

NEW FINDINGS OF *Serratula lycopifolia* (Vill.) A. Kern. AND *Trifolium pannonicum* Jacq. – RARE SPECIES IN THE FLORA OF THE REPUBLIC OF MOLDOVA

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The study was conducted within the field expeditions during which were collected seeds of rare plants, in the forest near the village of Vădeni, Soroca district, where new growth sites of two rare species, included in the 3rd edition of the Red Book (2015), were identified: *Serratula lycopifolia* (Vill.) A. Kerner and *Trifolium pannonicum* Jacq. The species inhabit the glades of mixed stands, dominated by the *Quercus petraea* (Matt.) Liebl. and *Q. robur* L., which is approximately 80 years old, light gray soil type, on a plateau at an altitude of 320 m. Collected specimens of the identified species were herbariumized and deposited in the Herbarium of the “Al. Ciubotaru” National Botanical Garden (Institute).

Serratula lycopifolia (Vill.) A. Kerner is a rare species of Community interest, protected by the Habitats Directive (2011). In the Republic of Moldova, according to Ionița et al. (2024), it is identified only in three locations: Gordinești and Fetești, Edineț district and Colosova, Grigoriopol district. Its distribution area includes Central and Eastern Europe, the Balkan Peninsula, Western Siberia. *Serratula lycopifolia* is one of the 6 species the restoration and repopulation activities for which were planned within the framework of the Project 20.80009.7007.22 “Research and conservation of vascular flora and macromycobiota in the Republic of Moldova” (2020-2023).

The highlighted location in the forest glades near the village of Vădeni represents a new growth point. The population is composed of three subpopulations at a distance of about 250 m from each other, and consists of about 30 mature specimens, and about 15 juvenile specimens, on an area of about 2.2 ha, which grow solitary and in small groups.

Trifolium pannonicum Jacq., a rare species for the flora of the Republic of Moldova, grows on the edge of oak and cherry forests in the north-west of the country: Briceni, Edineț, Rîșcani, Dondușeni districts, and the growth point in the

Vădeni forest would be its most South-Eastern growth point. The species' range includes Central and Eastern Europe, and the Balkan Peninsula.

The population we highlighted was not previously known and represents isolated specimens or small groups of 3-5 phytoindividuals, spread over approximately 200 m².

For *ex situ* conservation, germplasm of the two species was collected, as well as of other rare species from this habitat, such as: *Fritillaria montana* Hoppe ex W.D.J.Koch (included in the Red Book of the Republic of Moldova ed. 2015); *Asparagus officinalis* L.; *Asparagus tenuifolius* Lam.; *Clematis integrifolia* L.; *Iris aphylla* L. (species protected by the Law on the Fund of State Protected Natural Areas). Potential for further collections of rare species such as: *Lilium martagon* L.; *Veratrum nigrum* L.; *Potentilla alba* Moench. was identified.

The biological characteristics and ecological requirements of both species, together with the existing threats to their populations and habitats, determine the need to protect breeding sites as well as monitor the population status.

Keywords: *Serratula lycopifolia*; *Trifolium pannonicum*; rare species; new location; Republic of Moldova

Funding. This study was supported by the research project 24.80012.7007.08 „The safe conservation of the germplasm of rare plants from the Republic of Moldova” (CONSERVGERM), funded by National Agency for Research and Development.