

NEW RECORD OF VALERIANA SIMPLICIFOLIA (REICHEND.) KADATH IN SERBIA. M. Veljić¹, P. D. Marin¹, Z. Krivošej², and B. Petković¹. ¹Faculty of Biology, Botanical Institute and Jevremovac Botanical Garden, 11000 Belgrade, Serbia and Montenegro; ²Faculty of Sciences, University of Kosovska Mitrovica, 38220 Kosovska Mitrovica, Serbia and Montenegro.

UDC 582.971.3(497.11)

The genus *Valeriana* in the flora of Europe is represented by 20 species (Okendon, 1976). The flora of Serbia includes eight species (Kojić, 1973). *Valeriana simplicifolia* in Flora of Serbia is recognized as *Valeriana bertiscea* Panč. (Syn. *V. dioica* L. var. *simplicifolia* Rohl.; *V. simplicifolia* K. Malý) (Kojić 1973), with only one known locality—Koritnik (Kosovo and Metohija).

During our floristic investigation of the Uvac River Gorge (southwest Serbia), we found *Valeriana simplicifolia*. It was identified from material collected in May of 2000 and May of 2002 near the source of Uvac River (village of Carićina). The source of the Uvac River is situated at about 1,400 m a.s.l. Geologically, the ground was black and gray-brown soil on serpentinite rock. To be specific, it was a swampy meadow in which the dominant part of the vegetation cover consisted of *Carex* spp. and *Eriophorum latifolium* Hoppe (*Cariceto-Eriophoretum*). In addition to these edificators of the community, the following taxa of the vascular flora were also found: *Carex beckii* Wimm., *Carex caespitosa* L., *Carex depauperata* Good., *Carex diandra* Schrank, *Carex distans* L., *Carex flacca* Schreb. var. *clavaeformis* (Hoppe) Beck f. *dinarica* (Heuff.) Kükenth., *Carex flava* L. ssp. *lepidocarpa* (Tausch) Schinz et Keller, *Carex goodenowii* J. Gay., *Carex hostiana* DC., *Carex leporina* L., *Carex nitida* Host., *Carex oederi* Retz., *Carex paniculata* L., *Carex pendula* Huds., *Carex stellulata* Good. f. *stellulata*, *Carex vulpina* L. f. *vulpina*, *Juncus acutiflorus* Ehrh., *Juncus effusus* L., *Juncus inflexus* L., *Blysmus compressus* (L.) Panz., *Luzula pilosa* (L.) Willd., *Scirpus sylvaticus* L., *Cirsium rivulare* (Jacq.) Lk. f. *glabratum* Rohl., *Scrophularia umbrosa* Dumort., *Ranunculus acris* L., *Prunella vulgaris* L., *Polygonum bistorta* L., *Parnassia palustris* L., *Calta palustris* L., *Veronica anagallis-aquatica* L., *Mentha aquatica* L., *Mentha longifolia* (L.) Huds., *Lychnis flos-cuculi* L., *Geum rivale* L., *Alchemilla vulgaris* L., *Dactylis glomerata* L., *Poa trivialis* L., *Holcus lanatus* L., *Briza media* L., *Sanguisorba minor* Scop. subsp. *minor*, *Sanguisorba officinalis* L., *Cirsium acaule* (L.) Scop., *Campanula rapunculus* L., *Campanula patula* L., *Centaurea jacea* L., *Lotus corniculatus* L., *Galium boreale* L., *Potentilla erecta* (L.) Räuschel. var. *erecta*, *Plantago media* L., *Gentiana utriculosa* L., *Gentiana pneumonanthe* L., *Trifolium alpestre* L., *Trifolium pratense* L., *Dactylorhiza maculata* (L.) Soó, *Anemone nemorosa* L., *Narcissus poeticus* L., *Euphorbia amygdaloides* L., *Viola silvestris* Lam., *Colchicum autumnale* L., *Muscari racemosum* (L.) Mill., *Chamaecytisus hirsutus* (L.)

Link., *Genista ovata* Waldst. et Kit., *Fragaria vesca* L., *Glyceria plicata* Fries., *Myosotis palustris*(L.) Nath., *Rumex patientia* L., *Succisa pratensis* Moench, *Rubus idaeus* L., *Alnus glutinosa* (L.) Gaertn., *Betula pendula* Roth., *Juniperus communis* L., and *Juniperus oxycedrus* L., as well as the mosses *Amblystegium serpens* (Hedw.) B., S. & G., *Calliergonella cuspidata* (Hedw.) Loeske, *Campylium chrysophyllum* (Brid.) J. Lange, *C. polygamum* (B., S. & G) J. Lange & C. Jens., *C. stellatum* (Hedw.) J. Lange & C. Jens. var. *protensum* (Brid.) Bryhn., *C. stellatum* J. Lange & C. Jens. var. *stellatum*, *Cratoneuron filicinum* (Hedw.) Spruce var. *filicinum*, *Palustriella commutata* (Hedw.) Ochyra var. *commutata*, *Brachythecium rutabulum* (Hedw.) B., S. & G., *Eurhynchium hians* (Hedw.) Sande Lac., *Homalothecium lutescens* (Hedw.) Robins., *H. sericeum* (Hedw.) B., S. & G., *Bryum pseudotriquetrum* (Hedw.) Gaertn., Mayer & Scherb., *B. torquescens* B.



Fig. 1. Localities of *Valeriana simplicifolia* in Serbia: ☆ previous record, ✕ new record

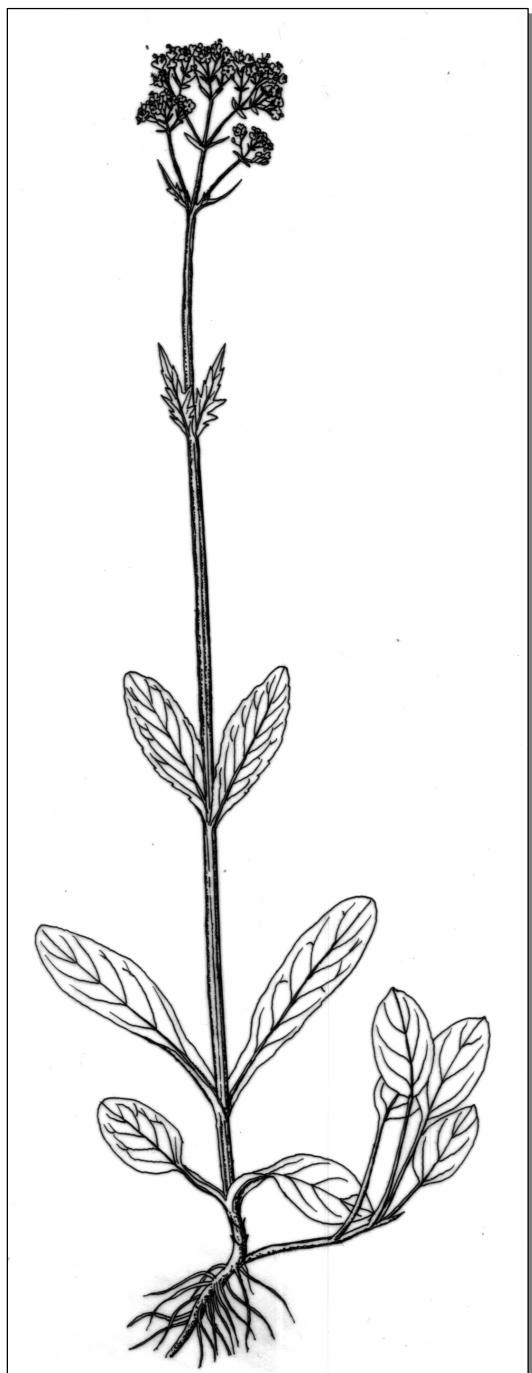


Fig. 2. *Valeriana simplicifolia* (male plant).

& S., *B. turbinatum* (Hedw.) Turn., *Climacium dendroides* (Hedw.) Web. & Mohr., *Dicranum scoparium* Hedw., *Entodon concinnus* (De Not.) Par., *Fissidens adianthoides* Hedw., *Grimmia pulvinata* (Hedw.) Sm., *Schistidium apocarpum*

(Hedw.) B., & S. var. *apocarpum*, *Hylocomium splendens* (Hedw.) B., S. & G., *Hypnum cupressiforme* Hedw. var. *cupressiforme*, *Plagiomnium affine* (Bland.) T. Kop., *P. rostratum* (Schrad.) T. Kop., *Orthotrichum affine* Brid., *O. anomalum* Hedw., *O. stramineum* Hornsch. ex Brid., *O. striatum* Hedw., *Tortella tortuosa* (Hedw.) Limpr., *Tortula ruralis* (Hedw.) Web. & Mohr. ssp. *ruralis*, *Thuidium recognitum* (Hedw.) Lindb., and *Lophozia collaris* (Nees) Dum.

Valeriana simplicifolia has a creeping, usually branched rhizome with numerous roots. The stems are 20-80 cm high, branched in the inflorescence region, ribbed, and glabrous. Short trichomes are present only on ribs and leaf margins, sometimes densely in nodes. The stem is green, in the lower part blue-green, with 3-5 pairs of leaves. The leaves are opposite, entire or with small lobes in the inflorescence region. Leaves in the lower part have petioles 2-5 cm long and ovate-orbicular to lanceolate elliptic lamina 3-9 cm long and 1,5-4 cm wide. In the middle region, they are sessile, ovate or lanceolate, and 2,5-10 cm long and 0,5-3 cm wide. The inflorescence is a corymb with one terminal cluster and 1-3 pairs of lateral clusters. The plant is dioecious, and flowers are unisexual with narrow lanceolate bracts in the base. The corolla is trumpet-shaped, pink-flowered; male flowers are 2.5-3.5 mm long, female flowers 1-1.5 mm long. Achenes are 2.5-3 mm long, lanceolate or ovate, glabrous, with pappus-like structure.

This species can be differentiated from similar species on the basis of several morphological characters. From the very similar species *V. triptera* L., it differs in possessing simple leaves with entire margins. It differs from *V. montana* L. with respect to flower structure (the given species is dioecious, and the flowers are unisexual) and in having a long rhizome.

Valeriana simplicifolia is distributed in mountains of Central and Eastern Europe and the Balkan Peninsula. Since *V. simplicifolia* has so far been recorded at only two localities, it can be treated as a rare species in Serbia. This species is also recognized as rare in the flora of Bulgaria (Velev, 1984, Delipavlov et al. 1995).

Specimens of the recorded species are deposited in the Herbarium of the Institute of Botany and Jevremovac Botanical Garden, Faculty of Biology, University of Belgrade (BEOU), voucher number 16052.

Acknowledgements - The authors are grateful to the Ministry of Science and Environment Protection of the Republic of Serbia for financial support.

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