

# TAXA WITH SPECIAL STATUS FROM THE ZĂICEȘTI VILLAGE AREA (BOTOȘANI COUNTY)

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**Key words:** Protected taxa, Red List, Romania, Moldavia, Botoșani, Zăicești.

## Introduction

The studied region is situated in the northern part of the Moldavian Plateau, surrounding the Zăicești village that is situated at 6 km to Botoșani (D.N. 29, coordinates: 26°30' - 26°50' E longitude and 47°30' - 47°40' N latitude).

The hydrographical network is deficient due to the continental climate and to the impermeability of the soils. The most important stream is Dresleuca that flows along the Zăicești hills' base. The hills are almost totally covered by the "La Rai" forest, being the only area with a higher humidity, the rest of the region and the hills' slopes being dryer.

The climate is excessive – continental due to the neighbouring with the Euro – Asiatic plain. The climatic characteristics are shown by the low temperatures in winter (– 30°C) and high in summer (+ 39°C). The precipitations level is situated between 500 and 600 mm with minimal values in February and maximal values in June.

## Materials and method

For analyzing the vascular flora of the region were used the classical methods and the usual materials for this kind of research. The working stages begin with documentation and study of the bibliography, followed by a terrain research stage and then a herbarium stage, finally ended with a stage of data interpretation and a complete list of taxa.

Among the identification guides used are: Al. Beldie – "*Flora României*" (vol. I and II) 1977, I. Sârbu et al. – "*Flora ilustrată a plantelor vasculare din estul României*" (vol. I and II) 2001, *Flora României* (vol. I – XIII) 1952 – 1976. For synonyms was used the paper: „*Flora ilustrată a României*” by V. Ciocârlan.

## Results and discussions

**1. Vascular plants included in the Red List** – for including the species in diverse categories of protection were used two scientific papers: Gh. Dihoru, Alexandrina Dihoru – "*Plante rare, periclitare și endemice în flora României – Lista Roșie*" 1993 – 1994 and M. Oltean, G. Negrean, A. Popescu et al. – "*Studii, sinteze, documentații de ecologie*" I/1994 (Tab. I).

Table I.

M. Oltean, G. Negrean et al.		Gh. Dihoru, Alexandrina Dihoru	
category	species	category	species
I	<i>Carex brevicollis</i> DC.	R (I)	<i>Carex brevicollis</i> DC.
R	<i>Carex liparocarpos</i> Gaudin	R	<i>Carex liparocarpos</i> Gaudin
R	<i>Carex strigosa</i> Hudson	R	<i>Carex strigosa</i> Hudson
R	<i>Carex supina</i> Wahlenb.	R	<i>Carex supina</i> Wahlenb.
nt	* <i>Cephalanthera damassonium</i> Druce	-	-
nt	<i>Cephalanthera longifolia</i> (L.) Fritsch	-	-
nt	* <i>Cephalanthera rubra</i> (L.) L.C. Richard	-	-

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R	<i>Crepis nicaeensis</i> Balb.	R	<i>Crepis nicaeensis</i> Balb.
R	* <i>Evonymus nanus</i> Bieb.	R	* <i>Evonymus nanus</i> Bieb.
K	<i>Fragaria moschata</i> Duchesne	-	-
R	<i>Gagea spathacea</i> (Hayne) Salisb.	R	<i>Gagea spathacea</i> (Hayne) Salisb.
nt	<i>Galanthus nivalis</i> L.	-	-
-	-	R	<i>Melampyrum nemorosum</i> L.
R	<i>Neottia nidus – avis</i> L.C.M. Richard	-	-
R	* <i>Omphalodes scorpioides</i> (Haenke) Schrank	R	* <i>Omphalodes scorpioides</i> (Haenke) Schrank
R	<i>Orchis purpurea</i> Hudson	-	-
R	<i>Pinus sylvestris</i> L.	-	-
-	-	V	<i>Plantago cornuti</i>
Ex	<i>Potentilla collina</i> Wibel. ssp. <i>thyrsiflora</i> (Hülse) Dostál	V	<i>Potentilla collina</i> Wibel. ssp. <i>thyrsiflora</i> (Hülse) Dostál
R	<i>Vicia peregrina</i> L.	R	<i>Vicia peregrina</i> L.
-	-	P genul <i>Sisymbrium</i> L.	
-	-	<i>Sisymbrium officinale</i> (L.) Scop.	
-	-	<i>Sisymbrium orientale</i> L.	

Breviary:

I – indeterminate species and subspecies

R – rare species and subspecies

V – vulnerable species and subspecies

Ex – extinct species and subspecies

K – less known species and subspecies

nt – not endangered endemic species and subspecies

P – endangered species and subspecies

\* – quoted species but not discovered again in the field

## 2. Endemics:

The endemic and sub endemic species (after M. Oltean, G. Negrean, A. Popescu et al. – “Studii, sinteze, documentații de ecologie” I/1994) identified in the studied area are 7 in number:

*Carex brevicollis* DC. – endemic in Romania

*Galanthus nivalis* – endemic in Romania

*Neottia nidus – avis* L.C.M. Richard – endemic in Romania

*Dentaria glandulosa* Waldst. et Kit. – endemic for the Carpathians

*Orchis purpurea* Hudson – sub endemic

*Pinus sylvestris* L. – sub endemic

*Vicia peregrina* L. – sub endemic

3. A number of 4 vascular plant species from the studied area are present on the **CITES Convention lists** that settles the international trade with endangered species of wild plants and animals:

*Galanthus nivalis* L.

*Cephalanthera damassonium* Druce

*Cephalanthera rubra* (L.) L.C. Richard

*Orchis purpurea* Hudson

4. After studying the bibliography was noticed that some species of vascular plants are rarely met in Moldova or in the rest of Romania. Even if the research ended in 2004 and published

now, appeared the possibility of using new literature like ”*Flora și vegetația Moldovei (România)*”, 2006 – Chifu T. and collaborators, for finding out what species are in this situation.

- a. For example: *Crepis nicaeensis* Bieb. is specified in counties from other regions of Romania (Transilvania, Banat, Oltenia, Muntenia) but not in **Moldova**.
- b. Also, a number of 11 species are quoted in a few counties from Moldova - Botoșani county (Tab. II).

Table II.

Species	Counties
<i>Achillea crithmifolia</i> Waldst. et Kit	Neamț, Vrancea
<i>Carex liparocarpos</i> Gaudin	Bacău, Suceava, Vrancea, Vaslui
<i>Carex strigosa</i> Hudson	Suceava, Neamț, Iași
<i>Carex supina</i> Wahlenb.	Bacău, Vrancea, Vaslui, Galați
<i>Centaurea arenaria</i> Bieb.	Galați, Vaslui
<i>Dictamnus albus</i> L. ssp. <i>albus</i>	Suceava, Neamț, Bacău, Vrancea, Vaslui, Galați, Iași
<i>Gagea spathacea</i> (Hayne) Salisb.	Iași, Vaslui
<i>Lapsana communis</i> L. ssp. <i>intermedia</i> (Bieb.) Hayek	Suceava, Bacău, Iași
<i>Potentilla collina</i> Wibel. ssp. <i>thyrsiflora</i> (Hülse) Dostál	Neamț, Iași, Vaslui
<i>Seseli libanotis</i> (L.) Koch ssp. <i>libanotis</i>	Suceava, Neamț, Bacău, Vrancea, Iași
<i>Vicia peregrina</i> L.	Bacău, Vrancea, Vaslui, Galați,

- c. This article presents the „La Rai - Zăicești” forest as a *new location* for 2 species:

*Cephalanthera rubra* (L.) L.C. Richard – quoted before at Gorovei and Lișna

*Orchis purpurea* Hudson – quoted only at Săveni

### Conclusions

This article presents a number of 29 taxa of vascular plants; among witch 22 taxa have a special situation (being included in 7 protection categories). It also rises certain problems of detailed knowledge about the areas of the species or about the more extended area of some vascular plants, bringing to front the problem of the enlarging area of the steppe into the sylvicsteppe that is characteristic for the region, due to the anthropic impact and to the climatic changes (southern species whose area extends north, for example *Centaurea arenaria* Bieb.).

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