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Original Scientific Paper

New records and noteworthy data of plants, algae and fungi in SE Europe and adjacent regions, 7

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ABSTRACT:
This paper presents new records and noteworthy data on the following taxa in SE Europe and adjacent regions: stonewort *Chara intermedia*, liverworts *Fossombronia wondraczekii* and *Pseudomoerckia blyttii,* mosses *Hamatocaulis vernicosus* and *Hookeria lucens,* monocots *Gladiolus palustris, Neotinea tridentata*, and *Orchis militaris* and dicots *Cardamine serbica, Cardamine waldsteinii, Hieracium kotschyanum* and *Pilosella petraea* are given within SE Europe and adjacent regions.

Keywords:
new report, *Cardamine serbica, Cardamine waldsteinii, Chara intermedia, Gladiolus palustris, Fossombronia wondraczekii, Hamatocaulis vernicosus, Hieracium kotschyanum, Hookeria lucens, Neotinea tridentata, Orchis militaris, Pilosella petraea, Pseudomoerckia blyttii,* SE Europe

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***Cardamine serbica* Pančić, fam. Brassicaceae (dicot, vascular plant)**
Contributors: Predrag Lazarević and Maja Lazarević
Geographical focus: Bosnia and Herzegovina
New records and noteworthy data: This is the first record for the gorge on the river Drina, part of Lake Perućac in the NE part of Bosnia and Herzegovina, and the second record for the Republic of Srpska.
Specimen data: 1) Bosnia and Herzegovina (Republic of Srpska), Perućac Lake, below Ljutica, N 44.00083333°, E 19.26952222°, 355 m a.s.l., limestone scree; 7 September 2021; leg./det. Lazarević P, Lazarević M.; **2)** Bosnia and

Herzegovina (Republic of Srpska entity), Perućac Lake, Pasjača near the Klotijevac Fortress, N 43.99734722°, E 19.30903611°, 345 m a.s.l., limestone scree; 7 September 2021; leg./det. Lazarević P, Lazarević M.
Vouchers: Herbarium of the Institute of Botany and Botanical Garden Jevremovac, University of Belgrade (BEOU), vascular plant collection 17819, 17820.

Cardamine serbica was described by Pančić (1884) from plants collected on Mt. Tara, between the village of Perućac and the gorge on the river Derventa. Its current status at the species level is confirmed by Kučera *et al.* (2008, 2010), and adopted by The Plant List (2021), POWO (2021), and WFO (2021). The morphological and genetic analyses provided by Kučera *et al.* (2008, 2010) determined that the taxa *C. serbica* from Mt. Tara and *C. maglicensis* Rohlena (syn. *C. maritima* subsp. *maglicensis* (Rohlena) Trinajstić, *C. maritima* var. *maglicensis* Rohlena) from Montenegro represent the same taxon *Cardamine serbica*, characterized by low genetic diversity.

Cardamine serbica is an endemic species from the western part of the Balkan Peninsula fragmentally distributed in the southeast parts of the Dinaric Arc (Southeast-East-East Illyrian floristic element according to Stevanović *et al.* 2014). It is recorded in Serbia (Mt. Tara, near Perućac Lake), Bosnia & Herzegovina (the gorge on the river Sutjeska, Vratar) and Montenegro (Mt. Maglić – the gorge on the river Piva, and Mt. Durmitor) (Pančić 1884; Rohlena 1906; Jovanović-Dunjić 1972; Kučera *et al.* 2008, 2010; Stevanović *et al.* 2014; Stupar *et al.* 2021).

Data on the distribution of the species in Bosnia & Herzegovina to date refer to the southern part of the country (Stupar *et al.* 2021). New records of *C. serbica* on the western side of Lake Perućac significantly expand its distribution area for Bosnia & Herzegovina. Here, the species inhabits open and partly shady, south-facing limestone screes, mostly very steep and active. Extensive field research of this area confirmed the presence of two nearby subpopulations, with fewer than 100 observed mature individuals. The habitats are hard to reach and explore, with the exception of the parts of the screes around the edges of the lake. The closest previously known population of this species is located on the neighbouring Serbian part of Mt. Tara – in the localities near Perućac (Pančić 1884; Jovanović-Dunjić 1972; Kučera *et al.* 2008) and the gorge on the river Derventa (BEOU, No. 39726). Since this population is very small and occupies a restricted area, new findings of *C. serbica* on the nearby Bosnian side of Lake Perućac make a significant contribution to the conservation efforts aimed at exploring, preserving and improving the current conservation status of the population of *C. serbica* in the Mt. Tara region.

***Cardamine waldsteinii* Dyer, fam. Brassicaceae (dicot, vascular plant)**
Contributors: Snežana Vukojičić and Nevena Kuzmanović
Geographical focus: Serbia
New records and noteworthy data: New sites are given for the rare and endangered species in Serbia – *C. waldsteinii*. These are new field and unpublished herbarium data for northwestern and western Serbia, for this strictly protected species in Serbia.
Specimen data: 1) Western Serbia, Mt. Jelova Gora, Tmuša river valley, N 43.964031°, E 19.778102°, MGRS 34T DP06, wet meadows by the river, 650m a.s.l.; 3 May 2021; leg./det. Vukojičić S; **2)** Western Serbia, Mt. Tara, Mitrovac, Tepih Livada, MGRS 34T CP76, peatbog, 1100 m a.s.l.; 19 May 1992; leg./det. Jovanović S, Lakušić D; conf. Vukojičić S., 27 October 2021; **3)** Western Serbia, Mt. Tara, Crveni Potok, N 43.91648°, E 19.42047°, mixed swamp forest of alder and Serbian spruce, 1094 m a.s.l.; 2 June 2012; leg./det. Kuzmanović N, Đurović S, Janković I.; conf. Vukojičić S., 27 October 2021; **4)** Western Serbia, Mt. Zvezda, Veliki Stolac, MGRS 34T CP75, heats, 13 June 2002; leg. Stevanović V, Ostojić D.; det. Vukojičić S.; **5)** Western Serbia, Mt. Tara, Ivica peak, MGRS 34T CP75, forest, May 1874; leg./det. Pavlović; conf. Vukojičić S., 27 October 2021; **6)** Northwestern Serbia, Mt. Boranja, downstream towards the lake, MGRS 34T CQ61, 17 April 2011; leg. Popovac Lj.; det. Vukojičić S.; **7)** Northwestern Serbia, Mt. Boranja, Debelo Osoje, MGRS 34T CQ61, 16 April 2011; leg./det. Jovanović V.; conf. Vukojičić S., 27 October 2021; **8)** Northwestern Serbia, Mt. Boranja, Urlovačka Kosa, N 44.3935°, E 19.281944°, MGRS 34T CQ61, stream with mosses, 686 m a.s.l., 18 April 2011; leg./det. Đurović S.; conf. Vukojičić S., 27 October 2021; **9)** Northwestern Serbia, Mt. Boranja, Poljanska Kosa, N 44.390694°, E 19.27575°, MGRS 34T CQ61, 670 m a.s.l., 18 April 2011; leg./det. Janković I; conf. Vukojičić S., 27 October 2021.
Vouchers: Herbarium of the Institute of Botany and Botanical Garden Jevremovac, University of Belgrade (BEOU), vascular plant collection 61/92, 16237, 16270, 35660, 65134, 65513, 65530, 65533, 68301, 80029.

Cardamine waldsteinii is a strictly protected species in Serbia (Official Gazzette RS 2010-2011). So far, there is little data on its distribution in Serbia under the name *C. savensis* O. E. Schulz. The prior localities refer to the areas in northwestern Serbia – Mt. Gučevo (Mitrović, *pers. comm.*), Mt. Valjevske Planine – Povlen, Jablanik, and Medvednik (Pančić 1874; Jovanović-Dunjić 1972; Nikolić *et al.* 1986), and in western Serbia – Mt. Tara and Mt. Golija (Gajić 1988, 1989). With the exception of Mt. Gučevo, where this species is registered in Zajača and Miljkovača (Mitrović, *pers. comm.*), there is no further precise data on sightings of this plant in other

mountains. We have provided new precise locations based on unpublished herbarium and our own field data.

***Chara intermedia* A. Braun in A. Braun, Rabenh. & Stizenb. 1859, fam. Characeae (charophyte, algae)**
Contributors: Ivana Trbojević and Jovana Pantović
Geographical focus: Serbia
New record and noteworthy data: This is the fifth (third recent) record for Serbia; a rare and threatened species.
Specimen data: Bačka region, Subotičko-Horgoška Sands, Hajdukovo, Đavolov Kanal, N 46.160513°, E 19.741079°; 120 m a.s.l.; 7 September 2020; leg. Sabovljević M, Pantović J.; det. Trbojević I, Petrović Đurić M.
Voucher: Herbarium of the Institute of Botany and Botanical Garden Jevremovac, University of Belgrade (BEOU), Charophyte collection 2732.

Currently, *Chara intermedia* is declared as nom. illeg. and a synonym of *C. papillosa* Kützing (Schubert *et al.* 2016). Still, when described in Serbia, *C. intermedia* A. Braun has been considered to be a synonym of *C. aculeolota* Kütz. (Blaženčić 2014; Vesić *et al.* 2016), which is not transferrable to *C. papillosa* (Schubert *et al.* 2016). Although the specimen reported here clearly does refer to *C. papillosa*, before a revision of all the other specimens from Serbia noted as *C. intermedia,* and to which we refer below, the authors decided to use the name *C. intermedia* so that any eventual confusion could be avoided.

According to the literature data, *C. intermedia* was rediscovered in Serbia in 2013 when it was detected in two new localities – the Selevenj and Majdan sandpits near Subotica, in north Vojvodina (Vesić *et al.* 2016). Previously this species was recorded in remote localities in northeastern (near Negotin) and central Serbia (near Raška), and these records were made more than 100 years ago (Košanin 1907).

Chara intermedia is considered a eurivalent species which can be found in various types of habitats – from large to small water bodies. It tolerates a wide range of trophy and colonizes freshwater habitats, but also tolerates oligohaline conditions. Nevertheless, this species is primarily characteristic of oligo to mesotrophic conditions and prefers alkaline water and sandy to muddy substrates (Schubert *et al.* 2016; Vesić *et al.* 2016). When rediscovered in Serbia, it was detected in two sandpits – permanent and relatively deep water bodies, where it was growing on sandy substrate. (Vesić *et al.* 2016). The locality of Đavolov Kanal is situated near these two sandpits, and can be described as an artificial short channel surrounded by mixed forest and agricultural land, and is mostly shaded. When the specimens were collected the locality was almost completely dried out. All of the collected specimens were sterile.

Chara intermedia is currently considered as Critically Endangered in Serbia, while in the Balkans it is considered Endangered. In Serbia, *C. intermedia* is described as a limnophyte which inhabits ponds and develops on muddy substrates, and habitat drying is highlighted as the main threat factor (Blaženčić *et al.* 2006; Blaženčić 2014).

***Fossombronia wondraczekii* (Corda) Lindb., fam. Fossombroniaceae (liverwort, bryophyte)**
Contributors: Simona Strgulc Krajšek and Darja Kopitar
Geographical focus: Slovenia
New record and noteworthy data: the first record for Slovenia after the year 1905.
Specimen data: Central Slovenia, Ljubljana, Mestni Log, the northern edge of Ljubljansko Barje, Log, the edge of a corn field, moist clay soil, N 46.0287° E 14.44972°, 300 m a.s.l.; 22 September 2021; leg. Strgulc Krajšek S, Kopitar D., det. Strgulc Krajšek S.
Voucher: Herbarium of the University of Ljubljana (LJU), s/n.

Fossombronia wondraczekii is a monoicous liverwort, usually growing on exposed humid soil, such as fields, tracks or ditch-sides, where competition is low (Damsholt 2002). It is one of the smallest European frillwort species. It has purple rhizoids, with 2–2.5 mm wide shoots and small (40–45 × 56-75 μm) thin-walled leaf cells with many minute oil bodies. The antheridia are yellowish and scattered on the dorsal side of the stem. The capsules are spherical, containing (37) 40–54 μm large spores ornamented with 10–13 lamellae (Damsholt 2002; Shumacker & Váňa 2005).

It is a widespread species in Europe, and its conservation status on the European level is that of Least Concern (LC) (Hodgetts *et al.* 2019a). It is included in the Updated Red List of Bryophytes of Slovenia with Data Deficient-vanished (DD-va) conservation status (Martinčič 2016). The only three records for Slovenia to date are more than 100 years old: Šenturška Gora near Kamnik (Robič 1893), Panovec near Nova Gorica (Loitlesberger 1905) and Kokra Valley (specimen in Herbarium LJU, Šafer 1886). *Fossombronia wondraczekii* grows in all the neighbouring countries of Slovenia. It is included in the national Red Lists of Italy as CR, Austria as VU and Hungary as DD (Hodgetts & Lockhart 2020). It does not have any conservation status in Croatia (Hodgetts & Lockhart 2020) despite only two localities in the Flora Croatica Database (Alegro & Šegota 2018).

In April 2021, we found one sterile specimen in an extensive cornfield with moist clay soil on the edge of Ljubljansko Barje. The purple rhizoids, small leaf cells and habitat indicated that it could be *F. wondraczekii.* Since the most reliable morphological characteristics for species identification are on the spores, we returned to

the site in September 2021 and found many specimens with developed antheridia. We collected a few samples and grew them in a large glass petri dish on moist vermiculite until the sporangia developed. The size and ornamentation of the spores confirmed the identification as *F. wondraczekii*.

We expect this species to be found elsewhere in the following years, as the bryophyte flora of ruderal and cultivated habitats in Slovenia is not well researched.

***Gladiolus palustris* Gaud., fam. Iridaceae (monocot, vascular plants)**
Contributors: Uroš Buzurović and Sanja Z. Djurović
Geographical focus: Serbia
New records and noteworthy data: New records in central Serbia are given for *G. palustris,* endemic to Europe and considered to be threatened in many countries.
Specimen data: 1) Central Serbia, Mt. Radan, N 42.977719°, E 21.484113°, MGRS 34T EN35, 959 a.s.l., grassland; 19 June 2021; leg. Buzurović U, Djurović S, Veljić M.; det. Buzurović U, Djurović S.; **2)** Central Serbia, Mt. Radan, N 43.037013°, E 21.504126°, MGRS 34T EN46, 852 a.s.l., grassland, 19 June 2021, leg. Buzurović, U, Djurović, S, Veljić, M.; det. Buzurović U, Djurović S.; **3)** Central Serbia, Mt. Radan, N 43.038724°, E 21.499053°, MGRS 34T EN46, 896 a.s.l., grassland, 19 June 2021, leg. Buzurović, U, Djurović, S, Veljić, M.; det. Buzurović U, Djurović S.
Voucher: Herbarium of the University of Belgrade (BEOU), collection of the Department of Plant Ecology and Geography 69800, 69801; the Natural History Museum in Belgrade, the General Herbarium of the Balkan Peninsula (BEO) 98746, 98747; photo documentation of U. Buzurović, S. Djurović.

The sword lily (*Gladiolus palustris*) has a discontinuous range in Europe from France to Lithuania in the north and from Italy and Albania to Ukraine in the south with the number of sites on the decline (Bilz 2011). In Serbia reported sites are mainly located south of the river Zapadna Morava and three sites have been reported in northeastern Serbia (Prodanović *et al*. 2018). *Gladiolus palustris* grows in periodically wet habitats like *Molinia* meadows but also in oak woods. The main threat leading to extinction is excessive habitat destruction, in particular water regime destabilization and pasture fertilization. Suitable management in protected areas should be carried out by mowing at the end of July and August after the seeds are shed (Canella *et al*. 2020). This species is protected by The Habitats Directive, Bern Convention and also in Serbia by the Law on Nature Protection and the Law on Trade in Endangered and Protected Species of Wild Flora and Fauna.

In June 2021 three new sites on Mt. Radan were discovered with 50 to 100 individuals per site. The sword lily had not been previously reported in the Radan Nature Park, and the newly discovered sites are the first records in EN35 and EN46 10×10 km^2 UTM grid cells.

***Hamatocaulis vernicosus* (Mitt.) Hedenäs., fam. Amblystegiaceae (moss, bryophyte)**
Contributors: Lado Kutnar and Janez Kermavnar
Geographical focus: Slovenia
New record and noteworthy data: This is a rare and threatened species in Slovenia (Uradni list 2004-2014), one of the Natura 2000 species, a species listed in the EU Habitat Directive (Annex II), a species which is vulnerable and decreasing at the pan-European level.
Specimen data: 1) the Julian Alps, Pokljuka plateau, west of Šijec peatbog, a small fen called Golemberca, N 46.334887°, E 13.989262°, 1196 m a.s.l.; 7 July 2021; leg. Kermavnar J, Kutnar L, Sabovljević M.; det. Sabovljević M.
Voucher: Herbarium of the Institute of Botany and Botanical Garden Jevremovac, University of Belgrade (BEOU), bryophyte collection, s/n.

Hamatoculis vernicosus (syn. *Drepanocladus vernicosus*) is a circumpolar boreo-montane species. It seems to be frequent in northern Europe, becoming rarer to the south, where it occurs in boreal zones of the mountain wetlands. It is considered vulnerable at the pan-European level with unequal frequency of occurrence and threats in different parts of Europe (Hodgetts *et al.* 2019a). Hodgetts *et al.* (2019b) noted a considerable decline in central, western and southern Europe, but also in southern Scandinavia, and proposed the strict protection of all these subpopulations. The main threats include drainage, eutrophication, and the growth of coarse vegetation, and also rising temperatures and decreased precipitation in southern areas of Europe due to climate change. Thus, not only has a decline in species been noted, but also that of habitat types and their quality.

In Slovenia there are a dozen records of this species, mostly very old ones, and the most recent one was reported almost 20 years ago. Many of these sites were visited in 2021, but no adequate habitat conditions for this species were found. The latest report comes from the region where it was previously recorded twice in the early 1990s (LJU Herbarium records, 1991, 1992 by Andrej Martinčič). Within the study of the mire communities in the Pokljuka region (Kutnar & Martinčič 2003), this species was also found in a small fen called Malo Bohinjsko Barje (Kutnar & Martinčič 2001), less than a kilometre from the new record in 2021.

***Hieracium kotschyanum* Heuff., fam. Asteraceae (dicot, vascular plants)**
Contributor: Zbigniew Szeląg
Geographical focus: Romania
New record and noteworthy data: First record from the Țarcu Mts.

Specimen data: the Southern Carpathians, Țarcu Mts., Cuntu glade, 150-200 NE of the meteorological station, N 45.300°, E 22.496°, *Picea abies* forest margin, a south-facing slope with *Bruckenthalia spiculifolia* alongside the tourist road, 1440 m a.s.l.; 15 July 2019; leg./det. Szeląg Z.
Voucher: Private author's collection (Herb. Hierac. Z. Szeląg).

Hieracium kotschyanum belongs to *H.* sect. *Cernua* R. Uechtr. (Szeląg 2003). This Romanian endemic is known from a few localities: 1) the Maramureș Mts. in the Eastern Carpathians; 2) the Muntele Mare Mts. in the Apușeni Mts.; 3) the Retezat Mts. in the Southern Carpathians (Nyárády 1965; Szeląg 2006). The newly discovered locality in the Țarcu Mts. is the westernmost in the entire species area, disjoined from its continuous geographical range in the Retezat Mts. by ca. 15 km.

***Hookeria lucens* (Hedw.) Sm., fam. Hookeriaceae; (bryophyte: pleurocarpous moss)**
Contributors: Jovana Pantović and Marko Sabovljević
Geographical focus: Serbia
New record and noteworthy data: the second record for Serbia, and the first record for Zlatibor County.
Specimen data: Western Serbia, Užice, Mt. Jelova Gora, N 43.936352°, E 19.781551°, in the soil alongside a stream in a beach forest, 972 m a.s.l.; 12 June 2021; leg./det. Pantović J, Sabovljević, M.
Voucher: Herbarium of the Institute of Botany and Botanical Garden Jevremovac, University of Belgrade (BEOU), Bryophyte collection Bryo/08713.

Hookeria lucens is a suboceanic temperate species, characteristic of non-calcareous steep earthy banks alongside forests streams and rivers (Blockeel *et al.* 2014). This species was firstly reported in Serbia from Mt. Golija (Papp & Erzberger 2005), around the source area in the Vodica reserve, in a *Piceo-Abieti-Fagetum* forest. Up to now, this was the only known record for the country. The finding of this taxon on Mt. Jelova Gora represents the second record for the country, and the first record for Zlatibor County (Pantović *et al.* 2021). Although the species is widespread throughout Europe, in south-eastern Europe it becomes less frequent (Sabovljević *et al.* 2008). In this area, it is known from Bosnia and Herzegovina, Croatia, Hungary, Montenegro, Romania and Slovenia (Hodgetts & Lockhart 2020). However, in some countries it was reported rather recently, such as in Hungary (Ellis *et al.* 2011) or Montenegro (Alegro *et al.* 2019). Although it is red-listed in several Central-European countries: the Czech Republic, Germany, Luxembourg, the Netherlands, Poland and Slovakia (Hodgetts & Lockhart 2020), in the neighbouring area it is recognized as vulnerable only in Romania (Ștefănuț & Goia 2012).

***Neotinea tridentata* (Scop.) R.M. Bateman, Pridgeon & M.W. Chase, fam. Orchidaceae (monocot, vascular plant)**
Contributors: Petya Boycheva and Dobri Ivanov
Geographical focus: Bulgaria
New record and noteworthy data: For the first time we report a habitat in the European NATURA 2000 network of the Batova river valley (BG0000102)
Specimen data: Northeastern Bulgaria, Dobrich region, the land around Sokolnik village, N 43.416325°, E 27.902556°; 22 May 2021; leg./det. Boycheva P, Ivanov D.
Voucher: Herbarium of Sofia University St. Kliment Ohridski (SO), 108153.

Near the deciduous forest, the population numbers four individuals per 1 m^2. Although the species is not new to the floristic region of northeastern Bulgaria (Assyov *et al.* 2012), it represents a new locality in the Batova river valley protected nature reserve. Data on the distribution of representatives from the family Orchidaceae in the Natura Batova valley area so far only include *Orchis purpurea* Huds. (MOEW 2022) and *Himantoglossum calcaratum* subsp. *rumelicum* (H. Baumann & R. Lorenz) Niketić & Djordjević (Tomović *et al.* 2021).

The species is protected, included in Annex IV of the Biodiversity Act and on the lists of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

***Orchis militaris* L., fam. Orchidaceae (monocot, vascular plant)**
Contributors: Milorad Veljković and Vladan Djordjević
Geographical focus: Serbia
New records and noteworthy data: This is the first record for Mt. Žar Planina, representing the southernmost limit of the species' distribution in Serbia and the Kosovo region.
Specimen data: Kosovo, Mt. Žar Planina, Sip, N 42.257658°, E 20.982969°, MGRS 34T DM97, *Festucetum valesiaceae* s.l., limestone, exp. S., incl. 30°, 1498 m a.s.l., 30 May 2021, leg./det. Veljković M.
Vouchers: photo documentation of Veljković M.

Orchis militaris is a Euro-Siberian species, distributed from southeastern Sweden and Russia through central European countries to northern Spain, central Italy, Bulgaria, Greece, and European Turkey, and eastward to the Altai Mountains and Lake Baikal (Farrell 1985). The new finding of this species on Mt. Žar Planina represents the first record of this species within MGRS 34T DM3 50×50 km^2 and also in DM 100×100 km^2 UTM grid cells. It was previously recorded in 23 10×10 km^2 UTM grid cells throughout Serbia (Djordjević *et al.* 2017).

The newly discovered population on Mt. Žar Planina numbered 10 individuals within an area of 2500 m^2. The

species is Regionally Extinct (RE) in Denmark, Critically Endangered (CR) in Belarus, Endangered (EN) in Ukraine, Finland, the Netherlands, Bulgaria and the Czech Republic, while it has the status of a Vulnerable species (VU) in Liechtenstein, Georgia, Lithuania, the United Kingdom, Slovakia, Slovenia, Croatia, Luxembourg and Austria (Kull *et al.* 2016). According to Djordjević *et al.* (2017), the estimated IUCN conservation status of this strictly protected species in Serbia is Near Threatened (NT) (Djordjević *et al.* 2017).

***Pilosella petraea* F. W. Schultz & Schultz-Bip., fam. Asteraceae (dicot, vascular plants)**
Contributor: Zbigniew Szeląg
Geographical focus: Romania
New record and noteworthy data: New record in the Mehedinţi Mts.
Specimen data: Banat region, Mehedinţi Mts., Ţăsna gorge, N 44.971°, E, 22.497°, south-facing calcareous rocks along a tourist path with *Syringa vulgaris* and *Cotinus coggygria*, 460 m a.s.l.; 21 May 2016 & 7 June 2021; obs./det. Szeląg Z.
Voucher: As the population is very small no herbarium specimens were collected.

Pilosella petraea F. W. Schultz & Schultz-Bip. is a homotypic synonym of *Hieracium heuffelii* Janka (Szeląg 2007). This outstanding relict species is known in Romania from two localities in the Banat region, i.e. the Aninei Mts. (*locus classicus*) and the Mehedinţi Mts., and from a few localities in the southern part of the Retezat Mts. (Retezatul Mic Mts.) (Nyárády 1965). Until now, the only known area of occurrence of the species in the Mehedinţi Mts. is the Prolaz (Pecinişca) gorge near Băile Herculane, situated ca. 12 km south of the Ţăsna gorge. Beyond Romania, *P. petraea* occurs only in the eastern part of the Stara Planina Mts. in Bulgaria (Szeląg 2008).

***Pseudomoerckia blyttii* (Moerch) Vilnet, Konstant., D.G.Long, Lockhart & Mamontov, fam. Pseudomoerckiaceae (liverwort, bryophyte)**
Contributors: Sorin Ştefănuţ and Constantin-Ciprian Bîrsan
Geographical focus: Romania
New record and noteworthy data: The southernmost record for the Carpathians and southeastern Europe
Specimen data: the Southern Carpathians, Iezer-Păpuşa Mts., Iezer glaciar ring, Capul Căţunului Peak, Argeş County, N 45.458244°, E 24.957636°, 2246 m a.s.l.; 22 September 2021; leg. Ştefănuţ S, Bîrsan C-C.; det. Ştefănuţ S.
Voucher: Herbarium of the Institute of Biology – Bucharest, Romanian Academy (BUCA), bryophyte collection, B12183, B12184.

The male and female samples of *Pseudomoerckia blyttii* were found on soil, on the southern side of Capul Căţunului peak, along with other bryophytes such as *Diplophyllum taxifolium* (Wahlenb.) Dumort., *Gymnomitrion concinnatum* (Lightf.) Corda, *Lophozia ventricosa* (Dicks.) Dumort., *Nardia scalaris* Gray, *Tritomaria scitula* (Taylor) Jørg. and *Rhabdoweisia fugax* (Hedw.) Bruch & Schimp.

This is the third mountain massif report of *Pseudomoerckia blyttii* to Romania. Previously, this species was reported from the Eastern Carpathians, the Rodna Mts., the Southern Carpathians, and the Făgăraş Mts. as *Moerckia blyttii* (Moerch) Brockm. (Ştefănuţ 2008). The taxon *Moerckia blyttii* was recently revised as *Pseudomoerckia blyttii* (Konstantinova *et al.* 2021). The nearest locality of the species to Romania is in Slovakia (Hodgetts & Lockhart 2020). The conservation status of *P. blyttii* in Romania has not changed from Vulnerable – VU B2ab(ii,iii,iv) (Ştefănuţ & Goia 2012).

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REZIME

Botanica SERBICA

Novi i značajni podaci o biljkama, algama i gljivama iz JI Evrope i susednih regiona, 7

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U radu su prikazani novi i značajni podaci sa područja JI Evrope i susednih regiona o sledećim taksonima: pršljenčici *Chara intermedia*, jetrenjačama *Fossombronia wondraczekii* i *Pseudomoerckia blyttii,* mahovinama *Hamatocaulis vernicosus* i *Hookeria lucens,* monokotilama *Gladiolus palustris, Neotinea tridentata* i *Orchis militaris* i dikotilama *Cardamine serbica, Cardamine waldsteinii, Hieracium kotschyanum* i *Pilosella petraea*.

Ključne reči: novi nalaz, *Cardamine serbica, Cardamine waldsteinii, Chara intermedia*, *Gladiolus palustris, Fossombronia wondraczekii, Hamatocaulis vernicosus, Hieracium kotschyanum, Hookeria lucens, Neotinea tridentata, Orchis militaris, Pilosella petraea, Pseudomoerckia blyttii,* JI Evropa