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Original Scientific Paper

New records and noteworthy data of plants, algae and fungi in SE Europe and adjacent regions, 2

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ABSTRACT:
This paper presents new records and noteworthy data on the following taxa in SE Europe and adjacent regions: the diatom alga *Eunotia boreoalpina*; the saprotrophic fungus *Clitocybe truncicola*; the liverwort *Haplomitrium hookeri*; the moss *Leptodon smithii*: the monocots *Epipactis purpurata, Stipa tirsa, Typha laxmannii* and *T. shuttleworthii*; and the dicots *Krascheninnikovia ceratoides, Polygonum albanicum* and *Sorbus latifolia*.

Keywords:
new record, *Clitocybe truncicola, Eunotia boreoalpina, Epipactis purpurata, Haplomitrium hookeri, Krascheninnikovia ceratoides, Leptodon smithii, Polygonum albanicum, Sorbus latifolia, Stipa tirsa, Typha laxmannii, Typha shuttleworthii*

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***Clitocybe truncicola* (Peck) Sacc., fam. Tricholomataceae (fungus, saprotrophic)**
Contributors: Ivana Djokić and Predrag Petrović
Geographical focus: Serbia
New record and noteworthy data: The first record of *Clitocybe truncicola* in Serbia.
Specimen data: Belgrade area, Ada Ciganlija, N 44.782283°, E 20.379246°, on a decaying log of a deciduous tree, in the protected area "Fungi of Ada Ciganlija", 84 m a.s.l., 11 October 2019; leg. Djokić I.; det. Petrović P.
Voucher: Natural History Museum in Belgrade, National Fungal Collection (BEO) 21128.

From early October to the end of November 2019, trunk funnel (*C. truncicola*) basidiocarps were collected from several sites on Ada Ciganlija, a river island

that has been artificially turned into a peninsula, located in the Sava River's course through central Belgrade. Specifically, basidiocarps were recorded within a protected area of 21 ha, a central forested complex declared the "Fungi of Ada Ciganlija" protected habitat in 2013. This area is specific as it hosts more than 250 species of macromycetes, many of which are included on Serbian and international lists of rare or endangered species. *Clitocybe truncicola* was originally described from North America (Bas *et al.* 1995) and the first finds of this species in Europe were reported as recently as in 1988 (Breitenbach & Kranzlin 1992). Since then it was reported from several European countries (Austria, Czech Republic, Denmark, Estonia, France, Germany, Hungary, Italy, Spain, the Netherlands, the United Kingdom), in some being considered very rare. It is one of only two European *Clitocybe* species, alongside *C. subbulbipes* Murr., that occur on dead wood of various tree species from the genera *Acer, Alnus, Carpinus, Fraxinus, Populus,* and *Ulmus*, as well as on *Sorbus aucuparia* L., which is why it was confused in the past with the macroscopically and ecologically similar *Ossicaulis lignatilis* (Pers.) Redhead & Ginns [formerly known as *Clitocybe lignatilis* (Pers.) P. Karst.] , also found in the same habitat on Ada Ciganlija (Bas *et al.* 1995; Lohmeyer 1999). According to the Global Biodiversity Information Facility (GBIF database – https://www.gbif.org/), *C. truncicola* has two disjunct records, one in China (reported in 2014) and another from Morocco (reported in 1989). The new record of this species is important both as a new finding for the protected area on Ada Ciganlija, an area covered by active measures on fungal conservation, and as a first record for Serbia.

***Epipactis purpurata* Sm., fam. Orchidaceae (monocot, vascular plant)**

Contributors: Vladan Djordjević and Predrag Lazarević

Geographical focus: Serbia

New records and noteworthy data: These are the first records for the Ivanjica region and Mt. Zlatibor, at the same time representing the first findings of this species within the MGRS 34T DP2 50 × 50 km^2 UTM grid cell. The new locality in the village of Lisa near the town of Ivanjica represents the easternmost limit of the species' distribution in the Dinaric part of the Balkan Peninsula.

Specimen data: 1) western Serbia, Ivanjica, village of Lisa, Samograd – Straža, N 43.661703°, E 20.231065°, MGRS 34T DP33, *Fagetum montanum*, limestone, exp. NW, incl. 20°, 810 m a.s.l., 21 July 2019; leg./det. Djordjević V. *17684*; **2)** western Serbia, Mt. Zlatibor, Čigota peak, Brezanje, N 43.65965°, E 19.77522°, MGRS 34T DP03, *Fagetum montanum*, limestone, exp. NE, incl. 20°, 1035 m, m a.s.l., 13 July 2020; leg. Djordjević V.; det. Djordjević V., Lazarević P. *17685*; **3)** western Serbia, Mt. Zlatibor, Murtenica peak, Šišačka Kosa, N 43.60519°, E 19.75772°, MGRS 34T CP92, *Fagetum montanum*, limestone, exp. S, incl. 25°, 1220 m a.s.l., 14 July 2020; leg. Djordjević V.; det. Djordjević V., Lazarević P. *17686*; **4)** western Serbia, Mt. Zlatibor, Murtenica peak, Brijač, Velika Stojkovača, N 43.59115°, E 19.78354°, MGRS 34T DP02, *Abieti-Fagetum*, limestone, exp. NE, incl. 25°, 1290 m a.s.l., 14 July 2020; leg. Djordjević V.; det. Djordjević V., Lazarević P. *17687*; **5)** western Serbia, Mt. Zlatibor, Sirogojno (church), N 43.68913°, E 19.88140°, MGRS 34T DP03, *Fagetum montanum*, limestone, exp. NE, incl. 25°, 865 m a.s.l., 22 August 2020; leg./det. Djordjević V. *17688*.

Vouchers: Herbarium of the Institute of Botany and Botanical Garden "Jevremovac", University of Belgrade (BEOU), vascular plant collection 17684, 17685, 17686, 17687, 17688.

This species is distributed primarily in the temperate zone of Western and Central Europe; it occurs north to Denmark, Great Britain and the Baltic States, west to France and northern Spain, and south to southern Italy, Greece and Bulgaria (Rankou 2011). The species was found on Mt. Maljen (Bukovi) for the first time in Serbia (Djordjević *et al.* 2010), and later on Mts. Jablanik, Tara, Zvijezda, Pobijenik, Jadovnik and Kamena Gora (Djordjević *et al.* 2017). New findings of this species in the Ivanjica region and on Mt. Zlatibor represent four new 10 × 10 km UTM grid cells in the region of western Serbia, in addition to previous findings only on Mts. Tara and Zvijezda (Djordjević *et al.* 2017).

The population in Ivanjica (village of Lisa) numbered two individuals within an area of 20 m^2, whereas the populations on Mt. Zlatibor consisted of the following numbers of individuals: four individuals / 20 m^2 (Murtenica peak, Šišačka kosa); seven individuals / 30 m^2 (Murtenica peak, Brijač); eight individuals / 50 m^2 (Sirogojno); and 16 individuals / 200 m^2 (Čigota, Brezanje). The species is endangered (IUCN: EN) in Bulgaria, the Czech Republic and Liechtenstein, whereas it has the status of a vulnerable species (IUCN: VU) in Slovakia, Luxemburg and Austria (Kull *et al.* 2016). According to Djordjević *et al.* (2017), the estimated IUCN conservation status of this species in Serbia is vulnerable (VU). Accordingly, the species should be included in the Red Data Book of Flora of Serbia.

***Eunotia boreoalpina* Lange-Bertalot et Nörpel-Schempp in Lange-Bertalot & Metzeltin, fam. Eunotiaceae (diatom, algae)**

Contributors: Ermin Mašić and Senka Barudanović

Geographical focus: Bosnia and Herzegovina

New record and noteworthy data: First record for Bosnia and Herzegovina. Species recorded in peatlands on Mt. Vranica.

Specimen data: Mt. Vranica, species recorded in four small mountain peat bogs: **1)** N 43.95192°, E 17.75827°,

1714 m a.s.l.; **2)** N 43.95134°, E 17.76057°, 1755 m a.s.l.; **3)** N 43.95131° E 17.76065°, 1755 m a.s.l.; **4)** N 43.95137°, E 17.76060°, 1761 m a.s.l.), August and September 2019; leg./det. Mašić E.
Vaucher: Diatom collection (Mašić E.) *s/n*, Laboratory for study of the systematics of algae and fungi, Department of Biology, Faculty of Science, University of Sarajevo (Bosnia and Herzegovina).

The first systematic algological research on Mt. Vranica (Bosnia and Herzegovina) was carried out in different wet habitats developed near mountain springs and brooks (Kapetanović & Hafner 2007). Additional data on the diversity of algae in freshwater habitats on Mt. Vranica were published by various authors (Barudanović *et al*. 2015; Mašić *et al*. 2019).

The presence of the species *Eunotia boreoalpina* in freshwater habitats on Mt. Vranica was expected. According to published data, this species in Central Europe is scattered but locally abundant in mountainous regions on siliceous bedrock, in moderately acidic electrolyte-poor springs, headwaters, lakes and minerotrophic fens (Cantonati *et al*. 2017).

In Bosnia and Herzegovina (Mt. Vranica), the species *E. boreoalpina* was identified only from mountain peat bogs. According to Krizmanić *et al*. (2015), this species is characteristic of moderately acidic waters with low electrolyte content. Altitudes where *E. boreoalpina* was identified range from 1714 to 1761 m a.s.l. In peat bogs where the species was identified, pH ranged from 4.16 to 5.93, dissolved oxygen ranged from 7.00 to 7.82 $mg \cdot L^{-1}$, while specific conductivity ranged from 22.44 to 600.8 $\mu S \cdot cm^{-1}$. According to the German Red List (Lange-Bertalot & Steindorf 1996), this species is not classified as threatened, but in Bulgaria (within the Balkan Peninsula) Stoyneva-Gärtner (2015) assessed its status as vulnerable (VU). Unfortunately, the peat bogs where *E. boreoalpina* was identified are today under strong anthropogenic influences. These habitat types cover only a small part of Mt. Vranica, and as they are the most fragile and the most sensitive habitat in this area, they deserve special conservation attention.

***Haplomitrium hookeri* (Sm.) Nees, fam. Haplomitriaceae (liverwort, bryophyte)**
Contributor: Sorin Ștefănuț
Geographical focus: Romania
New record and noteworthy data: This is the first record for the Parâng Mountains.
Specimen data: Southern Carpathians, Mts. Parâng, on a bank of Lung Lake, N 45.34558333°, E 23.55155556°, 2023 m a.s.l., 28 June 2012; leg./det. Ștefănuț S.
Voucher: Herbarium of the Bucharest Institute of Biology, Romanian Academy (BUCA), bryophyte collection, B4371.

The first published record of *Haplomitrium hookeri* for Romania was from the Rodna Mountains (Ștefănuț 2000), and since then three new reports were published: on the Bucegi Massif (Ștefănuț 2007), and on Mts. Făgăraș and Retezat (Ștefănuț 2010).

The presence of *H. hookeri* in the Parâng Mountains was expected, thus completing the species′ distribution in all of the Southern Carpathians. This is the southernmost record of the given species in Southeast Europe.

According to the European Red List of Mosses, Liverworts and Hornworts (Hodgetts *et al*. 2019), *H. hookeri* has been assessed as being of least concern (LC), but for Romania it is assigned to the category of vulnerable (VU) (Ștefănuț & Goia 2012).

***Kraschenninnikovia ceratoides* (L.) Gueldenst., fam. Amaranthaceae (dicot, vascular plant)**
Contributors: Marjan Niketić and Branislava Butorac
Geographical focus: Serbia
New records and noteworthy data: On the basis of extensive field investigation and herbarium revision, the species should be excluded from the flora of Serbia.
Specimen data: Based on revision of the specimen of the species reported in Serbia and checking the reported locality, this species cannot be confirmed for Serbia.
Vouchers: The previous voucher specimen [Banat, village of Banatska Palanka, Danube–Tisza–Danube Canal, MGRS 34T EQ26, 15 September 1978; leg./det. Joksimović Ž. (sub *Eurotia ceratoides*) *100003* (Natural History Museum in Belgrade, General Herbarium of the Balkan Peninsula – BEO)] was revised and found to actually belong to the naturalised species *Bassia scoparia* (L.) A. J. Scott (rev. Niketić M.).

The only record of the presence of Pamirian winterfat (*K. ceratoides*, tribe Axyrideae) in Serbia originates from Joksimović (1977), and it was subsequently cited in Flora of SR Serbia (Diklić & Nikolić 1986), but its occurrence has not been confirmed to date. An inspection of the original herbarium material in BEO showed that it was based on one specimen in a piece of newsprint, on the margin of which was written "*Eurotia ceratoides*". However, this specimen was misidentified and actually belongs to *Bassia scoparia* (L.) A. J. Scott. Therefore, neither Joksimović's record nor the data from the publication Flora of SR Serbia can be taken as valid, and the name *K. ceratoides* should be treated as misapplied in floristic data for Serbia. This Holarctic species is very rare in the European flora (Jalas & Suominen 1980) and survived in remains of the Pleistocene cold-steppe and semi-desert flora (Niketić 2018). According to Bartha & Király (2015), it became extinct in the Hungarian flora, and thus in that of the Pannonian Plain. The only enclave on the Balkan Peninsula is located in the central part of North Macedonia (Jalas & Suominen 1980).

***Leptodon smithii* (Hedw.) Web. & Mohr, fam. Neckeraceae (moss, bryophyte)**
Contributors: Jovana Pantović and Marko Sabovljević
Geographical focus: Serbia
New and noteworthy data: Two recent records for Serbia, the first record for Vojvodina province (North Bačka county, Bačka region) and the first one for the region of western Serbia (Zlatibor county).
Specimen data: **1)** Subotičko Horgoška sands, Bukvać, N 46.157408°, E 19.686411°, on *Fraxinus* bark in a mixed deciduous forest, 130 m a.s.l., 21 May 2020; leg. Pantović J., Stevanoski I., Bogosavljević J.; det. Pantović J.; rev. Sabovljević M. *07875*; **2)** Tara National Park, gorge of the Grlac River, N 43.97778°, E 19.33819°, on a fallen trunk in a canyon with mixed thermophyllous vegetation, 406 m a.s.l., 11 July 2016,; leg./det. Pantović J.; rev. Sabovljević M. *07876*.
Voucher: Herbarium of the Institute of Botany and Botanical Garden "Jevremovac", University of Belgrade Herbarium (BEOU), bryophyte collection, Bryo 07875 and 07876.

Leptodon smithii is distinctive epiphytic moss that grows on the trunks or larger branches of mature trees in woods, or more rarely on basic rocks (Atherton *et al*. 2010). This Mediterranean-Atlantic species is notably tolerant of dry shade, and it is common in the Mediterranean region (Blockeel *et al*. 2014). On the European level, it is considered to be of least concern (LC) according to the new European Red List of Mosses, Liverworts and Hornworts (Hodgetts *et al*. 2019). However, it is regionally rare and protected in some of Serbia´s neighbours, e.g., it is assessed as CR in Romania (Ştefănuţ & Goia 2012) and EN in Hungary (Papp *et al*. 2010).

This species was previously known in Serbia, but from only two sites. The first one, and the only record for the central part of Serbia, was given more than 70 years ago by Soška (Soška 1949), who reported it from the Topčider Park in Belgrade. However, this species was not refound in recently conducted exploration of the Belgrade metropolitan area (Sabovljević & Grdović 2009), and the Soška herbarium seems to be ruined. The second historical locality is a spring of the river Istočka Reka, in Kosovo and Metohija. This record was published by Martinčič (2006) on the basis of more than 50-year-old herbarium samples. The two recent records are a significant contribution to the bryophyte flora of Serbia and to knowledge of the distribution of bryophytes in Serbia, as well as possible bio-documentation of climate change and global warming.

***Polygonum albanicum* Jáv., fam. Polygonaceae (dicot, vascular plant)**
Contributors: Marjan Niketić and Gordana Tomović
Geographical focus: Serbia
New records and noteworthy data: These are the first records for Serbia proper and several new localities for the Republic of Serbia.
Specimen data: 1) western Serbia, Mt. Zlatibor, Partizanske Vode – Semegnjevo, MGRS 34T CP94, serpentinite, 16 July 1989; leg./det. Niketić M. *s/n.* (BEO); **2)** southwestern Serbia, Mt. Ozren, Goleč peak, N 43.2531869°, E 19.9136436°, MGRS 34T DN18, tiny screes by the roadside, harcburgite, 1325 m a.s.l, 20 July 2020; leg./det. Niketić M., Tomović G. *68407* (BEOU), *s.n.* (BEO); **3)** southwestern Serbia, Mt. Ozren, Orlujak peak, N 43.2522335°, E 19.8976081°, MGRS 34T DN18, tiny screes by the roadside, harcburgite, 1330 m a.s.l, 20 July 2020; leg./det. Niketić M., Tomović G. *68408* (BEOU), *s/n.* (BEO); **4)** southwestern Serbia, Mt. Ozren, Pape peak, N 43.2382985°, E 19.9059896°, MGRS 34T DN18, tiny screes by the roadside, harcburgite, 1345 m a.s.l, 20 July 2020; leg./det. Niketić M., Tomović G. *s/n.* (BEO); **5)** southwestern Serbia, Mt. Ozren, Revuša peak, N 43.2448967°, E 19.8535345°, MGRS 34T DN08, tiny screes by the roadside, harcburgite, 1630 m a.s.l, 21 July 2020; leg./det. Niketić M., Tomović G. *68409* (BEOU), *s/n.* (BEO)
Vouchers: Herbarium of the Institute of Botany and Botanical Garden "Jevremovac", University of Belgrade (BEOU), vascular plant collection 68407, 68408, 68409; Natural History Museum in Belgrade, General Herbarium of the Balkan Peninsula (BEO), s/n.

The presence of this species in Serbia was first recorded by Jávorka *et al.* (1926) from the Kosovo & Metohija province (Djakovica, vicinity of the village of Morina, Ćafa Morina pass). After Jávorka *et al.* (1926), it was confirmed for the same locality by Wraber (1990). Until now, this species was not known for Serbia proper, and these five records represent the first reports of its presence in this area. At the same time, the newly-discovered locality of *P. albanicum* on Mt. Zlatibor represents the northernmost and most continental border of the species´ distribution.

This obligate serpentinophyte inhabits rocky grounds and tiny screes by roadsides in hilly regions. On Mt. Zlatibor and at all four localities on Mt. Ozren, the subpopulations are very poor and consist of only a few flowering individuals.

***Sorbus latifolia* (Lam.) Pers. *sensu lato* (*S. aria* s.l. × *S. torminalis*), fam. Rosaceae (dicot, vascular plant)**
Contributors: Alma Hajrudinović-Bogunić and Faruk Bogunić
Geographical focus: Montenegro and Serbia
New records and noteworthy data: This is the first record for Montenegro and the second one reported for Serbia.
Specimen data: 1) Northwestern Montenegro, Nikšić, Grahovac, N 42.6969444°, E 18.6297222°, 1010 m a.s.l.,

5 October 2019; leg./det. Hajrudinović-Bogunić A., Bogunić F. *60020*; 2*n* = 3*x*; **2)** eastern Serbia, Mt. Suva Planina, Devojački Grob, N 43.1988889°, E 22.1416667°, 1300 m a.s.l., 4 October 2018.; leg. Bogunić F.; det. Bogunić F., Hajrudinović-Bogunić A. *60021*; 2*n* = 3*x*;
Vouchers: National Museum of Bosnia and Herzegovina, Herbarium of Bosnia and Herzegovina (SARA), the Herbarium Europaeum collection 60020, 60021.

Despite extensive investigation of the Balkan flora, gaps in taxonomic and distribution knowledge are still evident in certain plant groups, particularly in taxonomically complicated ones (Španiel *et al*. 2017). The genus *Sorbus* is a typical example, with a complex and unresolved taxonomy which is far from a clear-cut situation based on solid knowledge in the Balkans. The exceptional genetic and morphological diversity within the genus is a result of recurrent polyploidisation, homo- and heteroploid hybridisation, backcrosses and apomixis (Robertson *et al*. 2010; Hajrudinović *et al*. 2015a), which encouraged description of novel taxa across the European continent (Lepší *et al*. 2008, 2009; Hajrudinović *et al*. 2015b; Németh *et al*. 2016).

Sorbus subgenus *Tormaria* Májovský & Bernátová represents a complex aggregate containing taxa which originated through spontaneous hybridisation and backcrosses between members of the subgenera *Aria* and *Torminaria* (Rich *et al*. 2010). Central and Western Europe are considered as hotspots of *Tormaria* diversity that include various, mostly polyploid microspecies under the common name *S. latifolia* (Lam) Pers. s.l. (Kurto 2009). However, the distribution of *Tormaria* members is much wider and encompasses the Balkans as well (Hajrudinović *et al*. 2012; Zieliński & Vladimirov 2013; Teofilovski 2017).

Recently, two new localities of members of the subgenus *Tormaria* on the Balkan Peninsula were discovered in Serbia and Montenegro. Analysis of nuclear microsatellites of individuals from both localities confirmed triploids (Hajrudinović-Bogunić, preliminary results). These findings represent the first known locality for Montenegro and the second one reported for Serbia. The first locality of *S. latifolia* s.l. in Serbia, based on taxonomic revision of a single herbarium voucher, was reported by Zieliński & Vladimirov (2013).

***Stipa tirsa* Steven, fam. Poaceae (monocot, vascular plant)**
Contributors: Eva Kabaš and Snežana Vukojičić
Geographical focus: Serbia
New record and noteworthy data: This is the first record for the region of central Serbia.
Specimen data: central Serbia, Mt. Kopaonik, Krmeljica peak, N 43.262793°, E 20.741679°, 1016 m a.s.l., 27 May 2015; leg./det. Kabaš E.; rev. Vukojičić S. *41977*.
Voucher: Herbarium of the Institute of Botany and Botanical Garden "Jevremovac", University of Belgrade (BEOU), vascular plant collection 41977.
According to Martinovsky (1980), *Stipa tirsa* is present in the Balkans only at certain localities, representing the western borders of its distribution. Until now, *S. tirsa* was known only from a few localities in Serbia – Mt. Rtanj, Mt. Suva Planina and the spa Brestovačka Banja in eastern Serbia (Vukićević 1976), as well as the Mt. Vršačke Planine in the province of Vojvodina, where it was found in meadow steppe communities (Vučković 1991).

The newly recorded population on Mt. Kopaonik numbers up to 50 individuals and is found at one small site on steep slopes of the Krmeljica peak on an ultramafic substrate within a dry grassland steppe-like stand of *Stipa mayeri* Martinovsky. Because *S. tirsa* is a steppe relic species with very narrow distribution limited to restricted patches, the sites of its occurrence are of great conservation importance.

***Typha laxmannii* Lepech., fam. Typhaceae (monocot, vascular plant)**
Contributor: Nevena Kuzmanović
Geographical focus: Serbia
New records and noteworthy data: This is the first record for the region of western Serbia. Neophyte, probably spreading out.
Specimen data: western Serbia, Zlatibor county, Mt. Zlatibor, Bregovi, N 43.703966°, E 19.689724°, shallow pond beside the main road (European route E763), 1008 m a.s.l., 22 August 2020; leg./det. Kuzmanović N. *54494*.
Voucher: Herbarium of the Institute of Botany and Botanical Garden "Jevremovac", University of Belgrade (BEOU), vascular plant collection 54494.

The first records of *Typha laxmannii* for the Serbian flora were reported by Budak (1986) for the territory of Vojvodina province, where many localities in the Banat and Bačka regions were listed. More recent findings include records from eastern and southeastern Serbia: the village of Šaprance, environs of Dimitrovgrad, Trgovište – Vražji Kamen, environs of Vranjska Banja (Zlatković *et al*. 2007), as well as northeastern Serbia: the town of Zaječar – village of Rgotina, Rgotsko Lake (Zlatković & Bogosavljević 2014). Records of *T. laxmannii* are lacking from western Serbia. The first record for western Serbia (from Zlatibor county) is given here. The species was found in a shallow pond beside the main road.

***Typha shuttleworthii* Koch & Sonder, fam. Typhaceae (monocot, vascular plant)**
Contributors: Sanja Z. Djurović and Uroš Buzurović
Geographical focus: Serbia
New records and noteworthy data: New sites in central and western Serbia are given for *T. shuttleworthii*, which

is considered to be endangered in Serbia. It is a new species in the Tara National Park, the Golija Nature Park and the Radan Nature Park. The species is listed in the Bern Convention.

Specimen data: **1)** western Serbia, Mt. Tara, Kurjačine, MGRS 34T CP66, 5 August 2017; leg. Vukojičić S., Kabaš E., Djurović S., Buzurović U.; det. Đurović, S. *52007* (BEOU); **2)** western Serbia, Mt. Tara, Dikava – Kozulja, N 43.89517°, E 19.323501°, MGRS 34T CP66, 1289 m a.s.l., 25 July 2019; leg./det. Djurović S., Buzurović U. *67650* (BEOU), *85003* (BEO); **3)** western Serbia, Mt. Golija, Bzovik, Izubra, N 43.420927°, E 20.431155°, MGRS 34T DP50, 1102.5 m a.s.l., 16 July 2019; leg./det. Vukojičić S., Kabaš E., Veljić M., Lazarević P., Djurović S. *67820* (BEOU); **4)** central Serbia, Mt. Radan, Gornji Gajtan, N 42.9815409°, E. 21.4720178°, MGRS 34T EN35, 1036 m a.s.l, 30 July 2020; leg./det. Djurović S., Buzurović U., Veljić M. *68671* (BEOU), *85002* (BEO); **5)** central Serbia, Mt. Radan, Kosmača, N 43.0933059°, E. 21.375447°, MGRS 34T EN37, 800 m a.s.l., 31 July 2020; Djurović S., Buzurović U. (*photo documentation*).

Vouchers: Herbarium of the Institute of Botany and Botanical Garden "Jevremovac", University of Belgrade (BEOU), vascular plant collection 52007, 67650, 67820, 68671; Natural History Museum in Belgrade, General Herbarium of the Balkan Peninsula (BEO) 85003, 85002; photo documentation: S. Djurović, U. Buzurović.

Typha shuttleworthii is covered by the Bern Convention and included on national red lists and/or in red data books in many European countries (Korneck *et al*. 1996; Käsermann 1999; Király 2007; Hlaváček & Grulich 2009; Felbaba-Klushyna 2011; Kozłowska *et al*. 2011). In European Red List of Vascular Plants Needing Protection, it is marked as "Data Deficient" (Bilz *et al*. 2011). In Serbia it was first considered critically endangered with only four recorded sites: the environs of Novi Sad, Kragujevac and Sjenica; and Mt. Kukavica (Randjelović 1999 and references therin). With emerging new sites in eastern Serbia (Crna Reka gorge, Svrljiški Timok gorge and Topli Dol), the threat status of this species in Serbia was changed to endangered (EN; Tomović *et al*. 2009 and references therein).

Although four new sites are recorded, the species forms relatively small patches, usually not covering more than a few square metres, mostly in roadside ditches (except on Mt. Golija, where it also grows along a stream). The species is probably often not distinguished from *T. latifolia* L., and further localities will no doubt be discovered in Serbia.

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REZIME

Botanica SERBICA

Novi i značajni podaci o biljkama, algama i gljivama iz JI Evrope i susednih regiona, 2

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Prikazani su novi i značajni podaci sa područja JI Evrope i susednih regiona o dijatomejskoj algi *Eunotia boreoalpina*; saprofitskoj gljivi *Clitocybe truncicola*; jetrenjači *Haplomitrium hookeri*, mahovini *Leptodon smithii*: monokotilama *Epipactis purpurata*, *Stipa tirsa*, *Typha laxmannii* i *T. shuttleworthii*; i dikotilama *Krascheninnikovia ceratoides*, *Polygonum albanicum* i *Sorbus latifolia*.

Ključne reči: novi prilog, *Clitocybe truncicola, Eunotia boreoalpina, Epipactis purpurata, Haplomitrium hookeri, Krascheninnikovia ceratoides, Leptodon smithii, Polygonum albanicum, Sorbus latifolia, Stipa tirsa, Typha laxmannii, Typha shuttleworthii*