptchia collaris*
Leiocolea heterocolpos (Thed. ex Hartm.) Buch = *Mesoptchia heterocolpos*
Leiocolea muelleri (Nees ex Lindenb.) Jörg. = *Mesoptchia collaris*
Leiocolea turbinata (Raddi) Buch = *Mesoptchia turbinata*
Lejeunea calcarea Lib. = *Cololejeunea calcarea*
Lejeunea cavifolia var. *planiuscula* Lindb. apud Breidler, Glowacki = *Lejeunea cavifolia*
Lejeunea echinata (Hook.) Tayl. = *Cololejeunea calcarea*
Lejeunea rossettiana C. Massal. = *Cololejeunea rossettiana*
Lejeunea serpyllifolia Lib. = *Lejeunea cavifolia*

- Lejeunea ulicina* (Tayl.) Gottsche et al. = *Microlejeunea ulicina*
Lepidozia setacea auct. = *Kurzia pauciflora*
Leptoscyphus taylori (Hook.) Mitt. = *Mylia taylori*
Lophocolea cuspidata Limpr. = *Lophocolea coadunata*
Lophozia alpestris (Schleich. ex F. Weber) A. Evans = *Mesoptychia collaris*
Lophozia badensis (Gottsche) Schiffn. = *Mesoptychia badensis*
Lophozia bantriensis (Hook.) Steph. = *Mesoptychia bantriensis*
Lophozia barbata (Schmidt) Dumort. = *Barbilophozia barbata*
Lophozia bicrenata (Schmidel ex Hoffm.) Dumort. = *Iopaches bicrenatus*
Lophozia collaris (Nees) Schljakov = *Mesoptychia collaris*
Lophozia debiliformis R. M. Schust. et Damsh. = *Barbilophozia sudetica*
Lophozia elongata (Lindb.) Steph. = *Protolophozia elongata*
Lophozia excisa (Dicks.) Dumort. = *Lophozopsis excisa*
Lophozia floerkei Dumort. = *Neoorthocaulis floerkei*
Lophozia gracilis (Schleich. ex Steph.) Steph. = *Neoorthocaulis attenuatus*
Lophozia heterocolpos (Thed. ex C. Hartm.) M. Howe = *Mesoptychia heterocolpos*
Lophozia hornschuchiana (Nees) Macoum = *Mesoptychia bantriensis*
Lophozia incisa (Schrad.) Dumort. = *Schistochilopsis incisa*
Lophozia lycopodioides (Wallr.) Cog. = *Barbilophozia lycopodioides*
Lophozia michauxii (Web.) Steph. = *Anastrophyllum michauxii*
Lophozia polaris (R. M. Schust.) R. M. Schust. = *Lophozia polaris*
Lophozia polita (Nees) = *Saccobasis polita*
Lophozia porphyroleuca (Nees) Schiffn. = *Lophozia guttulata*
Lophozia quadriloba (Lindb.) A. Evans = *Schljakovianthus quadrilobus*
Lophozia quinquedentata (Huds.) Cogn. = *Trilophozia quinquedentata*
Lophozia sudetica (Nees ex Hueben.) Grolle = *Barbilophozia sudetica*
Lophozia turbinata (Raddi) Steph. = *Mesoptychia turbinata*
Lophozia ventricosa var. *porphyroleuca* (Nees) Hartm. = *Lophozia guttulata*
Madotheca baueri Schiffn. = *Porella baueri*
Madotheca cordaeana (Hueben.) Dumort. = *Porella cordaeana*
Madotheca jackii Schiffn. = *Porella platyphylla*
Madotheca laevigata (Schrad.) Dumort. = *Porella arboris-vitae*
Madotheca platyphylla (L.) Dumort. = *Porella platyphylla*
Madotheca rivularis Nees = *Porella cordaeana*
Marchantia alpestris (Nees) Burgeff = *Marchantia polymorpha* subsp. *montivagans*
Marchantia triandra Scop. = *Mannia triandra*
Marsupella ehrharti Corda = *Marsupella emarginata*
Marsupella neglecta (Limpr.) Steph. = *Marsupella sprucei*
Mastigobryum deflexum (Mart.) Nees = *Bazzania tricrenata*
Mastigobryum triangularis (Schleich. ex Steude) Steph. = *Bazzania tricrenata*
Metzgeria conjugata var. *simplex* (Lorb.) Aleff & Schumacker = *Metzgeria simplex*
Metzgeria fruticulosa (Dicks.) A. Evans = *Metzgeria violacea*
Nardia crenulata (Mitt.) Lindb. = *Solenostoma gracillimum*
Nardia haematosticta Lindb. = *Nardia geoscyphus*
Nardia hyalina Lindb. = *Solenostoma hyalinus*
Neesiella rupestris (Nees) Schiffn. = *Mannia triandra*
Pallavicinia hibernica (Hook.) Lindb. = *Moerckia hibernica*
Pedinophyllum pyrenaicum Lindb. = *Pedinophyllum interruptum*
Pellia calycina (Tayl.) Nees = *Apopellia endiviifolia*
Pellia endiviifolia (Dicks.) Dumort. = *Apopellia endiviifolia*
Peltolepis grandis (Lindb.) Lindb. = *Peltolepis quadrata*
Plagiochila interrupta (Nees) Dumort. = *Pedinophyllum interruptum*
Plectocolea obovata (Nees) Lindb. = *Solenostoma obovatum*
Porella rivularis (Nees) Lindb. = *Porella cordaeana*
Preissia quadrata (Scop.) Nees = *Marchantia quadrata*
Riccardia pinguis Gray = *Aneura pinguis*
Riccardia sinuata (Dicks. ex Hook.) Trevis = *Riccardia chamaedryfolia*
Riccia fluitans var. *canaliculata* (Hoffm.) A. Roth = *Riccia canaliculata*
Riccia intumescens (Bischl.) Heeg = *Riccia ciliata*
Riccia minima L. = *Riccia sorocarpa*
Sarcoscyphus ehrhardtii Corda = *Marsupella emarginata*
Sarcoscyphus emarginatus (Ehrh.) C. Hartm. = *Marsupella emarginata*
Sarcoscyphus funckii (F. Weber & D. Mohr) Nees = *Marsupella funckii*
Sarcoscyphus neglectus Limpr. = *Marsupella sprucei*
Scapania bartlingii (Hampe) Nees = *Scapania cuspiduligera*
Scapania convexa Pearson = *Scapania umbrosa*
Scapania dentata (Dumort.) Dumort. = *Scapania undulata*
Scapania nemorosa Dumort. = *Scapania nemorea*
Scapania rosacea (Corda) Nees = *Scapania curta*
Solenostoma amplexicaule (Dumort.) Steph. = *Solenostoma sphaerocarpum*

Solenostoma crenulata (Sm.) R.H. Schust. = *Solenostoma gracillimum*
Solenostoma schiffneri (Loitl.) Müll. Frib. = *Jungermannia polaris*
Sphagocetis communis (Dicks.) Nees = *Odontoschisma sphagni*
Sphagnoecetis communis var. *macrrior* Nees = *Odontoschisma denudatum*
Sphenolobus exectiformis (Breidl.) Steph. = *Tritomaria exectiformis*
Sphenolobus exectus (Schmid.) Steph. = *Tritomaria execta*
Sphenolobus hellerianus (Nees ex Lindenb.) Steph. = *Crossocalyx hellerianus*
Sphenolobus michauxii (F. Weber) Steph. = *Anastrophylum michauxii*
Stephanina complanata O. Kuntze = *Radula complanata*
Stephanina lindenbergiana (Gottsche) O. Kuntze = *Radula lindenbergiana*
Telaranea setacea auct. = *Kurzia pauciflora*
Tritomaria polita (Nees) Jörg. = *Saccobasis polita*
Tritomaria quinquedentata (Huds.) H. Buch = *Trilophozia quinquedentata*

References

- Babij, V., & Jogan, N. (2001). *Ricciocarpus natans* (L.) Corda – novoodkrita vrsta jetrenjaka v flori Slovenije. *Natura Sloveniae*, 3(1), 43–48.
- Bischler, H., & Jovet-Ast, S. (1973). Une mission hépatologique d'automne sur la côte yougoslave (Istrie, côte et îles dalmates, côte du Monténégro). *Rev. Bryol. Lichénol.*, 39, 554–629.
- Breidler, J. (1894). Die Lebermoose Steiermarks. *Mitt. Naturwiss. Ver. f. Steierm. Jahrgang 1894*, 256–357.
- Cryptogamae exsiccatae. Editae a Museo Hist.-Natur. Vindobonensi: Nr. 3779 – *Fosrombronia Dumortieri* (Hueben. et Genth.) Lindb.
- Dakskobler, I. (1996). Bukovi gozdovi Srednjega Posočja. *Scopolia*, 35, 1–78.
- Dakskobler, I., Martinčič, A., & Strgulc Krajšek, S. (2023). Dve novi dolinski nahajališči (pod)visokogorskih rastlinskih vrst v Zgornjem Posočju. *Hladnikia*, 52, 3–28.
- Deschmann, C. (1858). Beiträge zur Naturgeschichte des Laibacher Morastes. 2. *Jahresber. d. Ver. d. krainischen Landesmuseums*, 2, 59–87.
- Düll, R. (1999). Bryological results of some excursions in former Yugoslavia. In R. Düll, A. Ganeva, A. Martinčič, Z. Pavletić: *Contributions to the bryoflora of former Yugoslavia and Bulgaria* (p. 95–110). IDH-Verlag Bad Münstereifel.
- Düll, R., Pavletić, Z., & Martincic, A. (1999). Checklist of the Yugoslavian bryophytes. In Düll, R., Ganeva, A., Martincic, & A., Pavletić, Z., *Contributions to the bryoflora of former Yugoslavia and Bulgaria* (pp. 1–94). IDH-Verlag Bad Münstereifel.
- Głowacki, J. (1908). Die Moosflora des Bachergebirges. *Jahresber. d. Obergymn. Marburg*, pp. 1–30.
- Głowacki, J. (1910). Die Moosflora der Julischen Alpen. *Abh. Zool. Bot. Ges. Wien*, 5(2), 1–48.
- Głowacki, J. (1912). Moosflora der Steiner Alpen. *Jahrb. naturh. Mus. f. Kärnten, »Carinthia II«*, 1–6, 13–47; 130–156.
- Grom, S. (1963). Beiträge zur Moosflora Sloveniens (Jugoslawien) II. *Nova Hedwigia*, 5, 477–486.
- Grom, S. (1969). Mahovna flora Trnovskega gozda. *Vrstvo narave*, 6, 51–72.
- Hallingbäck, T., Hodgetts, N., Raeymaekers, G., Schumacker, R., Sérgio, C., Söderström, L., Stewart, N., & Váňa, J. (1998). Guidelines for application of the revised IUCN threat categories to bryophytes. *Lindbergia*, 23, 6–12.
- Hodgetts, N., & Lockhart, N. (2020). *Checklist and country status of European bryophytes – update 2020*. Irish Wildlife Manuals 123. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
- Hodgetts, N., Söderström, G. L., Blockeel, T. L., Caspari, S., Ignatov, C. S., Konstantinova, N., Lockhart, N., Papp, B., Schröck, C., Sim-Sim, M., Bell, D., Bell, H. H., Blomm, H. H., Bruggeman-Nannenga, A., Brugues, M., Enroth, J., Flatberg, K. I., Garilletti, R., Hedenäs, L., Holyoak, D. T., Hugonot, V., Kariyawasam, I., Köckinger, H., Kučera, J., Lara, F., & Porley, R. D. (2020). An annotated checklist of bryophytes of Europe, Macaronesia and Cyprus. *Journal of Bryology*, 42(1), 1–116. <https://doi.org/10.1080/03736687.2019.1694329>
- IUCN (2001). *IUCN Red list categories and criteria*. Version 3.1. IUCN Species Survival Commission.
- Kern, F. (1910). Die Moosflora der Karnischen und Julischen Alpen. *Vortrag. Jahresb. Schles. Ges. f. vaterl. Kult. II. Abt.*
- Kerner, A. (1888–1913). *Schedae ad Floram Exsiccatam Austro-Hungaricam*.
- Lobnik Cimerman, Ž. (2022). Mahovi gozdnih in barjanskih habitatnih tipov Pohorja. [Unpublished Master thesis]. University of Ljubljana.
- Lobnik Cimerman, Ž., & Strgulc Krajšek, S. (2022). New national and regional bryophyte records, 69 No. 26. *Riccia cavernosa* Hoffm. *Journal of Bryology*, 44(Part 1), 95–96.
- Lobnik Cimerman, Ž., Kopitar, D., & Strgulc Krajšek, S. (2023). Arable bryophytes from Northeastern Slovenia with new and interesting national records. *Botanica serbica*, 47(2), 301–308. <https://doi.org/10.2298/BOTSERB2302301C>
- Loitlesberger, K. (1905). Zur Moosflora der österreichischen Verhandlungen der Zoologisch-Botanischen Gesellschaft in Wien, 55, 475–489.
- Martinčič, A. (2003). Seznam listnatih mahov (*Bryopsida*) Slovenije. *Hacquetia*, 2(1), 91–166.
- Martinčič, A. (2007). Kritični prispevki za mahovno floro Slovenije, 16–23. *Hladnikia*, 20, 17–25.
- Martinčič, A. (2011). Seznam jetrenjakov (Marchantiophyta) in rogovnjakov (Anthocerotophyta) Slovenije. *Scopolia*, 72, 1–38.

Martinčič, A. (2012). Mahovna flora fitogeografskega podobmočja Mežiško-Mislinjska dolina-Strojna (Slovenija). *Hladnikia*, 30, 45–58.

Martinčič, A. (2016a). Updated Red list of bryophytes of Slovenia. *Hacquetia*, 15(1), 107–126.

Martinčič, A. (2016b). Nova nahajališča vrst – New localities 38. Mahovi (Bryophyta s. lat.). *Hladnikia*, 38, 75–77.

Martinčič, A. (2017). Novosti v flori mahov Slovenije 3. *Hladnikia*, 40, 26–39.

Martinčič, A. (ed.) & Strgulc Krajšek, S., Lobnik Cimerman, Ž., Dakskobler, I., & Šabeder, N. (2020). Nova nahajališča vrst – New localities 46. Mahovi (Bryophyta s. lat.). *Hladnikia*, 46, 89–93.

Martinčič, A. (ed.) & Strgulc Krajšek, S., Lobnik Cimerman, Ž., Kopitar, D., Behrič, S., Küzmič, F., Mlakar Medved, M., Dolničar, D., Germ, M., Gril, M., Janežič, N., Kokalj, N., Küzmič, O., Tomšič, N., & Trnkoczy, A. (2022). Nova nahajališča vrst – New localities 50 – Mahovi (Bryophyta s. lat.). *Hladnikia*, 50, 72–73.

Odor, P., & van Dort, K. (2002). Beech dead wood inhabiting bryophyte vegetation in two Slovenian forest reserves. *Zbornik gozdarstva in lesarstva*, 69, 155–169.

Paulin, A. (sine anno). Podatki o razširjenosti mahov v Sloveniji. Manuscript.

Pavletić, Z. (1955). *Prodromus flore briofita Jugoslavije*. Jugoslovenska Akademija Znanosti i umjetnosti, Posebna izdanja odjela za prirodne nauke. Knjiga III.

Pokorny, A. (1860). Verzeichniss der küstenländischen Lebermoose des Tommasinischen Herbars. *Verhandlungen der Zoologisch-Botanischen Gesellschaft in Wien*, 53(10), 51–53.

Robič, S. (1893). Kranjski mahovi. *Izvestja muzejskega društva za Kranjsko*, 3, 28–33; 67–75; 109–114; 148–152; 201–204.

Ros, R.M., V. Mazimpaka, U. Abou-Salama, M. Aleffi, T. L. Blockeel, M. Brugués, M. J. Cano, R. M. Cros, M. G. Dia, G. M. Dirkse, W. El Saadawi, A. Erdag, A. Ganeva, J. M. González-Mancebo, I. Herrnstadt, K. Khalil, H. Kürschner, E. Lanfranco, A. Losada-Lima, M.S. Refai, S. Rodriguez-Nunez, M. Sabovljević, C. Sérgio, H. M. Shabbara, M. Sim-Sim, & L. Söderström (2007). Hepaticae and Anthocerotales of the Mediterranean, an annotated checklist. *Cryptogamie, Bryologie*, 28(4), 351–537.

Sabovljević, M., & Natcheva, N. (2006). A check-list of the liverworts and hornworts of Southeast Europe. *Phytologia Balcanica*, 12(2), 169–180.

Scopoli, J. (1760). *Flora carniolica*, ed. 1.

Scopoli, J. (1772). *Flora Carniolica*. pp. 305–355. Krauss.

Sguazzin, F., & Polli, E. (1999). Contributo per un approfondimento delle conoscenze sulla flora briologica e vascolare delle Zelške jame (576 S) – Grotta del principe Ugo di Windischgraetz (119 VG), nel Rakov Škocjan (Rio dei Gamberi, Slovenia). *Atti e Memorie della Commissione Grotte »E. Boegan«*, 37, 125–141.

Söderström, L., Urmi, E., & Váňa, J. (2002). Distribution of Hepaticae and Anthocerotae in Europe and Macaronesia. *Lindbergia*, 27, 3–47.

Strgulc Krajšek S. (ed.) & Martinčič, A., Bek, V., Dolničar, D., Govedič, M., Gril, M., Grom, S., Lobnik Cimerman, Ž., Logar, R., Miho-

rič, A., Podobnik, A., Prah, K., Strgulc Krajšek, S., Šepič, B., Šparl, L., Tomšič, N., Trčak, B., & Valenčič, M. (2023). Nova nahajališča vrst – New localities 52. Mahovi (Bryophyta s. lat.). *Hladnikia*, 52, 90–96.

Strgulc Krajšek, S., & Lobnik Cimerman, Ž. (2022). *Riccia canaliculata* Hoffm. New records and noteworthy data of plants, algae and fungi in SE Europe and adjacent regions, 8. *Botanica serbica*, 46(1), 137–138.

Wallace, E. C. (1980). Seznam vrst iz okolice Bohinja. Manuscript.

Wraber, M. (1969). Pflanzengeographische Stellung und Gliederung Sloweniens. *Vegetatio*, 17, 76–99.

Zupančič, M., & Žagar, V. (1995). New views about the phytogeographic division of Slovenia, I. *Razprave IV. razreda SAZU*, 36(1), 3–30.

Appendix

Literature with floristic data for hornworts and liverworts for Slovenia, not cited in this article.

Literatura s florističnimi podatki za rogovnjake in jetrenjake za Slovenijo, ki ni citirana v tem prispevku.

Accetto, M. (1970). Gozd smreke in zelenega sršaja (*Asplenio-Piceetum* Kuoch 1953) v Podsteniški ter Rožeški koliševki in njegova ekološka problematika. *Gozdarski vestnik*, 9–10, 273–283.

Accetto, M. (1991). *Corydalido ochroleucae-Aceretum* ass. nova v Sloveniji. *Razprave IV. razreda SAZU*, 32(3), 89–182.

Accetto, M. (1995a). Frostbedingte Naturfichtenwälder im Gebiet von Kocevsko. *Sauteria*, 6, 7–20.

Accetto, M. (2006). *Campanulo justinianae-Piceetum abietis* var. ass. nov. v Dinarskem gorstvu južne Slovenije. *Razprave IV. razreda SAZU*, 47(1), 65–101.

Accetto, M. (2009). Jelovo bukovje na rastiščih logov ob Iški. *Hladnikia*, 23, 61–75.

Baćić, T., & Frajman, B. (2009). Notulae ad floram Sloveniae 99. *Riccia fluitans* L. *Hladnikia*, 24, 62–63.

Beck, G. (1906). Die Umkehrung der Pflanzregionen in den Dolinen des Karstes. *Sitzungsber. Akad. Wiss. Wien, math.-nat. Kl.*, 115, 1–20.

Besednjak, J., Martinčič, A., & Jogan, N. (2008). Mahovna flora okolice Branika (kvadrant 0148/2). *Hladnikia*, 21, 19–28.

Biasoletto, B. (1846). *Excursioni botaniche sullo Schneberg (Monte Nevoso) nella Carniola*. Museo civico di Storianaturale di Trieste.

Boros, A. (1944). Beiträge zur Kenntnis der Flora Föhrenwälder und der *Sphagnum*-Moore des Windischen Gebietes (Komitata Vas). *Bot. közlem.*, 41(3–5), 96–101.

Breidler, J. (sine anno). Moose aus Krain, den Julischen Alpen, Gebiet von Görz und Istrien, gesammelt in den Jahren 1881–1901. Manuscript.

Culiberg, M., Šercelj, A., & Zupančič, M. (1981). Palynologische und phytozoologische Untersuchungen auf den Ledine am Hochplateau Jelovica. *Razprave 4. razreda SAZU*, 23(6), 175–193.

Dakskobler I., & Martinčič, A. (2023a). Vegetation of moist rock crevices and moist (slope) debris in the Liščak gorge (Bača valley, Julian Alps). *Folia biologica et geologica*, 64 (1), 5–100.

- Dakskobler I., & Martinčič, A. (2023b). Značilnosti rastja korit Ročice v jugozahodnih Julijskih Alpah. *Folia biologica et geologica*, 64 (1), 175–220.
- Dakskobler, I. (1991). Gozd bukve in jesenske vilovine – *Seslerio autumnalis-Fagetum* (Ht. 1950) M. Wraber (1957) 1960 v submediteransko-predalpskem območju Slovenije. *Scopolia*, 24, 1–53.
- Dakskobler, I. (1996). Razvoj gozda na erozijskem območju na severnih pobočjih Porezna (Julijske Alpe). *Razprave IV. razreda SAZU*, 37(7), 147–188.
- Dakskobler, I. (1997). Fitocenološka oznaka sestojev črnega hrasta *Quercus ilex* L. na Sabotinu in nad izvirom Lijaka (zahodna Slovenija). *Acta biol. slovenica*, 41(2-3), 19–42.
- Dakskobler, I. (1997). Geografske variante asociacije *Seslerio autumnalis-Fagetum* (Ht.) M. Wraber ex Borhidi 1963. *Razprave IV. razreda SAZU*, 38(8), 165–255.
- Dakskobler, I. (1998). Naravni sestoji črnega bora (*Pinus nigra* Arnولد) na vzpetini Treska pri Šrpenici in nad dolino Tolminke (Julijske Alpe, severozahodna Slovenija). *Razprave IV. razreda SAZU*, 39(7), 255–278.
- Dakskobler, I. (2000). Fitocenološka oznaka rastič endemične vrste *Moehringia villosa* (Wulfen) Fenzl (Caryophyllaceae). *Razprave IV. razreda SAZU*, 41(2), 41–93.
- Dakskobler, I. (2002). Jelovo-bukovi gozdovi na Bovškem (Julijske Alpe, severozahodna Slovenija). *Razprave VI. razreda SAZU*, 43(2), 109–155.
- Dakskobler, I. (2002). Jelovo-bukovi gozdovi v dolinah Kneže, Zadlaščice in Tolminke (južne Julijske Alpe, zahodna Slovenija). *Razprave IV. razreda SAZU*, 43(3), 111–165.
- Dakskobler, I. (2002). Jelovo-bukovi gozdovi v zgornji Baški dolini (Julijske Alpe, zahodna Slovenija). *Hacquetia*, 1(1), 35–88.
- Dakskobler, I. (2003). Asociacija *Rhododendro hirsuti-Fagetum* Acceto ex Dakskobler 1998 v Zahodni Sloveniji. *Razprave IV. razreda SAZU*, 44(2), 5–85.
- Dakskobler, I. (2003). Floristične novosti iz Posočja in sosednjih območij v zahodni Sloveniji – III. *Hladnikia*, 15–16, 43–71.
- Dakskobler, I. (2003). Pionirsko smrekovje nad sedanjem (antropogeno) zgornjo gozdno mejo v južnih Julijskih Alpah (primer iz zgornje Baške doline). *Hacquetia*, 2(1), 19–52.
- Dakskobler, I. (2006). Asociacija *Rhodothamno-Laricetum* (Zukrigl 1973) Willner & Zukrigl 1990 v Julijskih Alpah. *Razprave IV. razreda SAZU*, 47(1), 117–192.
- Dakskobler, I. (2006). Calcareous open sedge swards and stony grasslands (*Seslerietalia caeruleae*) on the northern edge of the Trnovski gozd plateau (The Dinaric mountains, western Slovenia). *Hacquetia*, 5(1), 73–112.
- Dakskobler, I. (2006). Prispevek k poznovanju gozdne vegetacije Krasa (jugozahodna Slovenija). *Annales, Ser. Hist. Nat.*, 16, 57–76.
- Dakskobler, I. (2007). A new pioneer community with the dominant *Aurinia petraea* on the rockfall scree in the southern Julian Alps (western Slovenia). *Wulfenia*, 14, 105–131.
- Dakskobler, I. (2007). Fitocenološka in floristična analiza obrečnih gozdov v Posočju (zahodna Slovenija). *Razprave IV. razreda SAZU*, 48(2), 25–138.
- Dakskobler, I. (2007). Gozdovi plemenitih listavcev v Posočju. *Scopolia*, 60, 1–287.
- Dakskobler, I. (2008). Združbe visokih steblik v Julijskih Alpah in v severnem delu Trnovskega gozda (severozahodna in zahodna Slovenija). *Razprave IV. razreda SAZU*, 49(1), 57–164.
- Dakskobler, I. (2015). Phytosociological analysis of montane beech forests on steep shady slopes on mixed geological bedrock in western Slovenia. *Folia biologica et geologica*, 56(1), 5–104.
- Dakskobler, I. (2015). Phytosociological description of *Ostrya carpinifolia* and *Fraxinus ornus* communities in the Julian Alps and in the northern part of the Dinaric Alps (NW and W Slovenia, NE Italy). *Hacquetia*, 14(2), 175–247.
- Dakskobler, I. (2018). Phytosociological analysis of alpine swards with dominant *Salix serpillifolia* in the Julian Alps (NW Slovenia, NE Italy). *Folia biologica et geologica*, 59(1), 29–55.
- Dakskobler, I., & Martinčič, A. (2018). A new endemic plant community with *Schoenus nigricans* in the Southeastern Alps and northern Dinaric Alps. *Folia biologica et geologica*, 59(1), 5–28.
- Dakskobler, I., & Martinčič, A. (2020). Plant communities of moist rock crevices with endemic *Primula carniolica* in the (sub)montane belt of western Slovenia. *Hacquetia*, 19(2), 181–257.
- Dakskobler, I., & Martinčič, A. (2021a). Plant communities with *Carex frigida* in the Julian Alps (northwestern Slovenia). *Hacquetia*, 20(1), 57–80.
- Dakskobler, I., & Martinčič, A. (2021b). New localities of *Adiantum capillus-veneris* and *Moehringia villosa* in the southern Julian Alps. *Folia biologica et geologica*, 62(1), 27–51.
- Dakskobler, I., & Martinčič, A. (2021c). Botanične posebnosti Prodarjeve grape v zgornji Baški dolini (zahodna Slovenija). *Folia biologica et geologica*, 62(1), 177–216.
- Dakskobler, I., & Mayer, E. (1992). *Cortusa matthioli* L. am Südostrand der Alpen. *Razprave IV. razreda SAZU*, 33(5), 115–146.
- Dakskobler, I., & Peljhan, J. (2007). *Viola pyrenaica* Ramond ex DC. in the northern part of the dinaric mountains (the plateaus of Trnovski gozd and Nanos, Slovenia). *Hacquetia*, 6(2), 143–169.
- Dakskobler, I., & Podgornik, G. (2004). Notulae ad floram Sloveniae. 57. *Orchis pallens* L. *Hladnikia*, 17, 42–47.
- Dakskobler, I., Martinčič, A., & Razpet, P. (2023). Gozdne združbe in značilnosti rastlinstva v povodju Liščaka (Baška dolina, Julijske Alpe). *Folia biologica et geologica*, 64(1), 101–173.
- Dakskobler, I., Martinčič, A., & Rojšek, D. (2014). Phytosociological analysis of communities with *Adiantum capillus-veneris* in the foothills of the Julian Alps (western Slovenia). *Hacquetia*, 13(2), 235–258.
- Dakskobler, I., Martinčič, A., & Rojšek, D. (2017). New localities of *Adiantum capillus-veneris* in the river basin of Volarja/Volarnik (the Julian Alps) and phytosociological analysis of its sites. *Folia biologica et geologica*, 58(1), 31–45.
- Dakskobler, I., Vreš, B., Anderle, B., & Martinčič, A. (2021). Nova spoznanja o nahajališčih in rastičih vrst *Carex brunnescens* (Pers.) Poir. in *Carex canescens* L. v Julijskih Alpah. *Folia biologica et geologica*, 62(2), 241–253.
- Deschmann, K. (1858). Beiträge zur Naturgeschichte des Laibacher Morastes. 2. Jahresh. d. Ver. d. krainischen Landesmuseums, 2, 59–87.
- Deschmann, K. (1862). Über die Auffindung verschiedener Leber- und Laubmoose in Krain. Drittes Jahresh. d. Ver. d. krainischen Landesmuseums, p. 196, 221, 228, 229.
- Deschmann, K. (1869). Monatsvesammlung d. Ver. d. krainischen Landesmuseums. *Laibacher Tagblatt*, 17 (22. Januar 1869).

- Deschmann, K. (1869). Monatsvesammlung d. Ver. d. krainischen Landesmuseums. *Laibacher Tagblatt*, 100 (3. May 1869).
- Dolničar, D., L. Cimerman, Ž., & Kokalj, N. (2022). *Fossombronia wondraczekii* (Corda) Dumort. ex Lindb. Notulae ad floram Sloveniae. *Hladnikia*, 50, 59–63.
- Dolšak, F. (1936). Prof. Alfonza Paulina Flora exsiccata Carniolica. Centuria XV–XVIII. *Prirodoslovne razprave*, 3(3), 85–131.
- Duda, J. (1965). Beitrag zur Erforschung der Lebermoose Jugoslawiens. *Acta Botanica Croatica*, 24, 79–82.
- Giacomini, V. (1950). Ricerche sulla flora briologica xerothermica delle alpi italiane. *Vegetatio*, 3, 1–123.
- Głowiacki, J. (1913). Ein Beitrag zur Kenntnis der Moosflora der Karstländer. *Izvestja muzejskega društva za Kranjsko „Carniola“ nov. ser.* 4, 114–153.
- Grom, S. (1959). Prispevek k poznavanju flore v sistemu Škocjanskih jam. *Acta carsologica*, 2, 253–262.
- Grom, S. (1959). Quelques autres Bryophytes nouveaux pour la Yougoslavie et la Slovénie. *Revue Bryol. Lichenol.*, 28(3–4), 351–352.
- Grom, S. (1963). Prispevek k poznavanju mahovne flore Slovenskega Primorja. *Acta carsologica*, 3, 197–212.
- Grom, S. (1963). Musci. In Savnik R., Grom, S. & Hribar, F.: Draga pri Ponikvah. *Acta carsologica*, 3, 90–95.
- Hočev, S. – sodel. Batič, F., Martinčič, A., Piskernik, M. (1985). Preddinarski gorski pragozdovi. *VTOZD za gozdarstvo, Inšt. za gozadno in lesno gospodarstvo, strok. in znan. dela*, 76, 1–262.
- Hočev, S., Batič, F., Martinčič, A., & Piskernik, M. (1980a). Drugotni nižinski pragozd Krakovo v Krakovskem gozdu. *Zbornik gozdarstva in lesarstva*, 18(1), 5–144.
- Hočev, S., Batič, F., Martinčič, A., & Piskernik, M. (1980b). Mraziščni pragozd Prelesnikova koliševka. *Zbornik gozdarstva in lesarstva*, 18(1), 145–252.
- Hočev, S., Batič, F., Martinčič, A., & Piskernik, M. (1980c). Panonska pragozdova Donačka gora in Belinovec. *Zbornik gozdarstva in lesarstva*, 18(1), 253–354.
- Hočev, S., Batič, F., Martinčič, A., & Piskernik, M. (1995). Glive v pragozdovih Slovenije III. Dinarski gorski pragozdovi na Kočevskem in v Trnovskem gozdu. *Gozd. inšt. Slovenije, strok. in znan. dela*, 117, 1–320.
- Horvat, I. (1932). Gradja za briogeografiju Hrvatske. *Acta botanica Croatica*, 7, 73–128.
- Iviani, A. (1931). Lo „sfagneto“ della grotta del principe Ugo. *Le Grotte d’Italia*, 5(4), 155–157.
- Juvan, N. (2008). Vegetacija skalnih razpol silikatnega skalovja. BSc thesis, University of Ljubljana.
- Juvan, N., Čarni, A., & Jogan, N. (2011). Chasmophytic vegetation of silicate rocks on the southern outcrops of the Alps in Slovenia. *Wulfenia*, 18, 133–156.
- Košir, P. (2002). Prispevek k sinsistematični združbi *Hacquetio-Fraxinetum excelsioris* Marinčič in Wallnöfer et al. 1993. *Hacquetia*, 1(1), 109–131.
- Košir, P. (2005). Maple forests of the montane belt in the western part of the illyrian floral province. *Hacquetia*, 4(2), 37–82.
- Košir, P. (2005). Noble hardwood forests of the altimontane belt (*Lamio orvalae-Aceretum pseudoplatani* P. Košir et Marinčič 1999) in Slovenia (western part of the illyrian floral province). *Natura croatica*, 14(2), 59–86.
- Košir, P. (2005). Forests of valuable broad-leaved trees on non-carbonate bedrock in Slovenia (*Dryopterido affini-Aceretum pseudoplatani* ass. nova hoc loco). *Hacquetia*, 4(1), 61–89.
- Kutnar, L., & Martinčič, A. (2002). Inicialna oblika barjanskega smrekovja *Piceo-Sphagnetum flexuosi* ass. nova v Sloveniji. *Razprave IV. razreda SAZU*, 43(3), 247–266.
- Kutnar, L., & Martinčič, A. (2008). Bryophyte species diversity of forest ecosystems in Slovenia (intensive monitoring programme). *Zbornik gozdarstva in lesarstva*, 85, 11–26.
- Kutnar, L., Urbančič, M., & Čas, M. (2006). Ohranjenost gozdnih tal in vegetacije v habitatu divjega petelina v vzhodnih Karavankah in vzhodnih Kamniško-Savinjskih Alpah. *Zbornik gozdarstva in lesarstva*, 77, 5–42.
- Latzel, A. (1942). Die Grottenmoose von Postumia. *Travaux bryologiques*, 13, 66–70.
- Lobnik Cimerman, Ž. (2020). *Mahovi in jetrenjaki*. In Kocjan, M. et al., Rastlinstvo in živalstvo kalov v Kamniško-Savinjskih Alpah (p. 27–40). Društvo za raziskovanje mokrišč Slovenije.
- Lobnik Cimerman, Ž., & Martinčič, A. (2018). Notulae ad floram Sloveniae. *Blasia pusilla*. *Hladnikia*, 41, 87–90.
- Lobnik Cimerman, Ž., & Strgulc Krajšek, S. (2020). Novi podatki o uspevanju jetrenjakov *Riccia glauca* in *R. sorocarpa* v Sloveniji. *Hladnikia*, 46, 17–26.
- Lobnik Cimerman, Ž., Dolničar, D., Mohorko, Z., & Štrupar, L. R. (2021). Notulae ad floram Sloveniae: *Lunularia cruciata* (L.) Dumort. ex Lindb. *Hladnikia*, 48, 38–41.
- Marinček, L. (1980). Gozdne združbe na klastičnih sedimentih v jugovzhodni Sloveniji. *Razprave IV. razreda SAZU*, 22(2), 1–185.
- Marinček, L., & Čarni, A. (2007). Illyrian pre-alpine fir and beech forests – the association *Homogyne sylvestris-Fagetum* Marinček et al. 1993. *Hacquetia*, 6(2), 111–129.
- Marinček, L., & Čarni, A. (2010). Altimontanski bukovi gozdovi podzveze *Saxifrago-Fagenion* (*Artemonio-Fagion*). *Scopolia*, 69, 1–107.
- Marinček, L., & Marinšek, A. (2004). Vegetation of the Pečka virgin forest remnant. *Hacquetia*, 3(2), 5–27.
- Marinček, L., & Marinšek, A. (2009). Vegetation of the Strmec forest remnant. *Hacquetia*, 8(1), 5–30.
- Marinček, L., & Košir, P., & Šilc, U. (2001). Prispevek k sinsistematični asociaciji *Isopyro-Fagetum* Košir 1962. *Hladnikia*, 12–13, 41–56.
- Martinčič, A. (1977). Prispevek k poznavanju ekologije mrazišč v Sloveniji. *Razprave IV. razreda SAZU*, 20(5), 230–317.
- Martinčič, A. (1988). Flora in vegetacija barja Drni pri Zelencih. *Biološki vestnik*, 36(3), 19–33.
- Martinčič, A. (1991). Vegetacijska podoba vrst iz rodu *Schoenus* L. v Sloveniji I. *Schoenus nigricans* L. *Biološki vestnik*, 39(3), 27–40.
- Martinčič, A. (1997). Ekološko-fitocenološke dvoživke. *Acta biologica slovenica*, 41(2–3), 43–60.
- Martinčič, A. (2001). Vegetacijska podoba vrste *Schoenus ferrugineus* L. v Sloveniji. *Hladnikia*, 12–13, 87–105.

- Martinčič, A. (2003). Nova nahajališča vrst – Mahovi (*Bryophyta*). *Hladnikia*, 15–16, 101–105.
- Martinčič, A. (2008). Mahovna flora Šmrekovškega pogorja (Kamniško-Savinjske Alpe, Slovenija). *Hacquetia*, 7(1), 33–46.
- Martinčič, A. (2010). Mahovna flora fitogeografskega podobmočja Dravski Kozjak (Slovenija). *Hladnikia*, 25, 13–30.
- Martinčič, A. (2010). Nova nahajališča. Mahovi – jetrenjaki (*Marchantiophyta*). *Hladnikia*, 26, 67–76.
- Martinčič, A. (2011). Nova nahajališča vrst – New localities. Mahovi – jetrenjaki (*Marchantiophyta*). *Hladnikia*, 27, 79–88.
- Martinčič, A. (2012). Nova nahajališča: Mahovi – listnatni mahovi (*Bryopsida*), jetrenjaki (*Marchantiopsida*). *Hladnikia*, 29, 69–71.
- Martinčič, A. (2014). Mahovna flora fitogeografskega podobmočja Karavanke (Slovenija). *Hacquetia*, 13(2), 307–353.
- Martinčič, A. (2015). Nova nahajališča vrst 36. Mahovi (*Bryophyta* s. lat.). *Hladnikia*, 36, 70–74.
- Martinčič, A. (2015). Nova nahajališča vrst 35. Mahovi (*Bryophyta* s. lat.). *Hladnikia*, 35, 96–98.
- Martinčič, A. (2016). Nova nahajališča vrst – New localities 38. Mahovi (*Bryophyta* s. lat.). *Hladnikia*, 38, 75–77.
- Martinčič, A. (2016). Nova nahajališča vrst – New localities 37. Mahovi (*Bryophyta* s. lat.). *Hladnikia*, 37, 108–111.
- Martinčič, A. (2017). Nova nahajališča vrst – New localities 40. Mahovi (*Bryophyta* s. lat.). *Hladnikia*, 40, 96–102.
- Martinčič, A. (2017a). Nova nahajališča vrst – New localities 39. Mahovi (*Bryophyta* s. lat.). *Hladnikia*, 39, 73–76.
- Martinčič, A. (2018). Nova nahajališča vrst – New localities 42. Mahovi (*Bryophyta* s. lat.). *Hladnikia*, 42, 85–90.
- Martinčič, A. (2018). Novosti v flori mahov Slovenije 4. *Hladnikia*, 42, 43–61.
- Martinčič, A. (2018). Nova nahajališča vrst – New localities 41. Mahovi (*Bryophyta* s. lat.). *Hladnikia*, 41, 99–101.
- Martinčič, A. (ed.) & Anić, G., Bačić, M., Berg, C., Lobnik Cimerman, Ž., Dakskobler, I., Debenjak, J., Dolničar, D., Glad Zidar, L., Grom, S., Kocjan, J.M., Kopitar, D., Kravanja, M., Nagode, A., Piskernik, M., Podobnik, A., Štupar, L.R., Saboljlević, M., Seliškar, A., Štampar, L., Strgule Krajšek, S., & Wraber, T. (2021). Nova nahajališča vrst – New localities 48. Mahovi (*Bryophyta* s. lat.). *Hladnikia*, 48, 53–62
- Martinčič, A. et al. (2020). Nova nahajališča vrst – New localities 46. Mahovi (*Bryophyta* s. lat.). *Hladnikia*, 46, 89–93.
- Martinčič, A., & Piskernik, M. (1978). Vegetacija in ekologija rušja (*Pinus mugo* Turra) v Sloveniji. *Poročila Vzhodnoalp.-dinar. društva za preučev. veget.*, 14, 237–245.
- Martinčič, A., & Piskernik, M. (1985). Die Hochmoore Sloweniens. *Bioški vestnik*, vol. extraord., 1, 1–239.
- Martinčič, A., Vrhovšek, D., & Batič, F. (1981). Flora v jamah z umetno osvetlitvijo. *Bioški vestnik*, 29(2), 27–56.
- Martinčič, A., Wraber, T., & Dakskobler, I. (2019). Snow-bed communities with dominant *Salix herbaceae* in the Julian Alps. *Hacquetia*, 18(1), 47–73.
- Matouschek, F. (1900a). Bryologisch-floristische Mitteilungen aus Oesterreich-Ungarn, der Schweiz und Baiern I. *Verb. d. zool.-bot. Gesellschaft*, 50, 219–254.
- Matouschek, F. (1902–1903). Das bryologische Nachlassherbar des Friedrich Stoltz. Ein Beitrag zur bryologischen Floristik von Tirol und dem angrenzenden Italien, von Bayern, Krain und dem Küstenlande. *Ber. naturw.-med. Ver. in Innsbruck*, 38, 1–184.
- Morton, F. (1937). Monografia fitogeografica delle voragini e doline nella regione carsica di Postumia. Parte I. *Le Grotte d'Italia ser. 2.a*, 2, 1937 – XVI: 57–93.
- Morton, F. (1939). Monografia fitogeografica delle voragini e doline nella regione carsica di Postumia. Parte II. *Le Grotte d'Italia ser. 2.a*, 3, 1939 – XVII: 65–81.
- Morton, F. (1939–40). Piante verdi presso le lampade dell'illuminazione elettrica nelle grotte di Postumia. *Le Grotte d'Italia Ser. 2^a*, 4, 23–27.
- Müller, K. (1906–1916). *Die Lebermoose Deutschlands, Oesterreichs und der Schweiz*. In Rabenhorsts Kryptogamenflora Bd. 6.
- Paulin, A. (1905). *Bryophyta*. In: E. Kramer: Das Laibacher Moor. Laibach, pp. 109–110.
- Paulin, A. (1911). Jul. Glowacki, Die Moosflora der Julischen Alpen. *Izvestja muz. društva za Kranjsko „Carniola“ nov. ser.*, 2, 223–227.
- Paulin, A. (1915). Über einige für Krain neue oder seltene Pflanzen und die Formationen ihrer Standorte I. *Izvestja muzejskega društva za Kranjsko „Carniola“ nov. ser.*, 6, 117–125.
- Pavletić, Z. (1955). *Prodromus flore briofita Jugoslavije*. JAZU, knjiga III, pp. 578.
- Pavletić, Z., & Grom, S. (1958). Quelques Bryophytes nouveaux en Yougoslavie et en Slovénie. *Revue bryologique et lichenologique*, 27(3–4), 186–187.
- Pevalek, I. (1924). Geobotanička i algološka istraživanja cretova u Hrvatskoj i Sloveniji. *Rad JAZU*, 230, 29–117.
- Pichler, A. (1939). Die Lebermoosflora auf morschen Baumstämmen, vermodert. Holz und auf faulend. Baumstümpfen der Wälder Jugoslaviens. *Gl. Skop. nauč. Društvo*, 20, 141–153.
- Piskernik, M. (1971). Regionalna vegetacijska razčlenitev bazifilnih bukovih gozdov v Sloveniji. *Zbornik Biotehniška fak.*, Inštitut za gozdno in lesno gospodarstvo, 10, 65–115.
- Piskernik, M. (1973). Vegetacijske razmere v smrekovih mraziščih Slovenije. *Zbornik gozdarstva in lesarstva*, 11(1), 37–48. (Martinčič, A.: co-author of phytosociological tables).
- Piskernik, M. (1977). Gozdna vegetacija Slovenije v okviru Evropskih gozdov. *Zbornik gozdarstva in lesarstva*, 15, 1–236.
- Piskernik, M. (1982). Bioekološka in sestojna predstavitev mikroreliefnih gozdnih združb slovenskega ozemlja. *Inštitut za gozdno in lesno gospodarstvo, VTOZD za gozdarstvo, strokovna in znan. dela*, 75, 1–149.
- Piskernik, M., & Martinčič, A. (1970). Vegetacija in ekologija gorskih barij v Sloveniji. *Biotehniška fakulteta v Ljubljani, Inštitut za gozdno in lesno gospodarstvo. Zbornik*, 8, 131–203.
- Pittoni, J.C. Ritter von (1877). Flora der Sannthaler Alpen. In Frischaufr. J.: Die Sannthaler Alpen. Wien.
- Pocs, T. (1960). Einige Daten zur Moosflora Jugoslaviens. *Annal. hist.-nat. mus. nat. Hungaric.*, 52, 163–168.
- Pokorný, A. (1858). Nachrichten über den Laibacher Morast und seine Vegetationsverhältnisse. *Verhandlungen der Zoologisch-Botanischen Gesellschaft in Wien*, 8, 351–362.

- Puncer, I., Wojterski, T., & Zupančič, M. (1974). Der Urwald Kočevski Rog in Slowenien (Jugoslawien) – Pragozd Rajhenavski Rog na Kočevskem (Jugoslavija). *Fragmenta flor. et geobot.*, 20(1), 41–87.
- Reichardt, H. W. (1860). Die Flora des Bades Neuhaus nächst Cilli. *Verhandlungen der Zoologisch-Botanischen Gesellschaft in Wien*, 10, 713–742.
- Reichardt, H. W. (1861). Beitrag zur Moosflora der Sulzbacher Alpen in Süd Steiermark. *Oesterreichische botanische Zeitschrift*, 11, 7–8.
- Reichardt, H. W. (1864). Beitrag zur Moosflora Steiermarks. *Verh. Zool.-Bot. Ges. Wien*, 14, 137–146.
- Robič, S. (1877). Spomini na planine. *Novice, gospodarske, obrtniške in narodne*, 6, 43.
- Sauli, G. (1970). *Il componente bryologico delle associazioni vegetali del carso triestino*. Tesi Speriment. in Bot., Univ. d. stud. d. Trieste, fac. d. Scienze.
- Sendtner, O. (1842). Besteigung des Moresch in Julischen Alpen. *Flora*, 25, 442–448; 448–463; 474–479.
- Sguazzin, F. (2005). Contributo alla conoscenza della speleoflora della jama Dimnica (Grotta del fumo) (Slovenia). Briofite raccolte nel pozzo di accesso (Velike Dimnice) alla grotta. *Atti e Memori. della Comisione Grotte »E. Boegan«*, 40(2004), 107–116.
- Sguazzin, F., & Polli, E. (2000). Contributo per un approfondimento delle conoscenze sulla flora briologica e vascolare delle Zelške jame (576 S) – Grotta del Principe Ugo di Windischgraetz (119 VG), nel Rakov Škocjan (Rio dei Gamberi, Slovenia). *Atti e Memorie della Commissione Grotte »E. Boegan«*, 37, 125–141.
- Skudnik, M., Sabovljević, A., Batič, F., & Sabovljević, M. (2013). The bryophyte diversity of Ljubljana (Slovenia). *Polish Botanical Journal*, 58(1), 319–324.
- Skudnik, M., Sabovljević, A., Batič, F., & Sabovljević, M. (2013). Notes on some rare and interesting bryophytes of Slovenia. *Botanica serbica*, 37(2), 141–146.
- Strgulec Krajšek, S., & Martinčič, A. (2017). Potrditev uspevanja jetrenjaka *Mannia triandra* (Athyriaceae) v Sloveniji. *Hladnikia*, 40, 18–25.
- Strgulec Krajšek, S., & Kopitar, D. (2022). *Fossombronia wondraczekii* (Corda) Lindb. New records and noteworthy data of plants, algae and fungi in SE Europe and adjacent regions, 8. *Botanica serbica*, 46(1), 127–128.
- Strgulec Krajšek, S., Lobnik Cimerman, Ž., & Šabeder, N. (2021). *Anthoceros agrestis* Paton. *Hladnikia*, 47, 30–34.
- Suanjak, M. (2002). Dupla Graecensis Bryophytorum (2002). Moose aus dem Nachlass von Julius Glowacki. *Fritschiana*, 35, 17–49.
- Surina, B., & Dakskobler, I. (2013). Phytosociology and ecology of the dinaric fir beech forests (*Omphalodo-Fagetum*) at the north-western part of the illyrian floral province (NW Dinaric Alps). *Hacquetia*, 12(1), 11–85.
- Surina, B., & Martinčič, A. (2012). Chasmophytes on scree? A rule and not an exception in the vegetation of the Karst (southwest Slovenia). *Plant Biosystems*, 146, 1078–1091.
- Surina, B., & Rakaj, M. (2007). Subalpine beech forest with hairy alpenrose (*Polysticho lonchitis-Fagetum rhododendretosum hirsuti* subass. *nova*) on Mt. Snežnik (Liburnian karst, Dinaric Mts.). *Hacquetia*, 6(2), 195–208.
- Surina, B., & Vreš, B. (2009). The association *Drepanocladus uncinatus-Heliospermetum pusilli* (*Arabidetalia caeruleae*, *Thlaspietea rotundifolii*) in the Trnovski gozd plateau (Slovenia, NW Dinaric Mts). *Hacquetia*, 8(1), 31–40.
- Surina, B. (2002). Phytogeographical differentiation in the Dinaric fir-beech forest (*Omphalodo-Fagetum* s. lat.) of the western part of the Illyrian floral province. *Acta Botanica Croatica*, 61(2), 145–178.
- Surina, B. (2005). Asociacija *Doronico austriaci-Adenostyletum alliariae* Horvat ex Horvat et al. 1974 na Snežniku (Liburnijski kras, SZ Dinaridi). *Razprave IV. razreda SAZU*, 46(2), 145–160.
- Surina, B. (2005). Subalpinska in alpinska vegetacija Krnskega pogorja v Julijskih Alpah. *Scopolia*, 57, 1–222.
- Šilc, U., Čarni, A., Košir, P., Marinšek, A., & Zelnik, I. (2008). Litter-raking forests in SE Slovenia and in Croatia. *Hacquetia*, 7(1), 71–88.
- Tomažič, G. (1946). Flora in vegetacija kraških jam. *Zbornik prirodnih društva*, 4: 74–78.
- Tomažič, G. (1955). Posebnosti flore in vegetacije podzemlja in Krasa. *Prvi jugosl. speleol. kongr. Ljubljana*, 93–106.
- Vaarama, A. (1970). Localities of collecting during the excursion in the summer 1970. Manuscript.
- Vreš, B., & T. Čelik, (2021). Novosti o pojavljanju vrste *Carex lasiocarpa* v Sloveniji. *Folia biologica et geologica*, 62(2), 255–257.
- Vreš, B., Seliškar, A., & Dakskobler, I. (2012). The phytosociological position of *Senecio fontanicola* Grulich & Hodálová, a rare and endangered species endemic to the Eastern Alps, in the successional sere on the montane wetland Zelenci (NW Slovenia). *Wulfenia*, 19, 1–14.
- Wraber, M. (1963). Gozdna združba smrek na gozdne beklice v slovenskih vzhodnih Alpah. *Razprave SAZU, razr. za prirod. in med. vede*, 7, 79–175.
- Wraber, M. (1969). Subalpinski smrekov gozd na Kočevskem in njegova horološko-ekološka problematika. *Varstvo narave*, 6, 91–104.
- Wraber, T. (1963). *Linnæa borealis* L. planta rediviva slovenske flore. *Bioški vestnik*, 11, 43–48.
- Zelnik, I., Martinčič, A., & Vreš, B. (2010). Vegetation of the depressions with *Eleocharis quinquefolia* in spring fens in Slovenia. *Acta Biologica Slovenica*, 53(2), 23–31.
- Zupančič, M. (1982). *Sphagno-Piceetum* R. Kuoch 1954 v Sloveniji (predhodno obvestilo). *Bioški vestnik*, 30(2), 137–150.
- Zupančič, M. (1996). European Maple Association in Slovenia (*Corydalido cavae-Aceretum pseudoplatani* Moor 1938). *Razprave IV. razreda SAZU*, 37(8), 189–205.
- Zupančič, M., Žagar, V., Culiberg, M., & Šercelj, A. (2007). Taxonomic problems of *Pinus mugo* scrub on peat bog. *Razprave IV. razreda SAZU*, 48(2), 269–306.