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Original Scientific Report

New records and noteworthy data of plants, algae and fungi in SE Europe and adjacent regions, 5

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ABSTRACT:
This paper presents new records and noteworthy data on the following taxa in SE Europe and adjacent regions: saprotrophic fungi *Psathyrella typhae, Stropharia halophila,* mosses *Bryum klingraeffii* and *Buxbaumia viridis,* liverwort *Scapania gymnostomophila*, fern *Matteuccia struthiopteris*, monocots *Galanthus nivalis, Listera ovata,* and *Ophrys apifera,* and dicots *Astragalus dasyanthus* and *Paeonia officinalis* subsp. *banatica*.

Keywords:
new report, *Astragalus dasyanthus, Buxbaumia viridis, Bryum klingraeffii, Galanthus nivalis, Listera ovata, Matteuccia struthiopteris, Ophrys apifera, Paeonia officinalis* subsp. *banatica*, *Psathyrella typhae, Scapania gymnostomophila, Stropharia halophila,* SE Europe

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***Astragalus dasyanthus* Pall., fam. Fabaceae (dicot, vascular plant)**
Contributors: Predrag Lazarević and Verica Stojanović
Geographical focus: Serbia
New record and noteworthy data: This is the first record for the eastern part of Serbia, expanding its distribution from very few existing localities in Serbia (Vojvodina: Deliblatska Sands, Selevenjske Pustare, Ludaško Lake; Kosovo: Ibar Gorge near Lešak).
Specimen data: NE Serbia, Požeženska Sands (Humke – Pimine doline –Veliko Brdo area), N 44.69329028°, E 21.58152500°, on the sand dune system, 105 m a.s.l.; 24 May 2012.; leg./det. Lazarević P, Stojanović V.
Voucher: Herbarium of the Institute of Botany and Botanical Garden Jevremovac, University of Belgrade (BEOU), vascular plant collection 17741.

The general distribution of *A. dasyanthus* comprises parts of Serbia, Bulgaria, Hungary, Romania, Moldova,

Ukraine and SW Russia (Podlech 2008). In Serbia, it is scattered within very few localities: Deliblato Sands, Selevenjske Pustare, Ludaško Lake and the Ibar Gorge from the area surrounding Lešak to the administrative border with C Serbia (Pančić 1874; Diklić 1972; Avramović *et al.* 2007; Prodanović *et al.* 2008; Butorac & Panjković 2013). This new finding on the Požeženska Sands represents the only known locality for the Serbian mainland since some very old records for the Ibar valley below Raška (Pančić 1874; Perić *et al.* 2012) have not been confirmed. In the Požeženska Sands, the population of *A. dasyanthus* occurs within the Humke – Pimine Doline –Veliko Brdo area, between the villages of Ponikve and Vinci. It inhabits xerothermic, steppic grasslands on the sand dune system, intersected with forests and agricultural areas. This area represents a potential Natura 2000 site. *Astragalus dasyanthus* is a strictly protected species under national legislation, indicating the importance of the newly recorded population. Forest and shrub overgrowth, together with extensive agriculture, invasive species [*Ailanthus altissima* (Mill.) Swingle, *Robinia pseudoacacia* L., *Asclepias syriaca* L. etc.], and illegal landfills represent the most pronounced factors threatening the remaining natural habitats.

***Bryum klingraeffii* Schimp., fam. Bryaceae (moss, bryophyte)**
Contributors: Simona Strgulc Krajšek and Dijana Kosič
Geographical focus: Slovenia
New record and noteworthy data: The first record for Slovenia since 1891.
Specimen data: Slovene Istria, Pregara, Abrami, a small vineyard S of the road between Pregara and Abrami, N 45.44318°, E 13.87371°, 440 m a.s.l.; 16 January 2021; leg. Strgulc Krajšek S, Kocjan JM, Kosič D.; det. Strgulc Krajšek S.
Voucher: Herbarium of the University of Ljubljana (LJU), s/n.

Bryum klinggraeffii is a dioecious species, recognizable by abundant small (less than 100 μm in diameter) red or brown rhizoidal tubers with protuberant cells, the rhizoids are light brown, and the leaf border is indistinct (Porley 2008; Holyoak 2021). It grows all across Europe, mainly on cultivated land (Holyoak 2021). Its conservation status at the European level is classified as that of Least Concern (LC) (Hodgetts *et al.* 2019).

During a field trip to Slovene Istria in January 2021, we found it on bare wet eutric brown soil on Eocene flysch in a small vineyard near the village of Abrami. The only record from Slovenia was from the NE part of the country, from the banks of the Drava River near Ptuj (Breidler 1891). Due to the absence of recent data, the species was included in the Updated Red List of bryophytes of Slovenia with Data Deficient-vanished (DD-va) conservation status (Martinčič 2016).

We assume that *Bryum klinggraeffii* is neglected in Slovenia, as bryophyte flora of ruderal and cultivated habitats is not well researched. We expect more findings which will complement the species distribution in the following years.

***Buxbaumia viridis* (Lam. & DC.) Moug. & Nestl., fam. Buxbaumiaceae (moss, bryophyte)**
Contributors: Lado Kutnar and Janez Kermavnar
Geographical focus: Slovenia
New records and noteworthy data: New records of rare and endangered species, also listed as Bern Convention and Natura 2000 species.
Specimen data: 1) Iški vintgar, S of Ljubljana, one old sporophyte on a spruce stump, N 45.907234°, E 14.494448°, 377 m a.s.l.; 6 July 2021; leg. Sabovljević M, Kutnar L.; det. Sabovljević M.; **2)** Mount Krim, NE of Rakitna and S of Ljubljana, one big spruce stump with 11 sporophytes, N 45.902506°, E 14.452369°, 869 m a.s.l.; 6 July 2021; leg. Sabovljević M, Kermavnar J, Kutnar L.; det. Sabovljević M.; **3)** Pokljuka near Mrzli Studenec and Šijec bog, two sporophytes on one spruce stump, N 46.3370°, E 13.9930°, 1192 m a.s.l.; 7 July 2021; leg. Sabovljević M, Kermavnar J, Kutnar L.; det. Sabovljević M.; **4)** The Veliki Šumik area on Pohorje Mountain, two spruce stumps with 20 sporophytes in total, N 46.481759°, E 15.448656°, 1039 m a.s.l.; 9 July 2021; leg. Kutnar L, Sabovljević M.; det. Sabovljević M.; **5)** Planina pod Šumikom on Pohorje Mountain – SE of the Veliki Šumik area, one old sporophyte on a spruce stump, N 46.4756°, E 15.4562°, 1121 m a.s.l.; 9 July 2021; leg. Kutnar L, Kermavnar J.; det. Kutnar L, Sabovljević M.; **6)** Krma valley near Zgornja Radovna**,** one sporophyte on a spruce stump, N 46.410456°, E 13.929298°, 815 m a.s.l.; 12 July 2021; leg. Sabovljević M, Simčič A.; det. Sabovljević M.; **7)** Near the village of Na skali in the Soča valley, one decaying trunk with five sporophytes, N 46.340575°, E 13.710340°, 995 m a.s.l.; 16 July 2021; leg./ det. Sabovljević M.
Vouchers: photo-documentation;

Buxbaumia viridis is a boreo-montane species and prefers Norway spruce [*Picea abies* (L.) H. Karst.], Silver fir (*Abies alba* Mill.) and European beech (*Fagus sylvatica* L.) or mixed forests, rich in deadwood. It grows on well-decayed wood, on logs, and stumps in varying stages of decay and humidity. It is in the protonemal stage in the decaying wood substrate and can be easily recognized when sporophytes are produced. These can be found singly or in small groups on decaying trunks in advanced phases of decay in the late spring to summer period. It is a widespread but rare species, and its distribution range includes scattered habitats throughout the northern hemisphere mostly in boreal and boreal-like biomes. The main threat for this desiccation-intolerant species is considered to be forest management. Clearcutting completely destroys its habitat. After clearcutting, old stumps still exist, but the

microclimate in the more open forest areas is not favourable for this species due to changes in direct sun radiation and humidity misbalance.

The removal of deadwood eliminates the formation of suitable substrates and creates large openings in the canopy overstory (resulting in significant ecological changes) which may cause desiccation in the forest ground. The species is listed in Annex II of the EC Habitats and Species Directive and in Appendix I of the Council of Europe's Bern Convention.

Within the framework of the Life-IP Natura.SI project, the monitoring of this species in Slovenia has contributed to the discovery of these new localities as well as to those previously recorded and elaborated in Skudnik *et al.* (2013). However, it should be emphasised that late spring 2021 was cool and wet, while summer 2021 was significantly drier than the long-term average all over Slovenia, so this species is likely to be more frequent in Slovenia. Intensified monitoring efforts are thus needed in the forthcoming years.

***Galanthus nivalis* L., fam. Amaryllidaceae (monocot, vascular plant)**
Contributors: Petya Boycheva and Galina Yaneva
Geographical focus: Bulgaria
New record and noteworthy data: This is a species of conservation importance. The newly reported sites are in habitat types protected by the European NATURA 2000 Batova River Valley and Suha Reka network. We present a total of six new habitats.
Specimen data: 1) Northeastern Bulgaria, the land around Dolishte village, Varna region, N 43.3232090°, E 27.8905770°; 1 March 2020; leg./det. Boycheva P, Yaneva G.; **2)** Northeastern Bulgaria, the land around Dolishte village, Varna region, N 43.2917930°, E 27.8541930°; 22 March 2020; leg./det. Boycheva P, Yaneva G.; **3)** Northeastern Bulgaria, the land around Krumovo village, Varna region, N 43.3702950°, E 27.8160600°; 1 March 2020; leg./det. Boycheva P, Yaneva G.; **4)** Northeastern Bulgaria, the land around Krumovo village, Varna region, N 43.3695030°, E 27.8169880°; 1 March 2020; leg./det. Boycheva P, Yaneva G.; **5)** Northeastern Bulgaria, the land around Krumovo village, Varna region, N 43.4259080°, E 27.7545640°; 21 March 2020; leg./det. Boycheva P, Yaneva G.; **6)** Northeastern Bulgaria, the land around Krumovo village, Varna region, N 43.3948200°, E 27.7729430°; 28 March 2020; leg./det. Boycheva P, Yaneva G.
Voucher: Herbarium of Sofia University St. Kliment Ohridski (SO) 108049, 108052, 108050, 108051, 108044, 108048.

Although the species is not new to the floristic region of Northeastern Bulgaria (Assyov *et al.* 2012; Zahariev 2015; Zahariev & Kacheva 2015), it represents a new locality in Northeast Bulgaria. Data on the distribution of the *Galanthus* species in Bulgaria have been reported by Sidjimova *et al.* (2003) and Sidjimova (2006). A rare species, *G. nivalis* is included in Annex II of the Council Directive 92/43 EEC (the Habitats Directive) and Annex III of the Biodiversity Act, it has been assigned as an Endangered according to the Red Book of Bulgaria (Peev *et al.* 2011), and is included on the lists of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

***Listera ovata* (L.) R.Br., fam. Orchidaceae (monocot, vascular plant)**
Contributors: Petya Boycheva and Dobri Ivanov
Geographical focus: Bulgaria
New record and noteworthy data: This is the first record for the species in the Suha Reka protected site.
Specimen data: The St. Marina area, the land around Botevo village, Varna region, N 43.4260700°, E 27.75440370°; 2 May 2020, leg./det. Boycheva P, Ivanov D.
Voucher: Herbarium of Sofia University St. Kliment Ohridski, SO 108040.

In a deciduous forest, the population size is 48 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 Suha Reka protected nature reserve. Despite being relatively rare but widely dispersed across the country (Vladimirov *et al.* 2016), the species it is new for this area. 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).

***Matteuccia struthiopteris* (L.) Tod., fam. Onocleaceae (fern)**
Contributors: Snežana Vukojičić
Geographical focus: Serbia
New record and noteworthy data: A new site is given for the rare and critically endangered species in Serbia – *M. struthiopteris*. This is the second record for this strictly protected species of great conservation interest in Serbia.
Specimen data: Western Serbia, Kotraža, the Bjelica river valley, Beli Kamen N 43.687230°, E 20.235603°, MGRS 34T DP 33, moist soil along the river bank in association with *Alnus glutinosa*, 450 m a.s.l.; 1 May 2021; leg./det. Vukojičić S.
Vouchers: Herbarium of the Institute of Botany and Botanical Garden Jevremovac, University of Belgrade (BEOU), vascular plant collection 17758.

In the Red Book of Flora of Serbia *M. struthiopteris* is listed as a Critically Endangered species (Tatić & Marin 1999). Previous findings of this species in Serbia are related to the gorge of the river Moravica, in the part where the river Panjica flows up to 2 km downstream, between Arilje and Ivanjica (Vukićević 1992; Tatić & Marin 1999 and the references therein).

Along the Kotraža – Ivanjica main road, in the valley of the river Bjelica, near Beli Kamen, a new population of *M. struthiopteris* was found. The fern grows on moist soil right next to the river, within the alder forest (ass. *Matteuccio-Alnetum glutinosae*) and the population numbers up to 1000 individuals. Next to these communities, there is arable land, and intensive anthropogenic activity was noted. The habitat should be protected as soon as possible.

***Ophrys apifera* L., fam. Orchidaceae (monocot, vascular plant)**
Contributors: Sanja Z. Djurović and Uroš Buzurović
Geographical focus: Serbia
Novel and remarkable data: A new site in the Šumadija region in Serbia is given for this near threatened species. The species is listed in the CITES.
Specimen data: Mt. Juhor, Majur, N 43.938528°, E 21.294572°, MGRS 34T EP26, grassland, 220 a.s.l., 3 June 2020; leg./det. Djurović S, Buzurović U.; conf. Djordjević V.
Voucher: photo documentation of Djurović S, Buzurović U.

Ophrys apifera is one of the most widely distributed species of the genus *Ophrys* L., ranging from Ireland to the Caucasus, across Europe, North Africa, and the Middle East (Soliva *et al.* 2001). It is included on the list of the Convention on International Trade of Endangered Species of Fauna and Flora in Appendix II (CITES 2020). Although *O. apifera* has a wide range, it is characterized by a small population size, usually with no more than two individuals. Therefore, the estimated regional conservation status of the species is Near Threatened (NT). It was previously recorded in 20 10×10 km^2 UTM grid cells across Serbia (Djordjević *et al*. 2017).

In June 2020 one new species site on Mt. Juhor was discovered with only two flowering individuals as the first record in EP1 50×50 km^2 and also EP 100×100 km^2 UTM grid cells.

***Paeonia officinalis* subsp. *banatica* (Rochel) Soó, fam. Paeoniaceae (dicot, vascular plant)**
Contributors: Marjan Niketić and Gordana Tomović
Geographical focus: Serbia, Montenegro
New records and noteworthy data: A new subspecies for Montenegro and Kosovo and Metohija and confirmed presence for the Srem region (Vojvodina province) after almost 60 years. Also this is the first record for the Šumadija region.
Specimen data: 1) Serbia, Šumadija, Mt. Rudnik, Kotraža, Karaula, MGRS 34T DP78, *Quercus petraea* and *Carpinus orientalis* forest, limestone, 500 m a.s.l.; 6 May 2004; leg. Niketić M, Jovanović M.; det. Niketić M; **2)** Serbia, Šumadija, Mt. Rudnik, Kotraža, Karaula, N 44.140685°, E 20.685133°, MGRS 34T DP78, *Quercus petraea* and *Carpinus orientalis* forest, limestone, 470 m a.s.l.; 18 April 2019; leg. Niketić M, Buzurović U.; det. Niketić M; **3)** Serbia, Šumadija, Mt. Rudnik, Kotraža, Karaula, N 44.140685°, E 20.685133°, MGRS 34T DP78, *Quercus petraea* and *Carpinus orientalis* forest, limestone, 530 m a.s.l.; 4 June 2021; leg./det. Niketić M; **4)** Serbia, Srem, the Srem loess plateau, Koševac, level 259, MGRS 34T DR30, forest steppe with *Cotinus coggygria*, alluvium, 220 m a.s.l.; 8 May 2020; leg./det. Niketić M.; **5)** Serbia, Srem, the Srem loess plateau, Koševac, level 259, N 45.1687295°, E 20.1698463°, NMGRS 34T DR30, forest steppe with *Cotinus coggygria*, alluvium, 220 m a.s.l.; 8 May 2021; leg. Niketić M, Tomović G, Bogdanović S.; det. Niketić M; **6)** Serbia, Metohija, Mt. Paštrik, above the village of Gorožup, MGRS 34T DM67, *Quercetum macedonicae* forest and meadow, limestone, 500-1500 m a.s.l.; 26 Jul 1979; leg. Nikolić V, Diklić N, Mladenović S.; det. Nikolić V., sub. *Paeonia corallina*; rev. Hong D-Y. 16 August 2003 sub. *Paeonia arietina*; **7)** Montenegro, the Moračke Mountains, Stožac Peak, Tali, Korita – Rudna Gava, MGRS 34T CN64, high-mountain pastures, limestone, 1800 m a.s.l.; 16 August 2017; leg./det. Niketić M.
Vouchers: Natural History Museum in Belgrade, General Herbarium of the Balkan Peninsula (BEO), 100050, 100051, 100052, 100053, 100054, 45282, 100055.

This subspecies is new for the flora of Kosovo and Metohija, its presence in Srem has been confirmed, and it has also been recorded for the first time for the flora of Šumadija. From the area of Kosovo and Metohija, there is only a herbarium specimen from Mt. Paštrik (BEO 45282), which was originally identified as *P. corallina* Retz., and revised as *P. arietina* G. Anderson by D-Y. Hong (unpublished). The population in Srem (Koševac) (BEO 100053, 100054) has about 20 individuals located on only 10 m^2 within the steppe vegetation next to shrubs with *Cotinus coggygria*, while the population in Šumadija on the northern slopes of Mt. Rudnik (BEO 100050, 100051, 100052) is much more numerous and estimated at about 500 individuals.

According to Hong *et al.* (2008) and Hong (2010, 2011), the subspecies is represented in the flora of Hungary, Romania, Serbia and Bosnia and Herzegovina. According to Hayek (1924), this taxon is also present in Northern Macedonia, and according to Passalacqua & Bernardo (2004) in northwestern Italy.

Based on our observations, it differs from the typical subspecies primarily in terms of the smaller number of leaf lobes, while their width and hairiness are quite variable. Although the horology of these two subspecies has not yet been elucidated, it is probably a typical subspecies of the western distribution (extending from France in the west to the northwestern Balkans in the east), while in southeastern Europe it is replaced by *P. officinalis* subsp. *banatica*. Although *P. officinalis* subsp. *officinalis* was also mentioned for the flora of Serbia (Blečić 1972; Lazarević & Stojanović 2012), by checking the populations in the field in western Serbia, we confirmed the po-

sition of Hong *et al.* (2008) that only *P. officinalis* subsp. *banatica* is present in Serbia; also literature data for *P. officinalis* for Montenegro (Rohlena 1942) actually refer to *P. officinalis* subsp. *banatica*. In addition, numerous data on the presence of the species *P. daurica* Andrews (sub „*P. mascula*") as well as the transitional forms between *P. officinalis* and *P. daurica* in western Serbia (Amidžić & Krivošej 2001; Lazarević & Stojanović 2012) actually correspond to *P. officinalis* subsp. *banatica*, whose leaf lobes can vary from lanceolate (as in *P. officinalis* subsp. *officinalis*) to broadly elliptical (as in *P. daurica*). According to P. Lazarević (pers. comm.), *P. daurica* is very rare in W Serbia, where it has only been found in the vicinity of Mokra Gora.

Another morphologically very similar species to *P. officinalis* subsp. *banatica* is *P. arietina* which always has broad leaf lobes, but differs in the colour of the flower which is reddish pink (in *P. officinalis* subsp. *banatica* is pink to lilac), densely villose hairy calyx leaves and more hairy stem and leaves (although this last character is quite variable). This species has been described from Anatolia where it is widespread, while (often inaccurate) data for its presence in Southeast Europe (Cullen *et al.* 1993; Hong *et al.* 2008; Hong 2010, 2011) have not yet been confirmed. It is possible that such data actually refer to *P. officinalis* subsp. *banatica*, because as we have already mentioned, the material from Mt. Paštrik was revised (BEO 45282, det. Hong, sub. *P. arietina*, unpubl.). Since *P. officinalis* is also mentioned from Mt. Paštrik, but as the type subspecies (Wraber 1987), the presence of *P. arietina* from this locality should most likely be excluded. Accordingly, the data for Albania (Hayek 1924; Barina 2017) should be expected to correspond to *P. officinalis* subsp. *banatica*. Also, the data for the presence of *P. arietina* in eastern Bosnia (very close to the border with Serbia) (Hong *et al.* 2008) also require verification, because in the aforementioned paper for the same localities as the syntopic secies, *P. officinalis* subsp. *banatica* was also mentioned.

The relatively wide presence of *P. officinalis* subsp. *banatica* in the flora of Serbia requires a change in the current threat status assessment (CR), which is listed in the Red Book of Flora of Serbia (Božа & Stojšić 1999) and based on only one population in Vojvodina (Deliblato Sands).

***Psathyrella typhae* (Kalchbr.) A. Pearson & Dennis, fam. Psathyrellaceae (fungus, saprotrophic)**
Contributor: Boris Assyov
Geographical focus: Bulgaria
New records and noteworthy data: This is apparently the first record of *P. typhae* on the Balkan Peninsula and in Bulgaria (Zervakis *et al.* 1998; Ivančević 2002; Mešić & Tkalčec 2003; Denchev & Assyov 2010; Karadelev *et al.* 2018).
Specimen data: Znepole Region, Dragoman Marsh (Bulgaria), N 42.936449°, E 22.954273°, on decaying remains of *Typha latifolia* L.; 700 m a.s.l.; 9 October 2020; leg./det. Assyov B.
Voucher: Bulgarian Academy of Sciences, Institute of Biodiversity and Ecosystem Research, Mycological Collection (SOMF), 30347.

Psathyrella typhae is a species characteristic of various types of wetlands, where its substrate plants are present. The scattered records in the mycological literature suggest its wide geographic range over Europe where it is presumed to be common (Læssøe & Petersen 2019). While it is most often reported to occur on plants of the genus *Typha* L., it has also been found on the culms of a variety of other hygrophilous plants, mostly monocots, including species of the genera *Carex* L., *Phragmites* Adans., *Acorus* L., *Iris* L., *Rumex* L., *Scirpus* L., and *Sparganium* L. (Loizides & Yangou 2012; Læssøe & Petersen 2019). In the adjacent areas it is known from Anatolia in Turkey (İleri *et al.* 2019) and further south as far as Cyprus (Loizides & Yangou 2012). The lack of previous records from the Balkan Peninsula is thus surprising as *P. typhae* is a morphologically and ecologically distinctive species of the genus and may be relatively easily identified in the field. The explanation for the lack of any prior findings in the Balkans might be sought in its peculiar habitat – boggy areas with paludicolous vegetation. Such habitats seem to attract less attention compared to other ecosystems and at least in Bulgaria have been understudied (Gyosheva 2007). Nevertheless, *P. typhae* may turn out to be truly rare, judging from the fact that before the present finding emerged, the author had been searching for it unsuccessfully in numerous suitable locations for the last five years. The Bulgarian specimen reported here fits the descriptions in recent sources (Breitenbach & Kränzlin 1995; Örstadius & Knudsen 2008; Læssøe & Petersen 2019).

***Scapania gymnostomophila* Kaal., fam. Scapaniaceae (liverwort, bryophyte)**
Contributor: Sorin Ștefănuț
Geographical focus: Romania
New record and noteworthy data: The first record for the Eastern Carpathians.
Specimen data: Eastern Carpathians, Brașov County, Mt. Postăvaru, eastern side of Postăvaru Peak, N 45.569264°, E 25.568678°, 1762 m a.s.l.; 7 June 2021; leg./det. Ștefănuț S.
Voucher: Romanian Academy, Herbarium of the Institute of Biology – Bucharest (BUCA), bryophyte collection, B12117.

Scapania gymnostomophila grow in the limestone crevices in the eastern part of Postăvaru Peak, alongside *Encalypta spathulata* Müll.Hal.

This is the third report of *S. gymnostomophila* for Romania. Previously, this species was reported from the Southern Carpathians, the Bucegi Massif (Blockeel *et*

al. 2008) and the Piatra Craiului Mountains (Ellis *et al.* 2015). The nearest locality of this species is in Slovakia (Hodgetts & Lockhart 2020). The conservation status of *S. gymnostomophila* in Romania has been changed from Critically Endangered – B1ab(ii,iii)+2ab(ii,iii) (Ştefănuţ & Goia 2012) to Endangered – EN B2ab(ii,iii,iv).

***Stropharia halophila* Pacioni, fam. Strophariaceae (fungus, saprotrophic)**
Contributor: Boris Assyov
Geographical focus: Bulgaria
New records and noteworthy data: This is the first record of *S. halophila* on the Balkan Peninsula and in Bulgaria (Zervakis *et al.* 1998; Ivančević 2002; Tkalčec & Mešić 2003; Sesli & Denchev 2008; Denchev & Assyov 2010).
Specimen data: Black Sea coast, between the villages of Novo Oryahovo and Shkorpilovtsi (Bulgaria), N 42.987964°, E 27.879060°, fixed coastal sand dunes, 2 m a.s.l.; 28 October 2020; leg./det. Assyov B.
Voucher: Bulgarian Academy of Sciences, Institute of Biodiversity and Ecosystem Research, Mycological Collection (SOMF), 30348.

Stropharia halophila was first described from Italy (Jahnke *et al.* 1988) and later recorded from France, Portugal and the United Kingdom (Hausknecht & Reinwald 2001; Bon & Roux 2003; Legon & Henrici 2005; Moreau *et al.* 2007; Guinberteau 2012). It is reported for the first time from Bulgaria and the Balkan Peninsula. While its primary geographic range is drawn along the shores of Europe reaching as far as Southern Russia (Rebriev 2018), it is apparently not limited to this continent as it has also been recorded from Asia (Bau & Meng 2008). The finding of the species on the Balkan Peninsula is thus not unexpected and it may well occur in the coastal regions of other countries in the Balkans, where it should be further sought.

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REZIME

Botanica SERBICA

Novi i značajni podaci o biljkama, algama i gljivama iz JI Evrope i susednih regiona, 5

Marko S. Sabovljević, Gordana Tomović, Predrag Lazarević, Verica Stojanović, Simona Strgulc Krajšek, Dijana Kosič, Lado Kutnar, Janez Kermavnar, Petya Boycheva, Galina Yaneva, Dobri Ivanov, Snežana Vukojičić, Sanja Z. Djurović, Uroš Buzurović, Marjan Niketić, Boris Assyov i Sorin Ştefănuţ

U radu su prikazani novi i značajni podaci sa područja JI Evrope i susednih regiona o sledećim taksonima: saprofitskim gljivama *Psathyrella typhae* i *Stropharia halophila*, mahovinama *Bryum klingraeffii* i *Buxbaumia viridis*, jetrenjači *Scapania gymnostomophila*, paprati *Matteuccia struthiopteris*, monokotilama *Galanthus nivalis*, *Listera ovata* i *Ophrys apifera* i dikotilama *Astragalus dasyanthus* i *Paeonia officinalis* subsp. *banatica*.

Ključne reči: novi nalaz, *Astragalus dasyanthus*, *Buxbaumia viridis*, *Bryum klingraeffii*, *Galanthus nivalis*, *Listera ovata*, *Matteuccia struthiopteris*, *Ophrys apifera*, *Paeonia officinalis* subsp. *banatica*, *Psathyrella typhae*, *Scapania gymnostomophila*, *Stropharia halophila*, JI Evropa