

## FLORISTIC NOVELTIES FROM SOUTHERN SIBERIA

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Four species and one hybrid of aquatic plants were found for the first time in South Siberian regions: *Ranunculus subrigidus* W.B. Drew and *Utricularia australis* R. Br. in Kemerovo Region, *Potamogeton × angustifolius* J. Presl and *Sparganium stoloniferum* (Graebn.) Buch.-Ham. ex Juz. in Novosibirsk Region, *Elatine triandra* Schkuhr. in Tomsk Region. The second locality of *E. triandra* was found in Tyumen Region. The second locality of *S. stoloniferum* was revealed in Altai Territory. A new locality of *Centaurium meyeri* (Bunge) Druce, rare in the region, was found in Altai Territory. All new records update distributional data in Siberia for the species listed.

**Keywords:** *Centaurium meyeri*, *Elatine triandra*, *Potamogeton × angustifolius*, *Ranunculus subrigidus*, *Sparganium stoloniferum*, *Utricularia australis*, Altai Territory, aquatic plants, Kemerovo, Novosibirsk, Tomsk, Tyumen regions

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### REFERENCES

- Abramova L.A., Volkova P.A., Dudov S.V., Bobrov A.A., Kopylov-Guskov Y.O. 2014. Findings of new, adventive and rare for Buryatia species of vascular plants on the territory of Altachejsky reserve (Mukhorshibirsky district). — Turczaninowia. 17 (4): 69–73 (In Russ.).
- Bobrov A.A., Chemeris E.V. 2006. Zametki o rechnykh rdestakh (Potamogeton, Potamogetonaceae) Verkhnego Povolzh'ya [Notes on river pondweeds (Potamogeton, Potamogetonaceae) of the Upper Volga region]. — Novosti Sist. Vyssh. Rast. 38: 23–65 (In Russ.).
- Bobrov A.A., Chemeris E.V. 2009. Nakhodki novykh i redkikh rdestov (Potamogeton L., Potamogetonaceae) v rekakh severo-vostoka Tsentral'noy Rossii (Kostromskaya i Kirovskaya oblasti) [Findings of new and rare pondweeds (Potamogeton L., Potamogetonaceae) in the rivers of the north-east of Central Russia (Kostroma and Kirov regions)]. — Novosti Sist. Vyssh. Rast. 41: 291–301 (In Russ.).
- Bobrov A.A., Mochalova O.A. 2014. Notes on aquatic vascular plants of Yakutia on materials of the Yakutian Herbaria. — Novosti System. Vyssh. Rast. 45: 122–144 (In Russ.).
- Bobrov A.A., Volkova P.A., Kopylov-Guskov Y.O., Mochalova O.A., Kravchuk A.E., Nekrasova D.M. 2022. Unknown sides of *Utricularia* (Lentibulariaceae) diversity in East Europe and North Asia or how hybridization explained old taxonomical puzzles. — Perspectives in Plant Ecology, Evolution and Systematics. 54: 125649.  
<https://doi.org/10.1016/j.ppees.2021.125649>
- Cook C.D.K., Nicholls M.S. 1987. A monographic study of the genus *Sparganium*. Part 2: Subgenus *Sparganium*. — Bot. Helv. 97 (1): 1–44.
- Flora of the Tajik SSR. 1957. Polypodiophyta — Poaceae. Vol. I. Moscow—Leningrad. 548 p. (In Russ.).
- Flora Sibiriae. 1988–2003. / Ed. L.I. Malyshev. Novosibirsk. Vol. 1–14 (In Russ.).
- Ivanova M.O., Volkova P.A., Kopylov-Guskov Yu.O., Bobrov A.A. 2017. Floristic findings in southern nature regions of Tuva Republic and in conservation zone of



- Tzvelev N.N. 1984. Zametki o nekotorykh gidrofil'nykh rasteniyakh flory SSSR [Notes on some hydrophilic plants of the flora USSR]. — Novosti Sist. Vyssh. Rast. 21: 232–242 (In Russ.).
- Tzvelev N.N. 1996. Lentibulariaceae Rich. — In: Sosudistye rasteniya Sovetskogo Dal'nego Vostoka [Vascular Plants of the Soviet Far East]. St. Petersburg. Vol. 8. P. 260–267 (In Russ.).
- Urgamal M., Oyuntsetseg B., Nyambayar D., Dulamsuren Ch. 2014. Conspectus of the vascular plants of Mongolia. Ulaanbaatar. 282 p.
- Vlasova N.V. 1996. Elatinaceae. — In: Flora Sibiri [Flora of Siberia]. Novosibirsk. Vol. 10. P. 75–77 (In Russ.).
- Wiegleb G., Kaplan Z. 2007. An account of the species of *Potamogeton* L. (Potamogetonaceae). — Folia Geobotanica. 33 (3): 241–316.  
<https://doi.org/10.1007/BF03216205>
- Wiegleb G., Moravec J., Therillat J.-P., Bobrov A.A., Zalewska-Gałosz J. 2017. A taxonomic account of *Ranunculus* section *Batrachium* (Ranunculaceae). — Phytotaxa. 319 (1): 1–55.  
<https://doi.org/10.11646/phytotaxa.319.1.1>
- Yuzepchuk S.V. 1964. *Sparganium* L. — In: Flora sredney polosy Yevropeyskoy chasti SSSR [Flora of central part of the European USSR]. Leningrad. P. 691–693 (In Russ.).