Contribuţii Botanice – 2014, XLIX: 75-83
Grădina Botanică "Alexandru Borza"
Cluj-Napoca

THREATENED CORMOPHYTES IN TÂRNAVELOR PLATEAU FLORA

***Mihaela SĂMĂRGHIŢAN*[1], *Silvia OROIAN*[2]**
[1] Mureş County Museum, Natural Science Department, 24 Horea Str., **RO-540036 Târgu-Mureş, Romania**
[2] University of Medicine and Pharmacy, Târgu-Mureș, Faculty of Pharmacy, Pharmaceutical Botany and Cell Biology Department, 38 Gh. Marinescu Str., **RO-540139 Târgu-Mureş, Romania**
e-mail: msamarghitan@yahoo.com

Abstract: The objective of this study is to identify the main sozological categories of plants of Târnavelor Plateau, their dissemination and integration into habitat types.

Field observations and research in Târnavelor Plateau, included in the Natura 2000 Sighişoara-Târnava Mare-ROSCI0227, were conducted during 2003–2012.

The floristic inventory of the study area comprises 897 vascular taxa (843 species, 46 subspecies, 4 varieties and 4 forms), distributed in 100 families [14]. Of the 897 taxa identified, 51 taxa, grouped in 22 families, belong to different sozological categories.

Regarding the syntaxonomy, the 51 taxa belonging to different sozological categories are found in 19 plant associations belonging to 5 classes of vegetation.

Vulnerable plant species are listed within the following classes of vegetation: Festuco-Brometea, Rhamno-Prunetea, Querco-Fagetea.

By knowing which species are endangered and their phytocoenotic classification, different means of prevention, protection and conservation of biodiversity, of species with different degrees of vulnerability, can be proposed.

Keywords: flora, sozological categories, IUCN Red List, Târnavelor Plateau, plant associations.

Introduction

Conservation of biodiversity is a complex process that takes place within a well-defined international and national legal framework. Natura 2000 aims to collect data on certain plant species and habitats, species and habitat mapping data (i.e. identifying, locating and ensuring their inclusion in protected areas). The objective of this study is to identify the main sozologic plant categories of Târnavelor Plateau, their dissemination and integration into habitat types.

The only real opportunity to protect species threatened with extinction is to try to conserve the biological communities and ecosystems to which they belong. *In situ* preservation remains, therefore, the optimal solution that is ideal for conservation strategy. Sighişoara-Târnava Mare Natura 2000 site is located in the centre of the country, in the southern part of Transylvania. The investigated land area is 97,000 ha., representing one of the largest sites in the continental region of Romania. The 27 studied localities belong to three counties: Braşov, Mureş and Sibiu. (Fig. 1)

Previous studies of flora and vegetation of this area were conducted by Mountford J.O. and Akeroyd J.R., 2005 [10], Schneider-Binder, E., 2007 [15] and Oroian, S., 2009 [14].

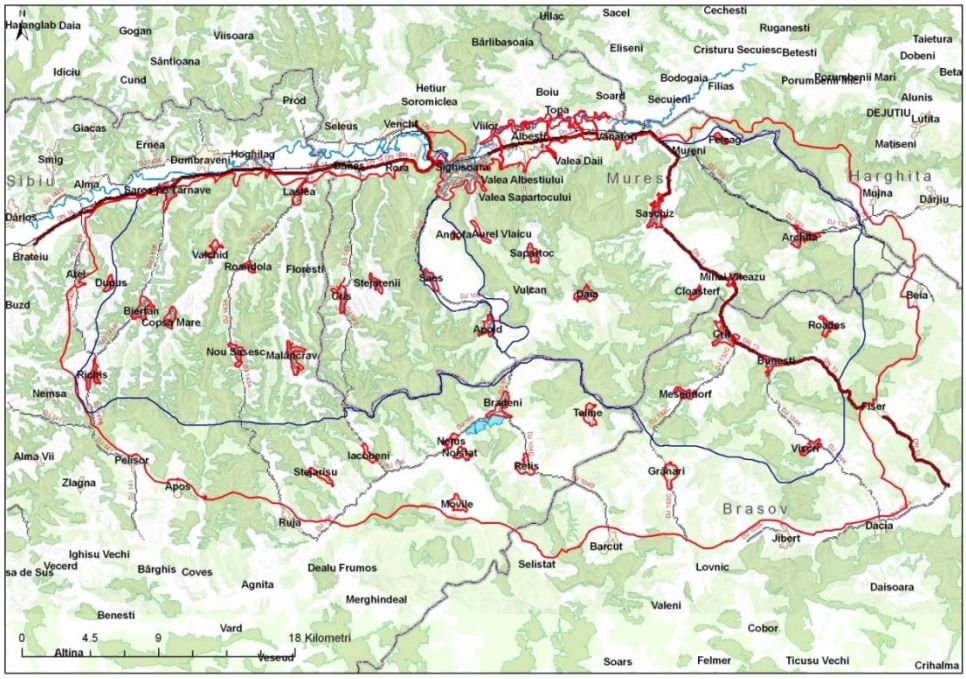

Fig. 1: Sighişoara - Târnava Mare Site Map

In terms of geography, this region is characterized by a hilly landscape with long summits and altitudes that generally do not exceed 600–700 m, and wide valleys with usually gentle slopes, but the occasional steep rise can be found.

Târnavelor Plateau has a temperate continental climate. The average annual temperature is 8.8 °C and the average annual rainfall is 615.4 mm/m^2.

Material and Methods

The inventory of the vascular flora of Târnavelor Plateau was developed based on personal research and bibliographical information. Naming of taxa was carried out under the *International Code of Phyosociological Nomenclature* [1], being consistent with *Flora Europaea* [18,19].

The presentation of each species is accompanied by data on the origin and geographical distribution, its frequency in Romania, its sozological category and phyto-coenotic classification in the investigated area.

The habitat types are coded according to Interpretation Manual of Natura 2000 Romanian habitats [8] and according to Habitats in Romania [7].

In determining Endangered, Rare or Vulnerable species, National Red Lists [3, 5, 6, 12, 13] were consulted, as well as the latest version of sozological categories published in the *IUCN Red List Categories* brochure [9].

Results and Discussions

Field observations and research of Târnavelor Plateau, included in the Sighisoara-Tarnava Mare-ROSCI0227 Natura 2000, were conducted during 2003-2012.

Floristic inventory of the study area comprises of 897 vascular taxa, i.e. 843 species, 46 subspecies, 4 varieties and 4 forms, distributed in 100 families. The number of species in the

Târnavelor Plateau determined so far represents approximately 25.62% of all known species of our country (3500 species in Flora R.P.R and R.S.R). Thus, in 0.04% of the country area, as is Târnavelor Plateau, there occurs a quarter of the known species of our country flora, allowing us to appreciate that Târnavelor Plateau is a region with a high floristic diversity. The explanation for this lies in the diversity of flora richness, climatic and soil conditions, as well as the geographical position of the territory studied. This paper did not analyze a number of 51 taxa that are in various stages of endangerment, taxa that are listed in the bibliography, but were not found in our research conducted in the field.

Of the 897 identified taxa, 51 taxa of 22 families belong to different sozological categories (Table 1).

Table 1: The sozological categories

Sozological category	VU	LC	NT
Number of taxa	9	1	41
%	17,64	1,96	80,39

The associations in the Târnavelor Plateau conspectus comprises 44 plant associations grouped into 30 alliances, 1 suballiance, 18 orders and 13 classes of vegetation [14].

Regarding the syntaxonomy, the 51 taxa belonging to different sozological categories are found in 22 plant associations belonging to 5 classes of vegetation.

Vulnerable plant species are listed within the following classes of vegetation: Festuco-Brometea, Rhamno-Prunetea, Querco-Fagetea.

By knowing which species are endangered and their phytocenotic classification, different means of prevention, protection and conservation of biodiversity of species with different degrees of vulnerability, can be proposed.

Table 2: Taxonomic inventory of sozological plant categories in the cormophyte flora of Târnavelor Plateau

Taxa	Family	IUCN Categ.	Geographical distribution	Distribution in the country	Extent in Târnavelor Plateau
Adenophora liliifolia (L.) Bess.	Campanulaceae	VU	Eua	Rare	Apold, Brădeni
Adonis vernalis L.	Ranunculaceae	VU	Eua (cont.)	Frequent	Apold, Cloaşterf, Criş, Mihai Viteazu, Mălâncrav, Movile, Saschiz, Ţeline
Alopecurus myosuroides Huds.	Poaceae	NT	Atl-Med	Sporadic	Sighişoara
Angelica palustris L.	Apiaceae	VU	Eua cont.	Rare	Ruja
Aristolochia lutea Desf.	Aristolochiaceae	NT	Balc-C-Eur	Sporadic	Movile, Şaeş
Astragalus dasyanthus Pallas	Fabaceae	NT	Pont-Pann	Sporadic	Mălâncrav
Carex hordeistichos Vill.	Cyperaceae	NT	subMed	Sporadic	Archita
Cephalanthera damasonium (Mill.) Druce	Orchidaceae	LC	Eur	Sporadic	Cloaşterf, Meşendorf, Mihai Viteazu, Mureni, between Saschiz and Daia
Cephalanthera rubra (L.) Rich.	Orchidaceae	NT	Eur	Sporadic	Beia, Cloaşterf, between Saschiz and Daia,
Cephalaria radiata Gris.	Dipsacaceae	NT	Dac.end.	Sporadic	Apold, Biertan, Brădeni, Movile, between Mureni and Archita, Noiştat, Ruja,

					Saschiz, Sighişoara-Angofa, Ţeline, Laslea, Mălăncrav
Crambe tataria Sebeok	Brassicaceae	VU	Pont-Pann	Sporadic	Cloaşterf, Mihai Viteazu, between Viscri and Buneşti
Dactylorhiza incarnata (L.) Soó	Orchidaceae	NT	Eua	Sporadic	Archita, Şaeş
Dactylorhiza majalis (Rchb.) P.H.Hunt&Summerh.	Orchidaceae	NT	C-Eur	Rare	near Viscri
Daphne cneorum L.	Thymelaeaceae	VU	Eur-C	Sporadic	Saschiz
Dianthus barbatus L. ssp.*compactus* (Kit.) Heuff.	Caryophyllaceae	NT	Alp-Carp-Balc	Frequent	Cloaşterf, Fundătura
Dictamnus albus L.	Rutaceae	VU	C-Eur-sMed	Sporadic	Criş, Mihai Viteazu, between Saschiz and Daia, Viscri
Echinops ruthenicus (Fisch.) M.B.	Asteraceae	NT	Pont-Pann-Balc	Sporadic	Brădeni, Ţeline
Echium russicum J.F.Gmel. (*Echium maculatum* L.)	Boraginaceae	VU	Pont-Pann	Rel. Frequent	Cloaşterf, Mihai Viteazu, Viscri
Elymus hispidus (Opiz) Melderis ssp. *barbulatus* (Schur) Melderis	Poaceae	NT	Eua cont.	Sporadic	Apold, Movile
Epipactis helleborine (L.) Crantz	Orchidaceae	NT	Eua	Frequent	Cloaşterf, Fişer, Meşendorf, Mureni
Epipactis palustris (L.) Crantz	Orchidaceae	NT	Eua	Sporadic	Criş, Daneş, Laslea, Mălâncrav, Mihai Viteazu, Nou Săsesc, Saschiz
Euphorbia esula L. ssp. *tommasiniana* (Bertol.) Nyman (*Euphorbia virgata* W.et K)	Euphorbiaceae	NT	Eua cont.	Sporadic	Apold, Beia, Brădeni, Fişer, Grânari, Iacobeni, Movile, between Mureni and Archita, Netuş, Noiştat, Ruja, Sighişoara-Angofa, Ţeline, Vulcan
Galium palustre L.	Rubiaceae	NT	Circ.	Frequent	Archita, Beia, Brădeni, Noiştat, Şaeş
Gymnadenia conopsea (L.) R.Br.	Orchidaceae	NT	Eur	Frequent	Laslea, Mălâncrav, Mihai Viteazu, Movile, Saschiz,
Hyoscyamus niger L.	Solanaceae	NT	Eua	Common	Buneşti, Criţ, Saschiz, Sighişoara
Inula bifrons L.	Asteraceae	NT	C-Med-Eur	Sporadic	Apold, Brădeni, Criş, Daia, Grânari, Laslea, Movile, Netuş, Noiştat, Ţeline
Iris aphylla L.	Iridaceae	VU	Cont. Eur.	Sporadic	Buneşti to Viscri, Mălâncrav, Noiştat
Limodorum abortivum (L.) Sw.	Orchidaceae	NT	C-Eur-sMed	Sporadic	Criş, between Saschiz and Daia, Mălâncrav
Listera ovata (L.) R.Br.	Orchidaceae	NT	Eua	Sporadic	Mălâncrav, Saschiz
Melampyrum nemorosum	Scrophulariaceae	NT	C-Eur	Sporadic	Viscri, Mălâncrav
Neottia nidus-avis (L.) Rich.	Orchidaceae	NT	Eua	Frequent	Apold, Beia, Cloaşterf, Meşendorf, between Saschiz and Daia
Orchis coriophora L.	Orchidaceae	NT	C-Eur	Frequent	Apold, Archita, Brădeni, Criş, Daneş, Laslea, Floreşti, Mălâncrav, Mihai Viteazu, between Mureni and Archita, Nou Săsesc, Saschiz, between Şaeş and Apold, Vulcan
Orchis laxiflora Lam. ssp. *elegans* (Heuff.) Soó	Orchidaceae	NT	Pann-Pont	Sporadic	Saschiz
Orchis militaris L.	Orchidaceae	NT	Eua	Frequent	Brădeni, Mălâncrav, Saschiz

Orchis morio L.	Orchidaceae	NT	Eur	Frequent	Brădeni, Daia, Daneş, between Şaeş and Apold
Orchis purpurea Huds.	Orchidaceae	NT	C-Eur	Rel. Frequent	Şaeş
Orchis tridentata Scop.	Orchidaceae	NT	C-Eur	Sporadic	Apold, Mălâncrav, Mihai Viteazu, Movile, between Mureni and Archita, Richiş, Saschiz, Stejărişu, Vulcan
Orchis ustulata L.	Orchidaceae	NT	Eur	Frequent	Daneş
Peucedanum officinale L.	Apiaceae	NT	Eua	Sporadic	Noiştat, Nou Săsesc
Platanthera bifolia (L.) Rich.	Orchidaceae	NT	Eua	Frequent	Roadeş, Sighişoara-Aurel Vlaicu
Potentilla palustris (L.) Scop.	Rosaceae	NT	Circ.bor .	Sporadic	Saschiz
Prunus tenella Batsch.	Rosaceae	VU	Eua(cont)	Rel.Frequent	Mihai Viteazu, between Saschiz and Daia
Ranunculus circinatus Sibth.	Ranunculaceae	NT	Eua	Rare	Saschiz
Ranunculus lingua L.	Ranunculaceae	NT	Eua	Sporadic	Movile, Şaeş
Rosa micrantha Borrer ex Sm.	Rosaceae	NT	C&S Eur	Sporadic	Beia, Viscri
Salvia sclarea L.	Lamiaceae	NT	Med	Rare	Richiş
Salvia transsilvanica (Schur ex Griseb.) Schur	Lamiaceae	NT	Trans (end)	Sporadic	Archita, Criş, Mălâncrav, Movile, between Mureni and Archita, between Saschiz and Daia, Viscri
Silene chlorantha (Willd.) Ehrh.	Caryophyllaceae	NT	Eua cont.	Sporadic	Apold, Mălâncrav, Sighişoara
Spiranthes spiralis (L.) Chevall.	Orchidaceae	NT	subAtl-subMed	Sporadic	Laslea, Mălâncrav
Traunsteinera globosa (L.) Reichenb.	Orchidaceae	NT	C-Eur (mont.)	Frequent	Mălâncrav, Nou Săsesc
Trollius europaeus L.	Ranunculaceae	NT	W&N Eur	Frequent	Viscri

Of the investigated area, 9 types of Natura 2000 habitats were identified, dominated by 19 plant associations where we can find those 51 species belonging to different sozological categories (Table 3).

Habitats containing the highest number of endangered species identified in the studied area are: 6210*, 6240* and 62C0* important orchid sites.

Table 3: Types of Natura 2000 habitats containing endangered species identified in Târnavelor Plateau

NATURA 2000 Code	HABITAT Type	PLANT ASOCIATION	Endangered species
3150	Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation	***Potamo perfoliati-Ranunculetum circinati* Sauer 1937**	*Ranunculus circinatus* (NT)
6430	Hydrophilous tall-herb fringe communities of plains and of the montane to alpine levels	***Scirpetum sylvatici Ralski* 1931**	*Ranunculus lingua* (NT)
6440	Alluvial meadows of river valleys of the *Cnidion dubii*	***Agrostetum stoloniferae* (Ujvárosi 1941) Burduja et al.1956 1958**	*Inula bifrons* (NT) *Orchis coriophora* (NT)
		***Agrostio- Deschampsietum caespitosae* (Soo,1928) Ujvarosi 1947**	*Carex hordeistichos* (NT) *Dactylorhiya incarnata* (NT)

			Epipactis palustris (NT) *Orchis coriophora* (NT) *Orchis laxiflora ssp.elegans* (NT)
6510	Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)	***Arrhenatheretum elatioris* Br.-Bl.ex Scherrer**	*Gymnadenia conopsea* (NT) *Orchis tridentata* (NT)
6520	Mountain hay meadows	***Anthoxantho-Agrostetum tenuis* (Sillinger 1933) Jurko 1969**	*Gymnadenia conopsea* (NT)
		***Festuco rubrae-Agrostietum capillaris* Horv.1951**	*Euphorbia virgata* (NT) *Gymnadenia conopsea* (NT) *Inula bifrons* (NT) *Orchis coriophora* (NT) *Orchis tridentata* (NT)
6210*	Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometea*) (*important orchid sites)	***Rhinantho rumelici-Brometum erecti* Sanda et Popescu 1999**	*Cephalaria radiata* (NT) *Gymnadenia conopsea* (NT) *Iris aphylla* (VU) *Orchis coriophora* (NT) *Orchis morio* (NT)
		***Brachypodio pinnati-Festucetum rupicolae* Ghişa 1962**	*Adenophora liliifolia* (VU) *Cephalaria radiata* (NT) *Euphorbia virgata* (NT) *Gymnadenia conopsea* (NT) *Inula bifrons* (NT) *Iris aphylla* (VU) *Orchis coriophora* (NT) *Orchis morio* (NT) *Orchis ustulata* (NT)
		***Danthonio-Brachypodietum pinnati* Soó 1946**	*Adonis vernalis* (VU) *Cephalaria radiata* (NT) *Gymnadenia conopsea* (NT) *Orchis coriophora* (NT) *Orchis tridentata* (NT)
		***Polygalo majoris-Brachypodietum pinnati* Wagner 1941**	*Adenophora liliifolia* (VU) *Adonis vernalis* (VU) *Cephalaria radiata* (NT) *Crambe tataria* (VU) *Dianthus barbatus* ssp.*compactus* (NT) *Dictamnus albus* (VU) *Gymnadenia conopsea* (NT) *Inula bifrons* (NT) *Iris aphylla* (NT) *Limodorum abortivum* (NT) *Orchis coriophora* (NT) *Orchis militaris* (NT) *Orchis morio* (NT) *Orchis tridentata* (NT) *Salvia transsilvanica* (NT)
6240*	Sub-Pannonic steppic grasslands	***Medicagini minimae-Festucetum valesiacae* Wagner 1941**	*Adonis vernalis* (VU) *Cephalaria radiata* (NT) *Euphorbia virgata* (NT)

			Orchis coriophora (NT)
		***Thymo pannonici-Chrysopogonetum grylli* Doniţă *et al*. 1992 (syn.*Chrysopogonetum grylli* Soó 1939)**	*Adonis vernalis* (VU) *Cephalaria radiata* (NT) *Gymnadenia conopsea* (NT) *Limodorum abortivum* (NT) *Orchis coriophora* (NT) *Orchis tridentata* (NT)
		***Festuco rupicolae-Caricetum humilis* Soó 1930,1947**	*Adonis vernalis* (VU) *Cephalanthera damasonium* (LC) *Dictamnus albus* (VU) *Echium maculatum* (VU) *Gymnadenia conopsea* (NT) *Orchis coriophora* (NT) *Prunus tenella* (VU)
		***Botriochloetum ischaemi* (Krist. 1937) Pop 1977**	*Adonis vernalis* (VU) *Astragalus dasyanthus* (NT) *Cephalaria radiata* (NT) *Dictamnus albus* (VU) *Echinops ruthenicus* (NT) *Gymnadenia conopsea* (NT) *Orchis coriophora* (NT)
62C0*	Ponto-Sarmatic steppes	***Elytrigetum hispidi* (Dihoru 1970) Popescu et Sanda 1988**	*Adonis vernalis* (VU) *Echinops ruthenicus* (NT) *Euphorbia virgata* (NT) *Inula bifrons* (NT)
		***Carici humilis-Stipetum joannis* Pop et Hodişan 1985**	*Adonis vernalis* VU) *Orchis coriophora* (NT)
		***Stipetum capillatae* (Hueck 1931) Krausch 1961**	*Adonis vernalis* (VU) *Cephalaria radiata* (NT) *Echinops ruthenicus* (NT) *Elymus hispidus* ssp.*barbulatus* (NT) *Euphorbia virgata* (NT) *Gymnadenia conopsea* (NT) *Inula bifrons* (NT) *Orchis tridentata* (NT) *Salvia transsilvanica* (NT)
91H0*	Pannonian woods with *Quercus pubescens*	***Corno-Quercetum pubescentis* Jakucs et Zólyomi ex Máthé et Kovács 1962**	*Cephalanthera damasonium* (LC) *Dictamnus albus* (VU) *Limodorum abortivum* (NT) *Prunus tenella* (VU) *Salvia transsilvanica* (NT)

Conclusions

The floristic inventory of the study area comprises 897 vascular taxa (843 species, 46 subspecies, 4 varieties and 4 forms), distributed in 100 families [14]. Of the 897 taxa identified, 51 taxa, grouped in 22 families, belong to different sozological categories.

Regarding the syntaxonomy, the 51 taxa belonging to different sozological categories are found in 19 plant associations belonging to 5 classes of vegetation.

Vulnerable plant species are listed within the following classes of vegetation: Festuco-Brometea, Rhamno-Prunetea, Querco-Fagetea.

REFERENCES

1. Barkman, J.J., Moravec, J., Rauschert, S., 1981, Code der pflanzensoziologischen Nomenklatur, *Vegetatio*, Upssala, **67** (3): 145-195.
2. Alexiu, V., 2011, *C*ategorii sozologice din cormoflora județului Argeș, Ed. „Paralela 45", Pitești.
3. Boşcaiu, N., Coldea, Gh., Horeanu, C., 1994, Lista roşie a plantelor vasculare dispărute, periclitate, vulnerabile şi rare din flora României, *Ocrotirea Naturii şi a Mediului înconjurător*, Bucureşti, **38** (1): 45-56.
4. Ciocârlan, V., 2009, *Flora ilustrată a României. Pteridophyta et Cormophyta*, Ed. Ceres, Bucureşti.
5. Dihoru, Gh., Dihoru, A., 1993 – 1994, Plante rare, periclitate şi endemice în flora României – Lista Roşie, *Acta Botanica Horti Bucurestiensis*, Bucureşti: 173-179.
6. Dihoru, G., Negrean, G., 2009, *Cartea roşie a plantelor vasculare din România*, Edit. Acad. Române, Bucureşti.
7. Doniţă, N., Popescu, A., Paucă-Comănescu, M., Mihăilescu, S., Biriş Iovu, A., 2005, *Habitatele din România*, Ed. Tehnică Silvică, Bucureşti.
8. Gafta, D., Mountford, O., (coord.), 2008, *Manual de interpretare a habitatelor Natura 2000 din România*, Ed. Risoprint, Cluj-Napoca.
9. IUCN, 1994, *IUCN Red List Categories*. Prepared by the IUCN Species Survival Commission. IUCN, Gland, Switzerland.
10. Mountford, J.O., Akeroyd, J.R., 2005, A biodiversity assessment of the Saxon villages region of Transylvania, *Transylvanian Review of Systematical and Ecological Research*, Sibiu-România, **2**: 31-42.
11. Negrean, G., 2001, Lista roşie a plantelor din România existente în pajişti, inclusiv endemite şi subendemite (Tracheophyta). In: Sârbu, A., (ed.), *Ghid pentru identificarea şi inventarierea pajiştilor seminaturale din România*, Ed.alo Bucureşti!, Bucureşti: 30-58.
12. Oltean, M., Negrean, G., Popescu, A., Roman, N., Dihoru, G., Sandală, V., Mihăilescu, S., 1994, Lista Roşie a plantelor superioare din România, Instit. de biologie, *Studii, sinteze, documentaţii de ecologie*, Bucureşti, **1**: 1-52.
13. Oprea, A., 2005, *Lista critică a plantelor vasculare din România*, Ed. Univ. „Al. I. Cuza", Iaşi.
14. Oroian, S., 2009, *Flora şi vegetaţia satelor săseşti din sud-estul Transilvaniei*, Edit. University Press, Târgu-Mureş.
15. Schneider-Binder, E., 2007, Xerophilous and Xero-Mesophilous grasslands on slumping hills around the saxon villages Apold and Saschiz (Transylvanian, Romania), *Transylvanian Review of Sistematical and Ecological research*, The Saxon Villages Region of southeast Transylvania, Sibiu-România, **4**: 55-64.
16. Sârbu, A., (coord.), 2007, *Arii speciale pentru protecţia şi conservarea plantelor în România*, Ed. "Victor B Victor", Bucureşti.
17. Săvulescu, T., (coord.), 1952-1976, *Flora R.P.R.-R.S.R.*, **I-XIII**, Ed. Acad. Române.
18. Tutin, T.G., Burges, N.A., Chater, A.O., Edmonson, J.R., Heywood, V.H., Moore, D.M., Valentine, D.H., Walters, S.M., Webb, D.A., (eds), 1993, *Flora Europaea*, **1** (Psilotaceae to Platanaceae). 2nd ed., Cambridge: Cambridge University Press.
19. Tutin, T.G., Heywood, V.H., Burges, N.A., Moore, D.M., Valentine, D.H., Walters, S.M., Webb, D.A., (eds), 1964-1980, *Flora Europaea*, **1-5**. 1st Ed., Cambridge: Cambridge University Press.

SPECII DE PLANTE PERICLITATE DIN CORMOFLORA PODIŞULUI TÂRNAVELOR

(Rezumat)

Obiectivele prezentului studiu au constat în identificarea principalelor categorii sozologice de plante din Podişul Târnavelor, răspândirea acestora şi încadrarea lor în tipuri de habitate.

Observaţiile şi cercetările de teren din Podişul Târnavelor, inclus în situl NATURA 2000 Sighişoara-Târnava Mare-ROSCI0227, s-au realizat în perioada 2003-2012.

Inventarul floristic al zonei studiate cuprinde un număr de 897 taxoni vasculari, respectiv 843 specii, 46 subspecii, 4 varietăţi şi 4 forme, repartizaţi în 100 de familii. Din cei 897 de taxoni identificaţi 51 de taxoni, încadraţi în 22 de familii, aparţin la diferite categorii sozologice.

Din punct de vedere sintaxonomic, cei 51 de taxoni ce aparţin la diferite categorii sozologice, se regăsesc în 21 de asociaţii vegetale care aparţin la 5 clase de vegetaţie.

Speciile vulnerabile se încadrează în următoarele clase de vegetaţie: Festuco-Brometea, Rhamno-Prunetea, Querco-Fagetea.

Cunoscând care sunt speciile periclitate şi încadrarea lor fitocenotică, se pot propune diferite mijloace de prevenire, protecţie şi conservare a biodiversităţii, a speciilor cu diferite grade de vulnerabilitate.

Received: 7.11.2012; Accepted: 23.10.2014.