

**GENUS *ARMERIA* WILLD. (PLUMBAGINACEAE) IN SERBIA
BASED ON TWO HERBARIUM COLLECTIONS IN BELGRADE**

UROŠ BUZUROVIĆ¹, KSENIJA JAKOVLJEVIĆ², MARJAN NIKETIĆ¹,
TANJA SENIĆ², GORDANA TOMOVIĆ²

¹ Natural History Museum, Belgrade, Njegoševa 51, 11000 Belgrade, Serbia,
e-mail: uros.buzurovic@nhmbeo.rs, mniketic@nhmbeo.rs

² Institute of Botany and Botanical Garden “Jevremovac”, Faculty of Biology,
University of Belgrade, Takovska 43, 11000 Belgrade, Serbia,
e-mail: gtomovic@bio.bg.ac.rs, kjakovljevic@bio.bg.ac.rs

This paper shows distribution of species of the genus *Armeria* Willd. in Serbia, based on analysis of the herbarium specimens from the collections of Natural History Museum in Belgrade (BEO) and of Institute of Botany and Botanical Garden “Jevremovac”, University of Belgrade (BEOU). A total of 181 herbarium specimens were analyzed, of which 84 are deposited in the collection of BEO and 97 in the collection of BEOU. In Serbia there are three species of this genus: *A. alpina* (DC.) Willd., *A. canescens* (Host.) Boiss. and *A. rumelica* Boiss. Although *A. maritima* (Mill.) Willd. (= *Statice armeria* L., = *A. vulgaris* Willd.) was listed in the edition “Flora of SR Serbia”, this species is not present in the territory of Serbia.

Key words: *Armeria*, distribution, herbarium collections, Serbia.

INTRODUCTION

Genus *Armeria* Willd. counts c. 120 species which makes it third most numerous genus of the family Plumbaginaceae, after the genera *Limonium*

Mill. and *Acantholimon* Boiss. Species of this genus are distributed from Madeira and Portugal in the West to Anatolia and Lebanon in the East, with the centre of distribution in the western Mediterranean area (Iberian Peninsula). *Armeria maritima* (Mill.) Willd. is the only species or species complex of this genus, which has a predominantly Holarctic distribution, with disjunct area in the Chile-Patagonian region (Scassellati *et al.* 2013). In the Flora Europaea 43 species are recorded of which the largest number is present in Iberian Peninsula (Pinto da Silva 1972) and Italy (Conti *et al.* 2005, Selvi 2009). Five currently accepted species were recorded in the Balkan peninsula: *A. alpina* (DC.) Willd., *A. canescens* (Host) Boiss., *A. maritima* (= *A. vulgaris* Willd.), *A. rumelica* Boiss. and *A. vandasii* Hayek (Rohlena 1942, Bjelčić 1967, Gajić 1972, Ančev 1982, Papanikolaou & Kokkini 1986, Pavletić 1994, Micevski & Matevski 1995, Papparisto *et al.* 1996, Nikolić 2015).

The first data on presence of any species of the current genus *Armeria* in Serbia had originated from Pančić (1874), who recorded a single species, "*Statice armeria* L." [currently *A. maritima*] in the following mountains: Mt Kopaonik, Mt Željin, Mt Maljen and Mt Zlatibor. Gajić (1972) reported the presence of four species of this genus: *A. alpina*, *A. canescens*, *A. rumelica* and *A. vulgaris*.

Given that many of the previous data on the presence and distribution of species of this genus in the territory of Serbia were inaccurate, one of the main aims of this study was to determine presence and total number of species of the genus *Armeria* in Serbia based on revision of material in the herbarium collections of the Natural History Museum in Belgrade (BEO) and the Institute of Botany and botanical Garden "Jevremovac", University of Belgrade (BEOU). Another aim was to present the distribution of species from the genus *Armeria* in Serbia based on herbarium data from these two collections.

MATERIAL AND METHODS

The plant material used to define the distribution of the genus *Armeria* from Serbia was deposited in Herbarium of the Natural History Museum in Belgrade (BEO) and Herbarium of the Institute of Botany and Botanical Garden "Jevremovac", University of Belgrade (BEOU), (Thiers 2014; <http://sweetgum.nybg.org/ih>, continuously updated). BEOU collection consists of three separate collections: the general collection - BEOU, collection of the Department of Plant Ecology and Geography (BEOU-KEGB) and the collection of Josif Pančić "*Herbarium Pancicianum*" - BEOU (Herb Panc).

Revision, identification and the nomenclature of the herbarium specimens of the genus *Armeria* was conducted by using Flora Europaea (Pinto da Silva 1972), the regional floras (Răvăruț 1960, Gajić 1972, Ančev 1982, Micevski & Matevski 1995), as well as other data sources like IOPI (<http://plantnet.rbgsyd.nsw.gov.au/iopi/iopihome.htm>) and The Plant list (2013).

Distribution of each *Armeria* species was shown on the UTM grid 10×10 km² based on Military Grid Reference System and the Universal Transverse Mercator (UTM) projection (<http://www.luomus.fi/english/botany/afe/map/utm.htm>, Lampinen 2001).

RESULTS

Catalogue of herbarium specimens of the genus *Armeria* from Serbia

Armeria alpina (DC.) Willd. (Fig. 1)

C Serbia Kopaonik (leg. Ilić, P., sep-1919, 16672 BEO); (leg. Pančić, J. aug-1852, 6921 BEOU (HerbPanc)); (leg. Pančić, J. aug-1856, 6920 BEOU (HerbPanc)); (leg. Pančić, J. 1874, 6925 BEOU (HerbPanc)); bara, 30.07, 39189 BEOU, rev. Buzurović, U. 26-apr-2014); Bećirovac, Krčmar, UTM DN89, 13-jul-1954, 39081 BEOU, rev. Buzurović, U. 26-apr-2014); Staro rudište, UTM DN89 (leg. Rudski, I. 05-jul-1938, 16673 BEO); vrh, UTM DN89, kamenjari (leg. Pavlović, Z. 01-aug-1953, det. Pavlović, Z., s.n. BEO); (leg. Pavlović, Z. 07-sep-1949, det. Pavlović, Z., s.n. BEO); (leg. Pavlović, Z. 07-sep-1949, det. Pavlović, Z., s.n. BEO, sub *A. alpina*? *A. canescens* var. *majellensis*, rev. Buzurović, U. 06-nov-2015); (leg. Pavlović, Z. 11-jul-1951, det. Pavlović, Z., s.n. BEO); (leg. Pavlović, Z. 18-jul-1951, det. Pavlović, Z., s.n. BEO); Milanov vrh, UTM DN89 (leg. Rudski, I. 07-may-1938, det. Soška, T., 16670 BEO); Rudarsko okno, UTM DN89 (leg. Rudski, I. 08-jul-1938, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 03-jul-2014); Pajino preslo, UTM DN89, Exp. NW, 1750 m (leg. Lakušić, D. 11-jul-1987, det. Lakušić, D., 23978 BEOU-KEGB, sub *A. rumelica*, rev. Buzurović, U. 26-apr-2014); Suvo Rudište, UTM DN89, 1900 m, pašnjaci (leg. Nikolić, V., Diklić, N., Mladenović, S. 28-jul-1979, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); 1800 m, kornit (leg. Buzurović, U., Janković, I. 05-aug-2013, 38918 BEOU-KEGB, sub *Armeria* sp.); 1900 m, kornit, *Minuartietum recurvae* (leg. Lakušić, D. 11-jul-1987, det. Lakušić, D., 23977 BEOU-KEGB, sub *A. rumelica*, rev. Buzurović, U. 26-apr-2014); 1980 m, kornit, *Minuartietum recurvae* (leg. Lakušić, D., Niketić, M 07-aug-1986, det. Lakušić, D.,

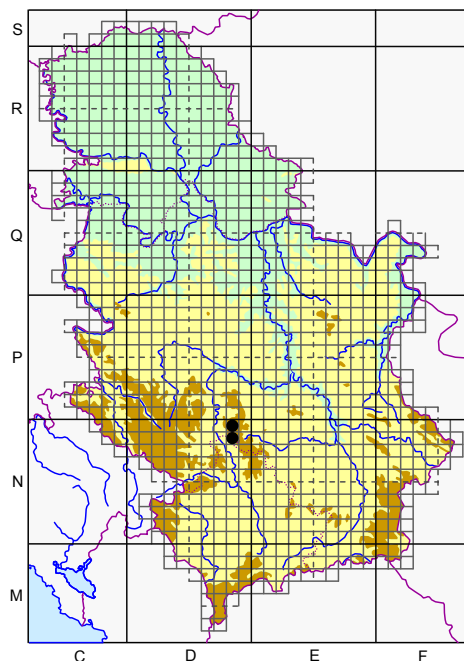


Fig. 1. – Distribution of the species *A. alpina* (DC.) Willd. in Serbia.

23980 BEOU-KEGB, sub *A. rumelica*, rev. Buzurović, U. 26-apr-2014); pašnjaci i kamenjari (leg. Diklić, N., Mladenović, S. 16-jul-1985, s.n. BEO, rev. Buzurović, U. 20-jun-2014); 19-jul-1911, 39192 BEOU, rev. Buzurović, U. 02-nov-2015); 39193 BEOU, rev. Buzurović, U. 02-nov-2015); (leg. Dimitrijević, M. 19-jul-1911, det. Jurišić, Ž., 16671 BEO); (leg. Lakušić, D., Mitrović, V. 26-may-2001, 13901 BEOU-KEGB, sub *A. rumelica*, rev. Buzurović, U. 26-apr-2014); (leg. Pančić, J. jul-1861, 6922 BEOU (HerbPanc)); ispod Milanovog vrha, UTM DN89, kamenjari (leg. Pavlović, Z. 11-sep-1946, det. Pavlović, Z., s.n. BEO); Treska, UTM DN88, 1500 m, serpentinit, kamenjari (leg. Nikolić, D. jul-1988, det. Lakušić, D., 23981 BEOU-KEGB, sub *A. rumelica*, rev. Buzurović, U. 26-apr-2014).

Armeria canescens (Host) Boiss. (Fig. 2)

NW Serbia Maljen, (leg. Pančić, J., 6936 BEOU (HerbPanc), sub *A. vulgaris*, rev. Buzurović, U. 26-apr-2014); 6944 BEOU (HerbPanc), rev. Buzurović, U. 26-apr-2014); Divčibare: UTM DP18, DP28, *Pinetum sylvestris* (leg. Sigunov, A. 01-jun-1969, 80864 BEO, sub *A. vulgaris*, rev. Buzurović, U. 18-jul-2014); 950 m, serpentinit, livada (leg. Diklić, N., Mladenović, S. 02-jul-1984, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); Divčibare - Ljuti krš, UTM DP28, 1022.5 m, 1022.5 (leg. Tomović, G., Jakovljević, K., Đurović, S., Buzurović, U. 30-may-2014, 40695 BEOU-KEGB); Kraljev sto, UTM DP28, 1000 m, serpentinit, kamenjari (leg. Jovanović, S., Lakušić, D., Vukojičić, S. 21-aug-2009, 29714 BEOU-KEGB, sub *A. rumelica*, rev. Buzurović, U. 19-jul-2014); Tometino polje, UTM DP27 (leg. Stevanović, V., 2671 BEOU-KEGB, sub *A. rumelica*, rev. Buzurović, U. 19-jul-2014); 2679 BEOU-KEGB, rev. Buzurović, U. 19-jul-2014); Kičer, UTM DP28, 783.4 m, serpentinit, kamenjari (leg. Stevanović, V., Lakušić, D., Veen, P. 22-may-2005, 20076 BEOU-KEGB, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); padine Crnog Vrh, UTM DP18, travnjak u crnograbovoj šumi (leg. Pavlović, Z. 09-jul-1961, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 06-nov-2015); **W Serbia Kosjerić**, UTM DP17 (leg. Ostojić, D., 10-jun-1997, 7112 BEOU-KEGB, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); **Murtenica**: Brijač, vrh, UTM DP02 (leg. Pavlović, Z. 16-jun-1959, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 06-nov-2015); **Tara**: Golubac, UTM CP86, 1067 m, serpentinit (leg. Buzurović, U., Niketić, M. 29-jun-2014, det. Buzurović, U., s.n. BEO); **Kaluderske Bare**, UTM CP86, 1250 m, serpentinit, *Pinetum sylvestris* (leg. Sigunov, A. 17-jun-1976, 82328 BEO, sub *A. vulgaris*, rev. Buzurović, U. 18-jul-2014); **Miloševac**, UTM CP75, serpentinit, livada (leg. Pavlović, Z. 15-jul-1960, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 06-nov-2015); serpentinit, travnjak (leg. Pavlović, Z. 15-jul-1960, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 06-nov-2015); (leg. Pančić, J. 1868, 6932 BEOU (HerbPanc), sub *A. elongata*, rev. Buzurović, U. 26-apr-2014); Zborište, UTM CP75, serpentinit (leg. Pavlović, Z. 04-jul-1957, s.n. BEO, sub *A. canescens* var. *pseudovulgaris*, rev. Buzurović, U. 06-nov-2015); **Zlatibor**, serpentinit (leg. Jovanović, S. 01-jun-1989, 42/89 BEOU-KEGB, sub *A. serpentina*, rev. Buzurović, U. 26-apr-2014); (leg. Jovanović, S. 20-may-1930, 39224 BEOU, sub *A. vulgaris*, rev. Buzurović, U. 26-apr-2014); (leg. Pančić, J., 6931 BEOU (HerbPanc), sub *A. elongata*, rev. Buzurović, U. 26-apr-2014); (leg. Pančić, J. jul-1856, 6945 BEOU (HerbPanc), sub *A. elongata*, rev. Buzurović, U. 26-apr-2014); (leg. Pančić, J. 1878, 6939 BEOU (HerbPanc), sub *A. vulgaris*, rev. Buzurović, U. 26-apr-

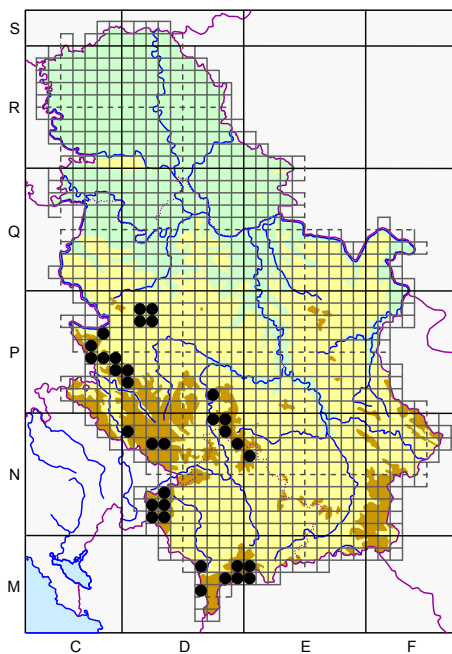


Fig. 2. – Distribution of the species *A. canescens* (Host.) Boiss. in Serbia.

2014); 6940 BEOU (HerbPanc), rev. Buzurović, U. 26-apr-2014); Čigota, UTM DP03, 1400 m, serpentinit, pašnjaci (leg. Nikolić, V., Diklić, N. 12-jul-1977, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); (leg. Soška, T. jun-1912, 39074 BEOU, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); Dobroselica - Ljubiš, UTM CP93, 1091.7 m, 1091.7 (leg. Tomović, G., Jakovljević, K., Đurović, S., Buzurović, U. 29-may-2014, 40691 BEOU-KEGB); Donja Ribnica, Tornik, UTM CP93 (leg. Jurišić, Ž. 24-jun-1912, 16675 BEO, sub *A. alpina*, rev. Buzurović, U. 20-jun-2014); Jokina čuprija - Pazova, UTM CP93, 1008 m, serpentinit, Bromo-*Danthonietum calycinae* (leg. Đorđević, V. 10-may-2014, 40654 BEOU-KEGB); Kraljeva Voda, UTM CP94, planinske livade (leg. Soška, T. jun-1926, 39229 BEOU, sub *A. vulgaris*, rev. Buzurović, U. 26-apr-2014); lokalitet 3, serpentinit (leg. Jovanović, S. 01-jun-1989, 129/89 BEOU-KEGB, sub *A. serpentina*, rev. Buzurović, U. 26-apr-2014); Palisad, UTM CP94, livada (leg. Pavlović, Z. 14-jun-1948, det. Pavlović, Z., s.n. BEO, sub *A. vulgaris*, rev. Buzurović, U. 06-nov-2015); Partizanske vode, UTM CP94, 950 m, serpentinit, *Pineto-Fagetum* (leg. Sigunov, A. 14-jun-1976, 81697 BEO, sub *A. alpina*, rev. Buzurović, U. 18-jul-2014); Partizanske vode - Semegnjevo, UTM CP94, 881.9 m, 881.9 (leg. Tomović, G., Jakovljević, K., Đurović, S., Buzurović, U. 29-may-2014, 40686 BEOU-KEGB); površ, serpentinit (leg. Stevanović, V., Jovanović, S., Lakušić, D. 01-jun-1997, 5193 BEOU-KEGB, sub *A. rumelica*); Ribnica, UTM CP93, livada (leg. Košanin, N. 06-aug-1930, 39225 BEOU, sub *A. vulgaris*, rev. Buzurović, U. 26-apr-2014); 900 m, serpentinit, livade (leg. Diklić, N., Mladenović, S. 05-jul-1984, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); (leg. Pančić, J. 1875, 6938 BEOU (HerbPanc), sub *A. vulgaris*, rev. Buzurović, U. 26-apr-2014); Stublo, Metaljka - Slomljak, UTM CP93, 1159 m, serpentinit, *Festuco-Brometea* (leg. Đorđević, V. 23-may-2014, 40655 BEOU-KEGB); Viogor, Panjak, UTM CP74, 832.1 m (leg. Tomović, G., Jakovljević, K., Đurović, S., Buzurović, U. 29-may-2014, 40667 BEOU-KEGB); livada (leg. Pavlović, Z. 05-jul-1957, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 06-nov-2015); serpentinit, Bromo-*Plantagnetum* (leg. Jovanović, S. 11-jun-1987, 87/57 BEOU-KEGB, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); (leg. Jurišić, Ž. 23-jun-1912, 16676 BEO, sub *A. alpina*, rev. Buzurović, U. 20-jun-2014); Veliki Viogor, vrh, UTM CP84, livada (leg. Pavlović, Z. 21-jun-1959, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 06-nov-2015); Vodice, UTM CP93, 1000 m, serpentinit, *Pinetum sylvestris* (leg. Sigunov, A. 14-jun-1976, 81627 BEO, sub *A. alpina*, rev. Buzurović, U. 18-jul-2014); **SW Serbia Ozren**: desna strana Uvca, UTM DN08, kamenjari (leg. Pavlović, Z., 10-jun-1951, s.n. BEO, sub *A. vulgaris*, rev. Buzurović, U. 06-nov-2015); Komarište, vrh, UTM DN08, kamenjari (leg. Pavlović, Z. 08-jun-1951, s.n. BEO, sub *A. vulgaris*, rev. Buzurović, U. 06-nov-2015); Revuša, vrh, UTM DN08, kamenjari (leg. Pavlović, Z. 09-jul-1958, s.n. BEO, sub *A. rumelica* (*A. vulgaris*), rev. Buzurović, U. 06-nov-2015); Pešter: Kondifuš, UTM DN37, 1187 m, serpentinit, *Festuco-Brometea* (leg. Đorđević, V. 27-jun-2014, 40776 BEOU-KEGB); Tuzinje, UTM DN27, 1221.7 m, 1221.7 (leg. Tomović, G., Jakovljević, K., Đurović, S., Buzurović, U. 28-may-2014, 40663 BEOU-KEGB); Tuzinje-Buđevo, UTM DN27 (leg. Košanin, N. jun-1926, 39090 BEOU, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); **C Serbia Kopaonik** (leg. Pančić, J., 6943 BEOU (HerbPanc), sub *Statice armeria*, rev. Buzurović, U. 26-apr-2014); (leg. Pančić, J. 02-jul-1886, 6946 BEOU (HerbPanc), sub *Statice elongata*, rev. Buzurović, U. 26-apr-2014); (leg. Pančić, J. 1869, 6923 BEOU (HerbPanc), sub *A. alpina*, rev. Buzurović, U. 02-nov-2015); (leg. Pančić, J. 1885, 6927 BEOU (HerbPanc), sub *A. alpina*, rev. Buzurović, U. 26-apr-2014); 6928 BEOU (HerbPanc), rev. Buzurović, U. 26-apr-2014); Jadovnik, na vrhu, UTM DN79 (leg. Pavlović, Z. 28-may-1951, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 06-nov-2015); Kozje stene, UTM DN79, 1400 m, krečnjak, kamenjari (leg. Lakušić, D., Niketić, M. 10-aug-1986, det. Lakušić, D., 23979 BEOU-KEGB, sub *A. rumelica*); Kukavica, UTM DN79, 1651 m, 1651 (leg. Kabaš, E., Batanjski, V. 29-jun-2015, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 06-nov-2015); Kukavica-Kozje stene, UTM DN79, 1688 m, 1688 (leg. Kabaš, E., Batanjski, V. 30-jun-2015, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 06-nov-2015); Kopaonička Kula, Kulina, UTM DN97 (leg. Rudski, I., 03-jul-1933, 16638 BEO, sub *A. rumelica*, rev. Buzurović, U. 04-nov-2015); Kule, UTM DN97 (leg. Pančić, J., 6919 BEOU (HerbPanc), sub *A. alpina*, rev. Buzurović, U. 02-nov-2015); Nebeske stolice, UTM DN88, serpentinit (leg. Kuzmanović, N., Jakovljević, K., Buzurović, U. 06-aug-2011, 36092 BEOU-KEGB, sub *A. vulgaris*, rev. Buzurović, U. 26-apr-2014); 1765 m, serpentinit (leg. Buzurović, U., Janković, I. 05-aug-2013, 38915 BEOU-KEGB, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); 1800 m, serpentinit (leg. Stevanović, V. 17-oct-1993, 1591/94 BEOU-KEGB, sub *A. rumelica*, rev. Buzurović, U. 02-nov-2015); 1800 m, serpentinit, *Seslerion latifoliae* (leg. Lakušić, D. 26-jun-2003, 17101 BEOU-KEGB, sub *A. rumelica*, rev. Buzurović, U. 26-apr-2014); 1850 m, serpentinit, kamenjari sa Jovibarba kopaonikense (leg. Lakušić, D.,

Lakušić, B. 12-aug-2005, 20140 BEOU-KEGB, sub *A. rumelica*, rev. Buzurović, U. 26-apr-2014); serpentinit, serpentinit, kamenjari (leg. Nikolić, D. 16-jul-1988, det. Lakušić, D., 23976 BEOU-KEGB, sub *A. vulgaris*, rev. Buzurović, U. 26-apr-2014); stene (leg. Pavlović, Z. 11-jul-1951, det. Pavlović, Z., s.n. BEO, sub *A. rumelica*, rev. Buzurović, U. 06-nov-2015); (leg. Pavlović, Z. 16-jul-1951, det. Pavlović, Z., s.n. BEO, sub *A. rumelica*, rev. Buzurović, U. 06-nov-2015); Oštro Koplje, UTM EN06, planinske livade (leg. Soška, T. 20-jun-1914, 39118 BEOU); Bare, UTM EN06 (leg. Soška, T. 29-jun-1914, 39121 BEOU); vrh, UTM EN06 (leg. Jurišić, Ž. 30-jun-1914, det. Jurišić, Ž., 16674 BEO, sub *A. alpina*, rev. Buzurović, U. 04-nov-2015); Suvo Rudište, UTM DN89, Exp. SE, stene (leg. Pavlović, Z. 16-jul-1951, det. Pavlović, Z., s.n. BEO, sub *A. rumelica*, rev. Buzurović, U. 06-nov-2015); Studena planina: Igriste, UTM DP71, pašnjaci (leg. Pavlović, Z. 24-jun-1957, s.n. BEO); Kosovo Kodža Balkan: Jezerska planina, UTM DM97, Exp. SE, serpentinit, pašnjaci i kamenjari (leg. Nikolić, V., 18-jul-1975, det. Diklić, N., s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); Šar-planina: Bištra, UTM DM96, pašnjaci i kamenjari (leg. Diklić, N., Mladenović, S., Nikolić, V. 22-jul-1976, det. Diklić, N., s.n. BEO, sub *A. alpina*, rev. Buzurović, U. 20-jun-2014); Crvene Karpe, UTM EM06 (leg. Stevanović, V. 04-sep-1997, 7947 BEOU-KEGB, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); Jažinačko jezero, UTM DM96, EM06, silikat, *Potentillo doerfleri-Juncetum trifidi* (leg. Jovanović, S., Lakušić, D., Benić, N. 28-jun-1990, 1495/90 BEOU-KEGB, sub *A. alpina*, rev. Buzurović, U. 02-nov-2015); (leg. Sabovljević, M. 27-jun-1997, 7437 BEOU-KEGB, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2012); Jezerska Čuka, UTM EM06, *Potentillo doerfleri-Juncetum trifidi* (leg. Jovanović, S., Lakušić, D., Benić, N. 28-jun-1990, 1457.90 BEOU-KEGB, sub *A. alpina*, rev. Buzurović, U. 20-sep-2014); stene i rudine (leg. Jovanović, S., Lakušić, D., Benić, N. 28-jun-1990, 1316.90 BEOU-KEGB, sub *A. alpina*, rev. Buzurović, U. 20-sep-2014); Livadica, UTM EM07 (leg. Stevanović, V. 05-jul-1977, 2842 BEOU-KEGB, sub *A. alpina*, rev. Buzurović, U. 20-sep-2014); Livadičko jezero, UTM EM07, in rupestribus (leg. Košanin, N. 06-jul-1911., 39132 BEOU); 2300 m, 2300 (leg. Stevanović, V. 05-jul-1977, 2857 BEOU-KEGB, sub *A. alpina*, rev. Buzurović, U. 20-sep-2014); (leg. Košanin, N. 07-jul-1911, 39129 BEOU); prema jezeru (Stojkova kuća) (leg. Džukić, G. 02-jul-1980, 3450 BEOU-KEGB, sub *A. alpina*, rev. Buzurović, U. 02-nov-2015); Livadica-Ljuboten, UTM EM07, pašnjaci i kamenjari (leg. Nikolić, V., Diklić, N. 26-jul-1976, s.n. BEO, rev. Buzurović, U. 20-jun-2014); Ostrovica, UTM DM97 (leg. Lazarević, M., Lazarević, P. 18-aug-2015., det. Buzurović, U., s.n. BEO, sub *Armeria* sp.); (leg. Stevanović, V., Jovanović, V. 20-jul-1989, 275/89 BEOU-KEGB, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); Ošljak, Popovo prase-Ostrovica, UTM DM96, DM97, 23-26-aug-1966, 39085 BEOU, rev. Buzurović, U. 26-apr-2014); Piribeg, UTM EM06, 2200 m, glacijalni cirk (leg. Stevanović, V., 19-jul-1989, 3497 BEOU-KEGB, sub *A. rumelica*, rev. Buzurović, U. 26-apr-2014); (leg. Lazarević, M., Lazarević, P. 24-aug-2015., det. Buzurović, U., s.n. BEO, sub *Armeria* sp.); Prevalac-Bistra, UTM DM96, krečnjak, kamenjari (leg. Nikolić, V., Diklić, N. 23-jul-1975, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); Stojkova kuća, UTM EM06, pašnjaci i kamenjari (leg. Nikolić, V., Diklić, N., Mladenović, S. 20-jul-1977, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); krečnjak, kamenjari (leg. Nikolić, V., Diklić, N. 22-jul-1975, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); Durlav potok, UTM EM06, kamenjari i livade (leg. Diklić, N., Mladenović, S., Nikolić, V. 25-jul-1976, det. Diklić, N., s.n. BEO, sub *A. alpina*, rev. Buzurović, U. 20-jun-2014); Metohija Koritnik: Rapče, UTM DM65, pojas bukve i munike (leg. Nikolić, V., Diklić, N. 12-jul-1968, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 25-feb-2015); Paštrik, UTM DM67 (leg. Džukić, G., Milojević, B. 19-jul-1980, 1126 BEOU-KEGB, sub *A. rumelica*, rev. Buzurović, U. 26-apr-2014); Prokletije: Koprivnik, UTM DN31, DN32, 2300 m, pašnjaci (leg. Grebensčikov, O. 07-jul-1939, det. Grebensčirov, O., 16667 BEO, sub *A. alpina*, rev. Buzurović, U. 25-feb-2015); alpijski pašnjaci (leg. Soška, T. 15-jun-1923, 39162 BEOU, sub *A. rumelica*, rev. Buzurović, U. 26-apr-2014); subalpijski pašnjaci (leg. Soška, T. 15-jun-1983, 39130 BEOU, rev. Buzurović, U. 26-apr-2014); Nedžinat, UTM DN22, osuline i kamenjari (leg. Diklić, N., Bogdanović, M., Nikolić, V. 15-jul-1973, det. Diklić, N., s.n. BEO, sub *A. alpina*, rev. Buzurović, U. 20-jun-2014); Prilepske planine, UTM DN21 (leg. Janković, M. 21-jun-1957, 39083 BEOU, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); Žljeb, Maja Rosulija, UTM DN33, 1990 m, 1990 (leg. Rudski, I. 25-jun-1932, det. Diklić, N., 16668 BEO, sub *A. alpina*, rev. Buzurović, U. 20-jun-2014); 2100 m, 2100 (leg. Rudski, I. 25-jun-1932, det. Diklić, N., 16669 BEO, sub *A. alpina*, rev. Buzurović, U. 20-jun-2014); Šar-planina: Crni Vrh, UTM DM96, 2200 m, 2200 (leg. Rudski, I. 05-jul-1930, 39092 BEOU, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); 2300 m, 2300 (leg. Rudski, I. 12-jul-1930, 39093 BEOU, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); Draičići-Crni vrh, UTM DM86, DM96, kamenjari

(leg. Diklić, N., Nikolić, V. 17-jul-1977, det. Nikloić, V., *s.n.* BEO); pašnjaci, kamenjari i livade (leg. Diklić, N., Mladenović, S., Nikolić, V. 18-jul-1978, det. Nikloić, V., *s.n.* BEO); Kobilica, UTM DM86, DM96, 2400 m, pašnjaci i kamenjari (leg. Nikolić, V., Diklić, N., Mladenović, S. 18-jul-1978, 19-jul-1977, *s.n.* BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); Karaula-Ljubinske uši, (leg. Niketić, M., Tomović, G., Duraki, Š. 08-jul-2007, 24494 BEOU-KEGB, sub *A. canescens?*, rev. Buzurović, U. 26-apr-2014); Konjuška, UTM DM96 (leg. Rudski, I., 12-jul-1930, 39094 BEOU, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014).

Armeria rumelica Boiss. (Fig. 3)

C Serbia Sokolovica: Aleksino brdo, UTM EN36, 750 m, andezit, livade *Diantho-Armerietum rumelicæ* (leg. Tomović, G., Randjelović, V., 20-jun-1997, 867 BEOU-KEGB);

S Serbia Bujanovac: Binačka Morava, Lučane, UTM EM59 (leg. Nikolić, V., 03-jun-1967, *s.n.* BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); (leg. Nikolić, V. 28-jun-1965, det. Nikloić, V., *s.n.* BEO, sub *A. vulgaris*, rev. Buzurović, U. 20-jun-2014); Loparinci, UTM EN60, kamenjari i eruptivne stene (leg. Diklić, N. 01-jun-1963, det. Diklić, N., *s.n.* BEO);

Karadag: Miratovac, iznad Suve reke, UTM EM58, 717 m, serpentinit (leg. Tomović, G., Zlatković, B., 01-jun-2014, 40714 BEOU-KEGB, sub *A. canescens*, rev. Buzurović, U. 02-nov-2015); **Končulj,** UTM EN50 (leg. Pančić, J. 1878, 6918 BEOU (HerbPanc), sub *A. alliacea*, rev. Buzurović, U. 02-nov-2015); **Preševo:** Čerenovac, UTM EM59 (leg. Niketić, M., Tomović, G., Đurović, S., Buzurović, U. 16-jun-2013, 38535 BEOU-KEGB, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014);

Radan planina: Petrova gora, UTM EN46, 1400 m, bukova šuma (leg. Nikolić, V. 23-jul-1959, *s.n.* BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); **Veliki Pod,** UTM EN36, livada (leg. Nikolić, V. 22-jun-1960, *s.n.* BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); **Rujan planina:** prevoj-Svinjište, pored puta, UTM EM68, 780 m, silikat (leg. Tomović, G., Zlatković, B. 01-jun-2014, 40743 BEOU-KEGB); **Vranje:** Crni vrh, UTM EN90, planinske livade (leg. Ilić, Đ. 06., det. Ilić, Đ., 16645 BEO); **Lebovac,** UTM EN61 (leg. Ilić, Đ. 07.1910, 16657 BEO); **SE Serbia Besna kobila,** UTM FN00, Exp. N, pašnjaci i kamenjari (leg. Diklić, N., Mladenović, S. 15-jul-1979, *s.n.* BEO, sub *Armeria* sp., rev. Buzurović, U. 03-jul-2014); planinske livade (leg. Ilić, Đ. 06., det. Ilić, Đ., 16646 BEO); ispod vrha, livade i pašnjaci (leg. Nikolić, V., Diklić, N. 17-jul-1968, *s.n.* BEO, sub *Armeria* sp., rev. Buzurović, U. 25-feb-2015); planinarski dom, livada (leg. Nikolić, V., Diklić, N. 22-jul-1967, *s.n.* BEO, rev. Buzurović, U. 20-jun-2014); **Dukat planina:** Karamanica, greben-rudnik, UTM FM09, 1734 m, visokoplaninske rudine (leg. Tomović, G., Zlatković, B., Tomović, Lj. 21-jun-2014, 40761 BEOU-KEGB); **Klisura Pčinje:** Manastir Prohor Pčinjski, UTM EM78 (leg. Tomović, G., Randjelović, V., Zlatković, B. 08-aug-1997, 8143 BEOU-KEGB, rev. Buzurović, U. 26-apr-2014); na putu za manastir (leg. Jovanović, S., Vukojičić, S., Pavić, S. 04-jun-1995, 1605/95 BEOU-KEGB, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); **Kozjak:** Virovi, UTM EM78, 1219 m, silikat (leg. Lakušić, D., et al. 22-jun-2014, det. Buzurović, U., *s.n.* BEOU-KEGB, sub *Armeria* sp.); **Motina:** UTM EM89, EN80 (leg. Ilić, Đ. jul-1910, *s.n.* BEO, sub *Armeria* sp., rev. Buzurović, U. 03-jul-2014); **Ostrozub:** Dobro Polje, UTM FN04, planinske livade (leg. Ilić, Đ. 06., det. Ilić, Đ., 16644 BEO); **Vlasina** (leg. Černjavski, P. 09-aug-1930, det. Černjavski, P., 16640 BEO); (leg. Ilić, Đ. jul-1910, 16630 BEO); 16631 BEO); (leg. Košanin, N.

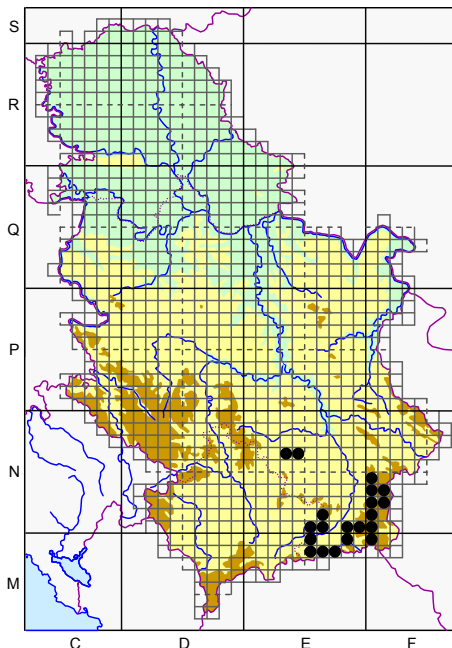


Fig. 3. – Distribution of the species *A. rumelica* Boiss. in Serbia.

08-jun-1907, 39187 BEOU); (leg. *Milovanović, D.* 22-jul-1948, 39078 BEOU, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); (leg. *Milovanović, D.* 30-jun-1947, 39080 BEOU, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); (leg. *Pančić, J.* 1881, 6933 BEOU (HerbPanc), sub *A. majellensis*, rev. Buzurović, U. 26-apr-2014); (leg. *Pančić, J.* 1882, 6934 BEOU (HerbPanc), rev. Buzurović, U. 26-apr-2014); (leg. *Petrova, A.* 23-may-1948, 39077 BEOU, sub *Armeria* sp., rev. Buzurović, U. 26-apr-2014); **Baltijance**, UTM FN02 (leg. *Ilić, Đ.*, jun-1910, det. *Ilić, Đ.*, 16656 BEO); **Čemernik**, UTM FN03 (leg. *Černjavski, P.* 19-aug-1930, det. *Černjavski, P.*, 16641 BEO); **Klisura**, UTM FN13 (leg. *Diklić, N.* 18-jul-1958, det. *Diklić, N.*, s.n. BEO); **Okruglica**, UTM FN12, 1230 m, silikat (leg. *Bokić, B., Radak, B.* 17-jun-2013, det. Buzurović, U., s.n. BEO, sub *Armeria* sp.); **Vardenik, Valožje, mahala Brzaci**, UTM FN00, FN01 (leg. *Bokić, B., Radak, B.* 17-jun-2013, det. Buzurović, U., s.n. BEO); **Veliki Strešer**, UTM FN01, FN02, Exp. W, 1700 m, livada (leg. *Nikolić, V., Diklić, N.*, 23-jul-1967, s.n. BEO, sub *Armeria* sp., rev. Buzurović, U. 20-jun-2014); **Vlasina rid**, UTM FN03, 1000 m, silikat, livada (leg. *Lakušić, D., Tomović, G., Vukojičić, S., Kabaš, E., Batansjki, V., Duraki, Š.* 19-jun-2010, 30399 BEOU-KEGB, sub *A. rumelica?*, rev. Buzurović, U. 26-apr-2014); **Vlasinsko jezero**, 1200 m, livada (leg. *Diklić, N.* 23-jul-1966, det. *Diklić, N.*, s.n. BEO, sub *A. rumelica* f. *rhodopaea*); **Gramada, Vrtop**, UTM FN13, *Festuco-Agrostietum nardetosum strictae* (leg. *Jovanović, S., Niketić, M.* 29-aug-1991, 1756. 91 BEOU-KEGB, sub *A. canescens*, rev. Buzurović, U. 26-apr-2014).

Analysis of specimens and species

During inspection and revision of the herbarium material from collections BEO and BEOU 181 herbarium specimens of the genus *Armeria* were recorded of which 84 specimens are deposited in the collection BEO and 97 specimens in the collection BEOU (Tab. 1). Analysis of data from these two collections proved the presence of three species from the genus *Armeria* within territory of Serbia.

Species *A. alpina* was recorded in two UTM squares (Fig. 1), *A. rumelica* in 20 UTM squares (Fig. 3), while *A. canescens* was recorded in 33 UTM squares 10×10 km² (Fig. 2) bearing the largest number of collected data (114 herbarium sheets) (Tab. 1).

Table 1. – Number of species of the genus *Armeria* present in Serbia, based on data from BEO and BEOU Herbarium collections.

Species	BEO	BEOU			Total
		BEOU (General)	(Herb Panc)	BEOU (KEGB)	
<i>A. alpina</i> (DC.) Willd.	13	4	4	6	27
<i>A. canescens</i> (Host.) Boiss.	48	16	14	36	114
<i>A. rumelica</i> Boiss.	23	4	3	10	40
Total	84	24	21	52	181

DISCUSSION AND CONCLUSIONS

In the current "Flora of SR Serbia" (Gajić 1972) four species of the genus *Armeria* were listed for the territory of Serbia. However, the review and revision of the herbarium material deposited in the collections of BEO and BEOU confirmed the presence of only three species: *A. alpina*, *A. canescens* and *A. rumelica*. Species *A. vulgaris* was not found in Serbia, despite numerous literature references (Gajić 1972, Pavlović 1955, Lakušić 1996).

According to Pančić (1874) only the species "*Statice armeria*" [*A. maritima*], was listed in the "Flora principatus Serbiae" for Mt Kopaonik, Mt Maljen, Mt Željina and Mt Zlatibor on serpentine (ultramafic) ground. Gajić (1972) treated Pančić's records for the *S. armeria* as a synonym for the species *A. vulgaris* [*A. maritima*] and incorrectly counted this species in the list of *Armeria* species in Serbia. All Pančić's records of *S. armeria* in Serbia actually refer to the species *A. canescens*, not to *A. maritima*.

Due to significant morphological variability of vegetative and reproductive organs (outer and inner rosette leaves, scapus and spathe), identification of *Armeria* species was reasonably challenging. Large number of infraspecific taxa within the most of the *Armeria* species was illustrated by the fact that Novák (1938) recognized and described 6 varieties and 20 forms within the species *A. canescens*. The same author cited 5 varieties and 5 forms within *A. rumelica*, as well as 5 forms within *A. alpina* (Novák 1939).

The most demanding was identification of *A. alpina* due to small number of specimens and incomplete materials deposited in the collections of BEO and BEOU. There are different opinions regarding the status of this taxon, since some authors consider it as a good species (Răvărut 1960, Gajić 1972, Ančev 1982, Feliner 1990), while according to others it represents the subspecies of *A. maritima* (Pinto da Silva 1972). For the purpose of accurate determination, it is necessary to compare material from Serbia with the type specimens from the Alps, as well as with plants from Mt Rila (SW Bulgaria) in the far southeastern part of the species range (Ančev 1982).

A. canescens in Serbia is distributed in Illyrian and Scardo-Pindic (NW, W, SW, C Serbia, Kosovo and Metohija), while the *A. rumelica* occurs in the western part of the Moesian floristic province (C, S, SE Serbia). *A. alpina* occurs only on the highest part of Mt Kopaonik in C. Serbia. The reason of wider distribution of *A. canescens* and *A. rumelica* in comparison to *A. alpina* lies in noticeably broader range of altitudes and habitat types in our country. In Mt Kopaonik (Suvo Rudište peak) two different *Armeria* species can be found in the same locality. The presence of two species in

this locality can be explained by edaphic factors, since the highest silicate part of the peak (Suvo Rudište) is inhabited by *A. alpina*, while on the ultramafic sites occurs *A. canescens*.

It is interesting to note that on the border of southern Serbia and Kosovo (locality Miratovac near Preševo), *A. rumelica* occurs on ultramafic substrate, although this substrate type in Serbia, as a rule, inhabits *A. canescens*. This can be explained by the fact that *A. rumelica* also grows close to this locality, on Mt Rujan, but on the silicate substrate. The presence of this species was also reported by Micevski & Matevski (1995) from ultramafics of Macedonia (Raduša), very close to the border with Serbia.

Acknowledgements

The authors would like to thank to curator Dr. Snežana Vukojičić who helped while working in the collections of the Institute of Botany and Botanical Garden “Jevremovac”, University of Belgrade (BEOU). The Ministry of Education, Science and Technological Development of the Republic of Serbia supported this research through Grant 173030 “Plant biodiversity of Serbia and the Balkans – assessment, sustainable use and protection”.

REFERENCES

- Ančev, M. (1982): *Armeria* Willd. In: Velčev, V., Kožuharov, S. (ed.): Flora Reipublicae Popularis Bulgaricae [Flora na Narodna Republika Bălgaria] 8: 345-349. – Bălgarskata Akademija na naukite, Sofija. [In Bulgarian]
- Bjelčić, Ž. (1967): Ordo Plumbaginales. In: Beck-Mannagetta, G., Malý, K., Bjelčić, Ž. (ed.): Flora Bosnae et Hercegovinae 4(2): 11-13. – Zemaljski muzej Bosne i Hercegovine, Sarajevo. [In Sebo-Croatian]
- Conti, F., Abbate, G., Alessandrini, A., Blasi, C. (2005): An annotated checklist of the Italian vascular flora. – Palombi & Partner, Roma.
- Feliner, G.N. (1990): *Armeria* Willd. In: Castroviejo, S., Lanza, M., Lopez Gonzalez G., Montserrat, P., Munoz Garmendia, F., Paiva, J., Villar, L. (eds): Flora Iberica 2: 642-721. – Real Jardin Botanico, Madrid. [In Spain]
- Gajić M. (1972): *Armeria* Willd. In: Josifović, M. (ed.): Flore de la Republique Socialiste de Serbie [Flora SR Srbije] 3: 94-98. – Srpska Akademija nauka i umetnosti, Odeljenje prirodno-matematičkih nauka, Beograd. [In Serbian]
- Lakušić, D. (1996): Pregled flore Kopaonika (JZ Srbija, Jugoslavija). - **Ekologija** 31(2): 1-35. [In Serbian]
- Lampinen R. (2001): Universal Transverse Mercator (UTM) and Military Grid Reference System (MGRS). [<http://www.luomus.fi/english/botany/afe/map/utm.htm>]

- Micevski, K., Matevski, V. (1995): *Armeria* Willd. In: Micevski, K. (ed.): The Flora of the Republic of Macedonia [Flora na Republika Makedonija] 1(3): 474-479. – Makedonska Akademija na naukite i umetnostite, Skopje. [In Macedonian]
- Nikolić, T. (2015): Flora Croatica Database, University of Zagreb, Faculty of Science, Zagreb. Retrieved October 21, 2015. [<http://hirc.botanic.hr/fcd/>]
- Novak, F. A. (1938): De Armeriis balcanicis nonnullis I - **Věstník Královské České Společnosti Nauk. Třída matematicko-přírodovědecké 1938**: 1-25. [In Latin]
- Novak, F. A. (1939): De Armeriis balcanicis nonnullis II - **Věstník Královské České Společnosti Nauk. Třída matematicko-přírodovědecké 1938**: 1-24. [In Latin]
- Pančić, J. (1874): Flora principatus Serbiae [Flora Kneževine Srbije]. – Državna štamparija, Beograd. [In Serbian]
- Papanikolaou, K., Kokkini, S. (1986): *Armeria* Willd. In: Strid, A. (ed.): Mountain flora of Greece 1: 749-750. – Cambridge University Press, Cambridge.
- Paparisto, K., Vangjeli, J., Ruci, B. (1996): *Armeria* Willd. In: Flore de l'Albanie [Flora e Shqipërisë] 3: 42-43. – Akadema e Shkencave e Republikës së Shqipërisë, Instituti i Kerkimeve Biologjike, Tiranë. [In Albanian]
- Pavletić, Z. (1994): Plumbaginaceae. In: Nikolić, T. (ed.): Flora Croatica. Index Florae Croaticae. - **Natura Croatica 3(2)**: 93-94.
- Pavlović, Z. (1955): Contribution à la Connaissance de la Flore et de la Végétation de la Monagne Ozren près de Sjenica (RP Serbie) [Prilog poznavanju serpentinske flore i vegetacije Ozrena kod Sjenice] II. - **Glasnik Prirodnjačkog muzeja srpske zemlje 7(1)**: 1-45. [In Serbian with French summary]
- Pinto da Silva, A.R. (1972): *Armeria* Willd. In: Tutin, T.G., Heywood, V.H., Burges, N.A., Moore, D.M., Valentine, D.H., Walters, S.M., Webb, D.A. (ed.): Flora Europaea 3: 30-35. – Cambridge University Press, Cambridge.
- Răvăruț, M. (1960): *Armeria* Willd. In: Săvulescu, T. (ed.): Flora Reipublicae Popularis Romanicae [Flora Republicii Populare Române] 7: 23-27. – Academia Republicii Populare Române, București. [In Romanian]
- Rohlena, J. (1942): Conspectus Florae Montenegrinae. - **Preslia 20-21**: 1-506.
- Scassellati, E., Lucchese, F., Abbate, G. (2013): A morphometric study of *Armeria canescens* aggr. (Plumbaginaceae) in the Italian Peninsula. - **Plant Biosystems 147(3)**: 743-750.
- Selvi, F. (2009): *Armeria saviana* sp. nov. (Plumbaginaceae) from Central Italy. - **Nordic Journal of Botany 27**: 125-133.
- The Plant List (2013): The Plant List, version 1.1. [<http://www.theplantlist.org>]
- Thiers, B. (2015): [continuously updated]. Index Herbariorum: A global directory of public herbaria and associated staff. New York Botanical Garden's Virtual Herbarium. [<http://sweetgum.nybg.org/ih>]

**РОД *ARMERIA* WILLD. (PLUMBAGINACEAE) У СРБИЈИ НА ОСНОВУ
ПОДАТАКА ИЗ ХЕРБАРСКИХ ЗБИРКИ У БЕОГРАДУ**

УРОШ БУЗУРОВИЋ, КСЕНИЈА ЈАКОВЉЕВИЋ, МАРЈАН НИКЕТИЋ,
ТАЊА СЕНИЋ, ГОРДАНА ТОМОВИЋ

РЕЗИМЕ

У раду је приказано распрострањење врста из рода *Armeria* Willd. у Србији на основу анализе хербарског материјала из збирке Природњачког музеја у Београду (ВЕО) и збирке Института за ботанику и ботаничке баште „Јевремовац“, Универзитета у Београду (ВЕОУ). Укупно је анализиран 181 хербарски табак од којих су 84 депонована у збирци ВЕО, а 97 у збирци ВЕОУ. На основу ревизије и анализе хербарског материјала у поменутиим збиркама, утврђено је да су у Србији присутне три врсте из овога рода: *A. alpina* (DC.) Willd., *A. canescens* (Host.) Boiss. и *A. rumelica* Boiss. Врста *A. maritima* (Mill.) Willd. (= *Statice armeria* L., = *A. vulgaris* Willd.) не расте на подручју Србије, иако су се подаци о њеном присуству наводили у Панчићевом делу „Флора кнежевине Србије“, као и у едицији „Флора СР Србије“.