Vascular flora of the old town of Počitelj and its surrounding area (South Bosnia and Herzegovina)

SEMIR MASLO
Lundåkerskolan Gislaved Sweden, semmas@edu.gislaved.se

ALDIN BOŠKAILO
University Džemal Bijedić of Mostar, aldinboskailo@hotmail.com

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The flora of the town of Počitelj was studied in the period 2010 to 2015. The number of plants growing spontaneously on and around the remains of the fortification walls and on the pavements is 616. Alien taxa present exclusively in cultivation were not analysed in this work. The following families are distinguished by the greatest number of taxa: Asteraceae ***s. l.*** (75/12.18%), Poaceae (58/9.42%), Fabaceae (48/7.79%), Lamiaceae (35/5.68%) and Brassicaceae (33/5.36%). The predominant life-forms are therophytes and hemicryptophytes with 227 and 208 taxa respectively (36.85% and 33.77%). The floral elements spectrum shows a strong prevalence of Mediterranean plants (31.33%), while Central European plants are almost absent (0.48%). A total of 32 taxa are found on the Bosnian and Herzegovinian National Red List, while 30 taxa are classified as invasive.

Keywords: biodiversity, vascular flora, Mediterranean.

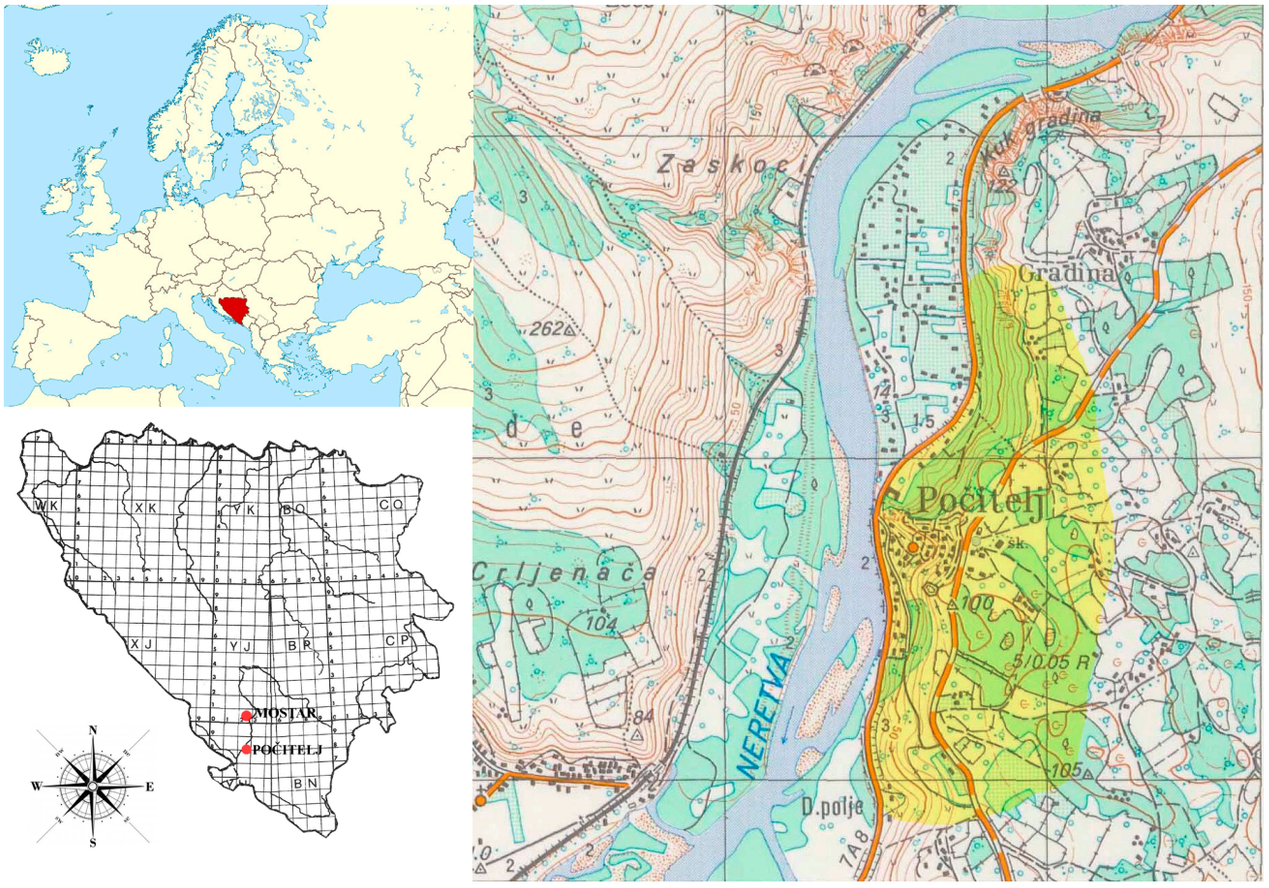


Fig.1. Location and boundaries of the researched area

INTRODUCTION

The historic urban site of Počitelj is situated at an altitude of 30-40 m, on the left bank of the River Neretva, on the main Mostar to Metković road, 30 km south of Mostar, in the southern part of Bosnia and Herzegovina (Fig.1). The old town was built into the rocky mountainside, overlooking a bend in the Neretva River, which gives it the appearance of a natural amphitheatre. The medieval fortress was built in the Mediterranean and oriental style over the period from the fifteenth to the eighteenth centuries. The oldest written evidence of medieval Počitelj dates from 1448, in Charters issued by King Alfonso V and Friedrich III (Kreševljaković, 1933). According to the 1991 census Počitelj had a population of cca 1000.

The substrate is composed of Cretaceous and Eocene limestones (Hrvatović, 2006). The pedological substrate consists mostly of *terra rossa* and brown soils on limestone and rendzina soils. Počitelj is characterized by a sub-Mediterranean climate with hot summers and mild as well as humid winters. As stated in the Biogeographic Map of Europe (Rivas-Martínez *et al.,* 2004), Počitelj is in the Euro-Siberian Region, Alpino-Caucasian Subregion, Apennino-Balkan Province, and Illyrian sector. With respect to natural vegetation this area is mostly characterized by the degradation stage of xero-thermophyllous broadleaf lower forest and thickets of oriental hornbeam (order *Ostryo-Carpinetalia orientalis* Lakušić *et al*. 1982) of the *Rusco aculeati-Carpinetum orientalis* Blečić et Lakušić 1966 association (Lakušić *et al*., 1982; Muratspahić *at al*., 1991; Redžić *et al.,* 1992). The area inside the medieval fortress is mostly characterized by cliff, rupicolous, and mural communities in the thermomediterranean zone, connected with the classes *Asplenietea trichomanis* (Br.-Bl. in Meier and Br.-Bl. 1934) Oberd. 1977 and *Parietarietea judaicae* Oberd. 1977 (Brullo & Guarino, 1998). Even vegetation of open drains, ruderal plant communities of the class *Chenopodietea albi* Br.-Bl. 1951 is present here.

In the last two decades numerous papers have been published about the flora and vegetation of European towns (Sukopp, 1990, 2002; Pyšek, 1998; Kelcey & Müller, 2011). The urban flora of Bosnia

and Herzegovina remains almost unexplored since, until now, only the cities of Sarajevo and Mostar and the town of Blagaj have been studied (Tomović-Hadžiavdić & Šoljan, 2006; Jasprica *et al*., 2011; Maslo, 2014, 2015; Maslo & Abadžić, 2015).

According to all the available reference works (see References), and our own field observations, the preliminary list of vascular flora of Počitelj consist of 616 taxa. Voucher material has been deposited in the Herbarium of the National Museum of Bosnia and Herzegovina (SARA).

MATERIALS AND METHODS

This study is based on all the available data and the authors' field investigations from spring 2010 to the end of 2015. Plant nomenclature follows Nikolić (2015) and the taxa not listed there are accepted after Tutin *et al.* (1968-1980, 1993). In this paper the Asteraceae family is viewed in the broader sense (*sensu lato*).

In the list of vascular flora (Appendix 1), the taxa are listed in alphabetic order. The life-form categories follow Raunkiaer (1934), Pignatti (1982) and Diklić (1984) and are marked with the standard abbreviations in the list of flora. The analysis of floral elements was made according to Horvatić (1963) and Horvatić *et al.* (1976/1968). The data about the plant taxa which could not be classified according to above mentioned source were taken from Horvatić (1967), Josifović *et al.* (1970-1977) and Gajić (1984) (Appendix 1).

Data concerning the geographic origin of alien taxa were taken mostly from the available reference works (see References). The terminology presented here has been adapted from Richardson *et al*. (2000) and Pyšek *et al*. (2004). All taxa were classified into three categories depending on the degree of their naturalization: casual taxa (CAS.), naturalized non-invasive taxa (NAT.) and naturalized invasive taxa (INV.) (Appendix 1).

With respect to the time of introduction, all taxa were classified into two categories:

- archaeophytes (arc), established non-native plants introduced intentionally or unintentionally before 1500 A.D.
- neophytes (neo), non-native plants introduced intentionally or unintentionally after 1500 A.D.

Endemic species in the broader sense are defined according to Bjelčić (1987), Šilić (1990) and Lubarda *et al*. (2014). Abbreviations for endangered taxa are given according to Đug *et al*. (2013).

RESULTS

The list of the flora of Počitelj contains a total of 616 taxa, which represents 13.48% of the total flora of Bosnia and Herzegovina (4569 taxa), (Redžić *et al.*, 2008). They are classified into 370 genera and 96 families. Pteridophyta contribute with 10 taxa. Gymnospermae are present with only four taxa. Angiospermae are present with 602 taxa, with a distinct domination of Dicotyledones (490 taxa, 79.55%) over Monocotyledones (112 taxa, 18.18%), see Tab. 1.

According to the number of taxa, the most abundant family is Asteraceae *s. l.* with 75 taxa (12.18%), followed by Poaceae (58 taxa, 9.42%), see Tab. 2. The most abundant genera are *Euphorbia* (10), *Trifolium* (9), *Allium* (8), *Geranium* (8) and *Medicago* (8 taxa).

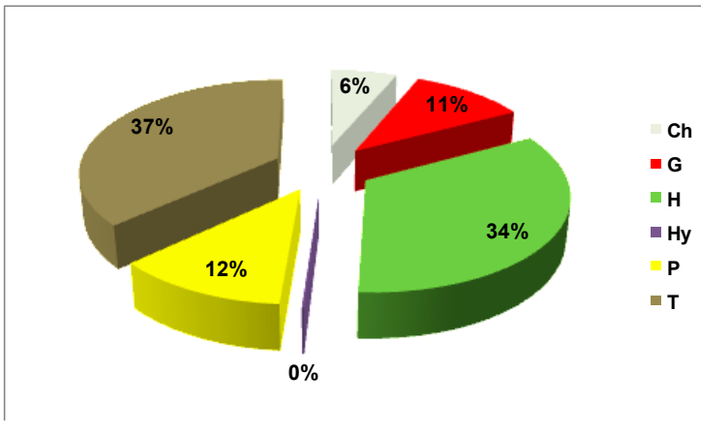
An analysis of life-forms of the flora of Počitelj (Fig. 2.) shows the domination of therophytes and hemicryptophytes with 227 and 208 taxa respectively (36.85% and 33.77%).

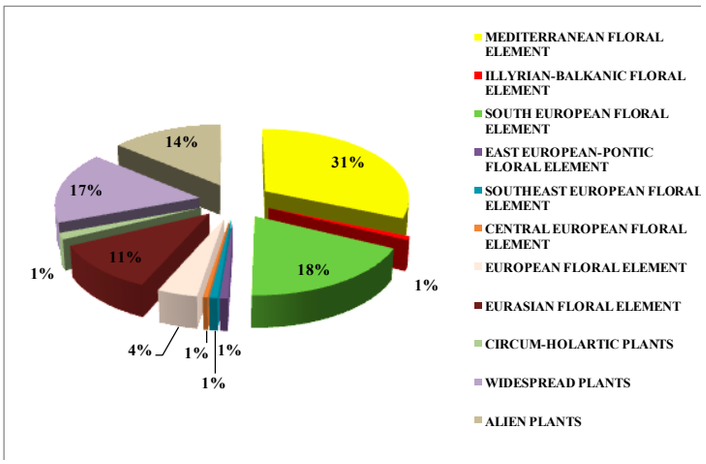
Tab.1. Taxonomic analysis of registered vascular flora

TAXA	Pteridophyta	Gymnospermae	Angiospermae		Total
			Dicotyledones	Monocotyledones	
Families	6	3	75	12	96
Genera	6	4	289	71	370
Species & subspecies	10	4	490	112	616
%	1.62	0.65	79.55	18.18	100

Tab.2. The most abundant families in the flora of Počitelj

Families	No. of taxa	% of total flora (616)
Asteraceae s. l.	75	12.18
Poaceae	58	9.42
Fabaceae	48	7.79
Lamiaceae	35	5.68
Brassicaceae	33	5.36
Scrophulariaceae	26	4.22
Apiaceae	20	3.25





City/Town	No. of taxa	Area (km²)	No. of inhabitants	Reference works
Počitelj (B & H)	616	4	1.000	Maslo & Boškailo (2015)
Blagaj (B & H)	723	4	2.700	Maslo & Abadžić (2015)
Mostar (B & H)	965	20	80.000	Maslo (2014)

Fig.2. Life-form spectrum of flora of Počitelj

Fig.3. Spectrum of floral elements of the flora of Počitelj

Tab. 3. Comparison of number of taxa

In the spectrum of floral elements (Fig. 3), the Mediterranean chorotype dominates (193 taxa; 31.33%), followed by South European plants (113 taxa; 18.34%), reflecting the phytogeographic location of the area studied. A significant number of alien plants (86 taxa; 13.96%) as well as widespread plants (103 taxa; 16.72%) is the consequence of marked, long-lasting human influence upon the flora and vegetation of the Počitelj region.

A total of 19 taxa (3.08% of total flora) have the status of endemic plants and 32 taxa of the flora of the town of Počitelj are in some threat category. Five taxa (15.63%) are categorized as Critically Endangered (CR), eight taxa (25.00%) as Endangered (EN), six taxa (18.75%) as Vulnerable (VU), five taxa (15.63%) as Near Threatened (NT), 3 taxa (9.38%) as Least Concern (LC) and five taxa (15.63%) as Data Deficient (DD).

Alien species contribute 13.96% to the total species number, the corresponding figures being 8.60% for neophytes and 5.36% for archeophytes. According to the degree of naturalization the most prominent are casual plants with 36 taxa (41.86%), followed by invasive plants with 30 taxa (34.88%). There were 20 taxa (23.26%) of naturalized plants. An analysis of the geographical origin of the alien flora of Počitelj showed that most plants originated from the Americas (40 taxa, 46.51%), among which most originate from North America (21 taxa). In summary, 30 of alien species were recently included in the Preliminary list of invasive alien plant species (IAS) in Bosnia and Herzegovina.

DISCUSSION

In the area studied, a total of 616 vascular plant taxa were recorded (Tab.1). The great richness of the flora of the relatively small area of Počitelj researched (4 km2 app.) results from the phytogeographical location of the town, the diversity of habitats and long-lasting anthropogenic influences.

The total number of taxa recorded for the old town of Počitelj is largely similar to the numbers of taxa recorded for the city of Mostar and the town of Blagaj.

Of the 616 taxa in the flora of Počitelj, 43 taxa were previously registered and 573 taxa have been recorded in this study for the first time. Some of the listed taxa are recognized as regionally endangered (IUCN 2001) and should be included in the future Red List of Endangered Plant Species of Bosnia and Herzegovina, such as *Serapias vomeracea* and *Campanula austroadriatica*. *S. vomeracea* is on the list of endangered taxa of the Bern Convention (Recommendation No 49, Anonymous 1996). No data is available for the area of Bosnia and Herzegovina. The population recorded at Počitelj is very small and consists of only a few individuals. In view of this, and the fact that the population is very vulnerable, we propose the species for inclusion on the future Red List of Endangered Plant Species of Bosnia and Herzegovina. On the other hand, C. *austroadriatica* was previously classified under the type of *Campanula pyramidalis*, and has recently been described as a new species (Lakušić *et al*. 2013). *C. pyramidalis* is categorized as NT by Đug *et al*. (2013). We suggest that *C. austroadriatica* be included in future Red List of Endangered Plant

Fig.5. Some endangered taxa in the flora of Počitelj: a. Asphodelus aestivus (VU). b. Campanula austroadriatica (NT). c. Crocus dalmaticus (EN). d. Legousia hybrida (NT). e. Sternbergia lutea (CR). f. Linaria pelisseriana (DD). g. Romulea bulbocodium (EN). h. Serapias vomeracea (CR). i. Spiranthes spiralis (EN). (Photo: Semir Maslo, except photo h by Ljiljana Borovečki – Voska and photos e and i by Aldin Boškailo).

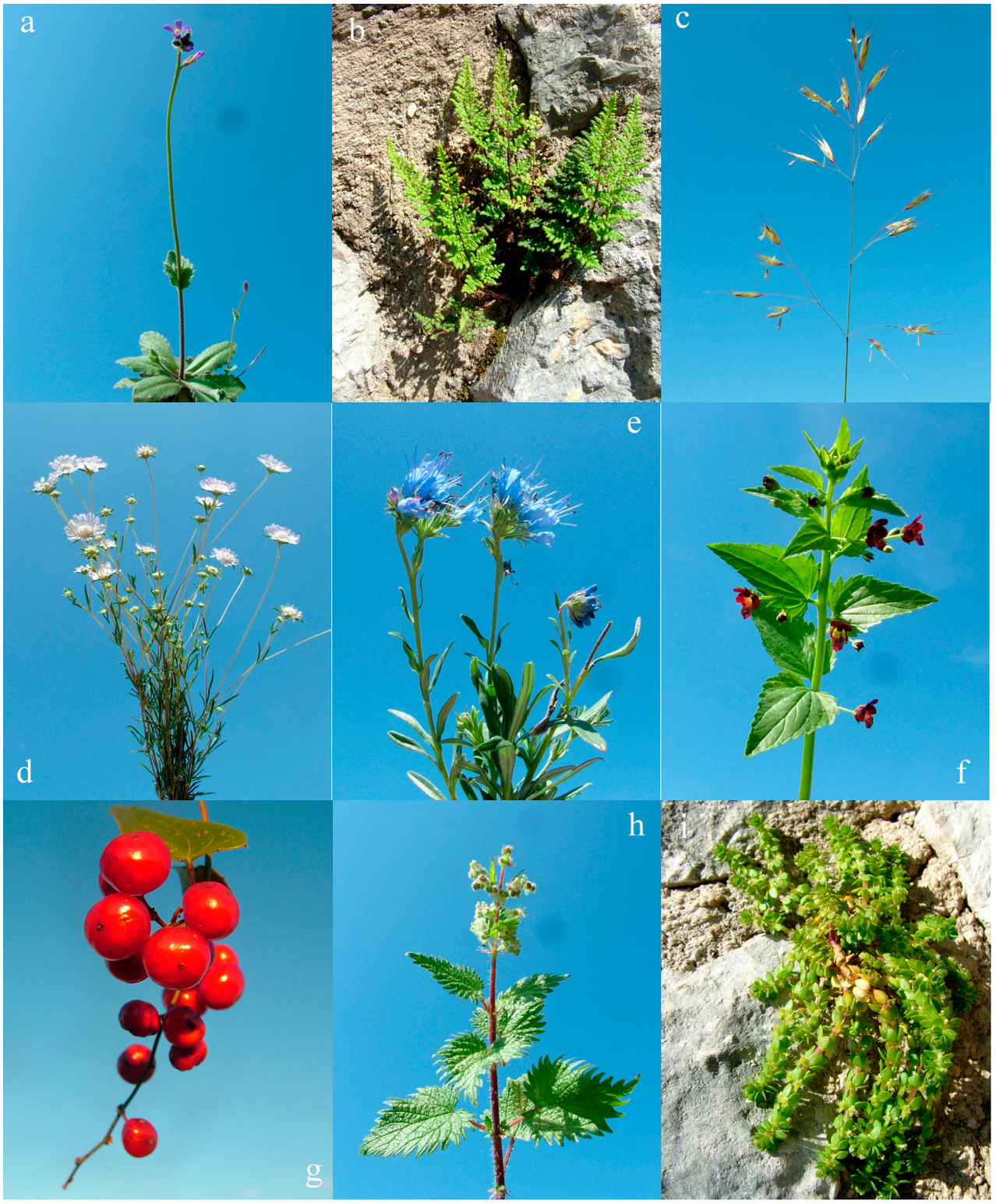


Fig.6. Some taxa with a limited distribution in the flora of Bosnia and Herzegovina: a. Arabis verna b. Cheilanthes persica c. Helictotrichon convolutum d. Lomelosia argentea e. Moltkia petraea f. Scrophularia peregrina g. Smilax aspera h. Urtica pilulifera i. Valantia muralis (Photo: Semir Maslo).

Species of Bosnia and Herzegovina, under category DD, because its distribution area in Bosnia is still unclear.

The most important habitats in the old towns are walls and pavements. Walls represent a specific type of habitat of anthropogenic origin, to a great extent resembling natural rock faces (Woodell, 1979). The occurrence of wall species varies considerably with respect to their position on the walls. The wall flora of Počitelj is mostly characterized by the class *Parietarietea judaicae* Oberd. 1977 (Brullo & Guarino, 1998) which is common on the vertical surfaces of the walls. The vertical surfaces of the walls are covered by only a thin layer of fine-grained soil and, as a result, a poor, mainly chasmophytic flora similar to that of the adjacent rocky slopes inhabits them. Some characteristic species are: *Ajuga chamaepitys*, *Antirrhinum majus, Arabis collina, A. verna, Arenaria leptoclados, Asplenium ceterach, A. ruta-muraria, A. trichomanes, Bromus madritensis, Campanula erinus, Cheilanthes persica, Crepis sancta, Cymbalaria muralis, Fumaria gaillardotii, F. kralikii, F. officinalis, Geranium lucidum, G. robertianum, G. rotundifolium, Hornungia petraea, Lamium amplexicaule, Legousia hybrida, Micromeria juliana, Parietaria judaica, Polypodium cambricum, Saxifraga tridactylites, Sedum hispanicum, S. ochroleucum, Umbilicus horizontalis, Valantia muralis* and *Veronica cymbalaria*.

The species composition of the basal zone of the walls consists mainly of plants growing in nearby vegetation. The favourable environmental conditions of this zone, with ample moisture and nutrients, make possible the establishment of a relatively rich flora. A large proportion of nitrophilous, ruderal, weed and alien species clearly reveal disturbance of the habitat. The most widespread taxa in that area are: *Ailanthus altissima, Alcea biennis, Amaranthus hybridus, A. retroflexus, Ambrosia artemisiifolia, Avena barbata, Bidens subalternans, Bromus sterilis, Chenopodium album, C. ambrosioides, Conyza bonariensis, C. canadensis, Eleusine indica, Hordeum murinum* ssp. *leporinum, Oxalis corniculata, Senecio vulgaris, Setaria pumila, S. verticillata, S. viridis* and *Sonchus asper* ssp. *glaucescens*. At wall bases which are more shadowed, *Chelidonium majus, Galium aparine, Scrophularia peregrina, Urtica dioica* and *U. pilulifera* are growing.

The vegetation of crevices and steep limestone cliffs is the most common type of vegetation within the city walls of Počitelj. The very unfavourable environmental conditions of this habitat, strong sunshine, the minimum amount of fertile soil and extremely poor moisture, led to the development of specific xerophytic vegetation. Some characteristic plants of that area are: *Aethionema saxatile*, *Arum italicum*, *Asphodeline lutea*, *Asphodelus aestivus*, *Carduus pycnocephalus*, *Muscari comosum*, *Orlaya grandiflora*, *Piptatherum miliaceum* ssp. *thomasii*, *Punica granatum*, *Smyrnium perfoliatum*, *Sternbergia lutea* etc.

The surrounding area is mostly characterized by the degradation stage of xero-thermophilous broadleaf lower forest and xerophilous vegetation of Mediterranean rocky grasslands and meadows of the class *Lygeo sparti-Stipetea tenacissimae* Rivas-Mart. 1978. It is represented by thermophilous communities of rocky meadows and pastures where species from Balkan, Illyrian, and south-eastern European floral elements play a dominant role, such as *Acanthus spinosissimus*, *Chrysopogon gryllus*, *Dichanthium ischaemum*, *Stipa bromoides*, *Scorzonera villosa*. Most of the endemic and endangered taxa are recorded here (*Anthyllis vulneraria* ssp. *praepropera*, *Arum nigrum*, *Astragalus monspessulanus* ssp. *illyricus*, *Crocus dalmaticus*, *Cyclamen hederifolium*, *Hermodactylus tuberosus*, *Moltkia petraea*, *Opopanax chironium*, *Romulea bulbocodium*, *Trifolium dalmaticum*, *Verbascum orientale*).

The whole area is strongly affected by intense human impact, mainly agricultural activities that have evidently downgraded the natural vegetation cover. As a result, of 43 taxa previously registered for the Počitelj area, 7 taxa recorded mostly by Vandas (1909) were not confirmed during this study (*Arbutus unedo*, *Artemisia alba*, *Asperula purpurea*, *Calamintha nepetoides*, *Carduus chrysacanthos*, *Leonurus marrubiastrum*, *Plantago argentea* and *Ptilostemon strictus*). These species have not been re-collected for over a century and must be regarded as extinct from the Počitelj area.

The most abundant plant family is Asteraceae *s.l.* (75 taxa; 12.18%), followed by Poaceae (58 taxa, 9.42%) and Fabaceae (48 taxa; 7.79%). The same three families were dominant in the taxa in the floras of the city of Mostar (Maslo, 2014) and the town of Blagaj (Maslo & Abadžić, 2015).

The highest number of life-forms in the flora of Počitelj consists of therophytes and hemicryptophytes with 227 and 208 taxa respectively (36.85% and 33.77%), while the least abundant are hydrophytes with only one taxon (0.16%). These results match the data for the town of Blagaj and the

Tab. 4. Plant life-form of the flora of Počitelj and floras of the town of Blagaj (Maslo & Abadžić, 2015) and city of Mostar (Maslo, 2014).

City	Therophyta	Hemicryptophyta	Phanerophyta	Geophyta	Chamaephyta	Hydrophyta
Počitelj	36.85%	33.77%	12.01%	10.88%	6.33%	0.16%
Blagaj	36.65%	36.51%	10.37%	8.02%	6.36%	2.07%
Mostar	38.86%	33.68%	9.64%	10.16%	6.22%	1.45%

Tab. 5. Comparison of the floral elements.

Floral element	Počitelj	Blagaj	Mostar
Mediterranean	31.33%	29.46%	26.94%
South European	18.34%	18.40%	18.65%
Eurasian	11.20%	13.14%	14.61%
Widespread plants	16.72%	16.18%	13.47%
Alien plants	13.96%	12.03%	15.65%
Others	8.45%	10.79%	10.68%
Total	100%	100%	100%

city of Mostar (Tab.4). The dominance of therophytes in urban floras is not unexpected as their short life-cycles and high numbers of easily dispersed seeds make these plants very effective colonizers of heterogeneous habitats.

The comparison of floral elements of the flora of Počitelj with the floras of the town of Blagaj and the city of Mostar (Tab.5) shows that there are great similarities in the dominant presence of Mediterranean taxa and a significant presence of South European, widespread and alien taxa, as well. These data indicate that the flora assemblages (in terms of life-forms and floral elements) of Mediterranean urban areas mainly result from the general conditions of the Mediterranean climate as well as from anthropogenic impact.

CONCLUSIONS

Of the total 616 plant taxa which were the object of this research, 573 were observed for the first time in the flora of Počitelj. The finding of six taxa from the area is of special interest because they were recently reported for the flora of Bosnia and Herzegovina: *Campanula austroadriatica*, *Fumaria gaillardotii*, *Helictotrichon convolutum, Opuntia vulgaris, Pueraria thunbergiana* and *Solanum nigrum* ssp. *schultesii* (Maslo & Boškailo, 2015; Maslo, 2016 a, 2016 b). Especially important is the finding of *Serapias vomeracea* as a new species for the flora of Bosnia and Herzegovina.

Some other taxa were recorded only here, or at one or a few localities in Bosnia and Herzegovina (*Aristolochia rotunda*, *Arum nigrum*, *Asphodelus aestivus*, *Asphodelus fistulosus*, *Cheilanthes persica*, *Hermodactylus tuberosus*, *Legousia hybrida*, *Linaria microsepala*, *Linaria pelisseriana, Lupinus micranthus, Scrophularia peregrina, Sternbergia lutea, Urtica pilulifera, Valantia muralis* and *Verbascum orientale*).

The endemic element is relatively rich. It includes 19 taxa with a restricted distribution range confided to the Balkans or even a smaller area. Eleven taxa of endemic plants (*Allium guttatum* ssp. *dalmaticum*, *Arum nigrum, Astragalus monspessulanus* ssp. *illyricus*, *Chaerophyllum coloratum, Crocus dalmaticus, Genista sylvestris* ssp. *dalmatica, Iris pseudopallida, Linaria microsepala, Moltkia petraea, Petteria ramentacea, Tanacetum cinerariifolium*) are even included in the Preliminary Red List of Endangered Plant Species of Bosnia and Herzegovina (Šilić, 1996).

The flora has a therophytic-hemicryptophytic character (70.62%), primarily due to the xerothermic climatic conditions of the area and secondly due to constant anthropogenic disturbance regimes. The Mediterranean element is represented in the flora of Počitelj by 193 taxa (31.33%). Together with the South European element, they constitute almost 50 % of the total flora.

In the Počitelj region we identified 86 alien plants taxa. Among these, 53 are neophytes and 33 are archaeophytes. Most neophytes from Počitelj came from America – 40 taxa. Among neophytes, 30 taxa were recently included in the Preliminary list of invasive alien plant species (IAS) in Bosnia and Herzegovina (Maslo, 2016 c). Though the most invasive plants are limited to the anthropic habitats, some of them penetrate semi-natural or natural ecosystems, often having a negative impact. Among these, some seem to be very aggressive in this area: *Ailanthus altissima, Ambrosia artemisiifolia, Bidens subalternans, Conyza canadensis* and *Pueraria thunbergiana.*

Our study has confirmed that the flora of Počitelj is extremely rich and diverse. The greater diversity of the flora of Počitelj is attributable to both geographic and cultural factors, and to the marked presence of Mediterranean taxa. The vascular flora of Počitelj showed many common characteristics with the floras of Blagaj and Mostar. It seems that the Počitelj area is more exposed to the Mediterranean climate than Mostar and Blagaj. This is supported by the presence of typical Mediterranean species that do not grow in the Mostar and Blagaj areas, and is found only in the southern Herzegovina or in neighbouring Dalmatia: *Helictotrichon convolutum*, *Serapias vomeracea*, *Smilax aspera* and *Valantia muralis*.

In summary, the vascular flora of Počitelj has a Mediterranean character. It is dominated by plants with a Mediterranean floral element (31.33%) and the life-forms are dominated by therophytes (36.85%).

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APPENDIX 1.

Vascular flora of the town of Počitelj: taxonomy, life form, floral element, endemic/conservation status, invasion status, residence time, origin and first record (If the author of the first record is not cited, the species is quoted here for the first time). Legend: P-phanaerophytes, Ch-chamaephytes, H-hemicriptophytes, T-therophytes, G-geophytes; end-endemic species; CR-Critically Endangered, EN-Endangered, VU-Vulnerable, NT-Near Threatened, LC-Least Concern, DD-Data Deficient; CAS-Casual taxa; NAT-Naturalized non-invasive taxa; INV-Ivasive taxa; arc-archaeophytes, neo-neophytes; Af- Africa, Am-C, Central America, Am-N-, North America, Am-S, South America, As-C, Central Asia, As-E, East Asia, As-W, West Asia, M-Mediterranean, Paleo-Paleotropical, Unkn-Unknown origin.

No. of taxa	Species and subspecies	Family	Life-form	Chorological group	Endemic taxa	Threatened taxa	Alien plants (CUAD)			1st record/author
							Invasion status	Residence time	Origin	
1.	Acanthus spinosissimus Pers.	Acanthaceae	H	ILAP		LC				
2.	Achnatherum calamagrostis (L.) P.Beauv	Poaceae	H	SEME						
3.	Acer campestre L.	Aceraceae	P	EURO						
4.	Acer monspessulanum L.	Aceraceae	P	SEME						
5.	Acer negundo L.	Aceraceae	P	CUAD			INV	neo	Am-N	
6.	Achillea millefolium L.	Asteraceae	H	WISP						
7.	Acinos arvensis (Lam.) Dandy. ssp. villosus (Gand.) Soják	Lamiaceae	T	EURO						Šilić 1979
8.	Aegilops geniculata Roth	Poaceae	T	CIME						
9.	Aegilops neglecta Req. ex Bertol.	Poaceae	T	CIME						
10.	Aegilops triunicialis L.	Poaceae	T	CIME						
11.	Aethionema saxatile (L.) R.Br.	Brassicaceae	Ch	SEME						
12.	Agrostis stolonifera L.	Poaceae	H	CIHO						
13.	Albizia julibrissin Durazz.	Fabaceae	P	CUAD			CAS	neo	Paleo.	
14.	Ailanthus altisima (Mill.) Sw.	Simaroubaceae	P	CUAD			INV	neo	As-E	
15.	Aira elegantissima Schur	Poaceae	T	SEME						
16.	Ajuga chamaepitys (L.) Schreb.	Lamiaceae	T	CIME						
17.	Ajuga genevensis L.	Lamiaceae	H	EURO						
18.	Alcea biennis Winterl.	Malvaceae	H	CUAD			NAT	neo	M	
19.	Alkanna tinctoria Tausch	Boraginaceae	H	CIME		CR				
20.	Alliaria petiolata (M.Bieb.) Cavara & Grande	Brassicaceae	H	EUAS						
21.	Allium ampeloprasum L.	Liliaceae	G	CIME						
22.	Allium carinatum L.	Liliaceae	G	EURO						
23.	Allium cepa L.	Liliaceae	G	CUAD			CAS	arc	As-W	
24.	Allium flavum L. ssp. flavum	Liliaceae	G	SEME						
25.	Allium guttatum Steven subsp. dalmaticum (A.Kern. ex Janch.) Stearn.	Liliaceae	G	ILBE	end	DD				
26.	Allium pallens L. ssp. tenuiflorum (Ten.) Stearn	Liliaceae	G	EUME						
27.	Allium roseum L.	Liliaceae	G	CIME						
28.	Allium sphaerocephalon L. ssp. sphaerocephalon	Liliaceae	G	SEME						
29.	Alopecurus myosuroides Huds.	Poaceae	T	WISP						

No. of taxa	Species and subspecies	Family	Life-form	Chorological group	Endemic taxa	Threatened taxa	Alien plants (CUAD)			1st record/author
							Invasion status	Residence time	Origin	
30.	Althaea cannabina L.	Malvaceae	H	SEPO						
31.	Alyssoides utriculata (L.) Medik.	Brassicaceae	H	SEME						
32.	Alyssum alyssoides (L.) L.	Brassicaceae	H	SEME						
33.	Alyssum hirsutum M. Bieb.	Brassicaceae	T	CIME						
34.	Amaranthus albus L.	Amaranthaceae	T	CUAD			NAT	neo	Am-N	
35.	Amaranthus deflexsus L.	Amaranthaceae	T	CUAD			NAT	neo	Am-S	
36.	Amaranthus hybridus L.	Amaranthaceae	T	CUAD			NAT	neo	Am-N	
37.	Amaranthus retroflexus L.	Amaranthaceae	T	CUAD			INV	neo	Am-N	
38.	Ambrosia artemisiifolia L.	Asteraceae	T	CUAD			INV	neo	Am-N	
39.	Amorpha fruticosa L.	Fabaceae	P	CUAD			INV	neo	Am-N	
40.	Anagallis arvensis L.	Primulaceae	T	WISP						
41.	Anagallis coerulea Schreb.	Primulaceae	T	WISP						
42.	Anchusa arvensis (L.) M.Bieb.	Boraginaceae	T	EURO						
43.	Anchusa cretica Mill.	Boraginaceae	H	CIME						
44.	Anchusa italica Retz.	Boraginaceae	H	SEME						
45.	Anchusa officinalis L.	Boraginaceae	H	EURO						
46.	Anemone hortensis L.	Ranunculaceae	G	EUME						
47.	Anthemis arvensis L.	Asteraceae	T	CIME						
48.	Anthyllis vulneraria L. ssp. praepropera Bornm.	Fabaceae	T	ILAE	end					
49.	Antirrhinum majus L.	Scrophulariaceae	T	CUAD			NAT	arc	M	
50.	Arabis collina Ten.	Brassicaceae	T	SEME						
51.	Arabis hirsuta (L.) Scop.	Brassicaceae	T	WISP						
52.	Arabis turrita L.	Brassicaceae	H	SEME						
53.	Arabis verna (L.) R. Br.	Brassicaceae	T	CIME						
54.	Arbutus unedo L.	Ericaceae	P	CIME						Beck et al 1967
55.	Arceuthobium oxycedri (DC.) M. Bieb	Loranthaceae	P	SEPO						
56.	Arctium lappa L.	Asteraceae	H	EUAS						
57.	Arctium minus Bernh.	Asteraceae	H	CIME						
58.	Arenaria leptoclados (Reichenb.) Guss.	Caryophyllaceae	T	EUAS						
59.	Arenaria serpyllifolia L.	Caryophyllaceae	T	WISP						
60.	Aristolochia clematitis L.	Aristolochiaceae	G	SEPO						
61.	Aristolochia rotunda L.	Aristolochiaceae	G	CIME		EN				
62.	Artemisia absinthium L.	Asteraceae	Ch	EUAS						
63.	Artemisia alba Turra	Asteraceae	Ch	SEME						Vandas 1909
64.	Artemisia annua L.	Asteraceae	T	CUAD			INV	neo	As-E	
65.	Artemisia vulgaris L.	Asteraceae	H	WISP						
66.	Arum italicum Miller	Araceae	G	MEAT						
67.	Arum nigrum Schott	Araceae	G	ILBE	end	VU				
68.	Arundo donax L.	Poaceae	G	WISP						
69.	Asparagus acutifolius L.	Asparagaceae	G	CIME						

No. of taxa	Species and subspecies	Family	Life-form	Chorological group	Endemic taxa	Threatened taxa	Alien plants (CUAD)			1st record/author
							Invasion status	Residence time	Origin	
70.	Asperula aristata L.f.	Rubiaceae	H	SEME						
71.	Asperula purpurea (L.) Ehrend.	Rubiaceae	Ch	SEME						Vandas 1909
72.	Asphodeline lutea (L.) Rchb.	Liliaceae	G	EAME						
73.	Asphodelus aestivus Brot.	Asparagaceae	G	CIME		VU				
74.	Asphodelus fistulosus L.	Asparagaceae	H	CIME		CR				
75.	Asplenium ceterach L. ssp. ceterach	Aspleniaceae	H	SEME						Ritter-Studnička 1958
76.	Asplenium onopteris L	Aspleniaceae	H	CIME						
77.	Asplenium ruta – muraria L.	Aspleniaceae	H	CIHO						
78.	Asplenium trichomanes L. ssp. quadrivalens D.E.Mey.	Aspleniaceae	H	WISP						
79.	Asterolinon linum-stellatum (L.) Duby	Primulaceae	T	CIME						
80.	Astragalus monspessulanus L. ssp. illyricus (Bernhardt) Chater	Fabaceae	H	ILAE	end	NT				
81.	Avena barbata Pott. ex Link.	Poaceae	T	WISP						
82.	Avena sativa L.	Poaceae	T	CUAD			CAS	arc	Unkn.	
83.	Avena sterilis L.	Poaceae	T	SEPO						
84.	Ballota nigra L. ssp. foetida (Lam.) Hay.	Lamiaceae	H	SEME						
85.	Ballota rupestris (Biv.) Vis.	Lamiaceae	Ch	SEMO						
86.	Barbarea vulgaris R. Br.	Brassicaceae	H	WISP						
87.	Bellis perennis L.	Asteraceae	H	EURO						
88.	Bellis sylvestris Cirillo	Asteraceae	H	CIME						
89.	Berteroa mutabilis (Vent.) DC.	Brassicaceae	H	EAME						
90.	Berula erecta (Hudson) Coville	Apiaceae	G	CIHO						
91.	Bidens subalternans DC.	Asteraceae	T	CUAD			INV	neo	Am-S	
92.	Biscutella cichoriifolia Loisel.	Brassicaceae	T	SEME						
93.	Blackstonia perfoliata (L.) Huds. ssp. serotina (Koch ex Rchb.) Vollm.	Gentianaceae	T	MEAT						
94.	Brachypodium sylvaticum (Huds.) P.Beauv.	Poaceae	H	EUAS						
95.	Brassica oleracea L. ssp. acephala (DC.) O. Schwarz	Brassicaceae	Ch	CUAD			CAS	arc	M	
96.	Brassica rapa L. ssp. rapa	Brassicaceae	T	CUAD			CAS	arc	M	
97.	Briza maxima L.	Poaceae	T	CIME						
98.	Bromus hordeaceus L. ssp. hordeaceus	Poaceae	T	SEME						
99.	Bromus madritensis L.	Poaceae	T	MEAT						
100.	Bromus squarrosus L.	Poaceae	T	SEPO						
101.	Bromus sterilis L.	Poaceae	T	WISP						
102.	Broussonetia papyrifera L`Herit ex Vent.	Moraceae	P	CUAD			INV	neo	As-E	
103.	Bunias erucago L.	Brassicaceae	T	SEME						
104.	Bupleurum praealtum L.	Apiaceae	H	EUAS						
105.	Bupleurum veronense Turra	Apiaceae	T	ILSE						
106.	Calamintha glandulosa (Req.) Benth.	Lamiaceae	H	SEPO						Beck et al 1983
107.	Calamintha nepetoides Jord.	Lamiaceae	H	SEPO						Vandas 1909
108.	Calendula officinalis L.	Asteraceae	T	CUAD			CAS	arc	Unkn.	

No. of taxa	Species and subspecies	Family	Life-form	Chorological group	Endemic taxa	Threatened taxa	Alien plants (CUAD)			1st record/author
							Invasion status	Residence time	Origin	
109.	Calepina irregularis (Asso) Thell.	Brassicaceae	T	EURO						
110.	Calystegia sepium (L.) R.Br.	Convolvulaceae	H	WISP						
111.	Campanula austroadriatica D. Lakušić et Kovačić	Campanulaceae	H	ILAE	end					
112.	Campanula bononiensis L.	Campanulaceae	H	EUAS						
113.	Campanula erinus L.	Campanulaceae	T	CIME						
114.	Campanula lingulata Waldst. et Kit.	Campanulaceae	H	SEME						Vandas 1909
115.	Canabis sativa L.	Cannabaceae	T	CUAD			NAT	arc	As-C	
116.	Capsella bursa – pastoris (L.) Med.	Brassicaceae	H	WISP						
117.	Capsella rubella Reut	Brassicaceae	T	CIME						
118.	Cardamine hirsuta L.	Brassicaceae	T	WISP						
119.	Cardaria draba (L.) Desv.	Brassicaceae	G	WISP						
120.	Carduus chrysacanthos Ten.	Asteraceae	H	SEME						Vandas 1909
121.	Carduus micropterus (Borbás) Teyber	Asteraceae	H	ILAE	end					
122.	Carduus pycnocephalus L.	Asteraceae	T	CIME						
123.	Carex caryophyllea Latourr.	Cyperaceae	H	EUAS						
124.	Carex distachya Desf.	Cyperaceae	H	CIME						
125.	Carex distans L	Cyperaceae	H	CIME						
126.	Carex divulsa Stokes ssp. divulsa	Cyperaceae	H	WISP						
127.	Carex flacca Schreber	Cyperaceae	G	WISP						
128.	Carex hallerana Asso	Cyperaceae	H	SEME						
129.	Carex hirta L.	Cyperaceae	G	EUAS						
130.	Carlina corymbosa L.	Asteraceae	T	CIME						
131.	Carpinus orientalis Mill	Corylaceae	P	ILSE						
132.	Carthamus lanatus L. ssp. lanatus	Asteraceae	T	CIME						
133.	Celtis australis L.	Ulmaceae	P	SEME						
134.	Centaurea calcitrapa L.	Asteraceae	T	MEAT						
135.	Centaurea deusta Ten. ssp. concolor (DC.) Hayek	Asteraceae	H	EUME						
136.	Centaurea jacea L.	Asteraceae	H	EUAS						
137.	Centaurea solstitialis L. ssp.solstialis	Asteraceae	T	SEPO						
138.	Centaurium erythraea Rafn.	Gentianaceae	T	WISP						
139.	Cephalaria leucantha (L.) Roemer & Schultes	Dipsacaceae	H	CIME						Vandas 1909
140.	Cerastium glomeratum Thuill.	Caryophyllaceae	T	WISP						
141.	Cerastium ligusticum Viv. ssp. trichogynum (Moschl) P.D.Sell. et Whitehead	Caryophyllaceae	T	WEME						
142.	Cercis siliquastrum L.	Fabaceae	P	CUAD			CAS	arc	M	
143.	Chaenorhinum minus (L.) Lange ssp. minus	Scrophulariaceae	T	EURO						
144.	Chaerophyllum coloratum L.	Apiaceae	H	ILAE	end	EN				
145.	Chamomilla recutita (L.) Rauschert	Asteraceae	T	WISP						
146.	Cheilanthes persica (Bory) Mett. ex Kuhn	Adiantaceae	H	MEAT						
147.	Chelidonium majus L.	Papaveraceae	H	WISP						
148.	Chenopodium album L.	Chenopodiaceae	T	WISP						

No. of taxa	Species and subspecies	Family	Life-form	Chorological group	Endemic taxa	Threatened taxa	Alien plants (CUAD)			1st record/author
							Invasion status	Residence time	Origin	
149.	Chenopodium ambrosioides L.	Chenopodiaceae	T	CUAD			INV	neo	Am-C	
150.	Chenopodium botrys L.	Chenopodiaceae	T	EUAS						
151.	Chenopodium hybridum L.	Chenopodiaceae	T	WISP						
152.	Chondrilla juncea L.	Asteraceae	H	EUAS						
153.	Chrozophora tinctoria (L.) Juss.	Euphorbiaceae	T	MEPO						
154.	Chrysopogon gryllus (L.) Trin	Poaceae	H	MEPO						
155.	Cichorium intybus L.	Asteraceae	H	WISP						
156.	Cirsium vulgare (Savi) Ten.	Asteraceae	H	EUAS						
157.	Citrullus lanatus (Thunb.) Mansf	Cucurbitaceae	T	CUAD			CAS	arc	Af	
158.	Cleistogenes serotina (L.) Keng.	Poaceae	H	SEPO						
159.	Clematis flammula L.	Ranunculaceae	P	CIME						
160.	Clematis vitalba L.	Ranunculaceae	P	EURO						
161.	Clematis viticella L.	Ranunculaceae	P	SEME						
162.	Colchicum autumnale L.	Colchicaceae	G	CEEU						
163.	Colchicum hungaricum Janka	Colchicaceae	G	CIME						
164.	Colutea arborescens L.	Fabaceae	P	CIME						
165.	Consolida regalis S.F.Gray	Ranunculaceae	T	CUAD			NAT	arc	M	
166.	Convolvulus arvensis L.	Convolvulaceae	G	WISP						
167.	Convolvulus cantabrica L.	Convolvulaceae	Ch	SEME						
168.	Conyza bonariensis (L.) Cronq.	Asteraceae	T	CUAD			INV	neo	Am-N	
169.	Conyza canadensis (L.) Cronq.	Asteraceae	T	CUAD			INV	neo	Am-N	
170.	Cornus mas L.	Cornaceae	P	SECO						
171.	Cornus sanguinea L.	Cornaceae	P	EURO						
172.	Coronilla emerus L. ssp. emeroides (Boiss. & Spruner) Hayek..	Fabaceae	P	EAME						Beck 1927
173.	Crataegus monogyna Jacqu.	Rosaceae	P	EUAS						
174.	Crepis foetida L. ssp. foetida	Asteraceae	T	SEME						
175.	Crepis foetida L. ssp. rhoeadifolia (M.Bieb.) Čelak.	Asteraceae	T	EEUP						
176.	Crepis neglecta L	Asteraceae	T	EUME						
177.	Crepis sancta (L.) Babc.	Asteraceae	T	EAME						
178.	Crepis vesicaria L. ssp. vesicaria	Asteraceae	T	CIME						
179.	Crocus dalmaticus Vis.	Iridaceae	G	ILAE	end	EN				
180.	Crocus reticulatus Steven ex Adams	Iridaceae	G	EEUP						
181.	Cruciata laevipes Opiz.	Rubiaceae	H	EUAS						
182.	Cucumis melo L.	Cucurbitaceae	T	CUAD			CAS	neo	Am-C	
183.	Cucurbita pepo L.	Cucurbitaceae	T	CUAD			CAS	neo	Am-C	
184.	Cupressus sempervirens L.	Cupressaceae	P	CUAD			CAS	arc	M	Beck 1903
185.	Cuscuta campestris Yunker	Cuscutaceae	T	CUAD			INV	neo	Am-N	
186.	Cuscuta epithymum L.	Cuscutaceae	T	WISP						
187.	Cyclamen hederifolium Aiton.	Primulaceae	G	SEME		CR				
188.	Cymbalaria muralis P.Gaertn., Mey. et Scherb.	Scrophulariaceae	H	SEME						Beck et al 1967

No. of taxa	Species and subspecies	Family	Life-form	Chorological group	Endemic taxa	Threatened taxa	Alien plants (CUAD)			1st record/author
							Invasion status	Residence time	Origin	
189.	Cynodon dactylon (L.) Pers.	Poaceae	G	WISP						
190.	Cynoglossum columnae Ten.	Boraginaceae	T	EAME		DD				Beck et al 1967
191.	Cynosurus echinatus L.	Poaceae	T	SEME						
192.	Cyperus longus L.	Cyperaceae	Hy	WISP						
193.	Dactylis glomerata L. ssp. glomerata	Poaceae	H	EUAS						
194.	Dactylis glomerata L. ssp. hispanica (Roth.) Nyman	Poaceae	H	CIME						
195.	Dasypyrum villosum (L.) P.Candargy	Poaceae	T	SEME						
196.	Datura stramonium L.	Solanaceae	T	CUAD			INV	neo	Am-N	
197.	Daucus carota L. ssp. carota	Apiaceae	H	WISP						
198.	Desmazeria rigida (L.) Tutin	Poaceae	T	MEAT						
199.	Dianthus ferrugineus Miller ssp. liburnicus (Bartl.) Tutin	Caryophyllaceae	H	ILAE	end					
200.	Dianthus sylvestris Wulfen in Jacq. ssp. sylvestris	Caryophyllaceae	H	SEMO						
201.	Dichanthium ischaemum (L.) Roberty	Poaceae	H	SEME						
202.	Digitaria sanguinalis (L.) Scop.	Poaceae	T	WISP						
203.	Diplotaxis tenuifolia (D.) DC.	Brassicaceae	H	WISP						
204.	Dittrichia viscosa (L.) Greuter	Asteraceae	H	CIME		EN				
205.	Dryopteris pallida (Bory) C.Chr. ex Maire et Petitmengin	Dryopteridaceae	G	EAME						
206.	Ecballium elaterium (L.) Richard	Cucurbitaceae	H	CIME						
207.	Echinochloa crus – galli (L) P. Beauv.	Poaceae	T	WISP						
208.	Echium italicum L.	Boraginaceae	T	CIME						Beck et al 1967
209.	Echium vulgare L.	Boraginaceae	H	EURO						
210.	Eleusine indica (L.) Gaertn.	Poaceae	T	CUAD			INV	neo	As-E	
211.	Elymus hispidus (Opiz.) Melderis	Poaceae	H	EUAS						
212.	Elymus repens (L.) Gould	Poaceae	G	WISP						
213.	Ephedra fragilis Desf. ssp. campylopoda (C. A. Mayer) Asch. et Graeb.	Ephedraceae	Ch	EAME						
214.	Epilobium hirsutum L.	Onagraceae	H	EUAS						
215.	Epilobium parviflorum Schreb.	Onagraceae	H	EUAS						
216.	Equisetum arvense L.	Equisetaceae	G	CIHO						
217.	Equisetum ramosissimum Desf.	Equisetaceae	G	CIHO						
218.	Eragrostis cilianensis (All.) F.T.Hubb.	Poaceae	T	WISP						
219.	Eragrostis minor Host.	Poaceae	T	CIME						
220.	Erigeron annuus (L.) Pers. ssp. annuus	Asteraceae	T	CUAD			INV	neo	Am-N	
221.	Erodium cicutarium (L.) L.Her	Geraniaceae	T	WISP						
222.	Eruca vesicaria (L.) Cav. ssp. sativa (Mill.) Thell	Brassicaceae	T	CUAD			CAS	arc	M	
223.	Eryngium amethystinum L.	Apiaceae	H	ILSE						
224.	Eryngium campestre L.	Apiaceae	H	SEME						
225.	Erysimum odoratum Ehrh.	Brassicaceae	H	CEEU						
226.	Euonymus europaeus L	Celastraceae	P	EUAS						
227.	Euonymus verrucosa Scop.	Celastraceae	P	SEPO						
228.	Eupatorium cannabinum L.	Asteraceae	H	EUAS						

No. of taxa	Species and subspecies	Family	Life-form	Chorological group	Endemic taxa	Threatened taxa	Alien plants (CUAD)			1st record/author
							Invasion status	Residence time	Origin	
229.	Euphorbia chamaesyce L.	Euphorbiaceae	T	SEME						
230.	Euphorbia characias L. ssp wulfenii (Hoppe ex Koch.) Radd-Sm.	Euphorbiaceae	Ch	ILAE						Vandas 1909
231.	Euphorbia cyparissias L.	Euphorbiaceae	H	EUAS						
232.	Euphorbia exigua L.	Euphorbiaceae	T	SEME						
233.	Euphorbia falcata L.	Euphorbiaceae	T	SEME						
234.	Euphorbia fragifera Jan	Euphorbiaceae	Ch	ILAE		VU				
235.	Euphorbia helioscopia L.	Euphorbiaceae	T	WISP						
236.	Euphorbia maculata L.	Euphorbiaceae	T	CUAD			INV	neo	Am-N	
237.	Euphorbia prostrata Aiton	Euphorbiaceae	T	CUAD			NAT	neo	Am-S	
238.	Euphorbia spinosa L.	Euphorbiaceae	Ch	CIME						
239.	Fallopia baldschuanica (Regel) J.Holub	Polygonaceae	P	CUAD			CAS	neo	As-C	
240.	Fallopia convolvulus (L.) A. Löve	Polygonaceae	T	WISP						
241.	Festuca pratensis Huds.	Poaceae	H	WISP						
242.	Ficus carica L.	Moraceae	P	CIME						Vandas 1909
243.	Filago vulgaris Lam.	Asteraceae	T	SEPO						
244.	Filipendula vulgaris Moenck.	Rosaceae	H	EUAS						
245.	Foeniculum vugare Miller	Apiaceae	G	CIME						
246.	Fragaria vesca Ehrh.	Rosaceae	H	WISP						
247.	Frangula alnus Miller	Rhamnaceae	P	WISP						
248.	Frangula rupestris (Scop.) Schur.	Rhamnaceae	P	ILAE						
249.	Fraxinus angustifolia Vahl	Oleaceae	P	EEUP						Beck et al 1983
250.	Fraxinus ornus L.	Oleaceae	P	SEME						
251.	Fumana procumbens (Dunal) Gren. & Godr.	Cistaceae	Ch	SEME						
252.	Fumaria gaillardotii Boiss.	Fumariaceae	T	CIME						
253.	Fumaria kralikii Jordan.	Fumariaceae	T	MEPO						
254.	Fumaria officinalis L.	Fumariaceae	T	WISP						Maly 1919
255.	Fumaria parviflora Lam.	Fumariaceae	T	WISP						
256.	Gagea villosa (M.Bieb.) Sweet	Fumariaceae	G	EUAS						
257.	Galanthus nivalis L.	Amaryllidaceae	G	EUAS		LC				
258.	Galinsoga parviflora Cav.	Asteraceae	T	CUAD			INV	neo	Am-S	
259.	Galium aparine L.	Rubiaceae	T	WISP						
260.	Galium corrudifolium Vill.	Rubiaceae	H	SEME						
261.	Galium firmum Tausch	Rubiaceae	Ch	ILAE	end					
262.	Genista sylvestris Scop. ssp. dalmatica (Bartl.) H. Lindb.	Fabaceae	Ch	ILAE	end	LC				
263.	Geranium columbinum L.	Geraniaceae	T	EUAS						
264.	Geranium dissectum L.	Geraniaceae	T	WISP						
265.	Geranium lucidum L.	Geraniaceae	T	MEAT						
266.	Geranium molle L. ssp. molle	Geraniaceae	T	EAME						
267.	Geranium molle L. ssp. brutium (Gasparr.) Graebn.	Geraniaceae	T	EAME						
268.	Geranium pyrenaicum Burm. f.	Geraniaceae	H	SEME						

No. of taxa	Species and subspecies	Family	Life-form	Chorological group	Endemic taxa	Threatened taxa	Alien plants (CUAD)			1st record/author
							Invasion status	Residence time	Origin	
269.	Geranium robertianum L.	Geraniaceae	T	WISP						
270.	Geranium rotundifolium L.	Geraniaceae	T	EUAS						
271.	Hedera helix L.	Araliaceae	P	EURO						
272.	Helianthemum nummularium (L.) Mill. ssp. nummularium	Cistaceae	Ch	SEME						
273.	Helianthus annuus L.	Asteraceae	T	CUAD			CAS	neo	Am-S	
274.	Helianthus tuberosus L.	Asteraceae	G	CUAD			INV	neo	Am-N	
275.	Helichrysum italicum (Roth) Mill. Corr. Guss.	Asteraceae	Ch	CIME						
276.	Helictotrichon convolutum (C.Presl) Henrard	Poaceae	H	WEME						
277.	Heliotropium europaeum L.	Boraginaceae	T	MEPO						
278.	Hermodactylus tuberosus (L.) Mill	Iridaceae	G	EAME		CR				
279.	Herniaria hirsuta L.	Caryopyllaceae	T	EURO						
280.	Herniaria incana Lam.	Caryopyllaceae	Ch	SEME						
281.	Hesperis laciniata All.	Brassicaceae	H	ILSE						
282.	Hieracium heterogynum (Froel.) Guterm	Asteraceae	H	ILBE						
283.	Hordeum murinum L. ssp. leporinum (Link) Arcang	Poaceae	T	CIME						
284.	Hornungia petraea (L.) Rchb.	Brassicaceae	T	EUME						
285.	Humulus lupulus L.	Cannabaceae	P	EUAS						
286.	Hyacinthus orientalis L.	Liliaceae		CUAD			CAS	arc	M	
287.	Hypericum perforatum L.	Clusiaceae	H	WISP						
288.	Inula britannica L.	Asteraceae	H	EURO						
289.	Inula conyza DC.	Asteraceae	H	SEPO						
290.	Inula spiraeifolia L.	Asteraceae	H	SEME						
291.	Inula verbascifolia (Willd.) Hausskn.	Asteraceae	H	ILAE						Vandas 1909
292.	Ipomaea purpurea Roth.	Convolvulaceae	T	CUAD			CAS	neo	A-S	
293.	Iris germanica L.	Iridaceae	H	CUAD			NAT	arc	As-E	
294.	Iris pseudopallida Trinajstić	Iridaceae	G	ILAE	end	DD				
295.	Juncus articulatus L.	Juncaceae	G	CIHO						
296.	Juncus inflexus L.	Juncaceae	H	EUAS						
297.	Juniperus oxycedrus L. ssp. oxycedrus	Cupressaceae	P	CIME						Ritter-Studnička 1958
298.	Kickxia spuria (L.) Dum.	Scrophulariaceae	T	CUAD			NAT	arc	M	Beck et al 1967
299.	Knautia integrifolia (L.) Bertol.	Dipsacaceae	T	CIME						
300.	Koeleria splendens C.Presl	Poaceae	H	SEME						
301.	Lactuca saligna L.	Asteraceae	T	EURO						
302.	Lactuca sativa L.	Asteraceae	H	CUAD			CAS	arc	Unkn.	
303.	Lactuca serriola L.	Asteraceae	T	WISP						
304.	Lactuca viminea (L.) J.Presl & C.Presl	Asteraceae	H	SEPO						
305.	Lamium amplexicaule L.	Lamiaceae	T	EUAS						Beck et al 1974
306.	Lamium bifidum Cirillo	Lamiaceae	T	CIME						Beck et al 1974
307.	Lamium maculatum L.	Lamiaceae	H	EUAS						Beck et al 1974
308.	Lamium purpureum L.	Lamiaceae	T	EUAS						

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							Invasion status	Residence time	Origin	
309.	Lathyrus cicera L.	Fabaceae	T	CIME						
310.	Lathyrus latifolius L.	Fabaceae	H	SEME						
311.	Lathyrus setifolius L.	Fabaceae	T	MEPO						
312.	Lathyrus sphaericus Retz.	Fabaceae	T	CIME						
313.	Lathyrus tuberosus L.	Fabaceae	H	EUAS						
314.	Laurus nobilis L.	Lauraceae	P	CUAD			CAS	arc	M	
315.	Legousia hybrida (L.) Delarbre	Campanulaceae	T	SEAT		NT				
316.	Leontodon crispus Vill. ssp. crispus	Asteraceae	H	SEME						
317.	Leontodon tuberosus L.	Asteraceae	H	CIME						
318.	Leonurus marrubiastrum L.	Lamiaceae	H	SEEU						Vandas 1909
319.	Lepidium campestre (L.) R. Br.	Brassicaceae	T	WISP						
320.	Lepidium graminifolium L.	Brassicaceae	H	SEPO						
321.	Lepidium ruderale L.	Brassicaceae	T	EUAS						
322.	Ligustrum vulgare L.	Oleaceae	P	CEEU						
323.	Limodorum abortivum (L.) Sw.	Orchidaceae	G	SEME		VU				
324.	Linaria genistifolia (L.) Mill. subsp. dalmatica (L.) Maire & Petitm.	Scrophulariaceae	H	BAAP						
325.	Linaria microsepala Kerner.	Scrophulariaceae	T	ILAE	end	DD				
326.	Linaria pelisseriana (L.) Mill.	Scrophulariaceae	T	MEAT		DD				
327.	Linaria vulgaris Miller.	Scrophulariaceae	H	EUAS						
328.	Linum bienne Mill.	Linaceae	T	MEAT						
329.	Linum tenuifolium L.	Linaceae	H	SEPO						
330.	Lithospermum arvense L.	Boraginaceae	Ch	EUAS						
331.	Lithospermum purpurocaeruleum L.	Boraginaceae	Ch	SEPO						
332.	Lobularia maritima (L.) Desv.	Brassicaceae	H	CUAD			CAS	neo	M	
333.	Lolium multiflorum Lam.	Poaceae	T	CIME						
334.	Lolium perenne L	Poaceae	H	EURO						
335.	Lomelosia argentea (L.) Greuter et Burdet	Dipsacaceae	H	SEPO						
336.	Lophochloa cristata (L.) Hyl.	Poaceae	H	MEAT						
337.	Lotus corniculatus L. ssp. hirsutus Rothm.	Fabaceae	H	SEME						
338.	Lunaria annua L.	Brassicaceae	H	SEEU						
339.	Lupinus micranthus Guss.	Fabaceae	T	SEEU						
340.	Luzula campestris (L.) DC.	Juncaceae	H	WISP						
341.	Lycopus europaeus L.	Lamiaceae	H	EUAS						
342.	Lythrum salicaria L.	Lythraceae	H	WISP						
343.	Maclura pomifera (Rafin.) C.K. Schneider	Moraceae	P	CUAD			CAS	neo	Am-N	
344.	Malva neglecta Wallr.	Malvaceae	T	WISP						
345.	Malva sylvestris L.	Malvaceae	H	WISP						
346.	Marrubium incanum Desr.	Lamiaceae	H	ILAP						
347.	Marrubium vulgare L.	Lamiaceae	H	WISP						
348.	Medicago arabica (L.) Huds.	Fabaceae	T	CUAD			NAT	arc	M	

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349.	Medicago falcata L.	Fabaceae	H	EUAS						
350.	Medicago lupulina L.	Fabaceae	T	WISP						
351.	Medicago minima (L.) Bartal	Fabaceae	T	WISP						
352.	Medicago orbicularis (L.) Bartal	Fabaceae	T	CIME						
353.	Medicago polymorpha L.	Fabaceae	T	SEME						
354.	Medicago prostrata Jacq.	Fabaceae	H	SEME						
355.	Medicago sativa L.	Fabaceae	H	CUAD			NAT	arc	Unkn.	
356.	Melia azedarach L.	Meliaceae	P	CUAD			CAS	neo	As-C	
357.	Melica ciliata L. ssp. ciliata	Poaceae	H	EUAS						
358.	Melilotus albus Medik	Fabaceae	T	EUAS						
359.	Melissa officinalis L.	Lamiaceae	H	EAME						
360.	Mentha longifolia (L.) Huds.	Lamiaceae	H	WISP						
361.	Mentha pulegium L.	Lamiaceae	H	EUME						
362.	Mentha spicata L.	Lamiaceae	H	WISP						
363.	Mercurialis annua L.	Euphorbiaceae	T	WISP						Beck 1916
364.	Micromeria juliana (L.) Benth. ex Rchb.	Lamiaceae	Ch	CIME						
365.	Mirabilis jalapa L.	Nyctaginaceae	G	CUAD			CAS	neo	Am-C	
366.	Misopates orontium (L.) Raf.	Scrophulariaceae	T	EUAS						
367.	Moltkia petraea (Tratt.) Griseb.	Boraginaceae	Ch	ILAE	end	NT				
368.	Morus alba L.	Moraceae	P	CUAD			NAT	arc	As-E	
369.	Morus nigra L.	Moraceae	P	CUAD			CAS	arc	As-W	
370.	Muscari comosum (L.) Mill.	Liliaceae	G	SEME						
371.	Muscari neglectum Guss. ex Ten.	Liliaceae	G	CIME						
372.	Mycelis muralis L.	Asteraceae	H	EUAS						
373.	Myosotis arvensis (L.) Hill	Boraginaceae	T	EUAS						
374.	Myosotis ramosissima Rochel	Boraginaceae	T	EUAS						
375.	Myosotis scorpioides L.	Boraginaceae	H	CIHO						
376.	Nigella damascena L.	Ranunculaceae	T	CIME						
377.	Odontites vulgaris Moench	Scrophulariaceae	T	WISP						
378.	Oenanthera biennis L.	Onagraceae	H	CUAD			INV	neo	Am-N	
379.	Ononis antiquorum (L.) Arcang.	Fabaceae	Ch	CIME						
380.	Onopordum illyricum L.	Asteraceae	H	CIME						
381.	Onosma echioides L.	Boraginaceae	Ch	ILAE	end					
382.	Ophrys bertolonii Moretti	Orchidaceae	G	BAAP						
383.	Ophrys scolopax Cav. ssp. cornuta (Steven) E.G.Camus	Orchidaceae	G	MEPO						
384.	Ophrys sphegodes Mill. subsp. atrata (Lindl.) E.Mayer	Orchidaceae	G	EUME						
385.	Opopanax chironium (L.) W.D.J.Koch	Apiaceae	H	CIME		EN				
386.	Opuntia vulgaris Miller	Cactaceae	Ch	CUAD			INV	neo	Am-C	
387.	Orchis coriophora L.	Orchidaceae	G	SEME						
388.	Orchis morio L. ssp. morio	Orchidaceae	G	EUME						

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389.	Origanum vulgare L.	Lamiaceae	H	EUAS						
390.	Orlaya grandiflora (L.) Hoffm.	Apiaceae	T	SEME						
391.	Ornithogalum gussonei Ten.	Liliaceae	G	SEEU						
392.	Orobanche minor Sm.	Orobanchaceae	T	SEME						
393.	Osyris alba L.	Santalaceae	P	CIME						
394.	Oxalis articulata Savigny	Oxalidaceae	G	CUAD			CAS	neo	Am-S	
395.	Oxalis corniculata L.	Oxalidaceae	T	WISP						
396.	Oxalis dillenii Jacq.	Oxalidaceae	H	CUAD			NAT	neo	Am-N	
397.	Paliurus spina – christi Mill.	Rhamnaceae	T	ILSE						
398.	Papaver rhoeas L.	Papaveraceae	T	CUAD			NAT	arc	M	
399.	Parietaria judaica L.	Urticaceae	H	SEME						
400.	Parietaria officinalis L.	Urticaceae	H	EUAS						
401.	Parthenocissus quinquefolia (L.) Planchon.	Vitaceae	P	CUAD			INV	neo	Am-N	
402.	Paspalum paspalodes (Michx.) Scribn.	Poaceae	G	CUAD			INV	neo	Am-N	
403.	Pastinacia sativa L.	Apiaceae	H	EUAS						
404.	Petrorhagia prolifera (L.) P.w. Ball & Heywood	Caryophyllaceae	T	CIME						
405.	Petrorhagia saxifraga (L.) Link	Caryophyllaceae	H	SEME						
406.	Petteria ramentacea (Sieb) Presl.	Fabaceae	P	ILAE	end	NT				
407.	Peucedanum oreoselinum (L.) Moench	Apiaceae	H	SEME						
408.	Phillyrea latifolia L.	Oleaceae	P	CIME						
409.	Phleum subulatum (Savi) Asch. & Graebn.	Poaceae	T	CIME						
410.	Physalis alkekengi L.	Solanaceae	H	EURO						
411.	Phytolacca americana L.	Phytolaccaceae	G	CUAD			INV	neo	Am-N	
412.	Picnomon acarna (L.) Cass.	Asteraceae	T	CIME						
413.	Picris echioides L.	Asteraceae	T	CIME						
414.	Picris hieracioides L.	Asteraceae	H	EUAS						
415.	Pimpinella peregrina L.	Apiaceae	H	SEME						
416.	Pimpinella saxifraga L.	Apiaceae	H	EUAS						
417.	Pinus halepensis Mill	Pinaceae	P	CUAD			CAS	arc	M	
418.	Piptatherum miliaceum (L.) Coss. ssp. thomasii (Duby) Soják	Poaceae	H	CIME						Ritter-Studnička 1958
419.	Pistacia terebinthus L.	Anacardiaceae	P	CIME						
420.	Pisum sativum L.	Fabaceae	T	CUAD			CAS	arc	Unkn.	
421.	Plantago argentea Chaix.	Plantaginaceae	H	SEME						Vandas 1909
422.	Plantago holosteum Scop.	Plantaginaceae	H	CIME						
423.	Plantago lanceolata L.	Plantaginaceae	H	WISP						Vandas 1909
424.	Plantago major L. ssp. major	Plantaginaceae	H	WISP						
425.	Plantago media L.	Plantaginaceae	H	EUAS						
426.	Platanus acerifolia (Aiton) Willd.	Platanaceae	P	CUAD			NAT	neo	Unkn.	
427.	Plumbago europaea L.	Plumbaginaceae	Ch	CIME						
428.	Poa annua L.	Poaceae	T	WISP						

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429.	Poa bulbosa L.	Poaceae	H	EUAS						
430.	Poa pratensis L.	Poaceae	H	WISP						
431.	Poa trivialis L. ssp. sylvicola (Guss.) H.Lindb.	Poaceae	H	CIME						
432.	Polycarpon tetraphyllum (L.) L.	Caryophyllaceae	T	SEME						
433.	Polygala nicaeensis Risso ex Koch	Polygalaceae	H	CIME						
434.	Polygonum aviculare L.	Polygonaceae	T	WISP						
435.	Polygonum hydropiper L.	Polygonaceae	T	CIHO						
436.	Polygonum lapathifolium L.	Polygonaceae	T	WISP						
437.	Polygonum mite Schrank	Polygonaceae	T	WISP						
438.	Polygonum persicaria L.	Polygonaceae	T	WISP						
439.	Polypodium cambricum L.	Polypodiaceae	G	EAME						Maly 1920
440.	Populus alba L.	Salicaceae	P	EUAS						
441.	Populus nigra L.	Salicaceae	P	WISP						
442.	Portulaca oleracea L.	Portulacaceae	T	CUAD			NAT	arc	M	
443.	Potentilla argentea L.	Rosaceae	H	CIHO						
444.	Potentilla hirta L.	Rosaceae	H	SEME						
445.	Potentilla recta L.	Rosaceae	H	EUAS						
446.	Potentilla reptans L.	Rosaceae	H	WISP						
447.	Prunella vulgaris L.	Lamiaceae	H	WISP						
448.	Prunus avium L.	Rosaceae	P	EUAS						
449.	Prunus cerasifera Ehrh.	Rosaceae	P	CUAD			NAT	arc	M	
450.	Prunus dulcis (Mill.) D.A.Webb	Rosaceae	P	CUAD			NAT	arc	M	
451.	Prunus mahaleb L.	Rosaceae	P	SEPO						
452.	Prunus persica (L.) Batsch	Rosaceae	P	CUAD			CAS	arc	As-E	
453.	Prunus spinosa L.	Rosaceae	P	EUAS						
454.	Prunus webbii (Spach) Vierh.	Rosaceae	P	EAME						Šilić 2006
455.	Pteridium aquilinum (L.) Kuhn	Hypolepidaceae	G	WISP						
456.	Ptilostemon strictus (Ten.) Greuter	Asteraceae	H	ILAP						Vandas 1909
457.	Pueraria thunbergiana Benth	Fabaceae	P	CUAD			INV	neo	As-E	
458.	Pulicaria dysenterica (L.) Gärtn.	Asteraceae	H	SEME						
459.	Punica granatum L	Punicaceae	P	CUAD			NAT	arc	As-W	
460.	Pyrus amygdaliformis Vill.	Rosaceae	P	SEME						
461.	Quercus frainetto Ten.	Fagaceae	P	EUME						Beck 1906
462.	Quercus pubescens Willd.	Fagaceae	P	SEPO						
463.	Ranunculus ficaria L.	Ranunculaceae	G	SEME						
464.	Ranunculus millefoliatus Vahl	Ranunculaceae	H	SEME						
465.	Ranunculus neapolitanus Ten.	Ranunculaceae	H	SEME						
466.	Ranunculus repens L.	Ranunculaceae	H	WISP						
467.	Ranunculus sardous Crantz	Ranunculaceae	T	WISP						
468.	Reichardia picroides (L.) Roth.	Asteraceae	H	CIME						

No. of taxa	Species and subspecies	Family	Life-form	Chorological group	Endemic taxa	Threatened taxa	Alien plants (CUAD)			1st record/author
							Invasion status	Residence time	Origin	
469.	Reseda lutea L.	Resedaceae	H	WISP						
470.	Reseda phyteuma L.	Resedaceae	T	SEME						
471.	Rhagadiolus stellatus (L.) Gaertner	Asteraceae	T	CIME						
472.	Ricinus communis L	Euphorbiaceae	T	CUAD			CAS	arc	Unkn.	
473.	Robinia pseudoacacia L.	Fabaceae	P	CUAD			INV	neo	Am-N	
474.	Romulea bulbocodium (L.) Sebast. et Mauri	Iridaceae	G	CIME		EN				
475.	Rorippa lippizensis (Wulfen) Rchb.	Brassicaceae	H	SEEU						
476.	Rosa canina L.	Rosaceae	P	WISP						
477.	Rosmarinus officinalis L.	Lamiaceae	P	CUAD			CAS	arc	M	
478.	Rubus caesius L.	Rosaceae	P	EUAS						
479.	Rubus heteromorphus Ripart ex Genev.	Rosaceae	P	ILAP						
480.	Rubus ulmifolius Schott.	Rosaceae	P	MEAT						
481.	Rumex conglomeratus Murray	Polygonaceae	H	WISP						
482.	Rumex obtusifolius L. ssp. sylvestris (Wallr.) Čelak.	Polygonaceae	H	EUAS						
483.	Rumex pulcher L.	Polygonaceae	T	SEPO						
484.	Ruscus aculeatus L	Liliaceae	G	CIME		VU				
485.	Salix alba L.	Salicaceae	P	EUAS						
486.	Salvia bertolonii Vis.	Lamiaceae	H	ILAE		NT				
487.	Salvia officinalis L.	Lamiaceae	Ch	EUME						
488.	Salvia sclarea L.	Lamiaceae	T	SEME						
489.	Salvia verbenaca L.	Lamiaceae	H	MEAT						
490.	Salvia verticillata L.	Lamiaceae	H	SEME						
491.	Sambucus nigra L.	Caprifoliaceae	P	EURO						
492.	Sanguisorba minor Scop. ssp. minor	Rosaceae	H	EUAS						
493.	Saponaria officinalis L.	Caryophyllaceae	H	WISP						
494.	Satureja cuneifolia Ten.	Lamiaceae	Ch	ILAP						Šilić 1979
495.	Satureja montana L. ssp. montana	Lamiaceae	Ch	MEPO						Vandas 1909
496.	Saxifraga tridactylites L.	Saxifragaceae	T	WISP						
497.	Scabiosa triandra L.	Dipsacaceae	H	SEME						
498.	Scandix pecten – veneris L.	Apiaceae	T	WISP						
499.	Scilla autumnalis L.	Liliaceae	G	MEPO						
500.	Scilla bifolia L.	Liliaceae	G	SEME						
501.	Scirpus holoschoenus L.	Cyperaceae	G	CIME						
502.	Scolymus hispanicus L.	Asteraceae	T	CIME						
503.	Scorpiurus muricatus L.	Fabaceae	T	CIME						
504.	Scorzonera villosa Scop.	Asteraceae	H	ILSE						
505.	Scrophularia canina L. ssp. bicolor (Sibth. et Sm.) Greuter	Scrophulariaceae	H	SEME						
506.	Scrophularia peregrina L.	Scrophulariaceae	T	CIME						Maly 1920
507.	Securigera cretica (L.) Lassen	Fabaceae	T	EAME						
508.	Securigera securidaca (L.) Deg. et Dörfl.	Fabaceae	T	CIME						

No. of taxa	Species and subspecies	Family	Life-form	Chorological group	Endemic taxa	Threatened taxa	Alien plants (CUAD)			1st record/author
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509.	Sedum acre L.	Crassulaceae	Ch	WISP						
510.	Sedum hispanicum L.	Crassulaceae	T	SEPO						
511.	Sedum ochroleucum Chaix	Crassulaceae	Ch	SEME						
512.	Sedum palmeri S. Wats.	Crassulaceae	Ch							
513.	Sedum telephium L. ssp. maximum (L.) Krock.	Crassulaceae	H	EURO						
514.	Sempervivum tectorum L.	Crassulaceae	Ch	EURO						
515.	Senecio vulgaris L.	Asteraceae	T	WISP						
516.	Serapias vomeracea (Burm.) Briq.	Orchidaceae	G	MEAT						
517.	Seseli montanum L. ssp. tommassinii (Rchb.F.) Arcang.	Apiaceae	H	ILSE						
518.	Sesleria autumnalis (Scop.) F.W.Schultz.	Poaceae	H	ILSE						
519.	Sesleria robusta Schott, Nyman et Kotschy	Poaceae	H	CIME	end					
520.	Setaria pumila (Poir.) Roem. & Schult.	Poaceae	T	WISP						
521.	Setaria verticillata (L.) P. Beauv.	Poaceae	T	WISP						
522.	Setaria viridis (L.) P. Beauv.	Poaceae	T	EUAS						
523.	Sherardia arvensis L	Rubiaceae	T	WISP						
524.	Silene latifolia Poir. ssp. alba (Mill.) Greuter et Bourdet	Caryophyllaceae	H	WEME						
525.	Silene otites (L.) Wibel	Caryophyllaceae	H	SEPO						
526.	Silene vulgaris (Moench) Garcke Garcke ssp. vulgaris	Caryophyllaceae	H	SEME						
527.	Sisymbrium officinale (L.) Scop.	Brassicaceae	T	WISP						
528.	Smilax aspera L.	Smilacaceae	P	CIME						
529.	Smyrnium perfoliatum L.	Apiaceae	H	CIME						
530.	Solanum dulcamara L.	Solanaceae	Ch	WISP						
531.	Solanum lycopersicum L.	Solanaceae	T	CUAD			CAS	neo	Am-S	
532.	Solanum nigrum L. ssp. nigrum	Solanaceae	T	WISP						
533.	Solanum nigrum L. ssp. schultesii (Opiz) Wessely	Solanaceae	T	WISP						
534.	Solanum tubersom L.	Solanaceae	G	CUAD			CAS	neo	Am-S	
535.	Solanum villosum Mill.	Solanaceae	T	SEME						
536.	Sonchus asper (L.) Hill ssp. asper	Asteraceae	H	WISP						
537.	Sonchus asper (L.) Hill ssp. glaucescens (Jord.) Ball	Asteraceae	H	CIME						
538.	Sonchus oleraceus L.	Asteraceae	T	WISP						
539.	Sorbus domestica L.	Rosaceae	P	CIME						
540.	Sorghum halepense (L.) Pers.	Poaceae	H	CUAD			INV	arc	M	
541.	Spiranthes spiralis (L.) Chevall.	Orchidaceae	G	EURO		EN				
542.	Stachys byzantina C.Koch	Lamiaceae	H	CUAD			CAS	neo	As-W	
543.	Stachys cretica L. ssp. salviifolia (Ten.) Rech. f.	Lamiaceae	H	ILAP						
544.	Stellaria media (L.) Vill. ssp. media	Caryophyllaceae	T	WISP						
545.	Stenbergia lutea Ker.	Amaryllidaceae	G	CIME		CR				
546.	Stipa bromoides (L.) Dörlf.	Poaceae	H	CIME						
547.	Symphytum tuberosum L.	Boraginaceae	G	SECO						
548.	Tagetes minuta L.	Asteraceae	T	CUAD			INV	neo	Am-S	Šilić 1973

No. of taxa	Species and subspecies	Family	Life-form	Chorological group	Endemic taxa	Threatened taxa	Alien plants (CUAD)			1st record/author
							Invasion status	Residence time	Origin	
549.	Tagetes patula L.	Asteraceae	T	CUAD			CAS	neo	Am-S	
550.	Tamarix dalmatica Baum	Tamaricaceae	P	ILSE						
551.	Tamus communis L.	Dioscoreaceae	G	SEME						
552.	Tanacetum cinerarifolium (Trev.) Schultz Bip.	Asteraceae	H	ILAE	end	VU				
553.	Taraxacum officinale Webber	Asteraceae	H	WISP						
554.	Teucrium chamaedrys L.	Lamiaceae	Ch	SEPO						
555.	Teucrium polium L.	Lamiaceae	Ch	WEME						
556.	Thesium divaricatum Jan. ex Mert. et Koch	Santalaceae	H	CIME						
557.	Thlaspi perfoliatum L.	Brassicaceae	T	EUAS						
558.	Thymus longicaulis C.Presl	Lamiaceae	Ch	ILAP						
559.	Tordylium apulum L.	Apiaceae	T	CIME						
560.	Tordylium maximum L.	Apiaceae	T	EUME						
561.	Torilis arvensis (Huds.) LK. ssp. neglecta (Schult.) Thell.	Apiaceae	T	SEME						
562.	Tragopogon pratensis L. ssp. orientalis (L.) Čelak.	Asteraceae	H	EUAS						
563.	Tragus racemosus (L.) All.	Poaceae	T	SEME						
564.	Tribulus terrestis L.	Zygophyllaceae	T	SEME						
565.	Trifolium angustifolium L.	Fabaceae	T	CIME						
566.	Trifolium arvense L.	Fabaceae	T	EUAS						
567.	Trifolium campestre Schreb.	Fabaceae	T	WISP						
568.	Trifolium dalmaticum Vis.	Fabaceae	T	ILAE	end					
569.	Trifolium fragiferum L.	Fabaceae	H	EUAS						
570.	Trifolium nigrescens Viv.	Fabaceae	T	CIME						
571.	Trifolium pratense L. ssp. pratense	Fabaceae	H	EUAS						
572.	Trifolium repens L. ssp. repens	Fabaceae	H	WISP						
573.	Trifolium stellatum L.	Fabaceae	T	CIME						
574.	Trigonella esculenta Willd..	Fabaceae	T	EUME						
575.	Ulmus minor Miller	Ulmaceae	P	WISP						
576.	Umbilicus horizontalis (Guss.) DC.	Crassulaceae	Ch	CIME						Beck 1923
577.	Urospermum picroides (L.) Desf.	Asteraceae	T	CIME						
578.	Urtica dioica L.	Urticaceae	H	WISP						
579.	Urtica pilulifera L.	Urticaceae	T	SEME						Beck 1906
580.	Urtica urens L.	Urticaceae	T	WISP						
581.	Valantia muralis L	Rubiaceae	T	CIME						
582.	Valeriana tuberosa L.	Valerianaceae	H	SEME						
583.	Valerianella locusta (L.) Laterr.	Valerianaceae	T	CIME						
584.	Verbascum blattaria L.	Scrophulariaceae	H	SEPO						
585.	Verbascum chaixii Vill. ssp. chaixii	Scrophulariaceae	H	EUAS						
586.	Verbascum densiflorum Bertol.	Scrophulariaceae	H	EUME						
587.	Verbascum lychnitis L.	Scrophulariaceae	H	EURO						
588.	Verbascum orientale (L.) All.	Scrophulariaceae	H	EAME		EN				

No. of taxa	Species and subspecies	Family	Life-form	Chorological group	Endemic taxa	Threatened taxa	Alien plants (CUAD)			1st record/author
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589.	Verbascum phlomoides L.	Scrophulariaceae	H	EUME						
590.	Verbascum pulverulentum Vill.	Scrophulariaceae	H	SEAT						
591.	Verbena officinalis L.	Verbenaceae	T	WISP						
592.	Veronica chamaedrys L	Scrophulariaceae	Ch	EUME						
593.	Veronica cymbalaria Bod.	Scrophulariaceae	T	SEME						Ritter-Studnička 1958
594.	Veronica hederifolia L.	Scrophulariaceae	T	EUAS						
595.	Veronica persica Poir.	Scrophulariaceae	T	CUAD			INV	neo	As-W	
596.	Veronica polita Fr.	Scrophulariaceae	T	EUAS						
597.	Veronica serpyllifolia L.	Scrophulariaceae	H	WISP						Beck et al 1967
598.	Veronica triloba Opiz.	Scrophulariaceae	T	EAME						
599.	Viburnum tinus L.	Caprifoliaceae	P	CIME						
600.	Vicia angustifolia L. ssp. angustifolia	Fabaceae	T	EURO						
601.	Vicia grandiflora Scop.	Fabaceae	T	EEUP						
602.	Vicia hirsuta (L.) Gray.	Fabaceae	T	WISP						
603.	Vicia lutea L.	Fabaceae	T	CIME						
604.	Vicia narbonensis L.	Fabaceae	T	CIME						
605.	Vicia villosa Roth ssp. varia (Host) Corb	Fabaceae	T	EEUP						
606.	Vinca major L.	Apocynaceae	Ch	CUAD			CAS	arc	M	
607.	Viola alba Besser	Violaceae	H	SEME						
608.	Viola kitaibeliana Schultes	Violaceae	T	CIME						
609.	Viola odorata L.	Violaceae	H	EURO						
610.	Viscum album L. ssp. album	Santalaceae	H	EUAS						
611.	Vitex agnus – castus L.	Verbenaceae	P	CIME						Beck & Maly 1950
612.	Vitis vinifera L. ssp sylvestris (Gm.) Hegi	Vitaceae	P	SEME						
613.	Vulpia myuros (L.) C.C.Gmel	Poaceae	T	WISP						
614.	Xantthium spinosum L.	Asteraceae	T	CUAD			INV	neo	Am-S	
615.	Xanthium strumarium L. ssp. italicum (Moretti) D.Löve	Asteraceae	T	CUAD			INV	neo	Am-S	
616.	Zea mays L.	Poaceae	T	CUAD			CAS	neo	Am-S	

The division of the plants into floral elements, according to Horvatić (1963) and Horvatić *et al.* (1976/1968).

1. MEDITERRANEAN FLORAL ELEMENT
1.1. Circum-Mediterranean taxa (**CIME**)
1.2. West-Mediterranean taxa (**WEME**)
1.3. East-Mediterranean taxa (**EAME**)
1.4. Illyrian Mediterranean taxa
1.4.1.Illyrian-South European taxa (**ILSE**)
1.4.2.Illyrian-Adriatic taxa
a) Illyrian-Adriatic endemic taxa (**ILAE**)
b) Illyrian-Apennine taxa (**ILAP**)
1.5. Mediterranean-Atlantic taxa (**MEAT**)
1.6. European Mediterranean taxa (**EUME**)
1.7. Mediterranean-Pontic taxa (**MEPO**)
2. ILLYRIAN-BALKANIC FLORAL ELEMENT
2.1. Illyrian-Balkanic endemic taxa (**ILBE**)
2.2. Balkanic-Apennine taxa (**BAAP**)
3. SOUTH EUROPEAN FLORAL ELEMENT
3.1. South European-Mediterranean taxa (**SEME**)
3.2. South European-Pontic taxa (**SEPO**)
3.3. South European-mountain taxa (**SEMO**)

3.4. South European-continental taxa (**SECO**3.5. South European-Atlantic taxa (**SEAT**)

4. EAST EUROPEAN-PONTIC FLORAL ELEMENT (**EEUP**)
5. SOUTHEAST EUROPEAN FLORAL ELEMENT (**SEEU**)
6. CENTRAL EUROPEAN FLORAL ELEMENT (**CEEU**)
7. EUROPEAN FLORAL ELEMENT (**EURO**)
8. EURASIAN FLORAL ELEMENT (**EUAS**)
9. CIRCUM-HOLARTIC PLANTS (**CIHO**)
10. WIDESPREAD PLANTS (**WISP**)
11. ALIEN PLANTS (**CUAD**)

Categories depending on the degree of naturalization: casual taxa (CAS.), naturalized non-invasive taxa (NAT.) and naturalized invasive taxa (INV.) according to Richardson *et al*. (2000) and Pyšek *et al*. (2004).

- CASUAL (TRANSIENT, EPHEMERAL) PLANTS. Alien plants that may flourish and even reproduce occasionally in an area, but which do not form self-replacing populations, and which rely on repeated introductions for their persistence.
- NATURALIZED PLANTS. Alien plants that reproduce consistently and sustain populations over many life cycles without direct intervention by humans; they often recruit offspring freely, usually close to adult plants, and do not necessarily invade natural, semi-natural or human-made ecosystems.
- INVASIVE PLANTS (PLANT INVADERS). Naturalized plants that produce reproductive offspring, often in very large numbers, at considerable distances from parent plants, and thus have the potential to spread over a large area.

SAŽETAK

U razdoblju između 2010. i 2015. izvršena su floristička istraživanja na području starog grada Počitelja. U rezultatima je navedeno ukupno 616 samoniklih biljnih svojti. Biljke koje rastu isključivo u kulturi nisu analizirane. Porodice s najvećim brojem svojta su Asteraceae *s. l.* (75/12,18%), Poaceae (58/9,42%), Fabaceae (48/7,79%), Lamiaceae (35/5,68%) i Brassicaceae (33/5,36%). U spektru životnih oblika prevladavaju terofiti (227/36,85%) i hemikriptofiti (208/33,77%). Spektar flornih elemenata pokazuje jasnu dominaciju mediteranskih biljkaka (31.33%), dok biljke centralnoeuropskog flornog elementa skoro nedostaju (0,48%). Na Popisu biljnih vrsta za Crvenu knjigu BiH kao i na popisu Crvene liste flore Federacije BiH, nalaze se 32 svojte, dok je zabilježeno ukupno 30 invazivnih vrsta.

Ključne riječi: biodiverzitet, vaskularna flora, Mediteran.