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ФЛОРА ФРАНГЕНСКОГО ПЛАТО (СЕВЕРО-ВОСТОЧНАЯ БОЛГАРИЯ)

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Ключевые слова
флора
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Аннотация. Впервые представлены результаты инвентаризации флоры Франгенского плато (Северо-Восточная Болгария). В статье приводятся сведения о фитогеографической и таксономической структуре флоры, эндемичных и реликтовых видах, жизненных формах, лекарственных и охраняемых растениях. Впервые приводится информация об инвазионных видах во флоре Франгенского плато. Впервые для Северо-Восточного флористического региона приводятся *Papaver rumelicum* Velen. и *Fraxinus pallisiae* Wilmott.

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Introduction

The Frangensko Plateau is one of the plateaus located in Northeastern Bulgaria and shares a border to the Dobrogea Plateau in north and west. Between both plateaus lies the Valley of Batovska River. To the east, the Frangensko Plateau reaches to the Black Sea. To the south is the Varna Valley. The plateau occupies 8 squares of the UTM-network of Bulgaria: NH68, NH69, NH78, NH79, NH88, NH89, NJ70 and NJ80 (Figure). Its area is about 360 km^2. The maximum altitude of the plateau is 356 m above sea level. The plateau lies about 2 km west of the Vaglen village (Kinava, Apostolov, 1980).

The Frangensko Plateau is located in the Continental-Mediterranean climatic region, the Black Sea climatic sub-region and the climatic regions on the North Coast. The temperature regime is characterized by mild winters and warm summers. The area does not receive much rainfall: the average annual rainfall is only 498 mm. The quantity of the rainfall is greatest in the early summer and late autumn. The precipitation is mostly of rain. Snow covers are rare and last only a few days. The prevailing wind directions are west-northwest and northeast (Management plan…, 2010).

Various rock complexes with age ranging from Eocene to Holocene can be found on the plateau: sandstones, sands, organogenic limestones, sandy limestones, marl, and clays. The rock formations are striped with a north-south direction and found mainly in the western part of Frangensko Plateau (Vladev, 2008).

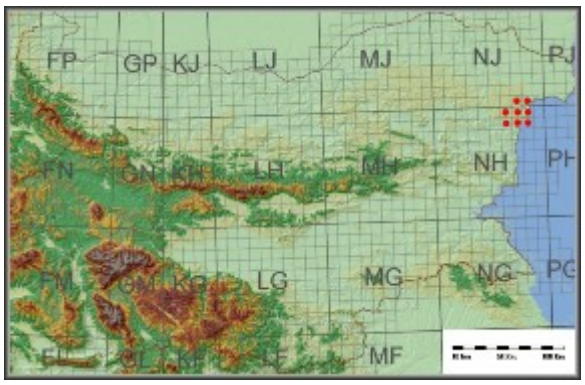

Рис. Положение Франгенского плато
Geographical location of Frangensko Plateau

The eastern slopes of the plateau are defined by a dense network of ravines and valleys. There is constant running water in some, while others are filled only when rain falls or by the melting snow. In the southern part of the plateau, the ravines stretch in the north-south direction and enter the Varna Lake. To the north, the ravines gradually reduce their size and run into the Black Sea. The largest watersheds provide the Batovska and the Kranevska River (Vladev, 2008). Several natural marshlands are found in the southern part of the Zlatni pyasatsi Natural Park are. They are filled continuously with

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groundwater, which is why they are still there even during the hottest summer months (Management plan…, 2010).

The following soil types and subtypes (listed in parentheses) can be found on the plateau: Leptosols (lithic and rendzic), Chernozems (haplic) and Phaeozems (haplic and luvic) (Ninov, 1997).

In terms of botanical and georgaphic definitions, the Frangensko Plateau is located in the Western Black Sea coastal district of the Euxinian province of the European deciduous forest area. It spreads over two floristic regions: the Black Sea coast (north) and Northeastern Bulgaria. The development of the Frangensko Plateau's vegetation cover is determined largely by the impact of the sea on various characteristics of temperate microclimate, the slope, the geological base, the humidity of soil, and the anthropogenic impact (Management plan…, 2010).

The first studies on the flora of the plateau were conducted by Velenovski and his associates, Hermengild Shkorpil and Anani Yavashev. In the 1880s, they carried out the first botanical studies in Northeastern Bulgaria, including the vicinity of Varna city. The results from their studies entered the first Bulgarian Flora (Velenovsky, 1891) and its Supplement (Velenovsky, 1898). Anani Yavashev carried out independent botanical research near Varna in the period between 1884 and 1905. In 1901, the Bulgarian Literary Society (now the Bulgarian Academy of Sciences) asked Anani Yavashev, Andrey Toshev, and Vaclav Stribarni to prepare a monograph entitled "Flora of Bulgaria in Zones." In this study, Yavashev had to describe the flora of Eastern Bulgaria. The book remains unpublished, but the collected materials are preserved and accessible in the archives of the Bulgarian Academy of Sciences. Hermengild Shkorpil also explored the flora in the vicinity of Varna and for years sent the collected materials to Joseph Velenovski. Trom 1889 to 1904, Vaclav Stribarni, one of the most prolific collaborators of Velenovski in Bulgaria, also collected and sent him plants from the areas between Varna and Kavarna (Stanev, 2001). So far, a comprehensive study of the Frangensko Plateau flora has not been conducted. There are data on the dendrology flora of the territories that are part of the plateau (Donchev, 1964; Jurukov et al., 2003). 400 species of vascular plants, belonging to 271 genera and 79 families have been identified in the Zlatni pyasatsi Natural Park (Management plan…, 2010).

There are two protected areas on the Frangensko Plateau: Zlatni Pyasatsi Natural Park and Aladza Manastir Protected Site (registered as protected sites and areas in Bulgaria in 2016). The area of the plateau is considered in two different protected areas by Natura 2000: River Valley of Batova Protected Area (BG0000102) and Zlatni Pyasatsi Protected Area (BG0000118). These areas were declared as protected with the Habitats Directive (Directive 92/43/EEC) that covers the protected area of the Birds Directive (Directive 2009/147/EC). The directives aim to preserve the area and the state, as well as – if necessary – the restoration of natural habitats and habitats of species and their populations within the protected area. To date, no inventory of the flora of the protected areas exists. The goal of our research is to complete an inventory of the Frangensko Plateau flora and to perform floristic analysis of the obtained data.

Materials and Methods

The present study of the flora of Frangensko Plateau was conducted by routing method in the period 2010-2014. The urbanized areas (villages and resorts) are not included in the study. The territory of the University Botanical Garden in Varna is also not included.

In determining the species and the life forms we used: Identifier of the vascular plants in Bulgaria (1992) and Handbook for Vascular Plants in Bulgaria (Delipavlov et al., 2011), Flora of People's Republic of Bulgaria, Volumes 1 to 9 (1963-1979; 1982-1989) and Flora of the Republic of Bulgaria, Vol. 10 (1995) and Vol. 11 (2012). The names of the taxa are in accordance with Conspectus of the Bulgarian vascular flora (Asyov et al., 2012). The abbreviations of the authors' names of the plants are according to

the International Plant Names Index (2016). Updating of the families is based on APG III (Angiosperm Phylogeny Group, 2009).

The life forms are represented via the system of Raunkiaer (1934). Biological types are defined while using Delipavlov et al. (2011). The floristic elements are in accordance with Asyov et al. (2012). Relics are presented in accordance with Zahariev (2016). The medicinal plants are in accordance with the Appendix of Medicinal Plants Act of Republic of Bulgaria (2014), Stoyanov (1972, 1973), Stoyanov, Kitanov (1960), Modern phytotherapy (1982), Pamukov, Ahtardzhiev (1989), Landzhev (2005), Specialized encyclopedia of medicinal plants in Bulgaria (2006).

The conservation statute is recognized using the following documents: Annex II to Council Directive 92/43/EEC of the European Community to protect natural habitats and of wild fauna and flora (1992), Appendix I to the Convention on Conservation of European Wildlife and Natural Habitats (Bern Convention) (1979), Appendix II to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1973), the Red Data Book of the Republic of Bulgaria, Vol. 1. Plants and Fungi (2015), Red List of Bulgarian vascular plants (2009), Annex III and Annex IV to the Act on Amending and Supplementing the Biological Diversity Act of the Republic of Bulgaria (2007), amending and supplementing the law of 2002. Some species are included in the Order for special arrangements for the conservation and use of the medicinal plants in Bulgaria (2014).

The anthropophytes are presented according to Stefanov, Kitanov (1962). The Invasive alien plant species are according to Petrova et al. (2012).

Results and Discussion

As a result of our investigations on the Frangensko Plateau, we identified 792 species of vascular plants, belonging to 394 genera and 91 families. Among the ones we identified, 762 species from 375 genera and 86 families are spontaneously distributed. The other 30 species are distributed as forest or decorative plants. This represents 18.6% from all species, 41.1% from all genera and 61.9% from all plant families in Bulgaria. The described species represent 33.9% of vascular plants as distributed in the interval 0-500 m above sea level according to the data provided by Peev et al. (1998). A systematic list of the established species is presented in the Appendix.

Division Lycopodiophyta includes 1 family, 1 genus and 1 species. Division Equisetophyta is represented by 1 family, 1 genus and 3 species. Division Polypodiophyta is represented by 1 family, 1 genus and 2 species. Subdivision Pinophytina includes 1 family, 1 genus and 1 species. Subdivision Magnoliophytina is the largest; it includes 82 families, 371 genera and 755 species. The distribution of taxa in those is as follows: Dicotyledonous – 69 families, 293 genera and 601 species; Monocotyledonous – 13 families, 78 genera and 154 species.

Most families and genera are represented by a smaller number of lower taxa: from 1 to 4. The majority of families, 52 (60.5%) were represented by 1-4 genera. Only 34 (39.5%) of the families are represented by 5 or more genera (Table 1). Most genera belong to the following families: Asteraceae (94), Poaceae (75), Fabaceae (66), Lamiaceae (42), Rosaceae (41) and Apiaceae (36). The majority of families, 69 (80.2%) were represented by 1-4 species. Only 17 (19.8%) of the families are represented by 5 or more species (Table 1). Most species belong to the following families: Asteraceae (46), Poaceae (41), Apiaceae (30), Lamiaceae (21), Fabaceae (19) and Brassicaceae (19). Most genera are represented by 1-4 species. Only 31 genera (8.3%) are represented by 5 or more species. Most species belong to the following genera: *Carex* (15), *Trifolium* (12), *Vicia* (11), *Lathyrus* (10), *Artemisia* (9), *Bromus* (9), *Verbascum* (9) and *Veronica* (9).

Таблица 1. Семейства, включающие 5 и более видов
Families with 5 or more genera and species

Families	Genera	Species		Families	Genera	Species
Asteraceae	46	94		Amaryllidaceae	5	12
Poaceae	41	75		Malvaceae	5	10
Fabaceae	19	66		Papaveraceae	4	10
Lamiaceae	21	42		Amaranthaceae	4	9
Rosaceae	15	41		Euphorbiaceae	2	9
Apiaceae	30	36		Fagaceae	2	9
Brassicaceae	19	28		Campanulaceae	2	8
Scrophulariaceae	10	28		Salicaceae	2	8
Caryophyllaceae	11	23		Violaceae	1	8
Cyperaceae	3	17		Geraniaceae	2	7
Boraginaceae	11	15		Oleaceae	4	7
Orchidaceae	9	14		Convolvulaceae	3	6
Polygonaceae	4	14		Iridaceae	2	5
Ranunculaceae	7	14		Juncaceae	1	5
Asparagaceae	7	13		Plantaginaceae	1	5
Caprifoliaceae	8	13		Sapindaceae	1	5
Rubiaceae	5	13		Ulmaceae	2	5

In the phytogeographical structure of the plateau are present 49 floristic elements total. The largest number of species belongs to the European-Asiatic (15.7%), the sub-Mediterranean (14.0%) and the European-Mediterranean (13.3%) floristic elements. This distribution corresponds to the geographic location of the study area.

The endemic taxa are represented by one Bulgarian endemic subspecies: *Opopanax chironium subsp. bulgaricum* (Velen.) N. Andr. and 5 Balkan endemic species: *Achillea clypeolata* Sm., *Angelica pancicii* Vandas, *Scabiosa triniifolia* Friv., *Silene frivaldszkyana* Hampe, and *Trifolium heldreichianum* Hausskn. The number of endemic taxa on the Frangensko Plateau (0.8%) is considerably smaller than the average for Bulgaria – 4.9% (Peev et al., 1998). The small number of endemic taxa is typical for those reagions in Bulgaria that are defined by low altitude.

The number of the relic species is 52 (6.8% of all species). Of these, 50 species are Tertiary relics, 2 species are Quaternary relics. The Tertiary relics are: *Acer campestre* L., *A. platanoides* L., *A. pseudoplatanus* L., *A. tataricum* L., *Alnus glutinosa* (L.) Gaertn., *Campanula lingulata* Waldst. et Kit., *Carpinus betulus* L., *C. orientalis* Mill., *Celtis australis* L., *Celtis plachoniana* K.I. Chr., *Clematis vitalba* L., *Colutea arborescens* L., *Corylus avellana* L., *Cotinus coggygria* Scop., *Crataegus pentagyna* Willd., *Ephedra distachya* L., *Fagus orientalis* Lipsky, *Fraxinus excelsior* L., *F. ornus* L., *Hedera helix* L., *Isopyrum thalictroides* L., *Jasminum fruticans* L., *Juglans regia* L., *Limodorum abortivum* (L.) Sw., *Lycopus europaeus* L., *Paliurus spina-christi* Mill., *Periploca graeca* L., *Populus canescens* (Aiton) Sm., *P. nigra* L., *P. tremula* L., *Primula vulgaris* subsp. *rubra* (Sm.) Arcang., *Quercus cerris* L., *Q. dalechampii* Ten., *Q. pubescens* Willd., *Rumex acetosa* L., *Ruscus aculeatus* L., *Salix alba* L., *S. caprea* L., *S. fragilis* L., *S. purpurea* L., *S. triandra* L., *Smilax excelsa* L., *Staphylea pinnata* L., *Syringa vulgaris* L., *Tamus communis* L., *Ulmus laevis* Pall., *U. minor* Mill., *Viburnum lantana* L., *Viscum album* L., *Vitis sylvestris* C. C. Gmel. The Quaternary relics are two species: *Galanthus nivalis* L. (Quaternary glacial relic) and *Iris pumila* L. (Quaternary interglacial relic). The small number of Quater-

nary relics is due to several reasons: the geographic location, the proximity to the Black Sea, and the associated warmer climate, as well as the low altitude of the plateau: from 0 to 356 m above sea level.

In our analysis of the life forms (Table 2), we found dominant participation of hemicryptophytes, 324 species (42.5%), followed by therophytes, 158 species (20.7%), phanerophytes, 107 species (16.0%) and cryptophytes, 98 species (12.9%). This distribution can be explained by the following: the plateau's location in the temperate zone, the large area of forest habitats, and the arable land on the plateau's territory.

Таблица 2. Распределение видов по жизненным формам
Distribution of the species by life form

Life form by Raunkiaer (1934)		Number of species	Percentage
Phanerophytes (Ph)		107	14.0
	Megaphanerophytes	8	1.1
	Mesophanerophytes	49	6.4
	Microphanerophytes	30	3.9
	Nanophanerophytes	20	2.6
Chamaephytes (Ch)		28	3.7
Hemicryptophytes (H)		324	42.5
Therophytes-Hemicryptophytes (Th-H)		47	6.2
Cryptophytes (Cr)		98	12.9
	Geophytes	80	10.5
	Helophytes	14	1.8
	Hydrophytes	4	0.5
Therophytes (Th)		158	20.7

Таблица 3. Распределение видов по биоморфологическим группам
Distribution of the species by biological type

Biological type	Number of species	Percentage
Annual herbaceous plant	158	20.7
Annual or biannual herbaceous plant	38	5.0
Annual or perennial herbaceous plant	9	1.2
Biannual herbaceous plant	30	3.9
Biannual or perennial herbaceous plant	17	2.2
Perennial herbaceous plant	407	53.4
Shrub	39	5.1
Shrub or tree	17	2.2
Tree	47	6.2

A variety of biological types is present, as well as all possible transitions between them. The results (Table 3) show that the largest groups are perennial plants with 407 species (53.4%) and annual plants with 158 species (20.7%). The dominant presence of perennial herbaceous plants can be explained by the wide variety of communities and habitats within the plateau. The relatively large number of annual herbaceous plants results from the largest area of arable land, the considerable number of settlements, and the roads between them.

The medicinal plants on the Frangensko Plateau are 362 species of vascular plants and are divided in 242 genera and 80 families. They represent 47.5% from all species, 64.7% from all genera and 92.0% from all plant families on the plateau. The established medicinal plants are divided into the following groups: 38 species of trees (10.5%), 24 species of shrubs (6.6%), 189 species of perennial herbaceous plants (52.2%), 12 species of biennial herbaceous plants (3.3%) and 51 species of annual herbaceous plants (14.1%). The remaining 48 species (13.3%) are related to the transitional groups among them. The significant number of medicinal plants (approximately every second plant on the plateau is a medical plant) attests to the economic importance of the flora on the plateau.

As a result of human activity on the plateau, the presence of anthropopytes is significant: 444 species of vascular plants (58.3%). Of these, 13 species are trees, 15 species are shrubs, 8 species are shrubs or trees and 408 species are herbaceous plants. The number of the adventive species on the plateau is 19 species (2.5%) and the number of the cosmopolitan species is 40 species (5.3%). This can be explained by the large number of settlements and resorts on the territory of the plateau, as well as the significant amount of arable land.

The invasive species on Frangensko Plateau are 19 species: *Acer negundo* L., *Ailanthus altissima* (Mill.) Swingle, *Amaranthus blitoides* Watson, *Amaranthus hybridus* L., *Amaranthus retroflexus* L., *Amorpha fruticosa* L., *Datura stramonium* L., *Elaeagnus angustifolia* L., *Erigeron annuus* (L.) Pers., *Erigeron canadensis* L., *Laburnum anagyroides* Medicus, *Lycium barbarum* L., *Mahonia aquifolium* (Pursh) Nutt., *Opuntia humifusa* (Raf.) Raf., *Oxalis corniculata* L., *Phytolacca americana* L., *Robinia pseudoacacia* L., *Sorghum halepense* (L.) Pers., *Xanthium spinosum* L. Most invasive species were spread with human activity and farmland.

The total number of species with conservation statute is 50 (6.6% of all species). In Annex II of Directive 92/43/EEC is included *Himantoglossum caprinum* (M. Bieb.) Spreng. In Annex V of Directive 92/43/EEC are included two species: *Galanthus nivalis* L. and *Ruscus aculeatus* L. In Appendix I of Convention on the Conservation of European Wildlife and Natural Habitats (Berne Convention) are included two species: *Himantoglossum caprinum* (M. Bieb.) Spreng. and *Verbascum purpureum* (Janka) Hub.-Mor. In Appendix II of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are included 16 species: *Anacamptis pyramidalis* (L.) Rich., *Cephalanthera damasonium* (Mill.) Druce, *C. longifolia* (L.) Fritsch, *Epipactis helleborine* (L.) Crantz, *Galanthus elwesii* Hook. f., *G. nivalis* L., *Himantoglossum caprinum* (M. Bieb.) Spreng., *Limodorum abortivum* (L.) Schwarz, *Neottia nidus-avis* (L.) Rich., *Ophrys cornuta* Steven, *Orchis coriophora* L., *O. morio* L., *O. purpurea* Huds., *O. simia* Lam., *O. tridentata* Scop., *Platanthera chlorantha* (Custer) Rchb. In Red List of Bulgarian vascular plants are included 25 species. In category Endangered are 9 species: *Anethum graveolens* L., *Artemisia pedemontana* Balb. ex Loisel., *Celtis plachoniana* K.I. Chr., *Elymus varnensis* (Velen.) Kožuharov, *Galanthus elwesii* Hook. f., *G. nivalis* L., *Jurinea ledebourii* Bunge, *Scilla bithynica* Boiss., *Verbascum purpureum* (Janka) Hub.-Mor. In category Vulnerable are 11 species and subspecies: *Anacamptis pyramidalis* (L.) Rich., *Angelica pancicii* Vandas, *Centaurea arenaria* M. Bieb., *Ephedra distachya* L., *Fraxinus pallisiae* Wilmott, *Himantoglossum caprinum* (M. Bieb.) Spreng., *Leucojum aestivum* L., *Limodorum abortivum* (L.) Schwarz, *Ophrys cornuta* Steven, *Opopanax*

chironium subsp. bulgaricum (Velen.) N. Andr., *Pastinaca umbrosa* Steven et DC. In category Nearly threatened are 3 species: *Artemisia pontica* L., *Ononis adenotricha* Boiss., *Vicia pisiformis* L. In category Least concern are 2 species: *Fritillaria pontica* Wahlenb. and *Tilia rubra* DC. In the Red Data Book of the Republic of Bulgaria are included 11 species in two categories. Endangered are 9 species: *Anethum graveolens* L., *Artemisia pedemontana* Balb. ex Loisel., *Celtis plachoniana* K.I. Chr., *Elymus varnensis* (Velen.) Kožuharov, *Galanthus elwesii* Hook. f., *Galanthus nivalis* L., *Jurinea ledebourii* Bunge, *Scilla bithynica* Boiss., *Verbascum purpureum* (Janka) Hub.-Mor. In category Vulnerable are 2 species and subspecies: *Himantoglossum caprinum* (M. Bieb.) Spreng. and *Opopanax chironium* subsp. *bulgaricum* (Velen.) N. Andr. In Annex III of the Act on Amending and Supplementing the Biological Diversity Act of the Republic of Bulgaria are included 13 species and subspecies: *Anacamptis pyramidalis* (L.) Rich., *Artemisia pedemontana* Balb. ex Loisel., *Centaurea marshalliana* Spreng., *Ephedra distachya* L., *Fritillaria pontica* Wahlenb., *Galanthus elwesii* Hook. f., *Galanthus nivalis* L., *Himantoglossum caprinum* (M. Bieb.) Spreng., *Jurinea ledebourii* Bunge, *Limodorum abortivum* (L.) Schwarz, *Ophrys cornuta* Steven, *Opopanax chironium* subsp. *bulgaricum* (Velen.) N. Andr., *Verbascum purpureum* (Janka) Hub.-Mor. In Annex IV of the Act on Amending and Supplementing the Biological Diversity Act of the Republic of Bulgaria are included 21 species: *Asparagus officinalis* L., *A. verticillatus* L., *Bupleurum affine* Sadler, *B. praealtum* L., *Crocus flavus* West., *C. pallasii* Goldb., *Echinops microcephalus* Sm., *E. sphaerocephalus* L., *Leucojum aestivum* L., *Lilium martagon* L., *Orchis coriophora* L., *O. morio* L., *O. purpurea* Huds., *O. simia* Lam., *O. tridentata* Scop., *Paeonia peregrina* Mill., *Polygonatum odoratum* (Mill.) Druce, *Ruscus aculeatus* L., *Salix caprea* L., *Scilla bifolia* L., *Stipa capillata* L. Prohibited is the collecting of herbs from the natural habitats for 12 species: *Althaea officinalis* L., *Angelica pancicii* Vandas, *Artemisia santonicum* L., *Asplenium trichomanes* L., *Convallaria majalis* L., *Inula helenium* L., *Orchis coriophora* L., *O. morio* L., *O. purpurea* Huds., *O. simia* Lam., *O. tridentata* Scop., *Ruscus aculeatus* L. Under restricted collection of herbs from their natural habitats are 3 species: *Betonica officinalis* L., *Carlina acanthifolia* All., *Paeonia peregrina* Mill.

The data for the species of conservation status provides evidence for the Frangensko Plateau's importance for the conservation of biodiversity.

We found two species that are new to the Northeastern floristic region: *Papaver rumelicum* Velen. and *Fraxinus pallisiae* Wilmott. Both species were located in the area of Batovo village.

Conclusions

The results of the inventory of vascular plants on the territory of the Frangensko Plateau show considerable variety of vascular plants. The obtained data can be used for comparative research on flora in different geographical sites in Northeastern Bulgaria and in the entire country.

Appendix

Systematic list of species of vascular plants, which are spontaneously distributed in Frangensko Plateau (Northeastern Bulgaria)

Lycopodiophyta

Selaginellaceae:

Selaginella helvetica (L.) Spring

Equisetophyta

Equisetaceae:

Equisetum arvense L.
E. ramosissimum Desf.
E. telmateia Ehrh.

Polypodiophyta

Aspleniaceae:

Asplenium ruta-muraria L.
A. trichomanes L.

Magnoliophyta

Pinopsida

Ephedraceae:

Ephedra distachya L.

Magnoliopsida

Amaranthaceae:

Amaranthus blitoides S.Watson
A. hybridus L.
A. retroflexus L.
Atriplex patula L.
Chenopodium album L.
C. glaucum L.
C. hybridum L.
C. urbicum L.
Kochia prostrata (L.) Schrad.

Anacardiaceae:

Cotinus coggygria Scop.

Apiaceae:

Aegopodium podagraria L.
Anethum graveolens L.
Angelica pancicii Vandas ex Velen.
A. sylvestris L.
Anthriscus cerefolium Hoffm.
Berula erecta (Huds.) Coville
Bifora radians M.Bieb.
Bupleurum affine Sadler
B. praealtum L.
Caucalis platycarpos L.
Chaerophyllum bulbosum L.
C. temulentum L.
Cnidium silaifolium Fiori et Paol.
Conium maculatum L.
Daucus carota L.
D. guttatus Sm.
Eryngium campestre L.
Falcaria vulgaris Bernh.
Ferulago campestris (Besser) Grecescu
F. sylvatica Rchb.
Foeniculum vulgare Mill.
Heracleum sibiricum L.
H. ternatum Velen.
Laser trilobum Baumg.
Myrrhoides nodosa (L.) Cannon
Opopanax chironium subsp. *bulgaricum* (Velen.) N.Andr.
Orlaya grandiflora (L.) Hoffm.
Pastinaca umbrosa Steven ex DC.
Peucedanum alsaticum L.
Physospermum cornubiense DC.
Scandix pecten-veneris L.
Seseli tortuosum L.
Sison amomum L.
Tordylium maximum L.
Torilis arvensis (Huds.) Link
Turgenia latifolia Hoffm.

Apocynaceae:

Periploca graeca L.
Vinca major L.
V. herbacea Waldst. et Kit.
Vincetoxicum hirundinaria Medik.

Araliaceae:

Hedera helix L.

Aristolochiaceae:

Aristolochia clematitis L.

Asteraceae:

Achillea clypeolata Sm.
A. coarctata Poir.
A. millefolium L.
Anthemis cotula L.
A. ruthenica M.Bieb.
Arctium lappa L.
A. minus Bernh.
Artemisia absinthium L.
A. annua L.
A. austriaca Jacq.
A. campestris L.
A. lerchiana Weber
A. pedemontana Balb. ex Loisel.
A. pontica L.
A. santonicum L.
A. vulgaris L.
Bellis perennis L.
Bidens tripartita L.
Carduus acanthoides L.
C. nutans L.
C. pycnocephallus L.
C. thoermeri Weinm.
Carlina acanthifolia All.
C. vulgaris L.
Carthamus lanatus L.
Centaurea arenaria M.Bieb.
C. calcitrapa L.
C. cyanus L.
C. diffusa Lam.
C. marshalliana Spreng.
C. rutifolia Sm.
C. solstitialis L.
C. thirkei Sch.Bip.

Chondrilla juncea L.
Cichorium intybus L.
Cirsium alatum (S.Gmel.) Bobrov
C. arvense (L.) Scop.
C. ligulare Boiss.,
C. vulgare (Savi) Ten.
Cota tinctoria (L.) J.Gay.
Crepis foetida L.
C. sancta (L.) Babc.
C. setosa Haller f.
C. tectorum L.
Crupina vulgaris Pers. ex Cass.
Doronicum columnae Ten.
D. hungaricum Rchb. f.
Echinops microcephalus Sm.
E. sphaerocephalus L.
Erigeron acris L.
E. annuus (L.) Pers.
E. canadensis L.
Eupatorium cannabinum L.
Filago lutescens Jord.
Hieracium cymosum L.
H. hoppeanum Schult.
H. pilosella L.
Inula britanica L.
I. conyza L.
I. germanica L.
I. helenium L.
Jacobaea erucifolia (L.) G.Gaertn. B.Mey et Schreb.
Jurinea ledebourii Bunge
Lactuca quercina L., *L. saligna* L.
L. serriola L.
L. viminea J.Presl. et C.Presl.
Lapsana communis L.
Leontodon crispus Vill.
L. hispidus L.
Leucanthemum vulgare Lam.
Matricaria chamomilla L.
Mycelis muralis Dumort.
Petasites hybridus (L.) G.Gaertn., B.Mey. et Scherb.
Picris hieracioides L.
Pulicaria dysenterica (L.) Bernh.
Scolymus hispanicus L.
Senecio sylvaticus L.
S. vernalis Waldst. et Kit.
Silybum marianum (L.) Gaertn.
Sonchus arvensis L.
S. asper Hill
S. oleraceus L.
Tanacetum corymbosum (L.) Sch.Bip.
T. macrophyllum Sch. Bip.
Taraxacum officinale F.H. Wigg.
T. serotinum Poir.
Tragopogon dubius Scop.
T. pratensis L.
Tripleurospermum tenuifolium Freyn ex Freyn et E. Brandis
Tussilago farfara L.
Xanthium spinosum L.
X. strumarium L.
Xeranthemum annuum L.

Berberidaceae:

Mahonia aquifolium Nutt.

Betulaceae:

Alnus glutinosa (L.) Gaertn.
Carpinus betulus L.
C. orientalis Mill.
Corylus avellana L.

Boraginaceae:

Anchusa hybrida Ten.
A. procera Besser ex Link
Buglossoides arvensis (L.) I.M.Johnst.
B. purpurocaerulea (L.) I.M.Johnst.
Cerinthe minor L.
Cynoglossum creticum Mill.
Echium italicum L.
E. vulgare L.
Heliotropium europaeum L.
Lappula barbata Gürke
Lycopsis arvensis L.
Myosotis arvensis (L.) Hill.
M. ramosissima Rochel
Nonea pulla DC.
Pulmonaria obscura Dumort.

Brassicaceae:

Alliaria petiolata (M.Bieb.) Cavara et Grande
Alyssum minutum Schlecht. ex DC.
A. tortuosum Rupr.
Arabidopsis thaliana (L.) Heynh.
Arabis glabra (L.) Bernh.
A. hirsuta (L.) Scop.
A. sagittata (Bertol.) DC.
A. turrita L.

Armoracia rusticana G.Gaertn., B.Mey. et Scherb.
Berteroa incana (L.) DC.
Brassica elongata Ehrh.
Capsella bursa-pastoris (L.) Medik.
Cardamine bulbifera Crantz
Cardaria draba (L.) Desv.
Descurainia sophia (L.) Webb ex Prantl
Erophila verna (L.) Chevall.
Erysimum crepidifolium Rchb.
E. cuspidatum DC.
E. diffusum Ehrh.
Lepidium campestre (L.) W.T.Aiton
L. perfoliatum L.
Lunaria annua L.
Sinapis arvensis L.
Sisymbrium officinale (L.) Scop.
S. orientale L.
Thlaspi alliaceum L.
T. arvense L.
Turritis glabra L.

Cactaceae:

Opuntia humifusa (Raf.) Raf.

Campanulaceae:

Campanula bononiensis L.
C. grossekii Heuff.
C. lingulata Waldst. et Kit.
C. persicifolia L.
C. rapunculoides L.
C. sibirica L.
C. trachelium L.
Jasione heldreichii Boiss. et Orph.

Cannabaceae:

Humulus lupulus L.

Caprifoliaceae:

Cephalaria transsylvanica (L.) Roem. et Schult.
C. uralensis (Murr.) Roem. et Schult.
Dipsacus fullonum L.
D. laciniatus L.
Knautia macedonica Griseb.
Lonicera xylosteum L.
Sambucus ebulus L.
S. nigra L.
Scabiosa hispidula Boiss.
S. micrantha Desf.
S. triniifolia Friv.
Valerianella turgida Betcke
Viburnum lantana L.

Caryophyllaceae:

Arenaria serpyllifolia L.
Cerastium brachypetalum Desp.
C. glomeratum Thuill.
C. semidecandrum L.
Dianthus armeria L.
D. giganteus D'Urv.
D. pallens Sm.
Herniaria hirsuta L.
H. incana Lam.
Lychnis coronaria (L.) Desr.
Moehringia trinervia Clairv.
Petrorhagia prolifera P.W.Ball et Heywood
Saponaria officinalis L.
Scleranthus perennis L.
Silene alba (Mill.) E.H.L.Krause
S. bupleuroides L.
S. conica L.
S. densiflora D'Urv.
S. frivaldszkyana Hampe
S. italica (L.) Pers.
S. vulgaris (Moench) Garcke
Stellaria holostea L.
S. media (L.) Vill.

Celastraceae:

Euonymus europaeus L.
E. latifolius Mill.
E. verrucosus Scop.

Ceratophyllaceae:

Ceratophyllum demersum L.

Cistaceae:

Helianthemum nummularium Mill.

Convolvulaceae:

Calystegia sepium (L.) R.Br.
C. sylvatica Griseb.
Convolvulus arvensis L.
C. cantabrica L.
Cuscuta epithymum L.
C. europaea L.

Cornaceae:

Cornus mas L.
C. sanguinea L.

Crassulaceae:

Sedum maximum Suter

S. ochroleucum Chaix

Cucurbitaceae:

Bryonia alba L.

Dioscoreaceae:

Tamus communis L.

Elaeagnaceae:

Elaeagnus angustifolia L.

Euphorbiaceae:

Euphorbia agraria M.Bieb.
E. amygdaloides L.
E. cyparissias L.
E. esula L.
E. helioscopia L.
E. nicaeensis All.
E. serrulata Thuill.
Mercurialis ovata Sternb. et Hoppe
M. perennis L.

Fabaceae:

Astragalus cicer L.
A. glycyphylloides DC.
A. glycyphyllos L.
A. hamosus L.
A. onobrychis L.
Bituminaria bituminosa (L.) C.H.Stirt.
Chamaecytisus supinus (L.) Link
Colutea arborescens L.
Coronilla emerus L.
C. scorpioides W.D.J.Koch.
C. varia L.
Corothamnus procumbens C.Presl.
Dorycnium herbaceum Vill.
Galega officinalis L.
Genista sessilifolia DC.
G. tinctoria L.
Lathyrus aphaca L.
L. hirsutus L.
L. laxiflorus Kuntze
L. niger (L.) Bernh.
L. nissolia L.
L. pratensis L.
L. sphaericus Retz.
L. sylvestris L.
L. tuberosus L.
L. vernus (L.) Bernh.
Lembotropis nigricans (L.) Griseb.
Lotus corniculatus L.
Medicago arabica (L.) Huds.
M. falcata L.
M. lupulina L.
M. minima (L.) Bartal.
M. polymorpha L.
M. sativa L.
Melilotus albus Medik.
M. officinalis Pall.
Onobrychis alba (Waldst. et Kit.) Desv.
O. gracilis Besser
Ononis adenotricha Boiss.
O. arvensis L.
O. pusilla L.
O. spinosa L.
Robinia pseudoacacia L.
Trifolium angustifolium L.
T. arvense L.
T. campestre Schreb.
T. echinatum M.Bieb.
T. fragiferum L.
T. heldreichianum Hausskn.
T. hybridum L.
T. michelianum Savi
T. ochroleucon Huds.
T. pannonicum Jacq.
T. pratense L.
T. repens L.
Vicia cracca L.
V. grandiflora Scop.
V. hirsuta (L.) Gray
V. lathyroides L.
V. narbonensis L.
V. pannonica Crantz
V. peregrina L.
V. pisiformis L.
V. sativa L.
V. tenuifolia Roth
V. varia Host

Fagaceae:

Fagus orientalis Lipsky
F. sylvatica L.
Quercus cerris L.
Q. dalechampii Ten.
Q. frainetto Ten.
Q. pedunculiflora K.Koch
Q. pubescens Willd.
Q. robur L.
Q. virgiliana Ten.

Gentianaceae:

Centaurium erythraea Rafn

Geraniaceae:

Erodium cicutarium (L.) L`Hér.,
Geranium columbinum L.
G. lucidum L.
G. molle L.
G. pyrenaicum Burm.f.
G. robertianum L.
G. rotundifolium L.

Haloragaceae:

Myriophyllum spicatum L.

Hypericaceae:

Hypericum elegans Stephan ex Willd.
H. perforatum L.
H. tetrapterum Fr.

Juglandaceae:

Juglans regia L.

Lamiaceae:

Acinos arvensis (Lam.) Dandy
Ajuga chamaepitys (L.) Schreb.
A. genevensis L.
A. laxmanii (L.) Benth.
A. reptans L.
Ballota nigra L.
Betonica officinalis L.
Calamintha nepeta (L.) Savi
C. sylvatica Bromf.
Clinopodium vulgare L.
Glechoma hederacea L.
G. hirsuta Waldst. et Kit.
Lamium galeobdolon (L.) L.
L. maculatum L.
L. purpureum L.
Leonurus cardiaca L.
Lycopus europaeus L.
L. exaltatus L.f.
Marrubium peregrinum L.
M. vulgare L.
Melissa officinalis L.
Mentha aquatica L.
M. pulegium L.
M. spicata L.
Origanum vulgare L.
Prunella grandiflora (L.) Jacq.
P. laciniata L.
P. vulgaris L.
Salvia nemorosa L.
S. nutans L.
S. verticillata L.
S. virgata Aiton
Scutellaria albida L.
S. columnae All.
Sideritis montana L.
Stachys annua L.
S. atherocalyx K.Koch.
S. germanica L.
S. sylvatica L.
Teucrium chamaedrys L.
T. polium L.
Thymus callieri Halácsy ex Litv.

Linaceae:

Linum austriacum L.
L. tenuifolium L.

Loranthaceae:

Loranthus europaeus Jacq.
Viscum album L.

Lythraceae:

Lythrum salicaria L.
L. virgatum L.

Malvaceae:

Alcea pallida (Waldst. et Kit. ex Willd.) Waldst. et Kit.
Althaea cannabina L.
A. officinalis L.
Lavatera thuringiaca L.
Malva neglecta Wallr.
M. sylvestris L.
Tilia cordata Mill.
T. platyphyllos Scop.
T. rubra DC.
T. tomentosa Moench

Moraceae:

Morus alba L.
M. nigra L.

Oleaceae:

Fraxinus excelsior L.
F. ornus L.
F. oxycarpa Willd.
F. pallisiae Wilmott
Jasminum fruticans L.
Ligustrum vulgare L.

Syringa vulgaris L.

Onagraceae:

Circaea lutetiana L.
Epilobium hirsutum L.

Orobanchaceae:

Orobanche cumana Wallr.

Oxalidaceae:

Oxalis corniculata L.

Paeoniaceae:

Paeonia peregrina Mill.

Papaveraceae:

Chelidonium majus L.
Corydalis marschalliana Pers.
C. slivenensis Velen. ex Nyman
C. solida (L.) Sw.
Fumaria officinalis L.
F. rostellata Knaf
F. vaillantii Loisel.
Papaver dubium L.
P. rhoeas L.
P. rumelicum Velen.

Phytolaccaceae:

Phytolacca americana L.

Plantaginaceae:

Plantago altissima L.
P. lanceolata L.
P. major L.
P. media L.
P. scabra Moench

Polygalaceae:

Polygala major Jacq.

Polygonaceae:

Fallopia convolvulus (L.) Á.Löve
Persicaria amphibia (L.) Gray
P. hydropiper Opiz
P. mitis (Schrank) Assenov
Polygonum aviculare L.
P. patulum M.Bieb.
P. pulchellum Loisel.
P. rurivagum Jord. ex Boreau
Rumex acetosa L.
R. conglomeratus Murray
R. crispus L.
R. obtusifolius L.
R. pulcher L.
R. sanguineus L.

Portulacaceae:

Portulaca oleracea L.

Primulaceae:

Anagallis arvensis L.
Lysimachia nummularia L.
Primula acaulis Hill

Ranunculaceae:

Adonis flammea Jacq.
Anemone ranunculoides L.
Clematis vitalba L.
Consolida hispanica (Costa) Greuter et Burdet
C. regalis Gray
Isopyrum thalictroides L.
Nigella arvensis L.
Ranunculus acris L.
R. ficaria L.
R. millefoliatus Vahl
R. polyanthemos L.
R. repens L.
R. velutinus Ten.
R. villosus DC.

Resedaceae:

Reseda lutea L.

Rhamnaceae:

Paliurus spina-christi Mill.

Rosaceae:

Agrimonia eupatoria L.
Aremonia agrimonoides (L.) DC.
Armeniaca vulgaris Lam.
Crataegus monogyna Jacq.
C. pentagyna Waldst. et Kit. ex Willd.
Filipendula vulgaris Moench
Fragaria moschata Duchesne
F. vesca L.
F. viridis Duchesne
Geum urbanum L.
Malus aprilovii Dimitrov
M. dasyphylla Borkh.
Potentilla argentea L.
P. laciniosa Waldst. et Kit. ex Nestl.
P. micrantha Ramond ex DC.
P. neglecta Baumg.
P. obscura Willd.
P. pedata Willd.
P. pilosa Willd.

P. reptans L.
Prunus avium L.
P. cerasifera Ehrh.
P. mahaleb L.
P. spinosa L.
Pyrus elaeagrifolia Pall.
P. pyraster (L.) Burgsd.
P. communis L.
Rosa agrestis L.
R. canina L.
R. corymbifera Borkh.
R. dumalis Bechst.
R. gallica L.
R. obtusifolia Desv.
R. tomentosa Sm.
Rubus caesius L.
R. discolor Weiche et Nees
R. thyrsanthus Focke
Sanguisorba minor Scop.
Sorbus aucuparia L.
S. domestica L.
S. torminalis (L.) Crantz

Rubiaceae:

Asperula cynanchica L.
Crucianella angustifolia L.
Cruciata glabra (L.) Ehrend.
C. laevipes Opiz
C. pedemontana (Bellardi) Ehrend.
Galium album Mill.
G. aparine L.
G. humifusum M.Bieb.
G. octonarium (Klokov) Soó
G. pseudoaristatum Schur
G. rivale Griseb.
G. verum L.
Sherardia arvensis L.

Salicaceae:

Populus canescens (Aiton) Sm.
P. nigra L.
P. tremula L.
Salix alba L.
S. caprea L.
S. fragilis L.
S. purpurea L.
S. triandra L.

Santalaceae:

Thesium dollineri Murb.

Sapindaceae:

Acer campestre L.
A. negundo L.
A. platanoides L.
A. pseudoplatanus L.
A. tataricum L.

Scrophulariaceae:

Digitalis lanata Ehrh.
Kickxia elatine (L.) Dumort.
Lathraea squamaria L.
Linaria dalmatica (L.) Mill.
L. genistifolia (L.) Mill.
L. vulgaris Mill.
Melampyrum arvense L.
Misopates orontium (L.) Raf.
Odontites serotina (Lam.) Dumort.
Pseudolysimachion orchideum (Crantz) Wraber
Verbascum banaticum Schrad.
V. blattaria L.
V. lychnitis L.
V. nigrum L.
V. ovalifolium Donn
V. phlomoides L.
V. phoeniceum L.
V. purpureum (Janka) Hub.-Mor.
V. speciosum Schrad.
Veronica austriaca L.
V. beccabunga L.
V. chamaedrys L.
V. hederifolia L.
V. officinalis L.
V. persica Poir.
V. polita Fr.
V. prostrata L.
V. teucrium L.

Simaroubaceae:

Ailanthus altissima (Mill.) Swingle

Solanaceae:

Datura stramonium L.
Lycium barbarum L.
Solanum dulcamara L.
S. nigrum L.

Staphyleaceae:

Staphylea pinnata L.

Tamaricaceae:

Tamarix ramosissima Ledeb.
T. tetrandra Pall. ex M.Bieb.

Thymelaeaceae:

Thymelaea passerina (L.) Coss. et Germ.

Ulmaceae:

Celtis australis L.
C. plachoniana K.I.Chr.
Ulmus glabra Huds.
U. laevis Pall.
U. minor Mill.

Urticaceae:

Parietaria lusitanica L.
P. officinalis L.
Urtica dioica L.

Verbenaceae:

Verbena officinalis L.

Violaceae:

Viola arvensis Murray
V. jordanii Hanry
V. kitaibeliana Schult.
V. odorata L.
V. reichenbachiana Jord. ex Boreau
V. riviniana Rchb.
V. suavis M.Bieb.
V. tricolor L.

Vitaceae:

Vitis sylvestris C.C.Gmel.

Zygophyllaceae:

Tribulus terrestris L.

Liliopsida

Alismataceae:

Alisma plantago-aquatica L.

Amaryllidaceae:

Allium atroviolaceum Boiss.
A. carinatum L.
A. flavum L.
A. paniculatum L.
A. rotundum L.
A. scorodoprasum L.
A. vineale L.
Galanthus elwesii Hook.f.
G. nivalis L.
Leucojum aestivum L.
Nectaroscordum siculum Lindl.
Sternbergia lutea (L.) Ker Gawl. ex Spreng.

Araceae:

Arum elongatum Steven
A. maculatum L.
Lemna minor L.
L. trisulca L.

Asparagaceae:

Asparagus officinalis L.
A. verticillatus L.
Convallaria majalis L.
Muscari botryoides (L.) Mill.
M. comosum (L.) Mill.
M. neglectum Ten.
M. racemosum (L). Lam. et DC.
Ornithogalum fimbriatum Willd.
Polygonatum latifolium Desf.
P. odoratum (Mill.) Druce
Ruscus aculeatus L.
Scilla bifolia L.
S. bithynica Boiss.

Cyperaceae:

Carex acutiformis Ehrh.
C. digitata L.
C. divulsa Stokes
C. flacca Schreb.
C. halleriana Asso
C. hirta L.
C. muricata L.
C. otrubae Podp.
C. pendula Huds.
C. praecox Schreb.
C. remota L.
C. riparia Curtis
C. sylvatica Huds.
C. tomentosa L.
C. vesicaria L.
Cyperus rotundus L.
Schoenoplectus lacustris (L.) Palla

Iridaceae:

Crocus flavus Weston
C. pallasii Goldb.
Iris graminea L.
I. pseudacorus L.
I. pumila L.

Juncaceae:

Juncus atratus Krock.
J. compressus Jacq.
J. effusus L.
J. inflexus L.
J. maritimus Lam.

Liliaceae:

Fritillaria pontica Wahlenb.
Gagea arvensis (Pers.) Dumort.
Lilium martagon L.

Orchidaceae:

Anacamptis pyramidalis (L.) Rich.
Cephalanthera damasonium Druce
C. longifolia (L.) Fritsch
Epipactis helleborine (L.) Crantz
Himantoglossum caprinum Spreng.
Limodorum abortivum (L.) Sw.
Neottia nidus-avis (L.) Rich.
Ophrys cornuta Steven ex M.Bieb.
Orchis coriophora L.
O. morio L.
O. purpurea Huds.
O. simia Lam.
O. tridentata Scop.
Platanthera chlorantha (Custer) Rchb.

Poaceae:

Aegilops neglecta Req. ex Bertol.
Agropyron cristatum (L.) Gaertn.
Agrostis capillaris L.
Alopecurus myosuroides Huds.
A. pratensis L.
Anthoxanthum odoratum L.
Apera spica-venti (L.) P.Beauv.
Arrhenatherum elatius (L.) P.Beauv. ex J.Presl et C.Presl
Botriochloa ischaemum (L.) Keng
Brachypodium pinnatum (L.) P.Beauv.
B. sylvaticum (L.) P.Beauv.
Briza media L.
Bromus arvensis L.
B. commutatus Schrad.
B. mollis L.
B. japonicus Thunb.
B. racemosus L.
B. ramosus Huds.
B. sterilis L.
B. squarrosus L.
B. tectorum L.
Calamagrostis epigeios Huds.
Chrysopogon gryllus (L.) Trin.
Cleistogenes serotina (L.) Keng.
Cynodon dactylon (L.) Pers.
Cynosurus cristatus L.
C. echinatus L.
Dactylis glomerata L.
Dasypyrum villosum (L.) P.Candargy
Digitaria ischaemum (Schreb.) Muhl.
D. sanguinalis (L.) Scop.
Echinochloa crus-galli (L.) P.Beauv.
Elymus elongatus (Host) Greuter
E. hispidus (Opiz) Melderis
E. repens (L.) Gould
E. varnensis (Velen.) Kožuharov
Eragrostis minor Host
Festuca drymeja Mert. et W.D.J.Koch
F. heterophylla Lam.
F. pratensis L.
Glyceria plicata Fr.
Holcus lanatus L.
Hordelymus europaeus (L.) Harz
Hordeum bulbosum L.
H. hystrix Roth
H. marinum Huds.
H. murinum L.
H. secalinum Schreb.
Koeleria macrantha (Ledeb.) Schult.
K. nitidula Velen.
K. splendens C.Presl
Leymus racemosus (Lam.) Tzvelev
Lolium perenne L.
L. temulentum L.
Melica ciliata L.
M. uniflora Retz.
Milium effusum L.
Phleum phleoides H.Karst.
P. pratense L.
Phragmites australis (Cav.) Steud.
Piptatherum holciforme Roem. et Schult.
P. virescens Boiss.
Poa annua L.
P. bulbosa L.
P. compressa L.
P. nemoralis L.
P. palustris L.
P. pratensis L.

P. trivialis L.
Sclerochloa dura (L.) P.Beauv.
Setaria italica (L.) P.Beauv.
S. viridis (L.) P.Beauv.
Sorghum halepense (L.) Pers.
Stipa capillata L.
Taeniatherum caput-medusae (L.) Nevski

Smilacaceae:

Smilax excelsa L.

Typhaceae:

Sparganium erectum L.
Typha angustifolia L.
T. latifolia L.

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FLORA OF FRANGENSKO PLATEAU (NORTH-EASTERN BULGARIA)

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Abstract. Inventory of the Frangensko Plateau flora is provided for the first time. The study presents information on: taxonomic structure; phytogeographyc structure; endemic species; relict species; the distribution of species by biological type and by life form; medicinal plants; species with conservation status. Invasive species on the plateau are described for the first time. For the first time in the Northeastern floristic region are indicated *Papaver rumelicum* Velen. and *Fraxinus pallisiae* Wilmott.

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