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A CONTRIBUTION TO THE VASCULAR FLORA OF THE ŠIBENIK ARCHIPELAGO ISLANDS (DALMATIA, CROATIA)

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The paper provides a list of 546 vascular plant taxa for which 855 new findings for the islands of the Šibenik archipelago (Kaprije, Krapanj, Murter, Obonjan, Prvić, Zlarin and Žirje) were recorded. Of the total number of new findings, 254 refer to 158 taxa which, in the area researched, grow either in cultivation or demonstrate the ability to subspontaneously spread out of the cultivated area. The previously published records of *Echium vulgare*, *Oxalis deppei* and *Vicia cracca* for the islands of Šibenik archipelago are based on a misidentification and actually refer to *E. plantagineum*, *O. articulata* and *Vicia villosa* ssp. *varia*. Therefore, *E. vulgare*, *O. deppei* and *V. cracca* have to be cancelled from the list of vascular plants occurring on the islands of Šibenik archipelago but *E. plantagineum*, *O. articulata* and *Vicia villosa* ssp. *varia* have to be included.

Key words: new findings of vascular plant taxa, Šibenik archipelago islands, Croatia

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U radu se navodi popis koji sadrži 546 svojti vaskularne flore za koje je zabilježeno ukupno 855 novih nalaza za otoke šibenskog arhipelaga: Kaprije, Krapanj, Murter, Obonjan, Prvić, Zlarin i Žirje. Od ukupnog broja novih nalaza, 254 je zabilježeno za 158 svojti koje na istraživanim otocima dolaze ili isključivo u kulturi ili pokazuju sposobnost subspontanog širenja izvan uzgoja. U popis flore otoka šibenskog arhipelaga treba uključiti svojte *Echium plantagineum*, *Oxalis articulata* i *Vicia villosa* ssp. *varia*, a izdvojiti svojte *E. vulgare*, *O. deppei* i *V. cracca* kojima su bile zamijenjene u nekim prethodno objavljenim radovima, zbog greške u determinaciji.

Ključne riječi: novi nalazi vaskularnih svojti, otoci šibenskog arhipelaga, Hrvatska

INTRODUCTION

The Šibenik archipelago encompasses around 150 islands and islets (RUBIĆ, 1952), located in the southern part of north Dalmatia. Only six islands in the archipelago – namely Kaprije, Krapanj, Murter, Prvić, Zlarin, and Žirje – are populated. The is-

lands of the Šibenik archipelago lie in the Dinaric direction (northwest – southeast) and are made mainly of Upper-Cretaceous (rudist) and paleogenic (Eocene) limestone (IVANOVIĆ, 1959). Characteristic climate for this area is, according to the climate classification by Köpenn, the Mediterranean climate with warm summers – the Csa climate i.e. the climate of olive trees (ŠEGOTA & FILIPČIĆ, 2003). The area of Šibenik archipelago belongs to the Eumediterranean zone characterised by the evergreen forest vegetation of the *Quercion ilicis* alliance, where the most important associations are *Myrto-Quercetum ilicis* and *Fraxino orni-Quercetum ilicis*.

The first veracious data on the flora of the Šibenik archipelago are found in the works dating back to the 19th century (VISIANI, 1826, 1842-1852, 1872). During the 20th century, several appendices on the flora of the Kornati islands were published (BAUMGARTNER, 1916; CUFODONTIS, 1929; PEVALEK, 1930; BEDALOV & GAŽI-BASKOVA, 1969; GAŽI-BASKOVA, 1975, 1983; GAŽI-BASKOVA & BEDALOV, 1976, 1977, 1978, 1983a, 1983b).

The majority of the papers about the flora of the Šibenik archipelago islands were published in the last 15 years. Several authors have published the results of their research into the flora of respective islands (FRANJIĆ & PANDŽA, 1996; MILOVIĆ, 2004a, 2005; PANDŽA & STANČIĆ, 1995, 2004; PANDŽA, 1998a, 1998b, 1998c, 2003; TRINAJSTIĆ, 1996; TRINAJSTIĆ & PAVLETIĆ, 1999; PANDŽA *et al*., 2002a) or individual findings of taxa (FRANJIĆ, 1993; PAVLETIĆ & PANDŽA, 1994; TRINAJSTIĆ *et al*., 1995;

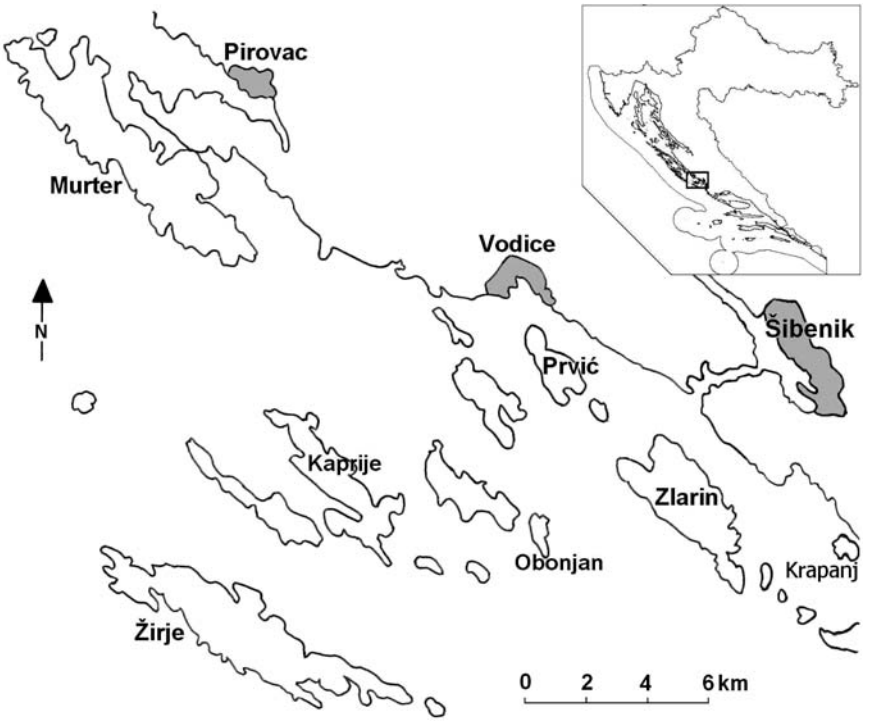

Fig. 1. The researched islands of the Šibenik archipelago

PANDŽA & STANČIĆ, 1999; PANDŽA *et al.*, 2001; MILOVIĆ, 2001, 2004b; MITIĆ, 2002; TRINAJSTIĆ & PANDŽA, 2002; FRANJIĆ *et al.*, 2003). The results of phytocenological research were published in several papers (MATIĆ *et al.*, 2001; TRINAJSTIĆ & KAMENJARIN, 2001; PANDŽA *et al.*, 2002b, 2004, 2005, 2007; PANDŽA, 2004).

Although the islands of the Šibenik archipelago are among floristically well-researched insular areas in the East Adriatic Littoral, the inventarisation of their vascular flora is still not complete. This is evident from the results of this research during which a large number of new findings of vascular plants was recorded for the islands of Kaprije, Krapanj, Murter, Obonjan, Prvić, Zlarin, and Žirje.

METHODS

In the period from 2002 to 2007, additional researches into the vascular flora of the islands Kaprije, Krapanj, Murter, Obonjan, Prvić, Zlarin, and Žirje were conducted (Fig. 1). This research included the autochtonous taxa, the cultivated taxa which have the ability to expand subspontaneously from their cultivated area, as well as taxa which occur only in cultivation.

The new taxa on these islands are mentioned in the list of flora within this paper. The taxa nomenclature has been adjusted according to NIKOLIĆ (2009) and the taxa that were not listed by NIKOLIĆ (2009) have been adjusted according to GRIN Taxonomy for Plants (2009) and marked by an asterisk (*), placed after the name of the taxa.

The abbreviations for the islands on which the taxa were found are placed after the name of the taxa; for the islands of Murter, Zlarin and Žirje a more precise location is provided.

Ka – the island of Kaprije
Kr – the island of Krapanj
M – the island of Murter (1 – Jezera; 2 – Tisno; 3 – Betina; 4 – Murter)
O – the island of Obonjan
P – the island of Prvić
Z – the island of Zlarin (1 – Zlarin settlement; 2 – Klepac hill; 3 – Pržnica hill; 4 – Zlarin field; 5 – Lokvica bay and cape Malpaga)
Ž – the island of Žirje (1 – Muna bay; 2 – Žirje settlement; 3 – Žirje field; 4 – Straža hill; 5 – Mikavica bay)

The taxa that, on the islands researched, appear only in cultivation are marked by the symbol ● after the name of the taxa, and the cultivated taxa that possess the ability to spread outside the cultivated area are marked by the symbol ▲.

RESULTS AND DISCUSSION

By analysing the papers published prior to this research, we have determined the total number of plant taxa which were recorded for the seven islands of the Šibenik archipelago (Tab. 1). While analysing the published data, the nomenclature of previously recorded taxa has been adjusted according to NIKOLIĆ (2009).

Previously recorded plants, *Silene vulgaris* (Moench) Garcke ssp. *reiseri* (K. Maly) Trinajstić (PANDŽA, 1998a, 1998c) and *Olea sylvestris* Mill. (PANDŽA, 1998b, 1998c, 2003), according to NIKOLIĆ (2009) do not have the status of independent taxa, but are included within the taxa of *Silene vulgaris* (Moench) Garcke ssp. *angustifolia* Hayek i.e. within the taxa of *Olea europaea* L.

For some plant species, the authors of several previously published works list some varietas, forms or cultivars: *Brassica oleracea* L. conv. *botrys* L. and *B. oleracea* L. conv. *capitata* L., *Briza maxima* L. f. *maxima* and *B. maxima* L. f. *rubra*, *Plantago lanceolata* L. var. *lanceolata* and *P. lanceolata* var. *lanuginosa* M. et K., *Cupressus sempervirens* L. f. *horizontalis* (Miller) Voss and *C. sempervirens* L. f. *sempervirens* Miller (FRANJIĆ & PANDŽA, 1996; PANDŽA, 1998) and so on. In NIKOLIĆ (2009) categories lower than subspecies are not represented, therefore in the analysis of the flora these taxa (varietas, forms and cultivars) are not counted separately but are included in the related species or subspecies.

Thus the total number of taxa of the flora of the islands researched (Tab. 1) differs slightly from the data published in previous literature.

According to the total number of previously recorded taxa we can conclude that the flora of the islands of Murter (742 taxa), Žirje (526), and Zlarin (443) was well researched, whereas the flora of the islands of Kaprije (343) and Prvić (270) was, until now, only partially researched.

Thus the aim of this research was primarily focused on the flora of the islands Kaprije and Prvić. Also, special attention was given to the inventarisation of cultivated plants on all the islands researched, because this component of flora has been neglected in previous papers.

Tab. 1. The number of vascular flora taxa of the islands researched according to data from the literature (after the accordance of the nomenclature to NIKOLIĆ, 2009)

Island	Surface (km^2); (Duplančić Leder et al., 2004)	No. of inhabitants in 2001 (Feldbauer, 2004)	No. of taxa (out of that in culture and subspont.)	Literature
MURTER	17,58	5060	742 (155)	Pandža, 1998a,2002, 2004; Pandža et al., 2001, 2004, 2005, 2007; Milović, 2001, 2004b
ŽIRJE	15,08	124	526 (73)	Pandža, 2003; Milović, 2004b; Pandža et al., 2005;
ZLARIN	8,05	276	443 (91)	Pandža, 1998b; Trinajstić & Pavletić, 1999; Milović, 2004b; Pandža et al., 2005
KRAPANJ	0,36	237	429 (42)	Pandža, 1998c; Milović, 2005; Pandža et. al., 2007
KAPRIJE	7,12	143	343 (76)	Franjić & Pandža, 1996
PRVIĆ	2,41	453	270 (16)	Pandža, 1998c; Milović, 2004b
OBONJAN	0,55	–	230 (9)	Milović, 2004a

During this research, with detailed field work and with redetermination of plants, some inaccurate entries of previously recorded species for the islands of the Šibenik archipelago have been noticed.

The findings of an allochthonous plant recorded previously under the name *Oxalis deppei* Loddiges ex Sweet, for Šibenik (MILOVIĆ, 2002) and some islands near Šibenik (FRANJIĆ & PANDŽA, 1996; PANDŽA, 1998a, 1998b, 1998c; MILOVIĆ, 2004a) refer to the species *O. articulata* Savigny. The species *O. articulata* is widely represented in the cultivation and as a naturalised plant outside of cultivation throughout the Šibenik area, including the inhabited islands of the Šibenik archipelago.

The species *E. plantagineum* and *Vicia villosa* ssp. *varia* were not, until now, noted in the lists of the flora of the islands of Murter, Krapanj, Prvić, and Zlarin because they were mistaken for the very similar species *Echium vulgare* and *Vicia cracca* (PANDŽA, 1998a, 1998b, 1998c) which were entered in the above mentioned lists. The field research and the redetermination of the material from the herbarium have confirmed that the taxa *E. plantagineum* and *Vicia villosa* ssp. *varia* are highly outspread on the islands researched, while the species *Echium vulgare* and *Vicia cracca* do not occur at all and should be cancelled from the flora list of these islands.

In this investigation, ten taxa which have been previously recorded at a species level were, after redetermination, qualified to the corresponding subspecies (Tab. 2).

Tab. 2. The previously registered taxa at a species level whose belonging to the adequate subspecies was determined

Taxa at a species level	Literature	Determined subspecies
A. vulneraria L. (as *A. rubicunda* Wender)	Franjić & Pandža, 1996; Pandža, 1998a, 1998b, 1998c	*A. vulneraria* L. ssp. *rubiflora* (DC.) Arcang
Ballota nigra L.	Pandža, 1998b	*Ballota nigra* L. ssp. *foetida* Hayek
Centaurea spinosociliata Seenus	Pandža, 2003	*C. spinosociliata* Seenus ssp. *cristata* (Bertol.) Dostal
Erigeron annuus (L.) Pers.	Pandža, 1998a	*E. annuus* (L.) Pers. ssp. *septentrionalis* (Fernald et Wiegand) Wagenitz
Erophila verna (L.) Chevall.	Pandža, 1998b	*Erophila verna* (L.) Chevall. ssp. *praecox* (Steven) Walters
Hypericum perforatum L.	Milović, 2004a	*H. perforatum* L. ssp. *veronense* (Schrank) H. Lindb.
Lepidium graminifolium L.	Franjić & Pandža, 1996; Pandža, 1998a, 1998b, 1998c	*Lepidium graminifolium* L. ssp. *suffruticosum* (L.) P.Monts.
Ophrys sphegodes Mill.	Milović, 2004a	*O. sphegodes* Mill. ssp. *atrata* (Lindl.) E.Mayer
Orchis tridentata Scop.	Pandža, 1998a, 1998b, 1998c, 2003	*O. tridentata* Scop. ssp. *commutata* (Tod.) Nyman
Sanguisorba minor Scop.	Franjić & Pandža, 1996; Pandža, 1998a, 1998b, 1998c	*S. minor* Scop. ssp. *muricata* Briq.
Satureja montana L.	Franjić & Pandža, 1996; Pandža, 1998a,1998b, 1998c	*S. montana* L. ssp. *variegata* (Host) P. W. Ball

THE LIST OF THE NEW TAXA FINDINGS FOR THE ISLANDS OF THE ŠIBENIK ARCHIPELAGO

PTERIDOPHYTA

Adiantaceae

Cheilanthes persica (Bory) Mett. ex Kuhn; **Z**(3)

Aspleniaceae

Asplenium ruta-muraria L.; **Ka**; **P**

MAGNOLIOPHYTA

CONIFEROPHYTINA

Cupressaceae

● *Cupressus arizonica* Greene*; **M**(4)

Juniperus phoenicea L.; **Z**(2,5)

Pinaceae

▲*P. pinea* L.; **Kr**

CYCADOPHYTINA

Ephedraceae

Ephedra fragilis Desf. ssp. *campylopoda* (C. A. Meyer) Asch. et Graeb.; **Ka**

Cycadaceae

● *Cycas revoluta* Thunb.*; **M**(4)

MAGNOLIOPHYTINA

MAGNOLIOPSIDA

Acanthaceae

● *Acanthus mollis* L.; **M**(4)

Aceraceae

▲ *Acer negundo* L.; **Z**(1)

Aizoaceae

● *Aptenia cordifolia* (L. f.) Schwantes*; **Ka**; **P**

▲ *Mesembryanthemum crystallinum* L.; **P**

Amaranthaceae

▲ *Amaranthus caudatus* L.; **P**

A. cruentus (Lesp. et Thev.) N. Terracc; **P**; **Z**(1)

A. deflexus L.; **P**

A. graecizans L.; **P**

A. powellii S. Watson; **P; Ž**(1)

● *Gomphrena globosa* L.; **M**(1,4)

Anacardiaceae

Pistacia terebinthus L.; **O**

● *Rhus typhina* L.; **M**(4)

Apiaceae

● *Apium graveolens* L.; **P**

Bifora testiculata (L.) Roth; **Ka**

Bupleurum veronense Turra; **P**

Orlaya grandiflora (L.) Hoffm.; **Ka**; **M**(4); **Z**(1,2,4)

● *Petroselinum crispum* (Mill.) A. W. Hill; **Kr**; **P**

Scandix pecten-veneris L.; **Ka**

Seseli montanum L. ssp. *tommasinii* (Rchb.) Arcang.; **Ž**(4)

S. tomentosum Vis.; **O**; **Ž**(4)

Tordylium apulum L.; **Ka**

T. officinale L.; **Ka**; **M**(1,4); **Z**(1,2,4,5)

Torylis arvensis (Huds.) Link ssp. *purpurea* (Ten.) Hayek; **Z**(2); **Ž**(3)

T. nodosa (L.) Gaertn.; **Z**(1)

Apocynaceae

▲ *Nerium oleander* L.; **P**

Araliaceae

● *Hedera canariensis* Willd.*; **M**(1,2,3,4); **P**

H. helix L.; **Ka**

Aristolochiaceae

Aristolochia clematitis L.; **P**

Aslepiadaceae

● *Aslepias syriaca* L.; **M**(4)

Asteraceae

Achillea setacea Waldst. et Kit.; **Z**(1)

Ambrosia artemisiifolia L.; **Z**(1)

*Anthemis arven*sis L.; **Ka**

A. segetalis Ten.; **P**

▲ *Artemisia absinthium* L.; **Ka**; **P**

● *Balsamita major* Desf.; **Ka**; **P**

Bidens subalternans DC.; **O**

Bombycilaena erecta (L.) Smoljan.; **Ka**; **Z**(1)

▲ *Calendula officinalis* L.; **P**

Carduus micropterus (Borbas) Teyber; **Z**(1,2)

Carlina corymbosa L.; **Ka**

Carthamus lanatus L.; **Ka**; **P**

Centaurea spinosociliata Seenus ssp. *cristata* (Bertol.) Dostal; **P**; **Z**(1,2,4)

▲ *Chrysanthemum coronarium* L.; **Ka**; **P**

Cirsium arvense (L.) Scop.; **P**

C. vulgare (Savi) Ten.; **P**

● *Cosmos bipinnatus* Cav.; **M**(3,4); **P**; **Ž**(2)

● *Cynara scolymus* L.; **P**

Dittrichia graveolens (L.) Greuter.; **P**

Erigeron annuus (L.) Pers. ssp. *septentrionalis* (Fernald et Wiegand) Wagenitz; **Z**(1,4)

Filago pyramidata L.; **M**(1,2,3,4); **P**; **Z**(1,4)
F. vulgaris Lam.; **P**
● *Gazania rigens* (L.) Gaertn.*; **Ka**; **Kr**
● *Helianthus annuus* L.; **Z**(1)
▲ *H. tuberosus* L.; **P**
Inula spiraeifolia L.; **P**
● *Leuchanthemum vulgare* Lam.; **M**(4)
Matricaria perforata Mérat (=*Tripleurospermum inodorum* Sch. Bip.); **Ka**
● *Osteospermum jucundum* (E. Phillips) Norl.*; **Ka**; **Kr**; **P**; **Ž**(1)
Picnomon acarna (L.) Cass.; **P**
Pseudognaphalium luteoalbum (L.) Hillard et B. L. Burtt; **M**(3)
● *Santolina chamaecyparissus* L.; **P**
● *Senecio angulatus* L.f.*; **Ka**; **M**(1,4)
▲ *S. bicolor* (Willd.) Tod. ssp. *cineraria* (DC.) Chater; **Ka**
▲ *Tagetes patula* L.; **Ka**; **M**(1,2,4); **P**; **Z**(1)
▲ *Tanacetum parthenium* (L.) Sch. Bip.; **Ka**; **P**; **Z**(1); **Ž**(2)
● *T. vulgare* L.; **Ka**; **Kr**
Tyrimnus leucographus (L.) Cass.; **P**

Bignoniaceae

▲ *Campsis radicans* (L.) Seen. (=*Tecoma radicans* (L.) Moench); **Ka**; **Kr**; **P**
● *Catalpa bignonioides* Walter; **M**(4)

Boraginaceae

Anchusa cretica Mill.; **M**(3)
Cynoglossum columnae Ten.; **M**(3,4); **Z**(1,2,4)
Echium parviflorum Moench; **Ka**
E. plantagineum L.; **Ka** (also occurs on other islands of the Šibenik archipelago but was mistaken for *E. vulgare* by PANDŽA, 1998a, 1998b, 1998c)
Lithospermum incrassatum Guss.; **M**(3)
L. purpurocaeruleum L.; **M**(3)

Brassicaceae

Aethionema saxatile (L.) R. Br.; **P**
Alyssum alyssoides (L.) L.; **Ka**; **P**; **Z**(4); **Ž**(1,2,3)
Arabidopsis thaliana (L.) Heynh.; **M**(4)
Arabis hirsuta (L.) Scop.; **Ka**
● *Brassica oleracea* L.; **Kr**; **P**
Bunias erucago L.; **Z**(4)
Cardamine hirsuta L.; **P**
Cardaria draba (L.) Desv.; **Z**(1)
Clypeola jonthlaspi L.; **Ka**; **M**(1), **Z**(3)
Diplotaxis erucoides (L.) DC.; **P**; **Ž**(1)
Erophila verna (L.) Chevall. ssp. *praecox* (Steven) Walters; **M**(1,3,4); **P**
Hornungia petraea (L.) Rchb.; **Kr**; **Ž**(4)
▲ *Lobularia maritima* (L.) Desv.; **Ka**; **M**(1,2,3,4); **P**
● *Matthiola longipetala* (Vent.) DC. subsp. *bicornis* (Sm.) P. W. Ball*; **Kr**

● *Raphanus sativus* L.; **P**
*Sinapis arven*sis L.; **P**
Sisymbrium officinale (L.) Scop.; **Ka**
S. orientale L.; **P**

Buddlejaceae

● *Buddleja davidii* Franch.; **M**(4)

Buxaceae

● *Buxus sempervirens* L.; **Kr**; **P**

Cactaceae

Opuntia vulgaris Mill.; **M**(3,4); **P**

Campanulaceae

Campanula erinus L.; **M**(3,4)
Legousia hybrida (L.) Delarbre; **Z**(1,4)

Cannaceae

● *Canna indica* L.; **Kr**; **P**

Capparaceae

▲ *Capparis spinosa* L.; **Kr**; **M**(4); **P**

Caprifoliaceae

Lonicera implexa Aiton; **Kr**
● *Viburnum opulus* L.; **M**(2)
V. tinus L.; **Kr**

Caryophyllaceae

Arenaria leptoclados (Reichenb.) Guss.; **P**; **Z**(1)
A. serpyllifolia L.; **Ka**; **M**(3,4); **Z**(1,3)
Cerastium glomeratum Thuill.; **Ka**; **Ž**(3)
C. pumilum Curtis ssp. *glutinosum* (Fries) Jalas; **Ka**; **P**; **Z**(1,2,3,4,5); **Ž**(3)
● *C. tomentosum* L.; **Ka**; **M**(1,4); **P**; **Z**(1)
● *Dianthus caryophyllus* L.; **M**(2,4)
Herniaria glabra L.; **Ka**
H. hirsuta L.; **P**; **Z**(1)
H. incana Lam.; **Ka**; **P**; **Z**(1,2,3,4,5)
Minuartia hybrida Vill. Scischkin; **P**
M. mediterranea (Link.) K. Maly; **Ka**; **Z**(1)
Myosoton aquaticum (L.) Moench; **M**(4); **P**
Petrorhagia prolifera (L.) P. W. Ball et Heywood; **P**
P. saxifraga (L.) Link; **P**
Polycarpon tetraphyllum (L.) L.; **P**
Sagina maritima G. Don; **Z**(1,5)
▲ *Saponaria officinalis* L.; **P**
Silene gallica L.; **Ka**; **M**(3); **P**; **Z**(1)
S. latifolia Poir. (= *Melandrium divaricatum* (Rchb.) Fenzl); **Ka**
Stellaria media (L.) Vill.; **Ka**; **P**

Celastraceae

● *Euonymus japonica* L. f.; **Kr**; **P**

Chenopodiaceae

Arthrocnemum fruticosum (L.) Moq. (= *Salicornia fruticosa* (L.) L.); **P**

● *Atriplex halimus* L.; **M**(3)

A. littorallis L.; **M**(1,3); **P**; **Z**(1)

A. patula L.; **P**

▲ *Bassia scoparia* (L.) A. J Schott (= *Kochia scoparia* (L.) Schrad.); **Ka**; **P**

● *Beta vulgaris* L. ssp. *vulgaris*; **Kr**; **P**

Chenopodium murale L.; **Ka**

Ch. vulvaria L.; **P**

Polycnemum majus A. Braun; **P**

Salsola kali L.; **P**

Suaeda maritima (L.) Dumort.; **P**

Cichoriaceae

Aetheorrhiza bulbosa (L.) Cass.; **Z**(1,4)

Cichorium endivia L.; **P**

Crepis dioscoridis L.; **Ka**; **P**

C. foetida L. ssp. *foetida*; **Ka**; **M**(3,4); **P**

C. neglecta L.; **Ka**; **Kr**

C. pulchra L.; **Ka**; **M**(3,4)

C. sancta (L.) Babc.; **Ka**

C. setosa Haller f.; **M**(4); **Z**(4)

C. vesicaria L. ssp. *vesicaria*; **Kr**

C. zacintha (L.) Babc.; **M**(4)

Hedypnois cretica (L.) Dum.Cours.; **Ka**; **P**; **Z**(1,4)

Hieracium heterogynum (Froel.) Gutermann (=*H. stupposum* Rchb.); **Ka**; **P**; **Z**(2,3,5)

H. piloselloides Vill. (= *H. florentinum* All.); **Z**(4,5)

H. praealtum Vill. ex Gochnat ssp. *bauhinii* (Besser) Petunn.; **P**

Hyoseris scabra L.; **M**(3,4)

Hypochoeris cretensis (L.) Bory et Chaub.; **P**; **Z**(1,4)

H. radicata L.; **Ka**; **P; Ž**(3)

▲ *Lactuca sativa* L.; **P**

L. viminea (L.) J. et C. Presl; **P**

Leontodon crispus Vill.; **Ka**

Picris echioides L. (= *Helminthia echioides* (L.) Gaertn.); **O**

Rhagadiolus stellatus (L.) Gaertn.; **Ka**; **P**

Scorzonera villosa Scop.; **Ka**; **Z**(2,4,5)

Sonchus asper (L.) Hill ssp. *glaucescens* (Jord.) Ball; **Ka**; **Kr**; **P**

S. tenerrimus L.; **Ka**; **M**(1,2,3,4); **P**; **Ž**(2)

Taraxacum laevigatum (Willd.) DC- aggr.*; **Ka**; **P**; **Z**(1,2,3,4); **Ž**(1,4)

T. megalorrhizon (Forssk.) Hand.-Mazz.; **Ka**; **P**; **Ž**(1,2)

T. officinale Weber; **Ka**; **P**; **Z**(1,2,4,5)

Tragopogon dubius Scop.; **M**(4); **P**

Urospermum delechampii (L.) Scop. ex F. W. Schmidt; **Ka**

Cistaceae

Cistus incanus L. ssp. *creticus* (L.) Heywood; **M**(1); **O**; **Ž**(2)
C. salviifolius L.; **P**
Fumana procumbens (Dunal) Gren. et Godr.; **Z**(2,3)
F. thymifolia (L.) Spach ex Webb; **Z**(5)

Convolvulaceae

Convolvulus cantabrica L.; **P**
▲ *Dichondra micrantha* Urb.*; **M**(4)
▲ *Ipomoea purpurea* Roth; **M**(2,4); **P**; **Z**(1); **P**

Cornaceae

Cornus sanguinea L.; **M**(4)

Corylaceae

Carpinus orientalis Mill.; **P**

Crassulaceae

Sedum acre L.; **Ka**; **M**(1,2,3,4); **P**; **Z**(1)
S. album L.; **Z**(1)
S. rubens L.; **Ka**
S. sexangulare L.; **P**
▲ *S. telephium* L. ssp. *maximum* (L.) Krock.; **M**(1,4)
▲ *Sempervivum tectorum* L.; **Kr**; **P**

Cucurbitaceae

● *Cucumis sativus* L.; **Kr**; **Ž**(2)

Cuscutaceae

Cuscuta campestris Yunker; **M**(3,4); **Z**(4)
C. europaea L.; **P**

Dipsacaceae

Knautia arvensis (L.) Coult.; **M**(4)
Lomelosia brachiata (Sm.) Greuter et Burdet (= *Tremastelma palaestinum* (L.) Janch.); **P**
Sixalis artropurpurea (Forssk.) Greuter et Burdet ssp. *maritima* (L.) Greuter et Burdet (=*Scabiosa maritima* L.); **M**(4); **P**; **Z**(4)

Ericaceae

Arbutus unedo L.; **Z**(2,3)

Euphorbiaceae

Andrachne telephioides L.; **Z**(1,5)
Euphorbia characias L. ssp. *wulfenii* (Hoppe ex Koch) A. M. Sm.; **P**
E. exigua L.; **Z**(1,4)
E. falcata L.; **P**
E. fragifera Jan.; **O**
● *E. marginata* Pursch; **P**
E. peplus L.; **Ka**
E. pinea L.; **Ka**; **M**(1,3,4); **P**
E. prostrata Aiton; **P**; **Z**(1)
▲ *Ricinus communis* L.; **Z**(1)

Fabaceae

▲ *Albizia julibrissin* Durazz.; **M**(4)
Argyrolobium zannonii (Turra) P. W. Ball; **Z**(1,2,3,5); **Ž**(1,4)
Astragalus hamosus L.; **Ka**
A. monspessulanus L. ssp. *illyricus* (Bernhardt) Chater; **Ka**
A. muelleri Steud. et Hochst.; **M**(1)
A. sesameus L.; **Z**(1,3,4)
● *Ceratonia siliqua* L.; **Ka**
▲ *Cercis siliquastrum* L.; **P**
▲ *Cicer arietinum* L.; **P**; **Ž**(2,3)
Colutea arborescens L.; **Ka**
Coronilla valentina L.; **M**(1)
Dorycnium herbaceum (Vill.) Rouy; **Z**(4)
Genista sylvestris Scop. ssp. *dalmatica* (Bartl.) H. Lindb.; **Ž**(5)
Hippocrepis bifora Spreng. (=*H. unisiliquosa* L.); **Ka**
H. ciliata Willd.; **Z**(5)
Hymenocarpos circinnatus (L.) Savi; **Z**(4)
Lathyrus aphaca L.; **Ka**; **Z**(1,4)
L. cicera L.; **Ka**
L. saxatilis (Vent.) Vis.; **P**
L. setifolius L.; **Ka**; **Ž**(3)
L. sphaericus Retz.; **Z**(4)
Lens nigricans (M. Bieb.) Godr.; **Z**(2,4,5)
Lotus corniculatus L.; **Z**(1,2)
Medicago coronata (L.) Bartal.; **Ka**; **M**(3,4); **Z**(3)
M. disciformis DC.; **Ka**; **M**(1,3,4); **P**
M. falcata L.; **P**; **Z**(4)
M. lupulina L.; **Ka**
M. polymorpha L.; **Ka**; **M**(1,3,4); **P**
M. rigidula (L.) All.; **Ka**; **M**(1,2,3,4); **P**; **Ž**(2,3)
M. sativa L.; **P**; **Z**(1,4)
M. truncatula Gaertn. (=*M. tribuloides*); **M**(4); **Z**(1)
Melilotus albus Medik.; **Z**(1)
M. indica (L.) All.; **Ka**
M. italicus (L.) Lam.; **P**
M. neapolitanus Ten.; **P**
M. officinalis L.; **P**; **Z**(1)
M. sulcatus Desf.; **P**; **Z**(3)
Onobrychis caput-galli (L.) Lam.; **Z**(1,4,5)
Ononis pusilla L.; **P**
O. reclinata L.; **M**(3,4); **P**
● *Phaseolus vulgaris* L.; **Kr**
Pisum sativum L. ssp. *elatius* (M. Bieb.) Asch. et Graebn.; **Ka**; **M**(4); **P**; **Z**(1,4,5)
● *P. sativum* L. ssp. *sativum*; **Kr**

● *Poinciana gilliesii* Hook.; **P**
▲ *Robinia pseudoacacia* L.; **P**
Securigera securidaca (L.) Degen et Dorfl.; **Ka**
● *Sophora japonica* L.; **P**
Trifolium arvense L.; **Z**(1,4)
T. cherleri L.; **M**(3)
T. echinatum M. Bieb.; **Kr**
T. lappaceum L.; **Ka**; **M**(3,4); **P**; **Z**(2,3,5)
T. repens L. ssp. *prostratum* Nyman; **M**(4); **Z**(1); **Ž**(1)
T. subterraneum L.; **Ka**
T. suffocatum L.; **Z**(4)
T. tomentosum L.; **P**; **Z**(4)
Trigonela gladiata M. Bieb.; **M**(1)
T. monspeliaca L.; **Ka**
Vicia angustifolia L. ssp. *angustifolia*; **Ka**; **Z**(2,4,5)
V. benghalensis L.; **M**(4)
● *V. faba* L.; **P**
V. hybrida L.; **Ka**; **Z**(1,4,5)
V. lutea L.; **P**
V. tenuissima (M. Bieb.) Schinz et Thell. (=*V. gracilis* Loisel.); **M**(1,3,4)
V. tetrasperma (L.) Schreber; **Z**(2)
V. villosa Roth ssp. *varia* (Host) Corb.; **P** (also occurs on other islands of the Šibenik archipelago but was mistaken for *Vicia cracca* by PANDŽA, 1998a, 1998b, 1998c)

Fagaceae

Quercus pubescens Willd.; **M**(1,4); **Z**(2,3)

Fumariaceae

Corydalis acaulis (Wulfen) Pers.; **M**(1,2)
Fumaria capreolata L.; **Ka**; **Ž**(1,2)
F. flabellata Gaspar.; **Ka**
F. officinalis L.; **Ka**
F. parviflora Lam.; **Ka**
F. petteri Reichenb. ssp. *thuretti* (Boiss.) Pugsley; **Ka**; **Z**(1)

Garryaceae

● *Aucuba japonica* Thunb.*; **P**

Gentianaceae

Blackstonia perfoliata (L.) Huds. ssp. *perfoliata*; **P**
Centaurium erythraea Rafn; **P**
C. spicatum (L.) Fritsch; **P**

Geraniaceae

Geranium columbinum L.; **Ka**; **Kr**; **P**
G. lucidum L.; **M**(3,4)
G. molle L. ssp. *brutium* (Gasparr.) Graebn.; **M**(1,2,3,4); **P**; **Z**(1)
G. molle L. ssp. *molle*; **M**(4)
G. pusillum Burm. f.; **P**

G. tuberosum L.; **Ž**(3)
● *Pelargonium radens* H. E. Moore*; **Kr**; **P**
● *P. zonale* (L.) Aiton; **P**; **Ž**(1,2)

Grossulariaceae

● *Ribes rubrum* L.; **M**(4)

Hippocastanaceae

● *Aesculus hippocastanum* L.; **M**(4); **P**

Hydrangeaceae

● *Hydrangea macrophylla* (Thunb.) Ser. (=*H. hortensis* Sm.); **P**
● *Philadelphus coronarius* L.; **Z**(1)

Juglandaceae

▲ *Juglans regia* L.; **P**

Lamiaceae

Ballota nigra L. ssp. *uncinata* (Fiori et Beg.) Patzak; **Z**(1)
Galeopsis angustifolia Hoffm.; **P**
Lamium purpureum L.; **M**(4); **Ž**(1,2,3)
● *Lavandula angustifolia* Mill.; **P**
● *L. dentata* L.*; **Kr**; **P**
Marrubium vulgare L.; **Z**(1)
▲ *Mentha spicata* L.; **Z**(1)
Origanum heracleoticum L.; **Ka**
● *O. majorana* L. (= *Majorana hortensis* Moench); **Ka**; **P**
● *Rosmarinus officinalis* L.; **P**
Salvia officinalis L.; **Ka**
S. pratensis L.; **Ž**(1)
S. viridis L.; **Z**(1)
Satureja montana L. ssp. *variegata* (Host) P. W. Ball; **P**; **Z**(2,3,5)
Stachys cretica L. ssp. *salviifolia* (Ten.) Rech. f.; **Ka**
Teucrium chamaedrys L.; **Kr**
T. flavum L.; **Z**(2,3)
● *T. fruticans* L.; **M**(1,2,4); **P**

Lardizabalaceae

● *Akebia trifoliata* (Thunb.) Koidz.*; **P**

Linaceae

Linum nodiflorum L.; **Z**(1,4,5)
L. strictum L. ssp. *corymbulosum* (Rchb.) Riony; **M**(1,2,3,4); **P**; **Z**(1,4)
L. tenuifolium L.; **P**

Loranthaceae

Arceuthobium oxycedri (DC.) Bieb.; **M**(1)

Magnoliaceae

● *Magnolia* ×*soulangeana* Soul.-Bod.*; **M**(4)

Malvaceae

Abutilon teophrasti Medik.; **M**(3)

▲ *Alcea rosea* L.; **Ž**(2)
Althaea cannabina L.; **P**
A. hirsuta L.; **Z**(4)
● *Hibiscus syriacus* L.; **P**; **Ž**(2)
Malva nicaensis All.; **Ka**; **P**; **Z**(1)
M. parviflora L.; **Ka**
M. sylvestris L.; **Ka**

Meliaceae

▲ *Melia azedarach* L.; **Kr**; **Z**(1)

Moraceae

Broussonetia papyrifera (L.) Vent.; **P**
▲ *Morus alba* L.; **Ka**; **P**; **Ž**(2)
● *M. nigra* L.; **Ž**(2)

Myrtaceae

● *Acca sellowiana* (O. Berg) Burret* (=*Feijoa sellowiana* (O. Berg) O. Berg); **P**
● *Callistemon citrinus* (Curtis) Skeels; **Kr**; **P**

Nyctaginaceae

● *Bougainvillea spectabilis* Willd.; **P**
▲ *Mirabilis jalapa* L.; **P**

Oleaceae

● *Jasminum azoricum* L.*; **M**(4); **P**
● *J. nudiflorum* Lindl.; **M**(4)
▲ *Ligustrum vulgare* L.; **Z**(1)
● *Syringa vulgaris* L.; **P**

Onagraceae

Epilobium hirsutum L.; **M**(3)
E. tetragonum L.; **Ž**(3)
● *Oenothera biennis* L.; **M**(1)

Orobanchaceae

Orobanche minor L.; **Ka**; **M**(1,3,4)
●. ramosa L.; **M**(4)

Oxalidaceae

● *Oxalis articulata* Savigny*; **Ka**; **Kr**; **M**(1,2,3,4); **O**; **P**; **Z**(1,4,5); **Ž**(3); (mistaken for *O. deppei* by FRANJIĆ & PANDŽA, 1996; PANDŽA, 1998a, 1998b, 1998c and MILOVIĆ, 2004a)
O. corniculata L.; **P**

Papaveraceae

Papaver strigosum (Boenn.) Schur; **Kr**; **P**

Passifloraceae

● *Passiflora caerulea* L.; **Ka**; **Kr**; **P**

Pittosporaceae

● *Pittosporum tobira* (Thunb.) Aiton, f.; **Ka**; **Kr**; **P**

Plantaginaceae

Plantago altissima L.; **Ka**; **Z**(1)
P. coronopus L. ssp. *commutata* (Guss.) Pilg.; **Ka**
P. coronopus L. ssp. *weldenii* (Rchb.) Arcang. (=*P. coronopus* L. ssp. *coronopus*); **P**; **Ž**(1)
P. major L. ssp. *intermedia* (Gilib.) Lange; **P**

Polygalaceae

● *Polygala myrtifolia* L.*; **M**(4)

Polygonaceae

▲ *Fallopia baldschuanica* (Regel) Holub; **P**
F. convolvulus (L.) Á.Löve; **Z**(1)
Polygonum arenastrum Boreau; **Ka**; **M**(3,4)
Rumex conglomeratus Murray; **P**

Portulacaceae

● *Portulaca grandiflora* Hooker; **M**(1,4)

Primulaceae

Cyclamen repandum Sibth. et Sm.; **Z**(2,3)

Ranunculaceae

Delphinium peregrinum L.; **P**; **Z**(1,4)
D. staphisagria L.; **Kr**
Ranunculus ficaria L. ssp. *calthifolius* (Rchb.) Arcang.; **Ka; Ž**(3,4)

Resedaceae

Reseda lutea L.; **Ka**; **Ž**(4)
R. phyteuma L.; **Kr**

Rhamnaceae

Rhamnus alaternus L.; **P**
Rh. intermedius Steud. et Hochst.; **P**; **Ž**(4)
● *Ziziphus jujuba* Mill.; **Ka**; **Kr**

Rosaceae

Aphanes arvensis L.; **M**(2)
● *Chaenomeles japonica* (Thunb.) Lindl. ex Spach*; **P**
Crataegus monogyna Jacq.; **Z**(2,5)
● *Eriobotrya japonica* (Thunb.) Lindl.; **Kr**; **P**
● *Kerria japonica* (L.) DC.; **M**(4)
● *Malus domestica* Borkh.; **Ka**; **P**; **Ž**(3)
Potentilla hirta L.; **P**
P. recta L.; **P**
● *Prunus armeniaca* L.; **Kr**; **P**; **Ž**(2)
● *P. avium* L.; **Kr**; **P**
▲ *P. cerasifera* Ehrh.; **Ka**; **M**(1,2,3,4); **P**; **Z**(1,4); **Ž**(1,2,3)
▲ *P. cerasus* L.; **Kr**; **P**
● *P. domestica* L.; **M**(4)
▲ *P. dulcis* (Mill.) D. A. Webb.; **O**; **P**
● *P. laurocerasus* L.; **Z**(1)
▲ *P. persica* (L.) Batsch; **P**
P. spinosa L.; **P**; **Ž**(2,3)

● *Pyracantha coccynea* M. J. Roemer; **Ka**; **P**; **Z**(1)
● *Pyrus communis* L.; **P**; **Ž**(2)
Rosa gallica L.; **Z**(4)
Rubus caesius L.; **Ka**; **M**(4); **Z**(1,4)
R. heteromorphus Ripart ex Genov (=*R. ulmifolius* Schott ssp. *dalmatinus* (Tratt.) Focke); **O**, **P**
▲ *Sorbus aria* (L.) Crantz; **M**(3)
● *Spiraea vanhouttei* (Briot) Zabel; **P**

Rubiaceae

Asperula aristata L. subsp. *scabra* (J. Presl et C. Presl) Nyman; **Ka**; **P**
A. arvensis L.; **Ž**(3)
Crucianella latifolia L.; **P**
Galium corrudifolium Vill.; **P**
G. murale (L.) All.; **Kr**; **M**(3,4)
G. parisiense L.; **P**; **Z**(1)
G. tricornutum Dandy; **Ka**
Rubia tinctorum L.; **M**(4)
Sherardia arvensis L.; **Ka**; **Z**(4)

Rutaceae

● *Citrus deliciosa* Ten.; **Ka**; **M**(1,2,3,4); **P**
● *C. limon* (L.) Burm.; **Kr**; **Ž**(1,2)
Dictamnus albus L.; **O**
● *Fortunella margarita* (Lour.) Swingle*; **P**; **M**(4)
Ruta chalepensis L. (=*R. bracteosa* DC.); **Ka**; **Z**(1); **Ž**(2)

Santalaceae

Osyris alba L.; **Ž**(1)

Scrophulariaceae

Chaenorhinum minus (L.) Lange ssp. *minus*; **Z**(1)
Kickxia commutata (Bernh. ex Rchb.) Fritsch; **M**(4); **P**; **Z**(1)
Linaria angustissima (Loisel.) Borbas (= *L. italica* Trev.); **M**(1,3,4); **P**; **Z**(4)
L. chalepensis (L.) Mill.; **Z**(1)
Odontites lutea (L.) Clairv.; **P**
Scrophularia canina L.; **Ka**; **P**
S. peregrina L.; **Z**(1)
Verbascum blattaria L.; **P**
V. orientale (L.) All.; **P**
V. phoeniceum L.; **P**
Veronica hederifolia L.; **Ž**(2)
V. persica Poir.; **Ka**; **P**
V. polita Fr.; **Ka**; **Kr**; **M**(4); **P**; **Z**(1); **Ž**(2,3)
V. triloba Opiz; **Ka**; **M**(4); **P**; **Ž**(3)

Simaroubaceae

Ailanthus altissima (Mil.) Swingle; **P**

Solanaceae

● *Capsicum annuum* L.; **Ž**(2)

▲ *Datura innoxia* Mill.; **P**
Hyoscyamus niger L.; **Z**(1)
● *Lycianthes rantonnetii* (Carrière) Bitter (=*Solanum rantonnetii* Carrière)*; **M**(4)
● *Petunia x hybrida* hort. ex E. Vilm.*; **Ka**
● *Solanum pseudocapsicum* L.*; **Ka**; **M**(4)
● *S. tuberosum* L.; **Kr**; **P**
S. villosum Mill. (=*S. luteum* Mill. s.l.); **P**

Tamaricaceae

▲ *Tamarix dalmatica* Baum; **Kr**; **P**
● *T. tetrandra* Pall. ex M.Bieb.; **P**

Thelygonaceae

Thelygonum cynocrambe L.; **Z**(1,4)

Thymelaeaceae

Thymelaea passerina (L.) Cosson et Germ.; **M**(1)

Tropaeolaceae

● *Tropaeolum majus* L.; **P**

Ulmaceae

Celtis australis L.; **K**
Ulmus minor Miller; **M**(4); **P**; **Z**(1,4)
▲ *U. pinnato-ramosa* Dieck ex Koehne; **P**; **Z**(1)

Urticaceae

Urtica urens L.; **Ka**; **P**

Valerianaceae

▲ *Centranthus ruber* (L.) DC.; **P**
Valeriana tuberosa L.; **M**(3)
Valerianella coronata (L.) DC.; **P**; **Z**(4)
V. discoidea (L.) Loisel.; **Z**(1,4)
V. locusta (L.) Laterrade; **P**
V. muricata (Stiven ex M. Bieb.) J. W. Loudon; **Ka**; **Z**(4)
V. pumila (L.) DC.; **P**; **Z**(1)

Verbenaceae

● *Glandularia* × *hybrida* (hort. ex Groenl. & Rümpler) G. L. Nesom & Pruski*; **Ka**; **Kr**
● *Lantana strigocamara* R. W. Sanders (=*L. camara* hort.)*; **Ka**; **M**(4)
Verbena officinalis L.; **P**

Violaceae

● *Viola* × *wittrockiana* Gams*; **Kr**; **M**(1,2,4); **P**

Vitaceae

▲ *Parthenocissus quinquefolia* (L.) Planchon; **P**

LILIOPSIDA

Agavaceae

▲ *Agave americana* L.; **Kr**
● *Yucca gloriosa* L.; **Kr**; **P**; **Z**(1)

Amaryllidaceae

▲ *Narcissus tazzetta* L.; **P**

▲ *Sternbergia lutea* (L.) Ker Gawl. ex Spreng.; **M**(4)

Arecaceae

● *Chamaerops humilis* L.; **Ka**; **P**

● *Phoenix canariensis* hort. ex Chabaud*; **P**

● *Trachycarpus fortunei* (Hook.) H. Wendl. (=*T. excelsa* hort.)*; **Ka**; **Kr**; **P**

● *Washingtonia filifera* (Linden ex André) H. Wendl.*; **Ka**; **P**

Cymodoceaceae

Cymodocea nodosa (Ucria) Asch.; **M**(4)

Cyperaceae

Carex distachya Desf.; **P**; **Z**(1,3,4,5)

C. divisa Huds.; **Ka**

C. divulsa Stokes; **Kr**; **P**; **Z**(1,5)

C. hallerana Asso; **P**; **Ž**(4)

C. pilulifera L. (=*C. oederi* Retz); **P**

● *Cyperus alternifolius* L.*; **Kr**

Scirpus maritimus L.; **P**

Dioscoreaceae

Tamus communis L.; **Z**(4)

Iridaceae

Gladiolus italicus Mill.; **Ka**; **Kr**; **M**(1,3,4); **Ž**(3)

Iris adriatica Trinajstić ex Mitić; **Ž**(1)

▲ *I. germanica* L. (incl. *I. florentina* L.); **O**

I. illyrica Tomm.; **M**(1,4); **P**

● *I. xiphium* L.*; **Ka**; **Ž**(1,2)

Juncaceae

Juncus bufonius L.; **Z**(1)

J. maritimus Lam.; **P**

Juncaginaceae

Triglochin bulbosa L. ssp. *barrelieri* (Loisel.) Rouy.; **M**(4)

T. maritimum L.; **Kr**

Laxmanniaceae

● *Cordyline australis* (G. Forst.) Endl.*; **M**(4)

Liliaceae

Allium ampeloprasum L.; **Ka**; **O**; **P**; **Z**(2,3)

● *A. ascalonicum* L.; **Kr**

A. atroviolaceum Boiss.; **P**

● *A. cepa* L.; **Kr**; **P**

A. flavum L.; **P**; **Z**(2,3,5)

A. neapolitanum Cirillo; **P**

A. paniculatum L. ssp. *fuscum* (Waldst. et Kit.) Arcang.; **P**

A. roseum L.; **Ka**; **Z**(1)

● *A. sativum* L.; **Kr**; **Ž**(1,2,5)

A. sphaerocephalon L.; **P**
Asphodelus aestivus Brot.; **Ka**
Colchicum hungaricum Janka; **Z**(2); **Ž**(4)
● *Hyacynthus orientalis* L.; **Ka**; **M**(1,4); **P**
● *Lilium martagon* L.; **Ka**
Ornithogalum refractum Kit. ex Schltr.; **Ka**; **M**(4); **Z**(1,4,5)
● *Tulipa gesneriana* L.*; **Ka**

Orchidaceae

Anacamptis pyramidalis (L.) Rich.; **M**(1,4)
Limodorum abortivum (L.) Sw.; **M**(1); **Z**(4)
Ophrys apifera Huds.; **M**(4)
O. bombyliflora Link; **M**(1)
O. sphegodes Mill. ssp. *atrata* (Lindl.) E. Mayer; **Ka**; **Z**(4); **Ž**(4)
O. x flavicans Vis.; **P**
Orchis laxiflora Lam. ssp. *laxiflora*; **M** (1)
O. morio L.; **M**(1)
O. purpurea Huds.; **Z**(5)
O. tridentata Scop. ssp. *commutata* (Tod.) Nyman; **Ka**; **Z**(5)
Serapias parviflora Parl.; **M**(1,3,4)

Poaceae

Aegilops geniculata Roth; **P**
Ae. neglecta Req. ex Bertol.; **Kr**; **M**(1,3,4); **P**
Ae. triuncialis L.; **Ka**; **P**
Avena sterilis L.; **Ka**; **M**(1,2,3,4); **P**
Brachypodium pinnatum (L.) P. Beauv. ssp. *rupestre* (Host) Schubl. et M. Martens; **Ž**(3)
Bromus erectus Huds. ssp. *condensatus* (Hack.) Asch. et Graebn.; **Ka**; **P**; **Z**(2)
B. erectus Huds. ssp. *erectus*; **Kr**; **Z**(1)
B. hordeaceus L. ssp. *molliformis* (Lloyd) Maire et Weiller; **P**
B. rigidus Roth.; **Ka**; **P**; **Z**(1,2,4)
● *Cortaderia selloana* (Schult. & Schult. f.) Asch. & Graebn.*; **Kr**; **M**(4); **P**
Cynosurus echinatus L.; **Ka**
Dactylis glomerata L. ssp. *glomerata*; **Ka**; **Kr**; **M**(1,3,4); **P**; **Z**(1,4)
Dasypyrum villosum (L.) P. Candargy; **Ka**
Desmazeria marina (L.) Druce (=*Catapodium marinum* (L.) C. E. Hubb.); **P**
Digitaria sanguinalis (L.) Scop.; **M**(2,3,4); **P**
Elymus repens (L.) Gould; **Z**(1,4)
Eragrostis cilianensis (All.) F. T. Hubb.; **P**
E. minor Host; **M**(4)
Festuca pratensis Huds.; **M**(3)
Gastridium ventricosum (Gouan) Schinz et Thell.; **Z**(4)
Hainardia cylindrica (Willd.) Greuter; **Ka**
Helictotrichon convolutum (C. Presl) Henrard.; **M**(1,2,3,4); **Z**(5)
Heteropogon contortus (L.) P. Beauv. ex Roem. et Schult.; **M**(1)
Koeleria splendens C. Presl; **Ka**; **P**

Lolium multiflorum Lam.; **P**; **Z**(1,4)
L. rigidum Gaudin ssp. *lepturoides* (Boiss.) Sennen et Mauricio; **Ka**; **P**
L. rigidum Gaudin ssp. *rigidum* (= *L. strictum* C. Presl); **Ka**; **Kr**; **Z**(4)**; Ž**(3)
Lophochloa cristata (L.) Hyl.; **P**
Melica ciliata L.; **P**
Phleum subulatum (Savi) Asch. et Graebn.; **P**
Phragmites australis (Cav.) Trin. ex Steud.; **M**(3); **Z**(1)
Piptatherum miliaceum (L.) Coss.; **Z**(5)
Poa annua L.; **Ka**; **M**(1,2,3,4); **P**
P. bulbosa L.; **Ka**; **Z**(2,3,5)
Polypogon monspeliensis (L.) Desf.; **Ka**
Psilurus incurvus (Gouan) Schinz et Thell. (=*P. aristatus* (L.) Duval-Jouve); **Ka**; **M**; **Z**(2,3,5)
Setaria gussonei Kerguelen (=*S. ambigua* (Guss.) Guss.); **P**; **Z**(1)
S. viridis (L.) P. Beauv.; **P**
Sorghum halepense (L.) Pers.; **P**
Stipa pennata L.; **Z**(1,2,3)
Vulpia ciliata Dumort.; **Ka**; **P**

The list of flora includes 546 vascular flora taxa for which a total of 855 new findings for the seven islands researched is listed. Out of that number 601 new findings are registered for 388 native and naturalised plants and 254 new findings are registered for 158 plant taxa that grow only in cultivation and those with the ability of subspontaneous spreading outside of the cultivated area.

Just as one could predict, the largest amount of new findings belong to the islands of Prvić (270) and Kaprije (160) whose flora has been so far the least researched one, and the fewest taxa (10) were found on the island of Obonjan (Tab. 3).

Tab. 3. The number of the newly found taxa and the total number of vascular plant taxa for the islands of the Šibenik archipelago researched into.

ISLAND	Number of previosly registered taxa		Number of newly registered taxa		Total number of taxa	
	Total	cult & subspont	Total	cult & subspont	total	cult & subspont
MURTER	742	155	140	46	882	201
ZLARIN	443	91	154	16	597	107
ŽIRJE	526	73	59	18	585	91
PRVIĆ	270	16	270	96	540	112
KAPRIJE	343	76	160	36	503	112
KRAPANJ	429	42	62	41	491	83
OBONJAN	230	9	10	1	240	10

Among the new findings, there is a significant number of cultivated taxa (Tab. 3) which are grown by the inhabitants of the islands for nutritional or decorative purposes. Along with the cultivated plants originating from the Mediterranean (*Olea europaea*, *Prunus dulcis*, *Laurus nobilis*, *Cupressus sempervirens*, *Lavandula angustifolia*, *Nerium oleander*) more and more alien species, especially some decorative plants, are being cultivated (*Bougainvillea spectabilis*, *Canna indica*, *Hydrangea macrophylla*, *Philadelphus coronarius*, *Poinciana gilliesii*).

The importance of inventarisation of cultivated plants is further emphasized by the fact that many foreign taxa, originally introduced for cultivation, demonstrate the ability of subspontaneous spreading into the surrounding habitats (*Calendula officinalis*, *Datura innoxia*, *Helianthus tuberosus*, *Opuntia ficus-indica*, *Parthenocissus quinquefolia*, etc.) and only a small number of foreign taxa has become completely naturalised and has begun to expand invasively outside of the cultivated area (*Ailanthus altissima*, *Broussonetia papyrifera* and *Robinia pseudoacacia*).

After finishing this research we have determined that the flora of the island of Murter has the largest number of species and subspecies (882) and a great number of species and subspecies was noted on five other inhabited islands of the Šibenik archipelago (between 491 for Krapanj and 597 for Zlarin). As it was expected, the fewest taxa were noted for the island of Obonjan (240 taxa), which is the only uninhabited island of those that were researched into. For the island of Krapanj, which is the smallest inhabited island of the Šibenik archipelago (0,36 km^2; 267 inhabitants) and is situated only 400 m from the mainland, as many as 491 plant taxa were registered. This example of the island of Krapanj indicates that population density and mainland vicinity are more important factors which determine the richness of the flora than the surface of the island.

From the above mentioned data, we can conclude that inhabited islands of the Šibenik archipelago, despite their small size, distinguish themselves in an abundance of plant taxa. This is, on one hand, a result of great diversity of the habitat and, on the other hand, of a strong and permanent human impact on these islands that have been inhabited for decades.

CONCLUSION

During this research, 855 new findings of 546 vascular plant taxa for seven islands of the Šibenik archipelago (Kaprije, Krapanj, Murter, Obonjan, Prvić, Zlarin, and Žirje) were recorded. The new findings update the total inventory of vascular flora of the islands researched. Among new findings there are also 254 findings that refer to 158 cultivated taxa, the part of vascular flora which was virtually neglected in the previous researches into the Šibenik area as well as the rest of Croatia. Owing to numerous researches into the vascular flora which were conducted in the last 15 years, the islands of the Šibenik archipelago are now one of the best researched area of our littoral. The current state of research of the area will enable a detailed taxonomic and ecologic analysis of the flora of individual islands and the analysis of the flora of the Šibenik archipelago as a whole.

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SAŽETAK

Prilog vaskularnoj flori otoka šibenskog arhipelaga

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U razdoblju od 2002. do 2007. obavljena su dopunska istraživanja vaskularne flore na sedam otoka šibenskog arhipelaga: Kapriju, Krapnju, Murteru, Prviću, Obonjanu, Zlarinu i Žirju. Za 546 svojti vaskularne flore zabilježeno je ukupno 855 novih nalaza, od čega se 254 nalaza odnosi na 158 svojti koje na istraživanom području dolaze ili isključivo u kulturi ili imaju sposobnost subspontanog širenja izvan kulture. Najveći broj novih nalaza zabilježen je za otoke Prvić (270) i Kaprije (160) čija je flora prije ovog istraživanja bila slabije istražena, a najmanje za otok Obonjan (10).

Nakon ovog istraživanja, ukupna flora naseljenih otoka šibenskog arhipelaga broji između 491 svojte (Prvić) do čak 882 svojte (Murter). Najmanji broj svojti zabilježeno je za otok Obonjan (240), najmanji i jedini nenastanjeni od sedam istraživanih otoka.

Tijekom istraživanja utvrđeno je da u popis flore otoka šibenskog arhipelaga treba uključiti svojte *Echium plantagineum*, *Oxalis articulata* i *Vicia villosa* ssp. *varia*, a izdvojiti *E. vulgare*, *O. deppei* i *V. cracca*, koje se umjesto njih navode u nekim prethodno objavljenim radovima, zbog greške u determinaciji. Za 10 svojti, prethodno zabilježenih na razini vrste, utvrđena je pripadnost odgovarajućim podvrstama.

Rezultati ovog istraživanja, kao i rezultati brojnih radova objavljenih u zadnjih 15-tak godina, ukazuju na veliko bogatstvo vaskularne flore otoka šibenskog arhipelaga što je rezultat relativno male udaljenosti od kopna i snažnog i dugotrajnog antropogenog utjecaja, jer se radi o otocima stare naseljenosti.