COMPREHENSIVE PLANT BIOLOGY

https://doi.org/10.2298/CPB2501117T

(2025) 49 (1): 117–130
ISSN 3042-3201
formerly Botanica Serbica

Original Scientific Paper

New records and noteworthy data of plants, algae and fungi in SE Europe and adjacent regions, 20

Gordana Tomović[1]*, Marko S. Sabovljević[1,2,3]*, Ermin Mašić[4], Viktor Nadarević[4], Dragiša Savić[5], Dmitar Lakušić[1], Snežana Vukojičić[1], Dimitar Stoykov[6], Georgi Kunev[7], Zbigniew Szeląg[8], Matej Dudáš[2], Pavel Širka[9], Marjan Niketić[10,11], Sorin Ştefănuţ[12], Vladan Djordjević[1], Dragana Jenačković Gocić[13] and Danijela Nikolić[13]

1 Institute for Botany and Botanical Garden, Faculty of Biology, University of Belgrade, Takovska 43, 11 000 Belgrade, Serbia
2 Department of Plant Biology, Institute of Biology and Ecology, Faculty of Science, Pavol Jozef Šafárik University in Košice, Mánesova 23, 040 01 Košice, Slovakia
3 Center of Plant Biotechnology and Conservation (CPBC), Takovska 43, 11000 Belgrade, Serbia
4 Faculty of Science, University of Sarajevo, Zmaja od Bosne 33-35, 71000 Sarajevo, Bosnia and Herzegovina
5 PE National Park Fruška Gora, Trg Zmaj Jove 1, 21208 Sremska Kamenica, Serbia
6 Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences, 2 Gagarin St., 1113 Sofia, Bulgaria
7 Sofia University St. Kliment Ohridski, Faculty of Biology, Department of Botany, 8 Dragan Tzankov Blvd., 1164 Sofia, Bulgaria
8 University of the National Education Commission, Institute of Biology and Earth Sciences, Podchorążych 2, 30-084 Kraków, Poland
9 Department of Phytology, Faculty of Forestry, Technical University in Zvolen, Slovakia
10 Natural History Museum, Njegoševa 51, 11000 Belgrade, Serbia
11 Serbian Academy of Sciences and Arts, Serbia, Kneza Mihaila 35, 11000 Belgrade, Serbia
12 Institute of Biology – Bucharest, Romanian Academy, 296 Splaiul Independentei, 060031 Bucharest, P.O. Box 56-53, Romania
13 University of Niš, Faculty of Sciences and Mathematics, Department of Biology and Ecology, Višegradska 33, 18000 Niš, Serbia

*column editors, to whom contribution should be sent (marko@bio.bg.ac.rs)

ABSTRACT:
This paper presents new records and noteworthy data on the following taxa in SE Europe and adjacent regions: diatom alga *Achnanthidium rosenstockii*, bryoparasitic fungi *Arrhenia retiruga* and *Arrhenia spathulata*, saprotrophic fungi *Coccomyces dentatus* and *Hysterobrevium mori*, liverworts *Lunularia cruciata* and *Pallavicinia lyellii*, fern *Salvinia natans*, monocots *Eleocharis carniolica* and *Pseudorchis albida* and dicots *Biscutella laevigata*, *Fumana arabica*, *Hieracium ferdinandi-coburgii*, *Impatiens balfourii*, and *Onosma pseudoarenaria* subsp. *fallax*

Keywords: new report, *Achnanthidium rosenstockii, Arrhenia retiruga, Arrhenia spathulata, Biscutella laevigata, Coccomyces dentatus, Eleocharis carniolica, Fumana arabica, Hieracium ferdinandi-coburgii, Hysterobrevium mori, Impatiens balfourii, Lunularia cruciata, Onosma pseudoarenaria* subsp. *fallax, Pallavicinia lyellii, Pseudorchis albida, Salvinia natans*, SE Europe

Received:
15 January 2025

Revision accepted:
20 March 2025

UDC: 581.95:582.261.1+582.28 +582.321+582.37/.39+582.52 +582.6/.9(292.4)

***Achnanthidium rosenstockii* (Lange-Bertalot) Lange-Bertalot, fam: Achnanthidiaceae (diatom algae).**
Contributors: Ermin Mašić and Viktor Nadarević
Geographical focus: Bosnia and Herzegovina
New record and noteworthy data: The first record for Bosnia and Herzegovina.
Specimen data: Bihać, Međudražje, Source of Crno vrelo, N 44.759611°, E 15.842639°, 483m a.s.l.; November 2024, leg./det. Mašić, E. & Nadarević V.
Vaucher: Diatom collection (Mašić, E.) s/n, Laboratory for systematics and

Published by Institute of Botany and Botanical Garden Jevremovac, Belgrade
Faculty of Biology, University of Belgrade, Belgrade, Serbia
www. cpb.bio.bg.ac.rs

ecology of algae, fungi and lichens, Department of Biology, Faculty of Science, University of Sarajevo (Bosnia and Herzegovina).

During preliminary research on the cyanobacterial and algal flora of Plješevica Mt. (Bosnia and Herzegovina), the rare diatom taxon named *Achnanthidium rosenstockii* (Lange-Bertalot) Lange-Bertalot was recorded. Although taxa from the genus *Achnanthidium* are relatively common in our freshwater ecosystems, this particular species had not been identified until now. In Europe, this taxon has been recorded at a limited number of locations. *A. rosenstockii* primarily inhabits oligo-mesotrophic lakes on carbonate substrates and serves as an indicator of exceptionally clean water (Lange-Bertalot *et al.* 2017). On Plješevica Mt., it was observed in a small stream which flows over tufa barriers into a larger river ecosystem. It typically appears in low abundance, either as isolated individuals or with a few frustules present in the sample. The species was identified within the epipelic community, alongside *Achnanthidium minutissimum* (Kützing) Czarnecki, *Encyonema ventricosum* (C. Agardh) Grunow, and *Encyonopsis microcephala* (Grunow) Krammer.

***Arrhenia retiruga* (Bull.) Redhead, fam. Hygrophoraceae (fungus, bryoparasitic)**
Contributor: Dragiša Savić
Geographical focus: Serbia
New record and noteworthy data: A new species for Serbia.
Specimen data: 1) Šumadija, Beograd, Stepin Lug, N 44.744961°, E 20.527208°, on an unidentified moss, 29 November 2020; leg./det. Stanojević S.; **2**) Eastern Serbia, Svrljig, Đurinac, N 43.40054°, E 22.12666°, on an unidentified moss, 4 December 2022; leg./det. Gajić M.
Vouchers: Private legator collections

The genus *Arrhenia* is widely distributed in the world and so far about 60 species have been described. The genus is comprised mainly of bryophilous species characterised by an omphalinoid or pleurotoid habit with poorly-developed hymenophores (Blanco-Dios 2019). *Arrhenia retiruga* belongs to the pleurotoid group (Redhead *et al.* 2002), with a laterally attached cap(pleuro), oriented laterally rather than vertically in relation to the stem. This species does not have a distinct stipe; instead, it is centrally attached or sometimes fixed at a single point to the substrate. The distribution of this species is limited to the meso-mediterranean to supra-mediterranean belts of the Mediterranean region. It is not host-specific and occurs on various moss species, but predominantly on pleurocarpous mosses (Barrasa & Rico 2003).

No records of this species have been found in the available mycological literature for Serbia. Although these two records represent the first documented occurrence, it is presumed to be much more widespread in the country, but has likely gone unnoticed until now.

***Arrhenia spathulata* (Fr.) Redhead, fam. Hygrophoraceae (fungus, bryoparasitic)**
Contributors: Marko S. Sabovljević and Dragiša Savić
Geographical focus: Serbia
New record and noteworthy data: A new species for Serbia.
Specimen data: 1) Western Serbia, Tara, Kaluđerske Bare, N 43.906215°, E 19.527604°, on an unidentified moss, 17 October 2021; leg./det. Baluban S.; 2) Bačka, Kelebija, N 46.169438°, E 19.583485°, on an unidentified moss, 11 November 2020; leg./det. Baluban S.; **3)** Banat, Deliblatska Peščara, N 44.87198°, E 21.06763°, on the moss *Syntrichia ruralis* (Hedw.) F. Weber & D. Mohr, 6 December 2024, FG2061, leg. Sabovljević M.; det. Savić D.
Vouchers: Herbarium of the Fruška Gora National Park, s/n and FG2061.

The genus *Arrhenia* is widely distributed and consists mainly of bryophilous species characterised by an omphalinoid or pleurotoid habit with poorly developed hymenophores (Blanco-Dios 2019). *Arrhenia spathulata* belongs to the pleurotoid group (i.e. non-omphalinoid). It has a distinct stipe which attaches laterally to the cap rather than centrally. This species is widespread in both the Eurosiberian and Mediterranean regions and is presumed to be host-specific to the moss *Syntrichia ruralis* (Barrasa & Rico 2003).

According to earlier opinions, *Arrhenia retiruga* and *A. spathulata* might represent different ecological variants of the same species. However, since the differences between them are not only morphological, but also anatomical, they are currently recognised as separate species (for details, see Barrasa & Rico 2003).

No records of this species have been found in the available mycological literature for Serbia. Although these three records represent the first documented occurrence, it is presumed to be much more widespread in the country, but has likely gone unnoticed until now.

***Biscutella laevigata* L., fam. Brassicaceae; (dicot, vascular plant)**
Contributors: Dmitar Lakušić and Snežana Vukojičić
Geographical focus: Serbia
New record and noteworthy data: This is a new report of a rare and endangered species in Serbia, based on herbarium data (BEOU).
Specimen data: Northeast Serbia, Djerdap Gorge, Veliki Štrbac, MGRS 34T FQ03, ass. *Seslerietum filifoliae* Zólyomi 1939, 250 m a.s.l., 8 May 1995; leg./det. Lakušić, D.
Vouchers: Herbarium of the Institute of Botany and Botanical Garden Jevremovac, University of Belgrade (BEOU), vascular plant subcollection of the Department for Plant Ecology and Geography 121/95.

The first documented and published record of this species for the northeastern region of Serbia was for Mt. Rtanj (Pančić 1874). Later, the species was reported from Mt. Suva Planina (Jovanović-Dunjić 1972; Ranđelović *et al.* 2000), but these records remained unconfirmed. On Mt. Rtanj, it was registered in the localities of Kusak, Presla and Šiljak, in subalpine carbonate rocky grounds *Potentillo-Caricetum humilis* R. Jov. 1955 and grasslands *Poetum violaceae* Horv. 1937 (Jovanović-Dunjić 1956).

The new finding in the Djerdap Gorge is of particular significance as it represents the second confirmed occurrence of this species in Serbia, also supported by herbarium material.

***Coccomyces dentatus* (J.C. Schmidt & Kunze) Sacc., fam. Rhytismataceae (fungus, saprotrophic)**
Contributor: Dimitar Stoykov
Geographic focus: Bulgaria
New records and noteworthy data: The first report of *Coccomyces dentatus* for Bulgaria (according to Hinkova 1965; Fakirova 1978; Stoykov 2020).
Specimen data: Sofia region, Sofia city, Vrana Park, N 42.641072°, E 23.438033°, on fallen, dry leaves of *Quercus rubra* L., *ca.* 560 m a.s.l., 1 June 2024, leg./det. Stoykov D.
Voucher: Bulgarian Academy of Sciences, Mycological Collection of the Institute of Biodiversity and Ecosystem Research (SOMF), 31732.

The new findings of *Coccomyces dentatus* in the Sofia region represents the fourth member of the genus *Coccomyces* recorded in Bulgaria, along with *C. coronatus* (Schumach.) De Not. on *Fagus sylvatica* L., first published in Hinkova (1965) and later in Fakirova (1978), *C. quadratus* (J.C. Schmidt & Kunze)

P. Karst. on *Vaccinium myrtillus* L., reported in Hinkova (1965), and *C. delta* (Kunze) Sacc., published in Stoykov (2020). So far, *Coccomyces delta* was the only species of the genus known to occur on oak in Bulgaria, on the dry, dead leaves of *Quercus coccifera* L., from the valley of the Struma River (Stoykov 2020).

***Eleocharis carniolica* W.D.J. Koch, fam. Cyperaceae (monocot, vascular plant)**
Contributor: Georgi Kunev
Geographical focus: Bulgaria
New records and noteworthy data: The first record in Bulgaria since 1988, and a new report for the West Balkan Mts. The species is listed in the Bern Convention and EU Habitat Directive.
Specimen data: W Balkan Mts., Petrohan Pass, 300 m to the W of Petrohan hut, N 43.114864°, E 23.132026°, MGRS 34T FN77, 1460 m a.s.l.; with flowers and unripe fruits; 5 August 2023; leg./det. Kunev G.
Vouchers: Herbarium at the University of Sofia (SO) 108237, 108238; Vascular plants collection (BG-NMNHS-BOT) at the Herbarium at National Museum of Natural History at the Bulgarian Academy of Sciences (BNHM): 1914 (https://www.gbif.org/occurrence/4535554521).

The species was noticed for the first time by the author in late June 2022 and further material was collected in the following year. Based on the collected material the specimens were identified as *Eleocharis carniolica*. It became evident that it had also been spotted in the same locality earlier but no material had been collected (Assyov, pers. comm.). Here, additional information regarding its population status at this new site and the present status of the species in the country is provided.

This is a recent record of the species in Bulgaria and the only confirmed site in the last 37 years (MOEW 2025). In Bulgaria, *E. carniolica* is a species of conservation concern, evaluated as Endangered for the national Red List (Stoeva 2011), and included in Annexes 2 and 3 of the Bulgarian Biodiversity Act. At the European level, its conservation significance is highlighted by its inclusion in Annex I of the Bern Convention, and as a plant species of community interest of Annexes II and IV of the Habitats Directive/ 92/43/EEC.

Eleocharis carniolica is known as a diagnostic species for the vegetation class *Isoëto-Nanojuncetea* Br.-Bl. et Tx., typically distributed at low altitudes, along the shores of ponds, lower course riversides, temporary streamlets, open meadows, or various man-made habitats such as roadside depressions, drainage canals or ditches (Niemczyk *et al.* 2023). In contrast, the present population of *E. carniolica* at the Petrohan locality displays quite different habitat traits. It consists of up to 150 tuffs spreading over 0.03 ha. The plants occur in several interconnected mire pools, surrounded by dense carpets of *Sphagnum* spp. interspersed with *Vaccinium vitis-idaea* L., *Potentilla erecta* (L.) Raeusch., *Bruckenthalia spiculifolia* (Salisb.) Rchb., and *Carex flava* aggr. and shaded by *Pinus sylvestris* L. and *P. peuce* Griseb. trees.

***Fumana arabica* (L.) Spach, fam. Cistaceae (dicot, vascular plant)**
Contributor: Georgi Kunev
Geographical focus: Bulgaria
New records and noteworthy data: This is the second collection and locality for the species in Bulgaria
Specimen data: SW Bulgaria, Struma River valley (*South*), E of Novo Hodzhovo village, Sandanski Municipality, N 41.407504°, E 23.414327°, MGRS 35T GL08, open eroded and overgrazed slopes, sandy substrate, 168 m a.s.l.; initial flowering stage; 31 March 2024; leg./det. Kunev G.

Vouchers: Herbarium at the University of Sofia (SO) 108285; Herbarium at the Institute of Biodiversity and Ecosystem Research (SOM) 179195; Vascular plants collection (BG-NMNHS-BOT) at the Herbarium at the National Museum of Natural History at the Bulgarian Academy of Sciences (BNHM): 3260 (https://www.gbif.org/occurrence/4920293528).

Fumana arabica is a Mediterranean element in Bulgarian flora, known up to now from a few collections, gathered at a single site, with the earliest record dating back to 1962 (Velchev *et al.* 1966; Markova 1979). The current report concerns a new, second known locality of the species in Bulgaria.

About 50 diffusely dispersed individuals were noted occupying eroded overgrazed slopes of with a southern exposure. It occupies shallow rock crevices and semi-stable deposits derived from friable sandstones. The dominant vegetation was represented by scattered low shrubbery of *Juniperus deltoides* R.P. Adams, *Cytisus rectipilosus* Adamović, and *Genista januensis* Viv., and open grasslands of mostly annuals, such as *Crepis sancta* (L.) Bornm., *Silene subconica* Friv., *Hippocrepis ciliata* Willd., *Myosotis ramosissima* Rochel ex Schult., *Euphorbia helioscopia* L., *Galium spurium* L., *Minuartia tenuifolia* (L.) Hiern, *M. hamata* (Hausskn. & Bornm.) Mattf., *Tuberaria guttata* (L.) Fourr., *Salvia viridis* L., *Muscari neglectum* Guss. ex Ten. & Sangiov., *Valerianella* spp., *Cerastium* spp., and others.

***Hieracium ferdinandi-coburgii* J. Wagner & Zahn, fam. Asteraceae (dicot, vascular plants)**
Contributor: Zbigniew Szeląg
Geographical focus: Greece
New record and noteworthy data: The first record in the Peloponnese Peninsula.
Specimen data: Taygetos (Ταΰγετος) Mts., Mt. Profitis Ilias (Προφήτης Ηλίας), calcareous scree on the north-eastern slope along a tourist path to the summit, N 36.955°, E 22.352°, 2200–2250 m a.s.l.; 30 July 2022; leg./det. Szeląg Z.
Voucher: Private author's collection (Herb. Hierac. Z. Szeląg).

Hieracium ferdinandi-coburgii was first described from the alpine belt of Mt. Olympus (Όλυμπος) (Wagner 1935). According to Buttler (1991) this Greek endemic also occurs in the Pindus (Πίνδος) Mountains. The newly discovered locality in the Taygetos Mts. is located *ca.* 250 km from the nearest known locality in the Pindus Mountains. This suggests that the species may have a wider distribution in the Scardic Mountain range.

Hieracium ferdinandi-coburgii combines the morphological features of *H. gaudryi* Boiss. & Orph. and *H. naegelianum* Pančić, and probably originated as a hybrid between them. As the sexual population of *H. naegelianum* is currently known only from North Macedonia (Szeląg & Ilnicki 2011), the occurrence of *H. ferdinandi-coburgii* in the Peloponnese Peninsula should be considered relict.

***Hysterobrevium mori* (Schwein.) E. Boehm & C.L. Schoch, fam. Hysteriaceae (fungus, saprotrophic)**
Contributor: Dimitar Stoykov
Geographic focus: Bulgaria
New records and noteworthy data: The first report of *Hysterobrevium mori* from the Eastern Forebalkan and the second report in Bulgaria (according to Fakirova 2004).
Specimen data: Eastern Forebalkan, Lovech district, Troyan municipality, Patreshko village, N 42.900986°, E 24.768936°, on a fallen, dead oak branch, *ca.* 493 m a.s.l.; 2 May 2006; leg./det. Stoykov D.

Voucher: The Bulgarian Academy of Sciences, Mycological Collection of the Institute of Biodiversity and Ecosystem Research (SOMF), 31733.

The ascospores originating from the black hysterothecia, examined under LM in water, were 14.5–18 × 8–9.5 µm (mean±1stdev = 16.6 ± 1.2 × 8.5 ± 0.5), n = 5, subhyaline, muriform. *Hysterobrevium mori* was previously known in Bulgaria only from Vitosha region, on the branches of *Salix* sp. and *Juglans regia* L. (Fakirova 2004).

***Impatiens balfourii* Hook. f., fam. Balsaminaceae (dicot, vascular plant)**
Contributor: Matej Dudáš
Geographical focus: North Macedonia
New records and noteworthy data: This is a new record of an adventive species rarely reported in North Macedonia.
Specimen data: North Macedonia, Resen, Taše Miloševski Street, N 41.0904403°, E 21.0131067°; 4 August 2024; leg/det. Dudáš M.; iNaturalist ID 236132579.
Voucher: Herbarium of the Botanical Garden, Pavol Jozef Šafárik University, Košice, Slovakia (KO) 38234, 38235.

The record was made in the city centre of Resen, where five high branched flowering plants were observed as an escapee from cultivation. The plants were growing in a slot under the terrace of a nearby sweet shop.

The native range of Kashmir balsam is from northern Pakistan to the western Himalayas (POWO 2024). It has been cultivated as an ornamental species in different parts of the world and in the last 50 years this species has become more widespread in the western, southern and central parts of Europe (Adamowski 2009; Schmitz & Dericks 2010). In SE Europe, there are several records from Albania (Barina & Pifkó 2008), Bulgaria (Vladimirov *et al.* 2013, 2018), Croatia (Ilijanić *et al.* 1994), Greece (Dimopoulos *et al.* 2013; Vladimirov *et al.* 2015), Serbia (Bogosavljević *et al.* 2007) and Turkey (Yazlik 2021). Although there are no published records from North Macedonia, there are a few observations published on iNaturalist from the SW part of the country (Ohrid – iNaturalist ID 142200731 and 91014518, Kalishta – iNaturalist ID 189827718 and Lubanishta – iNaturalist ID 179392784).

***Lunularia cruciata* (L.) Dumort. ex Lindb., fam. Lunulariaceae (liverwort, bryophyte)**
Contributors: Pavel Širka and Marko S. Sabovljević
Geographical focus: Serbia
New records and noteworthy data: In Europe, a rare species outside the Atlantic and Mediterranean region; the northernmost record in Serbia, the first record for the Bačka region, the first record for the Central Serbia region (Pantović *et al.* 2020).
Specimen data: 1) Bačka, Bački Petrovac, between tiles in a private yard accompanied by *Bryum argenteum* Hedw.; N 45.355504°, E 19.589323°, 80 m a.s.l.; 15 December 2024; leg: Širka P, det: Širka P, Sabovljević MS.; **2)** Central Serbia, Mt. Jastrebac, near Jastrebačka River, close to Košutin Vir, on thin soil and rocks near water; N 43.454946°, E 21.359413°; 10 May 2012; leg./det. Sabovljević MS.; **3)** Northwestern Serbia, Gradac River gorge, around the entrance area to the Degurićka Pećina cave, on thin soil and rocks near water; N 44.237708°, E 19.883412°; 2 May 2022; leg./det. Sabovljević MS.
Vouchers: Herbarium of the Institute of Botany and the Jevremovac Botanical Garden, University of Belgrade, Bryophyte Collection (BEOU-Bryo) s.n.

Lunularia is a monotypic genus of liverworts in the monogeneric family Lunulariaceae with its only species being *L. cruciata*. Despite resembling *Marchantia* in the type of gemma, it is easily recognisable by the crescentic cupules containing gemmae, from which it derives its name (Váňa 2005). This species has an Atlantic-Mediterranean distribution, while elsewhere in Europe it is considered introduced and rather rare, dispersed by human activity and greatly expanding northwards in recent decades also due to climate change (Essl & Lambdon 2009; Sabovljević & Marka 2009). Outside its native range it occurs almost exclusively in man-made damp habitats such as paths, gardens or greenhouses (Sim-Sim 2019).

In Serbia, this ruderal element was historically reported from a glasshouse at the Jevremovac Botanical Garden in Belgrade (Pavletić 1955), and for the first time in the wild from the Gradac River gorge near the city of Valjevo (Sabovljević & Marka 2009). Within the territory of the province of Vojvodina it was recently recorded from the foothills of the Fruška Gora Mt. at two sites (Beočin, Jazak) in the Srem region (Ilić, 2019, unpublished). Our finding represents the northernmost record of the species in Serbia to date, the first on the left bank of the Danube River. It was found sterile but with the presence of gemmae. In addition, we also report a new healthy population in the Gradac gorge as well as a new small population and the first report of this species in Central Serbia. It seems that climate change is contributing to the spread of this species across the country, and new records are expected.

***Onosma pseudoarenaria* Schur subsp. *fallax* (Borbás) Rauschert, fam. Boraginaceae (dicot, vascular plants)**
Contributors: Marjan Niketić and Gordana Tomović
Geographical focus: Serbia
New records and noteworthy data: Confirmation of the taxon presence for the flora of Serbia, more than 50 years after the first literature record.
Specimen data: 1) Southwestern Serbia, Prijepolje, Mileševka River gorge, 2 km from Mileševa Monastery in the vicinity of Prijepolje, MGRS 34T CP90; 4 June 2004; leg. Stevanović V.; det. Niketić M.; **2)** Southwestern Serbia, Priboj, Sastavci – Kasidoli, Velika Kosa, Kasidolski stream, MGRS 34T CP90, N 43.5535942°, E 19.4406257°, spilite, 450–500 m a.s.l., rocky grounds within a pine and oak forest; 26 May 2022; leg./det. Niketić M.
Vouchers: Herbarium of the Institute of Botany and Botanical Garden Jevremovac, University of Belgrade (BEOU), vascular plant collection 22140; Herbarium of the Natural History Museum in Belgrade, General Herbarium of the Balkan Peninsula (BEO), 4354.

Within the Alpine-Carpathian-Dinaric species *Onosma pseudoarenaria* Schur, the subspecies *fallax* is of Illyrian distribution (the surroundings of Trieste in Italy, Croatia, Bosnia and Herzegovina, Montenegro and southwestern Serbia) (Valdés & Raab-Straube 2011+). In Serbia, this taxon was previously known only from the southwestern region and the first and so far only reference in the literature referred to the Lim River canyon in the vicinity of Brodarevo (Teppner 1971). Three known sites in Serbia are located in the extreme southeastern part of the subspecies' range. In Valdés & Raab-Straube (2011+) it is mistakenly mentioned for the flora of Serbia as an allegedly misapplied name (in the flora of SR Serbia) for *O. arenaria* subsp. *tuberculata* (Kit. ex Rochel) Soó, which grows in Austria, Slovakia and Hungary. However, it is mentioned only for the flora of Deliblatska peščara in the southeastern part of Vojvodina (Cincović & Kojić 1974). According to ecological, biogeographical and floristic knowledge, that record could only correspond to the type subspecies of *O. arenaria* Waldst. & Kit., and not to the Dinaric taxon *O. pseudoarenaria* subsp. *fallax*.

***Pallavicinia lyellii* (Hook.) Gray, fam. Pallaviciniaceae (liverwort, bryophyte)**
Contributor: Sorin Ștefănuț
Geographical focus: Romania
New record and noteworthy data: A new record of a very rare and threatened liverwort species to Romania
Specimen data: Central Romania, Făgăraș Depression, Sibiu County, Arpașu de Sus, Lacul lui Vizante, N 45.703056°, E 24.644444°, 605 m a.s.l.; 11 June 2019; leg./det. Ștefănuț S.
Vouchers: Bryophyte collection of the Herbarium of the Institute of Biology – Bucharest, Romanian Academy (BUCA), B4857–B4874.

Lacul lui Vizante is the third recorded site for *Pallavicinia lyellii* in Romania, hosting the largest population of this species. The habitat is a flooded black alder forest (*Alnus glutinosa* (L.) Gaertn.) with a *Sphagnum* bog at the edge, on the left side of the Arpașu Mare River, at the foot of the Făgăraș Mountains. More than 75 microhabitats with exclusively female thalli of *P. lyellii* have been identified at this site. The other two known sites with *P. lyellii* are located on the right side of the Arpașu Mare River. The first site was found in 2001, 2.22 km north of the Lacul lui Vizante site, consisting of five microhabitats with male thalli of *P. lyellii* (Ștefănuț 2003, 2008, 2012). The second site was discovered in 2018, 1.42 km north-northeast of the Lacul lui Vizante site, and contains three microhabitats with female thalli of *P. lyellii* (Ellis *et al.* 2019). This liverwort grows on peat, between the roots of alder trees, in the flooded area.

Despite being the largest population of *P. lyellii* reported for Romania, the species remains critically endangered (CR A1a;B1ab(ii,iii,iv,v)+2ab(ii,iii,iv,v);-C2a(i,ii)+b) because the liverwort is reproductively isolated, and lacks sporophytes (Ștefănuț & Goia 2012). For the protection of *P. lyellii*, the Lacul lui Vizante area has been proposed as a NATURA 2000 site (ROSCI0469).

***Pseudorchis albida* (L.)** Á. **Löve & D. Löve, fam. Orchidaceae (monocot, vascular plant)**
Contributors: Vladan Djordjević and Snežana Vukojičić
Geographical focus: Serbia
New records and noteworthy data: The first record of this species on Mt. Željin, the second known mountain on which this species has been recorded in the region of Central Serbia. In addition, four recent records of this species on Mt. Kopaonik provide the first precise localities of this species on this mountain. The species is protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
Specimen data: 1) Central Serbia, Mt. Željin, Pločka čuka, N 43.475929°, E 20.804920°, MGRS 34T DP81, ass. *Festuco-Deschampsietum flexuosae* prov., granodiorite, exp. NW, incl. 20°, 1758 m a.s.l.; 14 individuals, 22 June 2024; leg. Djordjević V, Krdžić S.; det. Djordjević V, Vukojičić S.; **2)** Central Serbia, Mt. Kopaonik, Sunčana Dolina – Rudnička Ravna, N 43.282655°, E 20.800527°, MGRS 34T DN89, ass. *Festuco-Deschampsietum flexuosae* prov., porphyroid granodiorite with transitions to quartz monzonite, exp. W, incl. 25°, 1695 m a.s.l.; 2 individuals, 2 July 2023; leg. Djordjević V, Krdžić S.; det. Djordjević V.; **3)** Central Serbia, Mt. Kopaonik, Karaman, Karaman stream, Hotel Rtanj, N 43.289500°, E 20.819638°, MGRS 34T DN89, ass. *Festuco-Deschampsietum flexuosae* prov., porphyroid granodiorite with transitions to quartz monzonite, exp. NW, incl. 25°, 1750 m a.s.l.; 32 individuals, 2 July 2023; leg. Djordjević V, Krdžić S.; det. Djordjević V.; **4)** Central Serbia, Mt. Kopaonik, Ćurčićka Ravan – Jaram, N 43.308768°, E 20.820502°, MGRS 34T DN89, ass. *Vaccinio-Juniperetum sibiricae* Mišić 1964, porphyroid quartz monzonite

and granite, exp. W, incl. 20°, 1799 m a.s.l.; 7 individuals, 4 July 2023; leg./det. Djordjević V.; **5)** Central Serbia, Mt. Kopaonik, Vučak, N 43.297319°, E 20.828805°, MGRS 34T DN89, ass. *Vaccinio-Juniperetum sibiricae* Mišić 1964, porphyroid quartz monzonite and granite, exp. N, incl. 30°, 1933 m a.s.l.; 2 individuals, 28 Jun 2024; leg./det. Djordjević V.
Vouchers: Herbarium of the Institute of Botany and Botanical Garden Jevremovac, University of Belgrade, vascular plant collection (BEOU) 72209, 72560, 72561, 72562, 72563; photo documentation of Djordjević V.

Pseudorchis albida is a boreal species distributed in Europe, Greenland, eastward to Kamchatka, and extending south to the Iberian and Apennine peninsulas and northern Greece (Jersáková *et al.* 2011). In Serbia, the species has been recorded in the following regions and localities: Southwestern Serbia (Mt. Mokra Gora), Central Serbia (Mt. Kopaonik), Eastern Serbia (Mts. Suva Planina and Stara Planina), Southeastern Serbia (Vlasina, Božićka Planina and the mountains in the vicinity of the town of Bosilegrad) as well as Kosovo and Metohija (Mts. Prokletije and Šar Planina) (Diklić 1976; Lakušić 1996; Ranđelović *et al.* 2000; Ranđelović & Zlatković 2010; Djordjević 2021). The new finding of this species on Mt. Željin is the second record of this species in the region of Central Serbia. Previously, the species had only been recorded on Mt. Kopaonik (Diklić 1976; Lakušić 1996). Moreover, this is the first record of this species in the MGRS 34T DP81 10 × 10 km and also in the DP 100 × 100 km UTM grid cells. Considering that the species was previously recorded on Mt. Kopaonik without any precise locality data (Diklić 1976; Lakušić 1996), the four recent records of this species provide the first accurate data on the distribution and ecological preferences of this species on Mt. Kopaonik.

The species was found at the Pločka Čuka locality on Mt. Željin, within a *Festuco-Deschampsietum flexuosae* prov grassland community. The dominant taxa in this plant community were *Festuca nigrescens* Lam., *Deschampsia flexuosa* (L.) Trin. and *Nardus stricta* L. The species was found on granodiorite, at an elevation of 1758 m a.s.l., on a northwestern-facing slope with an inclination of 20°. The newly recorded population of this species consists of 14 individuals within an area of 100 m^2. On Mt. Kopaonik, at the localities of Sunčana Dolina – Rudnička Ravna and Karaman, the species was recorded as part of the *Festuco-Deschampsietum flexuosae* prov. grassland community on porphyroid granodiorite with transitions to quartz monzonite. Also on Mt. Kopaonik, at the localities of Ćurčićka Ravan – Jaram and Vučak, the species was found within the *Vaccinio-Juniperetum sibiricae* Mišić 1964 community on porphyroid quartz monzonite and granite.

The species has the IUCN status of regionally extinct (RE) in the Netherlands and Belgium, critically endangered (CR) in Denmark, endangered (EN) in Ukraine, Sweden, the Czech Republic and Slovakia, vulnerable (VU) in the United Kingdom and Bulgaria, and near threatened (NT) in Norway, Finland, Croatia and Austria (Kull *et al.* 2016).

***Salvinia natans* (L.) All., fam. Salviniaceae (fern)**
Contributors: Dragana Jenačković Gocić and Danijela Nikolić
Geographical focus: Serbia
New records and noteworthy data: The new record of *Salvinia natans* in the pond complex located on the right bank of the Velika Morava River represents the southernmost point of its distribution in Serbia.
Specimen data: 1) Three sites within the pond complex, surrounded by alluvial forest in the Pomoravlje district, the town of Jagodina, Glogovac settlement, N 44.038255°, E 21.302592°, 144 m a.s.l., 12 September 2022, leg./det. Nikolić D, Raca I, Jenačković Gocić D.; N 44.039299°, E 21.301290°, 140 m a.s.l., 12 September 2022, leg./det. Nikolić D, Raca I, Jenačković Gocić D.; N 44.038306°,

E 21.302581°, 145 m a.s.l., 12 September 2022, leg./det. Jenačković Gocić D, Nikolić D, Raca I.); **2)** A few sites in the littoral zone of the right bank of the Danube River, Bor District, Negotin municipality, Radujevac settlement, N 44.279567°, E 22.671818°, 75 m a.s.l., 6 October 2022, leg./det. Nikolić D, Raca I, Jenačković Gocić D.); Mihajlovac settlement, N 44.374008°, E 22.500685°, 87 m a.s.l., 6 October 2022, leg./det. Nikolić D, Raca I, Jenačković Gocić D.; Slatina settlement, N 44.428231°, E 22.471976°, 64 m a.s.l., 6 October 2022, leg./det. Nikolić D, Raca I, Jenačković Gocić D.; N 44.426559°, E 22.466637°, 75 m a.s.l., 6 October 2022, leg./det. Jenačković Gocić D, Nikolić D, Raca I.; Brza Palanka settlement, N 44.486121°, E 22.457272°, 94 m a.s.l., 6 October 2022, leg./det. Nikolić D, Raca I, Jenačković Gocić D.; N 44.462227°, E 22.449437°, 82 m a.s.l., 6 October 2022, leg./det. Jenačković Gocić D, Nikolić D, Raca I.
Vouchers: Herbarium Moesiacum Niš (HMN), 18766–18772.

Salvinia natans is a pleustonic aquatic fern with a circumpolar distribution encompassing Central and Southern Europe, the European part of Russia, the Caucasus, Central Asia, the Far East, India, China, Japan, North America, and North Africa (Stojanović *et al*. 2015). According to Annex II of the European Habitats Directive, it is classified as extinct in France, Belgium, the Netherlands, and Switzerland, critically endangered in Germany, endangered in the Czech Republic, vulnerable in Bulgaria, and near threatened in Croatia, Belarus, and Russia. Additionally, it is protected but not classified as threatened in France, Hungary, Albania, and Greece (Allen 2011). In Serbia, *S. natans* is recognised as a plant of international importance and classified as regionally endangered under the Bern Convention (Stojanović *et al*. 2015).

Although it is widespread in Vojvodina province (Stojanović *et al*. 2015 and the references therein), its distribution south of the Danube and Sava rivers is limited. Populations have been reported in the Velika Morava valley near the settlements of Miloševo, Velika Plana, and Mala Krsna, based on data published 60 years ago, as well as in gravel pits within the Drina River valley. Hence, the populations recorded in the pond complex near the settlement of Glogovac mark the southernmost point of its distribution in Serbia. At this locality, individuals of this species covered several square meters, forming two monodominant stands alongside *Ceratophyllum demersum* L. and *Lemna minor* L. The distribution of *S. natans* in the riverbed of the Danube River is well-documented for its Middle (Pannonian) section (Vukov *et al*. 2008), while data on its occurrence in the Iron Gate and Western Pontic sections remain insufficient.

Our findings not only confirm its presence in the section of the Danube River between the hydroelectric power plants Đerdap I and Đerdap II (near the settlements of Mihajlovac, Slatina, and Brza Palanka), but also provide new information about its southernmost point in the Danube riverbed within the boundaries of Serbia, downstream of Đerdap II, near the settlement of Radujevac.

Acknowledgements – D. Stoykov acknowledges the Phylogeny, Taxonomy and Sustainable Use of fungi project. D. Savić and M.S. Sabovljević express their gratitude to Miloš Gajić (Svrljig), Sran Stanojević (Belgrade) and Stevan Baluban (Beočin) for generously providing data on their records on bryoparasitic fungi from the genus *Arrhenia*. D in Serbia. Jenačković Gocić and D. Nikolić were financially supported by the Ministry of Science, Technological Development, and Innovation of the Republic of Serbia (451-03-137/2025-03/ 200124). S. Ștefănuț acknowledges support from project no. RO1567-IBB03/2025 through the Institute of Biology Bucharest of the Romanian Academy. V. Djordjević and S. Vukojičić were supported by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia (451-03-66/2024-03/ 200178).

REFERENCES

Adamowski W. 2009. *Impatiens balfourii* as an emerging invader in Europe. *Neobiota* **8**: 183–194. https://doi.org/10.1016/j.flora.2009.12.037

Allen DJ. 2011. *Salvinia natans*. The IUCN Red List of Threatened Species http://dx.doi.org/10.2305/IUCN.UK.20112.RLTS.T163996A5688211.en [Accessed on 04 January 2025]

Barina Z & Pifkó D. 2008. Additions and amendments to the flora of Albania. *Willdenowia* **38**: 455–464. https://doi.org/10.3372/wi.38.38206

Barrasa JM & Rico VJ. 2003. The non-omphalinoid species of *Arrhenia* in the Iberian Peninsula. *Mycologia* **95**: 700–713. https://doi.org/10.2307/3761946

Blanco-Dios JB. 2019. Notes on the genus *Arrhenia* (I): *Arrhenia pontevedrana*, sp. nov. and *A. subglobisemen* (Agaricales, Basidiomycota), from the northwest of the Iberian Peninsula. *Studies in Fungi* **4**: 185–191. https://doi.org/10.5943/sif/4/1/20

Bogosavljević S, Zlatković B & Ranđelović V. 2007. Flora klisure Svrljiškog Timoka. 9th Symposium on Flora of Southeastern Serbia and Neighbouring regions, Proceedings, PMF, Niš, 41–54.

Buttler KP. 1991. *Hieracium* L. In: Strid A & Tan K (eds.), *Mountain Flora of Greece* **2**, pp. 595–642, Edinburgh University Press, Edinburgh.

Cincović T & Kojić M. 1974. Boraginaceae A. L. de Jussieu. In: Josifović M (ed.), *Flora SR Srbije* **6**, pp. 1–71. Srpska akademija nauka i umetnosti, Beograd.

Diklić N. 1976. *Leucorchis* E. Meyer. In: Josifović M (ed.), *Flora SR Srbije* **8**, pp. 88–92, Srpska Akademija Nauka i Umetnosti, Beograd.

Dimopoulos P, Raus T, Bergmeier E, Constantinidis T, Iatrou G, Kokkini S, Strid A & Tzanoudakis D. 2013. *Vascular plants of Greece. An annotated checklist*. Botanic gardens and botanical museum Berlin-Dahlem, Berlin and Hellenic botanical society, Athens.

Djordjević V. 2021. *Flora orhideja (Orchidaceae) zapadne Srbije*. Srpska akademija nauka i umetnosti, Posebna izdanja – knjiga 701, Odeljenje hemijskih i bioloških nauka – knjiga 17, Belgrade, Serbia.

Ellis LT, Aleffi M, Bączkiewicz A, Buczkowska K, Bambe B, Boiko M, Zagorodniuk N, Brusa G, Burghardt M, Calleja JA, Mazimpaka V, Lara F, Fedosov VE, Gremmen NJM, Homm T, Hugonnot V, Ignatova EA, Klama H, Kučera J, Vicherová E, Lamkowski P, Lapshina ED, Maksimov AI, Maksimova TA, Ochyra R, Plášek V, Pleskach LY, Poponessi S, Venanzoni R, Pospelov IN, Potemkin AD, Kholod SS, Sáez L, Skuchas YV, Spitale D, Srivastava P, Omar I, Asthana AK, Ştefănuţ S, Torzewski K, Virchenko VM, Wierzgoń M & Wolski GJ. 2019. New national and regional bryophyte records, 60. *Journal of Bryology* **41**: 285–299. https://doi.org/10.1080/03736687.2019.1643117

Essl F & Lambdon PW. 2009. Alien bryophytes and lichens of Europe. In: Drake JA (ed.) *Handbook of Alien Species in Europe*, pp. 29–41, Springer.

Fakirova V. 1978. Materials concerning the species composition and the distribution of *Ascomycetes* in Bulgaria. II. *Fitologiya* **10**: 67–70.

Fakirova VI. 2004. New records of Bulgarian *Ascomycetes*. *Mycologia Balcanica* **1**: 41–43.

Hinkova C. 1965. Contribution to the fungus flora of Bulgaria. *Annual of Sofia University, Faculty of Biology* **58**: 95–105.

Ilijanić L, Marković L & Stančić Z. 1994. *Impatiens balfourii* Hookef fil. in Kroatien. *Acta Botanica Croatica* **53**: 115–119.

Jersáková J, Malinová T, Jeřábková K & Dötteri S. 2011. Biological Flora of the British Isles: *Pseudorchis albida* (L.) Á. & D. Löve. *Journal of Ecology* **99**: 1282–1298.

Jovanović-Dunjić R. 1956. Tipovi pašnjaka i livada na Rtnju. *Zbornik radova Instituta za Ekologiju i Biogeografiju Srpske Akademije Nauka* **6**: 3–45.

Jovanović-Dunjić R. 1972. *Biscutella* L. In: Josifović M. (ed.), *Flora SR Srbije* ***3***, pp. 262–364, Srpska Akademija Nauka i Umetnosti. Beograd.

Kull T, Selgis U, Pecina MV, Metsare M, Ilves A, Tali K & Shefferson RP. 2016. Factors influencing IUCN threat levels to orchids across Europe on the basis of national red lists. *Ecology and Evolution* **6**: 6245–6265.

Lakušić D. 1996. Pregled flore Kopaonika (JZ Srbija, Jugoslavija). *Ekologija* **31**: 1–35.

Lange-Bertalot H, Hofmann G, Werum M, Kelly M & Cantonati M. 2017. *Freshwater benthic diatoms of Central Europe: over 800 common species used in ecological assessment vol. 942*. Schmitten-Oberreifenberg, Koeltz Botanical Books.

Markova M. 1979. *Fumana* (Dunal) Spach. In: Jordanov D (ed.), *Flora Reipublucae Popularis Bulgaricae* **7**, pp. 412–414, Aedibus Academiae Scientiarum Bulgaricae, Serdicae.

MOEW 2025. Ministry of Environment and Waters (MOEW), Information System for NATURA 2000, Documents on plant species, *Eleocharis carniolica* – report. Available at: https://natura2000.egov.bg/EsriBg.Natura.Public.Web.App/Home/Reports?reportType=Plants [Accessed 23 December 2025]

Niemczyk M, Rucińska A, Puchalski J, Kapler A, Nowak A & Jaźwa M. 2023. Is the protection of habitat directive *Eleocharis carniolica* in its northern limits really needed? A life strategy based investigation. *Aquatic Botany* **188**: 103676. https://doi.org/10.1016/j.aquabot.2023.103676

Pančić J. 1874. *Flora Kneževine Srbije*. Državna štamparija, Beograd.

Pantović J, Veljić M, Grdović S & Sabovljević M. 2020. An annotated list of hornwort and liverwort species of Serbia. *Cryptogamie, Bryologie* **41**: 35–48. https://doi.org/10.5252/cryptogamie-bryologie2020v41a3

Pavletić Z. 1955. Prodromus flore briofita Jugoslavije. JAZU, Zagreb.

POWO 2024. Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. Available at: http://www.plantsoftheworldonline.org/ [28 October 2024].

Ranđelović V & Zlatković B. 2010. *Flora i vegetacija Vlasinske visoravni*. Prirodno-matematički fakultet, Niš.

Ranđelović V, Zlatković B, Jušković M & Živojinović Lj. 2000. Endangered of flora of Mt. Suva planina. *6. Simpozijum o flori jugoistočne Srbije i susednih područja*. *Zbornik radova*, pp. 303–322, Sokobanja.

Redhead SA, Lutzoni F, Moncalvo JM & Vilgalys R. 2002. Phylogeny of agarics: partial systematics solutions for core omphaloid genera in the Agaricales (euagarics). *Mycotaxon* **83**: 19–57.

Sabovljević M & Marka J. 2009. The biological evidence of climate changes: a case study of liverwort *Lunularia cruciata* (L.) Dum. ex Lindb. in Serbia. *Botanica Serbica* **33**: 185–187.

Schmitz U & Dericks G. 2010. Spread of alien invasive *Impatiens balfourii* in Europe and its temperature, light and soil moisture demands. *Flora* **205**: 772–776. https://doi.org/10.1016/j.flora.2009.12.037

Sim-Sim M. 2019. *Lunularia cruciata* (Europe assessment). The IUCN Red List of Threatened Species 2019: e.T87531062A87714722. https://www.iucnredlist.org/species/87531062/87714722, [Accessed 22 December 2024].

Ştefănuţ S. 2003. *Pallavicinia lyellii*, a new species from Romania. *Acta Horti Botanici Bucurestiensis* **30**: 71–78.

Ştefănuţ S. 2008. *The hornwort and liverwort atlas of Romania*. Bucureşti: Ars Docendi, Universitatea din Bucureşti.

Ştefănuţ S. 2012. *Aneura maxima* (Schiffn.) Steph. (Aneuraceae, Marchantiophyta): a new species for Romania. *Cryptogamie Bryologie* **33**: 75–80.

Ştefănuţ S & Goia I. 2012. Checklist and Red List of Bryophytes of Romania. *Nova Hedwigia* **95**: 59–104.

Stoeva M. 2011. *Eleocharis carniolica* W.D.J. Koch In: Peev D, Petrova AS, Anchev M, Temniskova D, Denchev CM, Ganeva A, Gussev C, Vladimorov V, Golemanskz V, Beron P, Yivkov M, Popov A, Popov V, Beschkov V, Deltshev C, Michev T, Spassov N, Stoev P, Dobrev D, Biserkov V, Gussev C, Hibaum G, Roussakova V, Pandurski I, Uyunov Y, Marius D, Tyonev D & Tsoneva S. (eds.), *Red Data Book of the Republic of Bulgaria* **1**, Plants and Fungi, p. 480, BAS & MoEW, Sofia.

Stojanović V, Rilak S, Jelić I, Perić R, Sabovljević M & Lazarević P. 2015. *Biljke od međunarodnog značaja u flori Srbije*. Zavod za zaštitu prirode Srbije, Beograd.

Stoykov DY. 2020. New data on *Ascomycota* in Bulgaria. *Phytologia Balcanica* **26**: 3–15.

Szeląg Z & Ilnicki T. 2011. Diploid chromosome numbers in *Hieracium* and *Pilosella* (Asteraceae) from Macedonia and Montenegro. *Acta Biologica Cracoviensia Series Botanica* **53**: 124–126. https://doi.org/10.2478/v10182-011-0023-2

Teppner H. 1971. Cytosystematik, bimodale Chromosomensätze und permanente Anorthoploidie bei *Onosma* (Boraginaceae). *Oesterreichische Botanische Zeitschrift* **119**: 196–233.

Valdés B. & Raab-Straube E. von. 2011+. Boraginaceae. In: Euro+Med Plantbase - the information resource for Euro-Mediterranean plant diversity. Available at: http://www.europlusmed.org [Accessed 22 December 2024].

Váňa J. 2005. *Lunularia* Adans. – lunatka. Verze: 1.1 (7.1.2005). In: Kučera J (ed.), Mechorosty České republiky – on-line klíče, popisy a ilustrace. Available at: http://bryoweb.bf.jcu.cz/klic. [Accessed on 22 December 2024].

Velchev V, Bondev I, Ganchev S & Kochev H. 1966. Materials and critical notes on the Bulgarian flora. *Reports of the Institute of Botany* **16**: 235–238.

Vladimirov V, Aybeke M & Tan K. 2018. New floristic records in the Balkans: 37. *Phytologia Balcanica* **24**: 397–461.

Vladimirov V, Dane F, Stevanović V & Tan K. 2013. New floristic records in the Balkans: **22**. *Phytologia Balcanica* **19**: 267–303.

Vladimirov V, Dane F & Tan K. 2015. New floristic records in the Balkans: 26. *Phytologia Balcanica* **21**: 53-91.

Vukov D, Božа P, Igić R & Anačkov G. 2008. The distribution and the abundance of hydrophytes along the Danube River in Serbia. *Central European Journal of Biology* **3**: 177–187.

Wagner J. 1935. Beiträge zur Flora von Griechenland. *Repertorium Novarum Specierum Regni Vegetabilis* **38**: 281–288.

Yazlik A. 2021. *Impatiens balfourii* (Balsaminaceae): first recording from the Western Black Sea Region of Turkey. *Turkish Journal of Weed Science* **24**: 13–18.

COMPREHENSIVE PLANT BIOLOGY

REZIME

Novi i značajni podaci o biljkama, algama i gljivama iz JI Evrope i susednih regiona, 20

Gordana Tomović, Marko S. Sabovljević, Ermin Mašić, Viktor Nadarević, Dragiša Savić, Dmitar Lakušić, Snežana Vukojičić, Dimitar Stoykov, Georgi Kunev, Zbigniew Szeląg, Matej Dudáš, Pavel Širka, Marjan Niketić, Sorin Ștefănuț, Vladan Djordjević, Dragana Jenačković Gocić i Danijela Nikolić

U radu su prikazani novi i značajni podaci sa područja JI Evrope i susednih regiona o sledećim taksonima: dijatomeji *Achnanthidium rosenstockii,* brioparazitskim gljivama *Arrhenia retiruga, Arrhenia spathulata,* saprofitskim gljivama *Coccomyces dentatus* i *Hysterobrevium mori,* jetrenjačama *Lunularia cruciata* i *Pallavicinia lyellii,* paprati *Salvinia natans,* monokotilama *Eleocharis carniolica* i *Pseudorchis albida* i dikotilama *Biscutella laevigata*, *Fumana arabica, Hieracium ferdinandi-coburgii, Impatiens balfourii* i *Onosma pseudoarenaria* subsp. *fallax*

Ključne reči: novi nalaz, *Achnanthidium rosenstockii, Arrhenia retiruga, Arrhenia spathulata, Biscutella laevigata, Coccomyces dentatus, Eleocharis carniolica, Fumana arabica, Hieracium ferdinandi-coburgii, Hysterobrevium mori, Impatiens balfourii, Lunularia cruciata, Onosma pseudoarenaria* subsp. *fallax, Pallavicinia lyellii, Pseudorchis albida, Salvinia natans*, JI Evropa