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RARE VASCULAR PLANTS IN THE «DOBRUȘA» LANDSCAPE RESERVE

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Abstract: The state of rare species presence in landscape reserve “Dobrușa” was highlighted. There were 35 threatened species of higher vascular plants revealed, being positioned on different categories of rarity, 7 of which are included in the Red Book of the Republic of Moldova (3rd ed.) and 24 protected by the law.

Key words: vascular flora, landscape reserve “Dobrușa”, Republic of Moldova

Conservation of rare plant species, as an extremely important and most vulnerable component of biological diversity, is essential to ensure the functional and structural features of the natural ecosystems of the Republic of Moldova. The current depletion of the flora of the region occurs for various reasons, of which, the following are most significant: destruction of the habitat, fragmentation and anthropogenic transformation of landscapes, overexploitation of ecosystems and species, environmental pollution and, as one of the most serious consequences, aridization of the climate and the impact of invasive taxa. One of the promising ways to maintain a stable state of both flora in general and species in a state of threat is their preservation and monitoring in the system of specially protected natural areas.

The aim of this work was to elaborate a list of protected and threatened vascular plants within the limits of the boundaries of the landscape reserve “Dobrușa” (Șoldănești district), characterized by the greatest preservation of natural forest and forest glades communities. The state of rare species is adversely affected by forestry activities such as clearcutting, measures to promote natural regeneration, the establishment of forest cultures, which alter the natural environment and species habitats.

Field investigations were carried out during the 2010-2020 growing seasons and involved the thorough survey of the protected area, as well as the cameral study of collected material. In this regard, we applied a detailed route-based method, also the existing literature on rare species were used [1-3].

Landscape reserve “Dobrușa” (2,634 ha), located between the village of Olișcani and the Ciorna river (Șoldănești state forestry, Olișcani forestry, forest stands Olișcani-Prisaca and Dobrușa). The rare vascular flora of the reserve contains 35 taxa, of which 7 are included in the Red Data Book of the Republic of Moldova (3rd edition) [2] – *Epipactis purpurata* Smith (CR), *Athyrium filix-femina* (L.) Roth (VU), *Cephalanthera damasanium* (Mill.) Druce (VU), *Galanthus nivalis* L. (VU), *Fritillaria montana* Hoppe (VU), *Lunaria rediviva* L. (EN) and *Scopolia carniolica* Jacq. (VU).

At the national level, 24 species are protected, of which 18 species are in a state of

threat – *Cephalanthera damasonium* (Mill.) Druce, *Lunaria rediviva* L., *Paris quadrifolia* L., *Crocus reticulatus* Stev. ex Adams, *Serratula coronata* L., *Asparagus tenuifolius* Lam., *Seseli tortuosum* L., *Platanthera bifolia* (L.) Rich., *Galanthus nivalis* L., *Athyrium filix-femina* (L.) Roth, *Dryopteris filix-mas* (L.) Schott, *Lathyrus venetus* (Mill.) Wohlf., *Luzula campestris* (L.) DC., *Tulipa biebersteiniana* Schult. et Schult.fil., *Listera ovata* (L.) R.Br., *Staphylea pinnata* L., *Epipactis purpurata* Smith, *Scopolia carniolica* Jacq. and 5 species *Lilium martagon* L., *Epipactis helleborine* (L.) Crantz, *Neottia nidus-avis* (L.) Rich., *Actaea spicata* L., *Sorbus torminalis* (L.) Crantz, the condition of which is not a cause for concern.

The other 31 species are included in the Operational List compiled during the design of the creation of the National Ecological Network, or are protected exclusively territorially, but without special protection measures: *Trommsdorffia maculata* (L.) Bernh., *Cerastium arvense* L., *Orites parviflora* Grossh., *Carex elongata* L., *Carex strigosa* Huds., *Lathyrus aureus* (Stev.) Brandza, *Fritillaria montana* Hoppe, *Epilobium ciliatum* Rafin., *Potentilla alba* L., *Cruciata glabra* (L.) Ehrend., *Seseli tortuosum* L., *Asparagus tenuifolius* Lam., *Serratula coronata* L., *Crocus reticulatus* Stev. ex Adams, *Paris quadrifolia* L., *Lunaria rediviva* L., *Cephalanthera damasonium* (Mill.) Druce, *Galanthus nivalis* L., *Athyrium filix-femina* (L.) Roth, *Dryopteris filix-mas* (L.) Schott, *Lathyrus venetus* (Mill.) Wohlf., *Luzula campestris* (L.) DC., *Tulipa biebersteiniana* Schult. et Schult. fil., *Listera ovata* (L.) R. Br., *Staphylea pinnata* L., *Epipactis purpurata* Smith, *Scopolia carniolica* Jacq., *Lilium martagon* L., *Epipactis helleborine* (L.) Crantz, *Neottia nidus-avis* (L.) Rich., *Actaea spicata* L. and *Sorbus torminalis* (L.) Crantz.

To preserve the biodiversity of natural ecosystems of forests of Landscape reserve “Dobruşa”, it is necessary to develop and implement a set of measures to record, regulate and minimize the negative impact, which has recently led, in fact, to the depletion of biodiversity resources.

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