

Ugroženost - vrste i staništa

Cretovi

- vlažna, hranjivima siromašna staništa
- acidofilni (niski pH) (engl. *bogs, peatbogs*)
- bazofilni(alkalni, visoki pH) (engl. *fens*)
- karakteristična borealna staništa, koja zahtijevaju visoku zračnu vlagu (kod nas su to reliktna staništa iz postglacijala)
- većina cretnih vrsta kod nas su na južnoj granici svog areala



Trstenik

Drosera anglica Huds. (RE)



Neretva?
zadnji
podatak
1931

Drosera intermedia Hayne (RE)



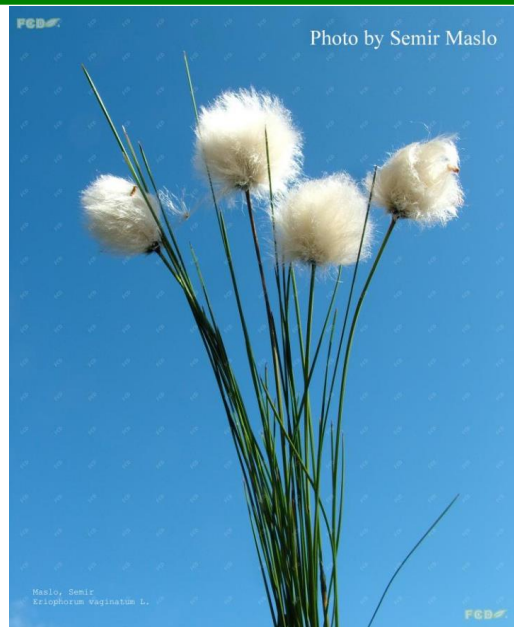
Zagorje
zadnji
podatak
1931



Drosera rotundifolia L. (CR)



Eriophorum gracile Roth (RE)



Eriophorum vaginatum L. (CR)



Švedska



Eriophorum angustifolium Honck. (CR)



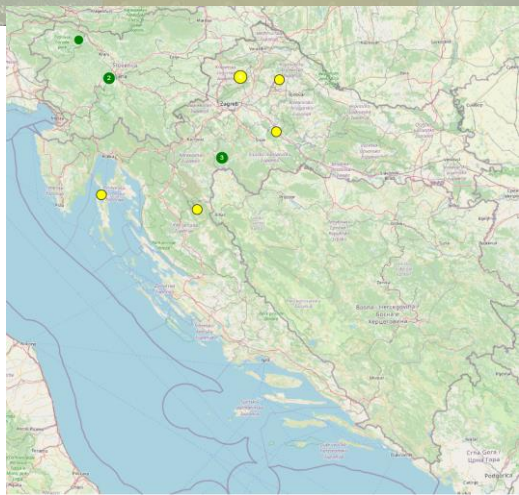
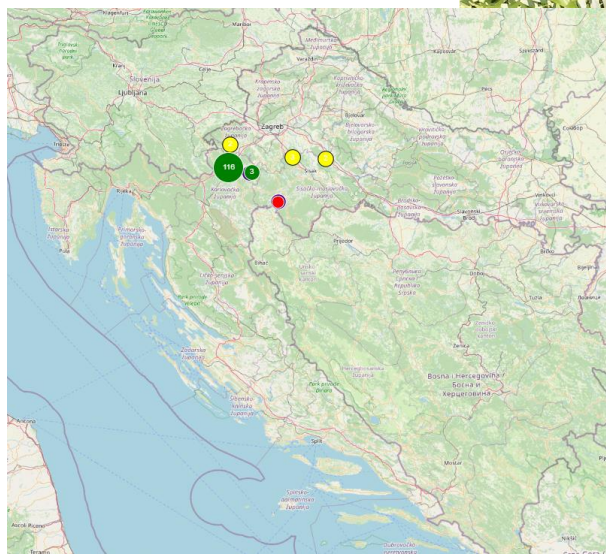
Plitvička jezera, Rudanovac



Eriophorum latifolium Hoppe (EN)

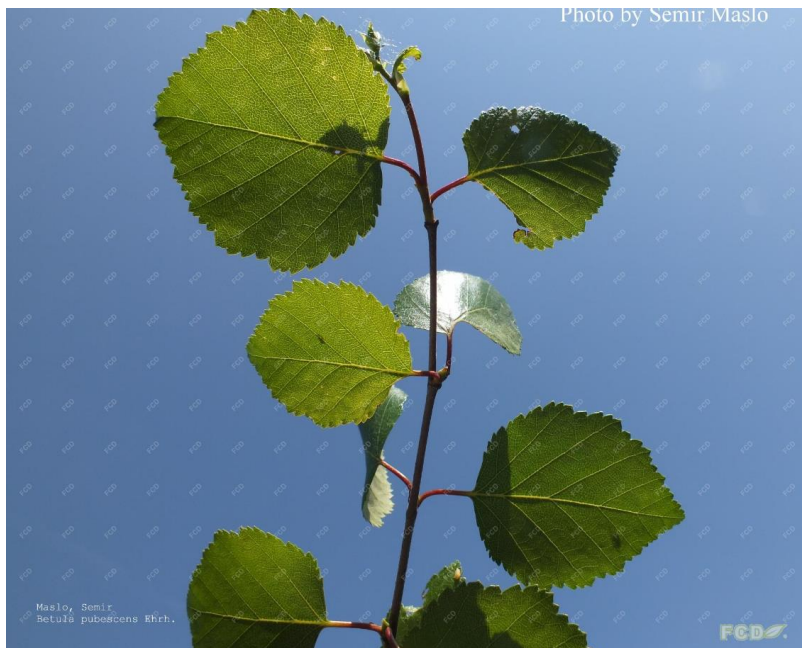


Lycopodiella inundata (L.) Holub (CR)

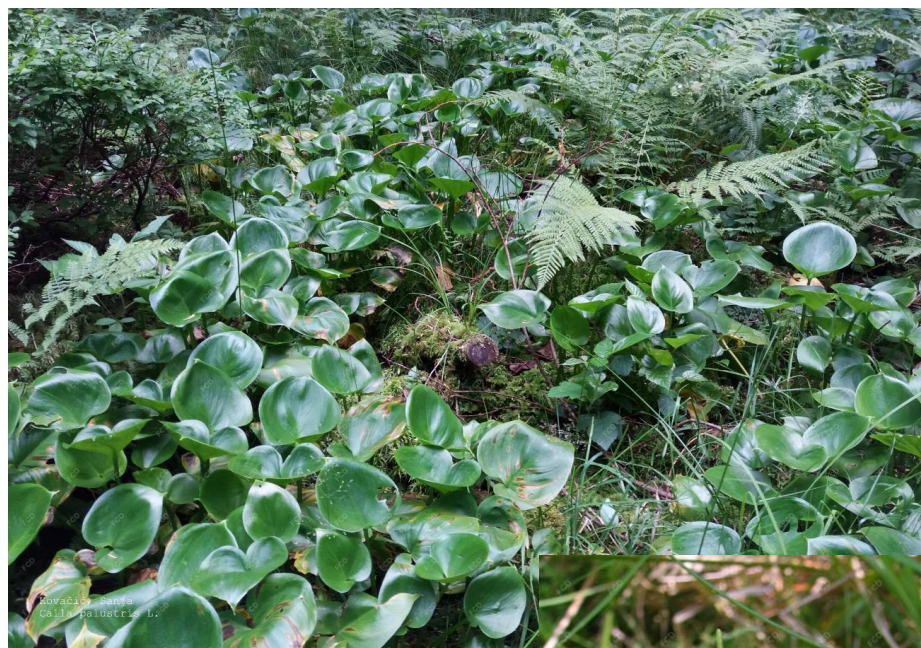


Osmunda regalis L. (CR)

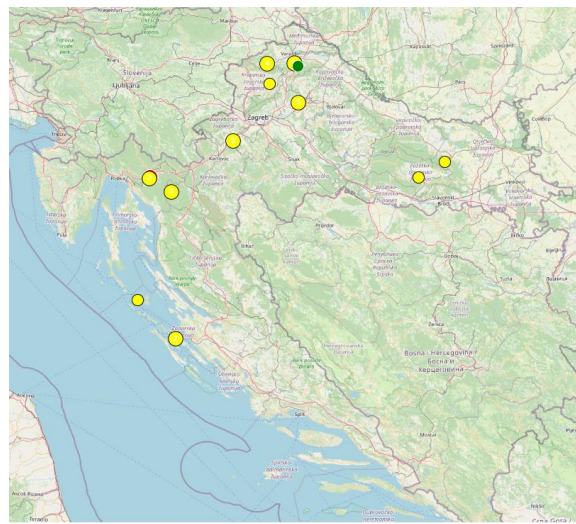
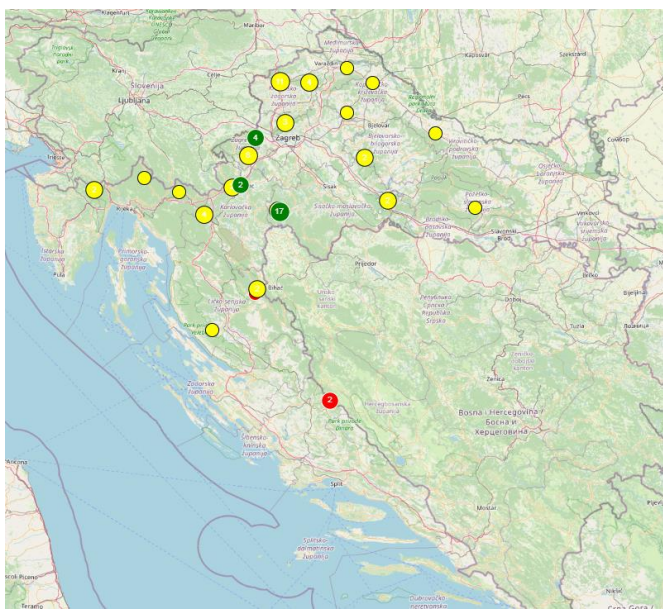
Betula pubescens Ehrh. (CR)



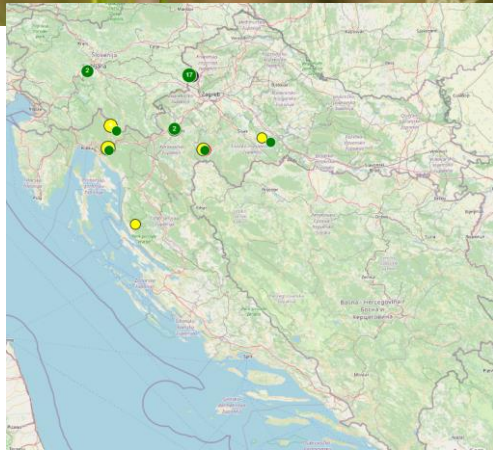
Calla palustris L. (CR)



Gorski kotar, Sungerski lug



Rhynchospora alba(L.) Vahl (CR)



Carex echinata
Murray (EN)

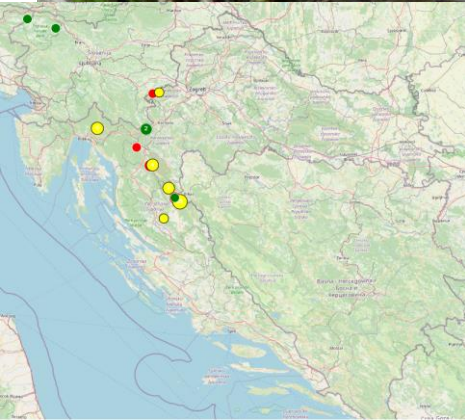
Menyanthes trifoliata L. (EN)



Pinguicula vulgaris L. (CR)



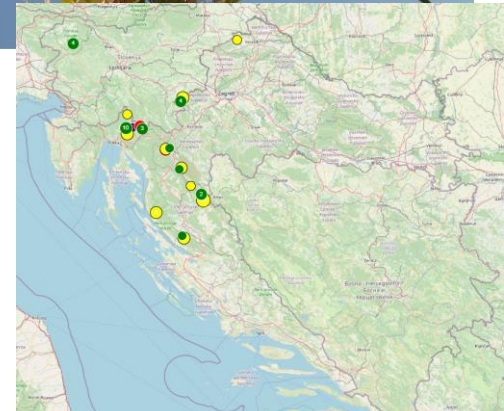
Plaški, cret na Dretulji



Tofieldia calyculata (L.) Wahlenb. (CR)



Maslo, Semir.
Tofieldia calyculata (L.)
Wahlenb.



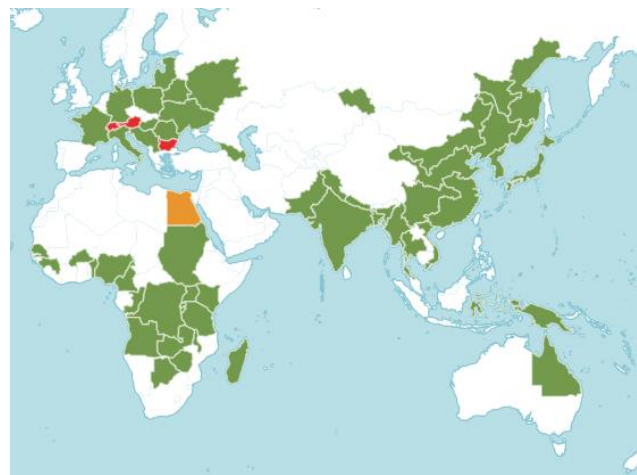
Vodena staništa

- vode stajaćice (jezera, umjetne akumulacije, ribnjaci, močvare)
- vode tekućice (rijeke, potoci)
- povremene mediteranske lokve



Cetina

Caldesia parnassifolia (L.) Parl. (RE)



Francuska

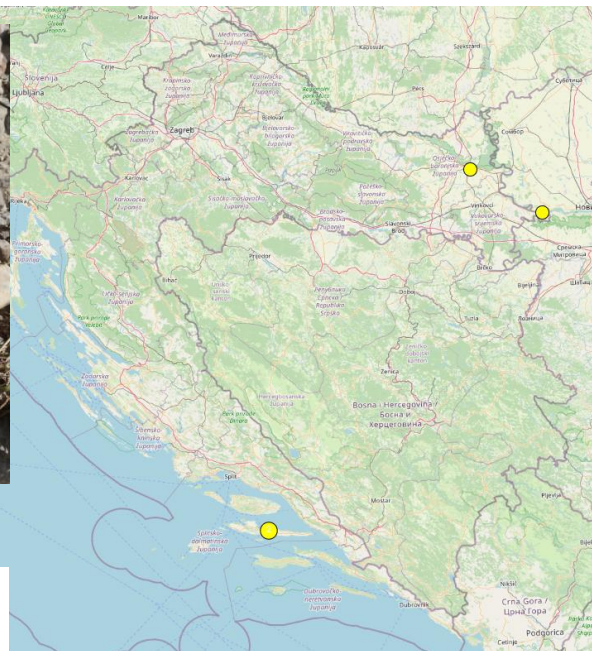
Cyperus glaber L. (RE)



<https://www.inaturalist.org/observations/62882306>

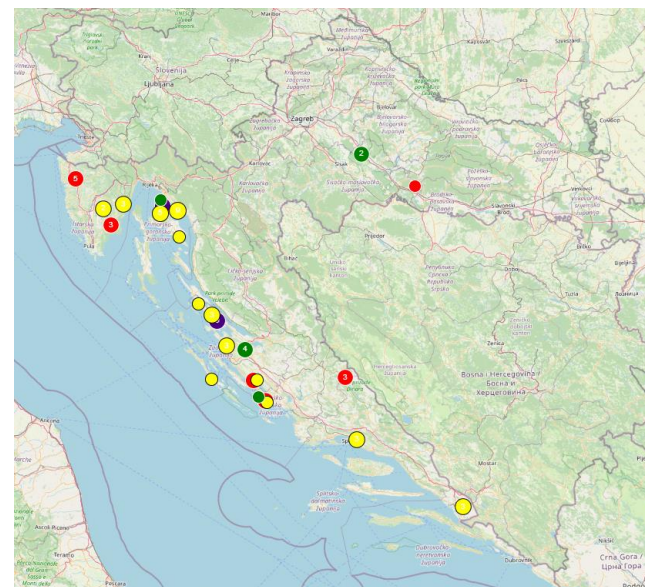


<https://www.inaturalist.org/observations/207885728>

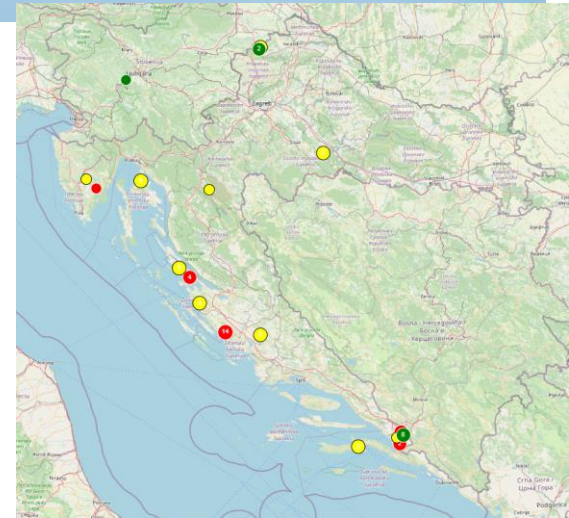
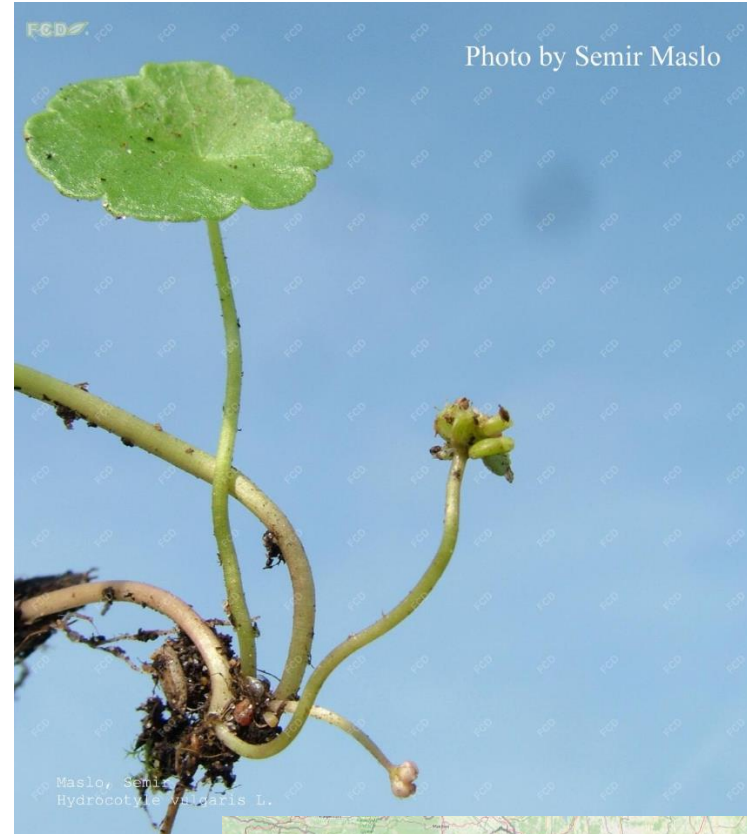


Opis nalazišta	Autori	Godina
otok Hvar (Dalmacija)	Trinajstić, I.	1993
Da. (Dalmacija)	Hayek, A.	1933
fluvii Dravi circa Essekinum (Slavonija)	Schlosser, J.C.K.; Vukotinović, Lj.	1869
Ilok (Slavonija)	Schlosser, J.C.K.; Vukotinović, Lj.	1869
Insel Lesina und die dazu gehörigen kleinen unbewohnten Inselchen (o. Hvar, Dalmacija)	Petter, F.	1852
Dalmatia, in hortis et cultis in insula Lesina - otok Hvar, južna Dalmacija (Hrvatska). Unositelj: Dario Hruševar	Visiani, R.	1842

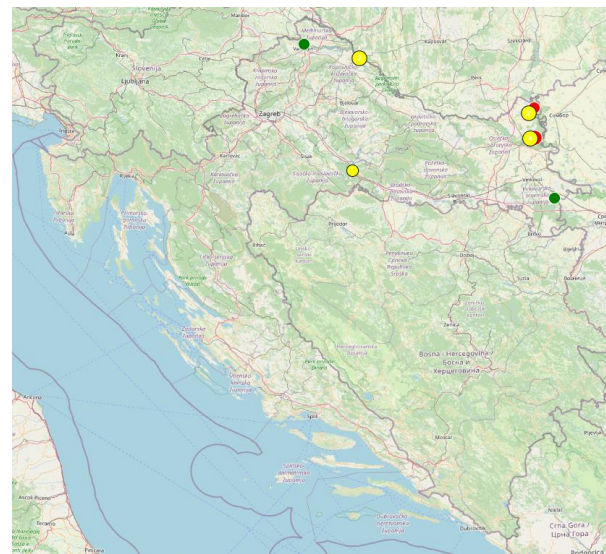
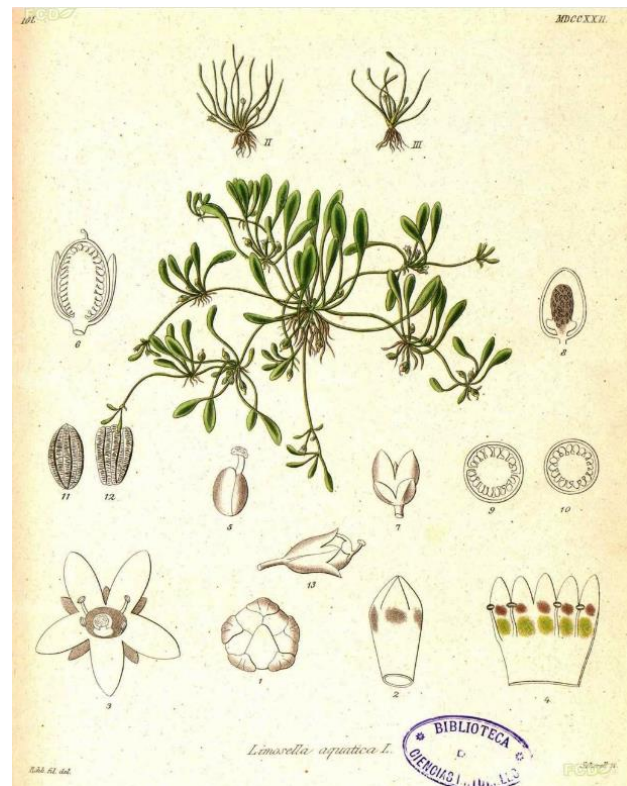
Baldellia ranunculoides (L.) Parl. **(CR)**



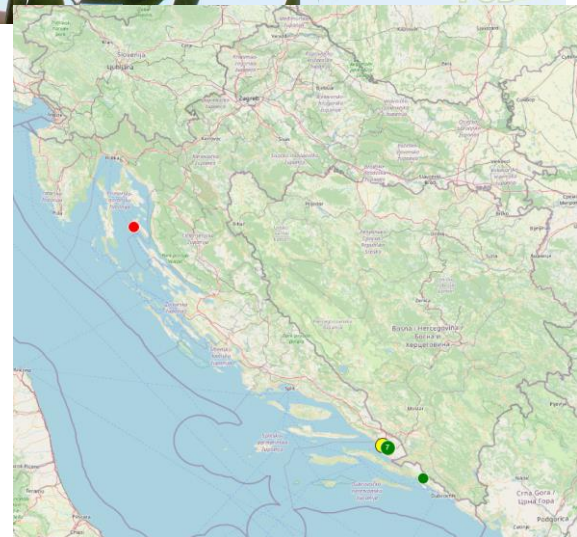
Hydrocotyle vulgaris L. (CR)



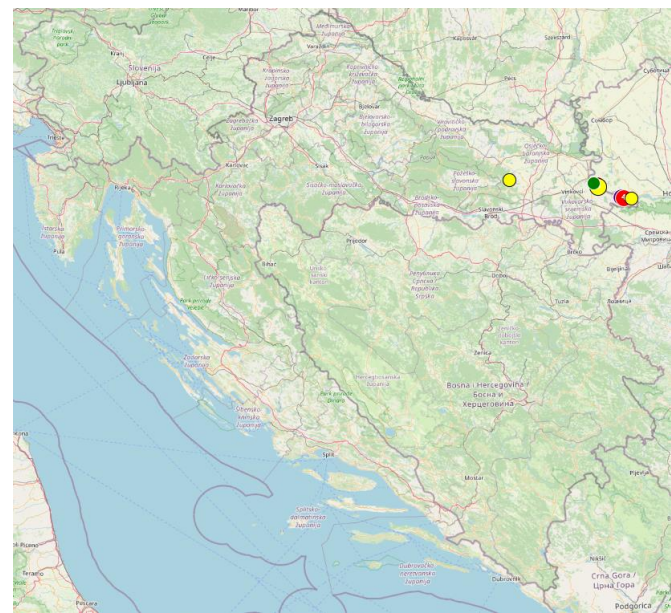
Limosella aquatica L. (CR)



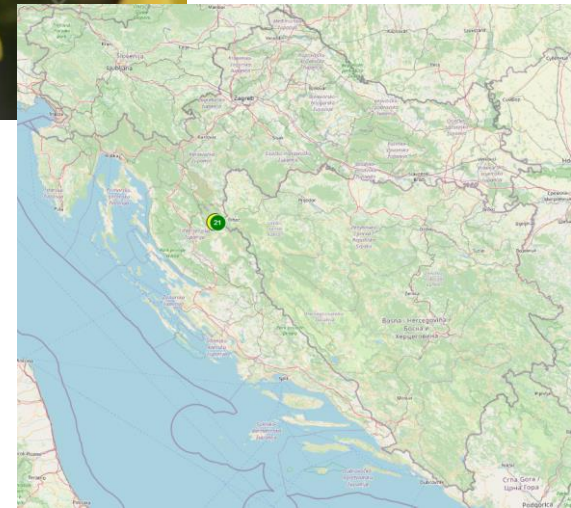
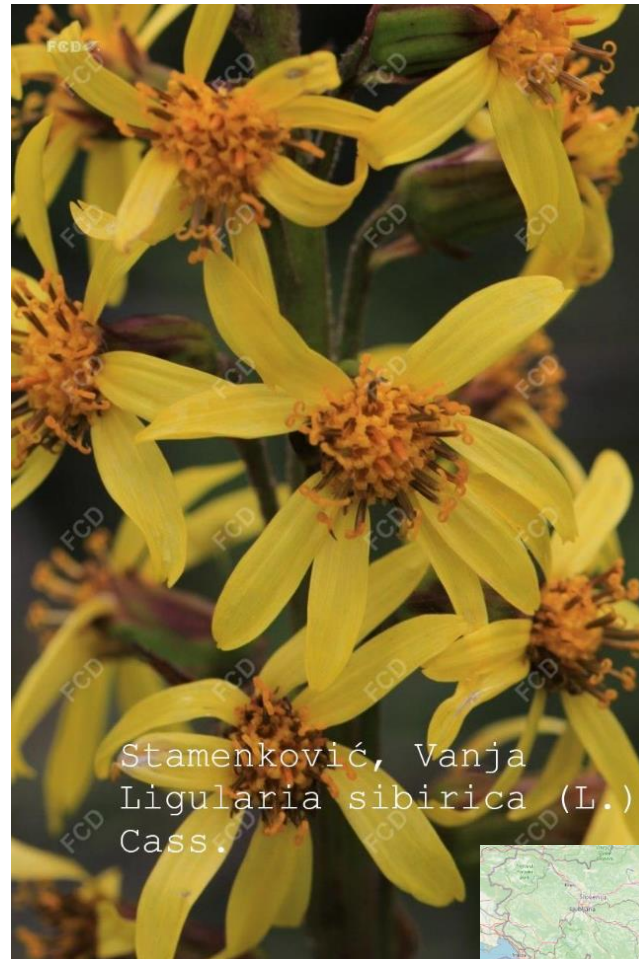
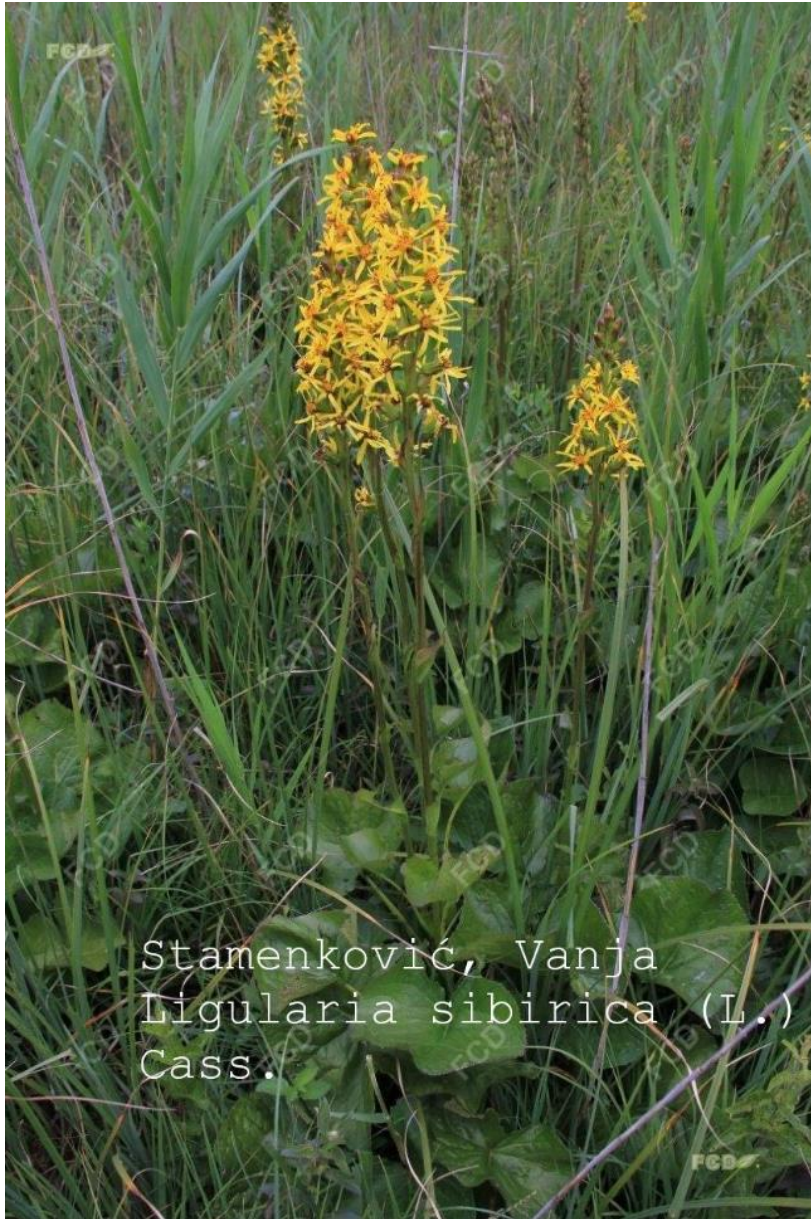
Dorycnium rectum (L.) Ser. **(CR)**



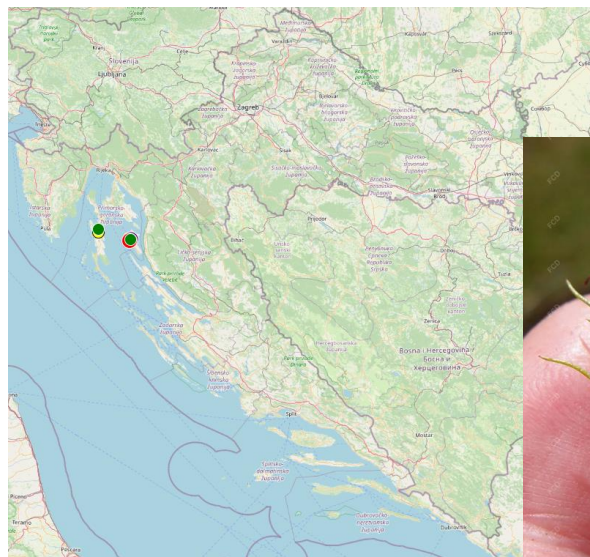
Kitaibelia vitifolia Willd. (CR)



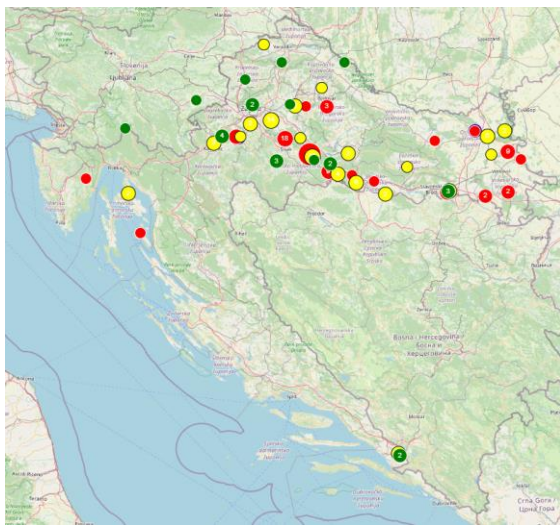
Ligularia sibirica (L.) Cass. (CR)



Pilularia minuta Durieu (CR)



Marsilea quadrifolia L. (NT)



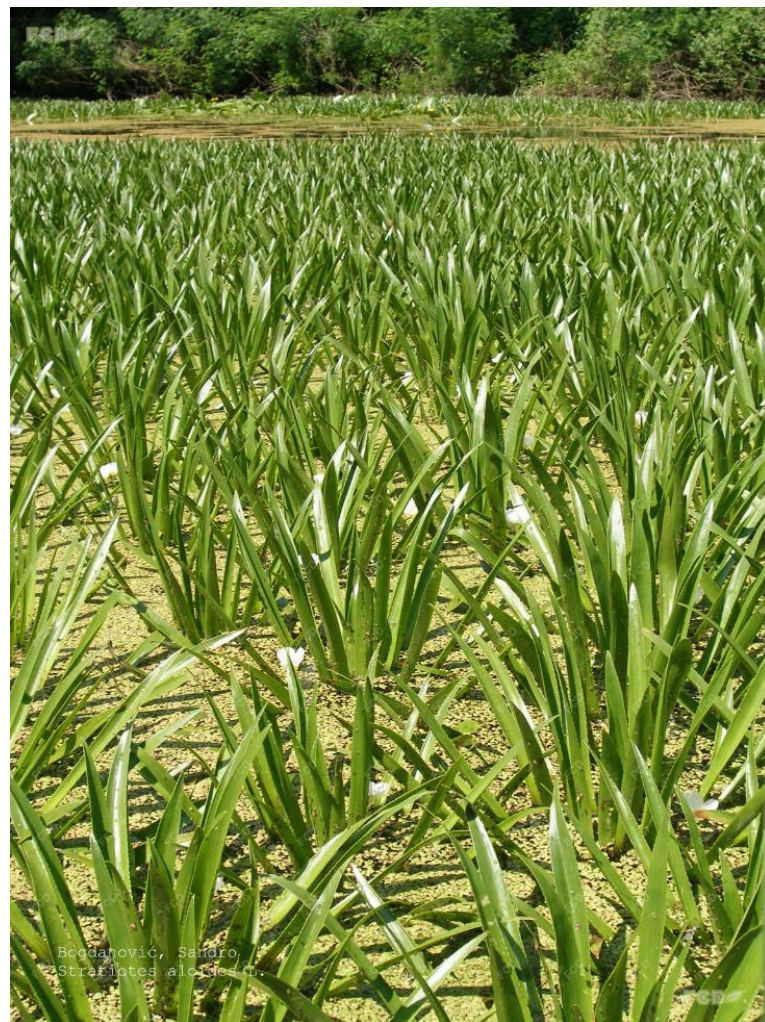
Lemna gibba L. (EN)



Wolffia arrhiza (L.) Wimm. (VU)



Stratiotes aloides L. (VU)



Lonjsko polje

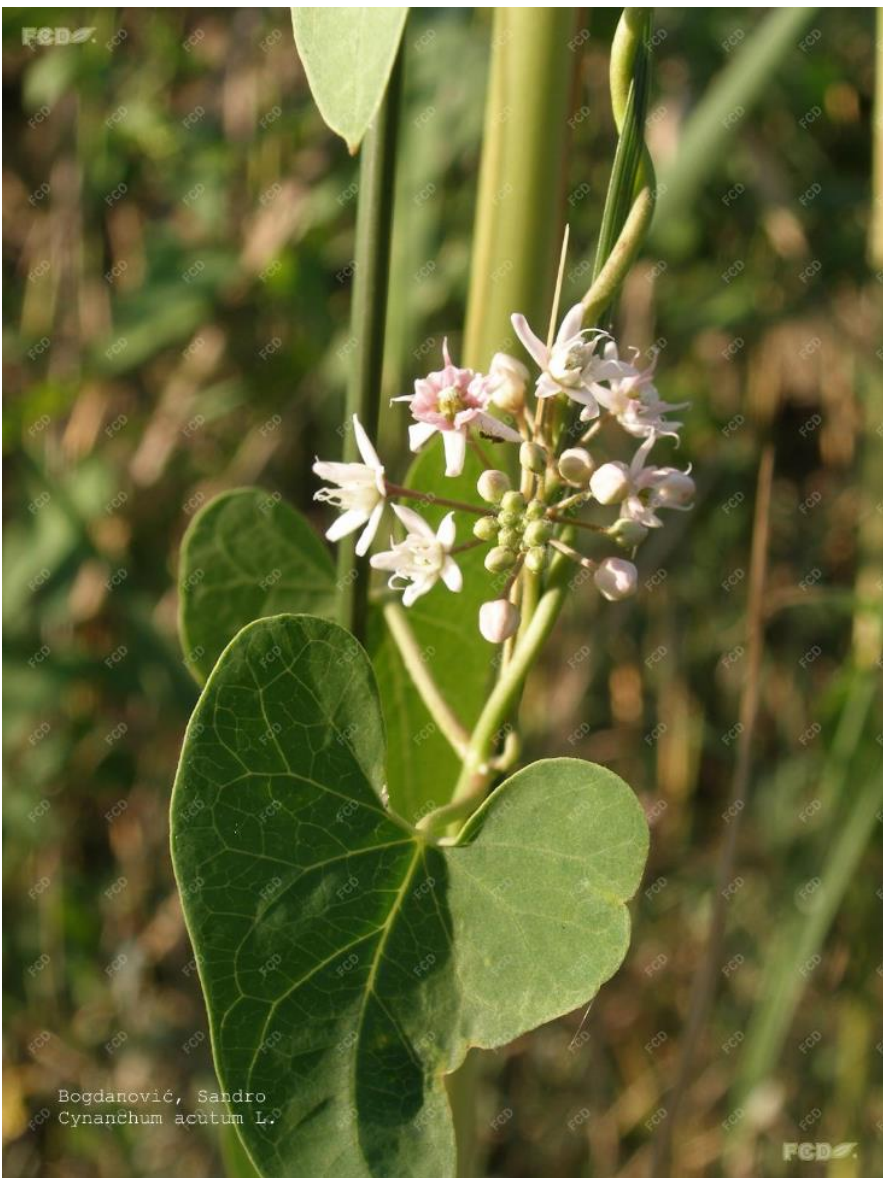
Ranunculus lingua L. (EN)



Ranunculus ophioglossifolius Vill. (EN)



Cynanchum acutum L. (EN)

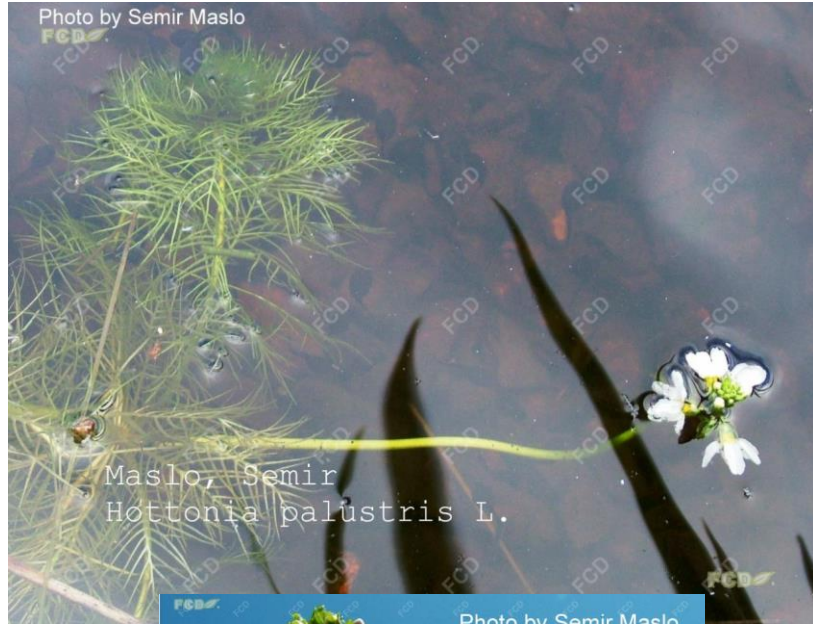


Periploca graeca L. (EN)



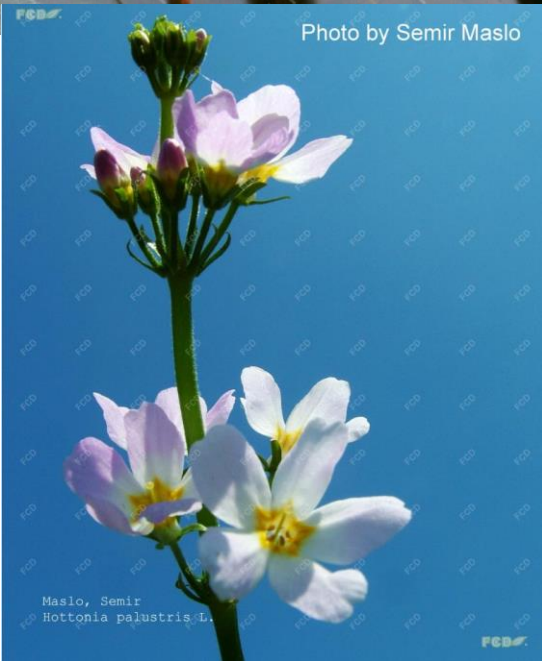
Hottonia palustris L. (EN)

Photo by Semir Maslo



Maslo, Semir
Hottonia palustris L.

Photo by Semir Maslo



Maslo, Semir
Hottonia palustris L.

Hippuris vulgaris L. (NT)



Maslo, Semir
Hippuris vulgaris L.

Photo by Semir Maslo



Morske obale, primorske slane močvare i kontinentalne slatine

- morske obale nisu rijetka staništa, ali su jako ugrožena urbanizacijom i turizmom
- primorske slane močvare (engl. *saltmarshes*) na doticaju morske i slatke vode
- kontinentalne slatine – rijetko stanište na istoku Hrvatske
- halofiti

Dianthus multinervis Vis. (EX)

- sabrao Matija Botteri (19. st.)
- opisao Roberto Visiani
- zadnje opažanje V. Vončina (1911.)



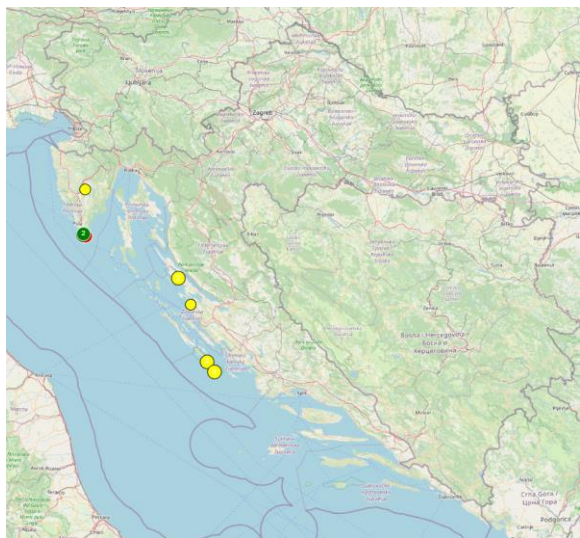
primjerak u ZA



Convolvulus lineatus L. (CR)

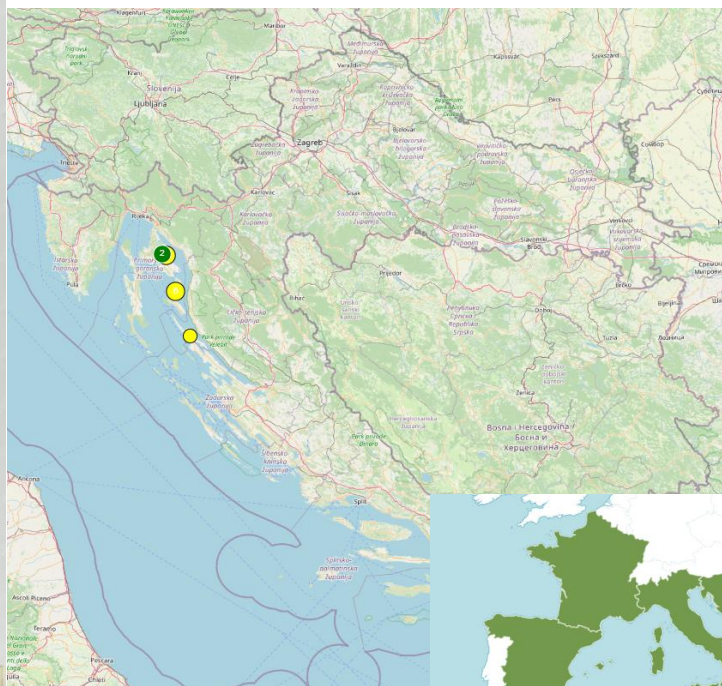


Premantura

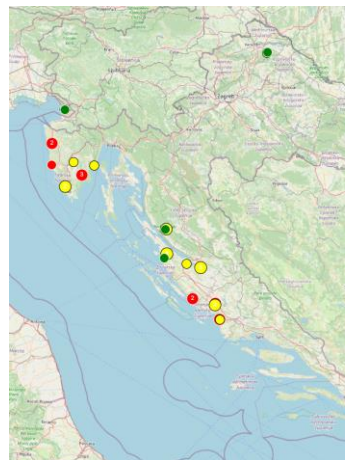


Topić, Jasenka
Convolvulus lineatus L.

Asplenium sagittatum (DC.) Bange (CR)



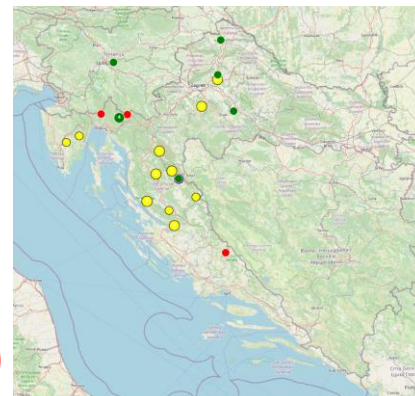
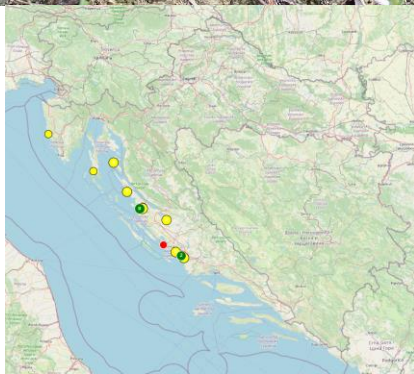
Triglochin barrelieri Loisel. (CR)



Triglochin maritima L. (CR)



Triglochin palustris L. (CR)

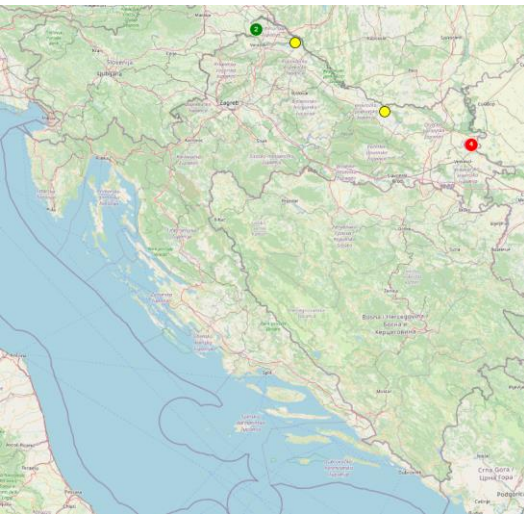


Camphorosma annua Pall. (CR)

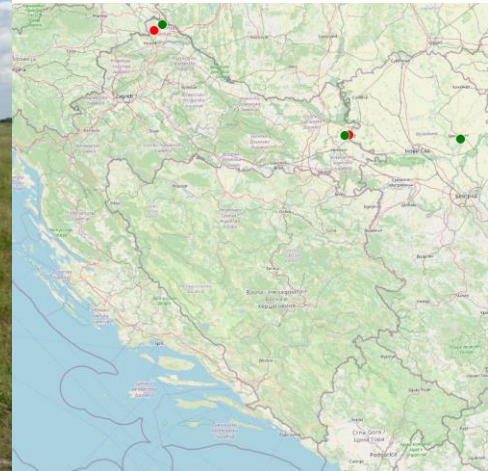


Trpinja, slani pašnjak,
Natura 2000 područje

Pholiurus pannonicus (Host) Trin. (CR)



Ozimec, Siniša
Camphorosma annua Pall.



Allium telmatum Bogdanović, Brullo, Giusso et Salmeri (EN)



Milović, Milenko
Allium telmatum
Bogdanović, Brullo,
Giusso et Salmeri

FCD

Otok Vir, rt. Stinice



Milović, Milenko
Allium telmatum
Bogdanović, Brullo,
Giusso et Salmeri

FCD

Anthemis tomentosa L. (VU)



Bogdanović, Sandro
Anthemis tomentosa L.

Rt Kamenjak

Glaucium flavum Crantz (NT)

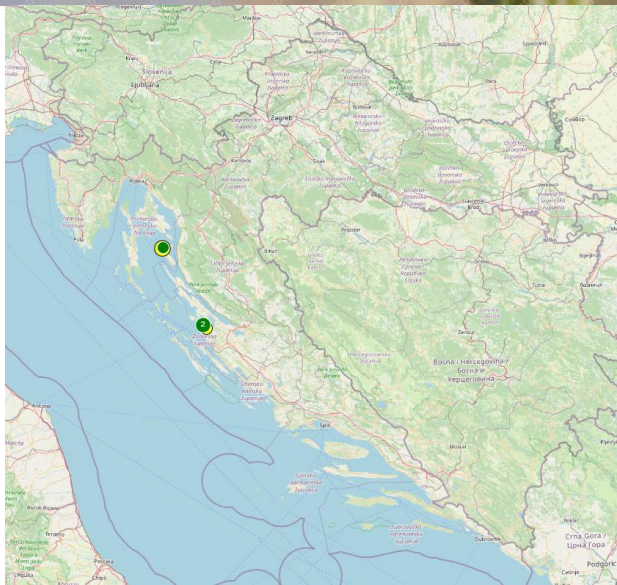


Terzić, Amadej
Glaucium flavum Crantz

Primorski pijesci

- rijetka staništa na dominantno stjenovitoj istočnoj obali Jadranskog mora
- najveća pješčana staništa na Mljetu, Rabu, Korčuli, Susku, Pelješcu i oko grada Nina
- najugroženiji turizmom
- psamofitske vrste (biljke pješčarke)

Ammophila arenaria (L.) Link ssp. *arundinacea* H.Lindb. (RE) -> CR



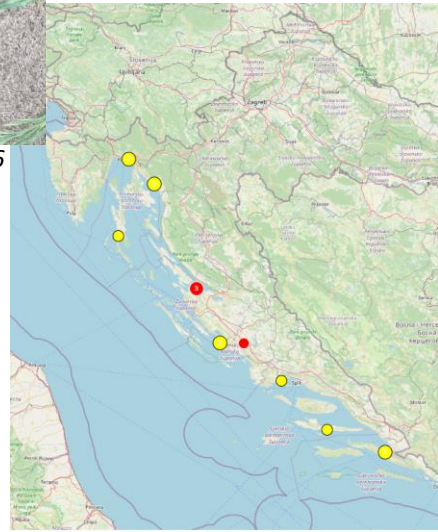
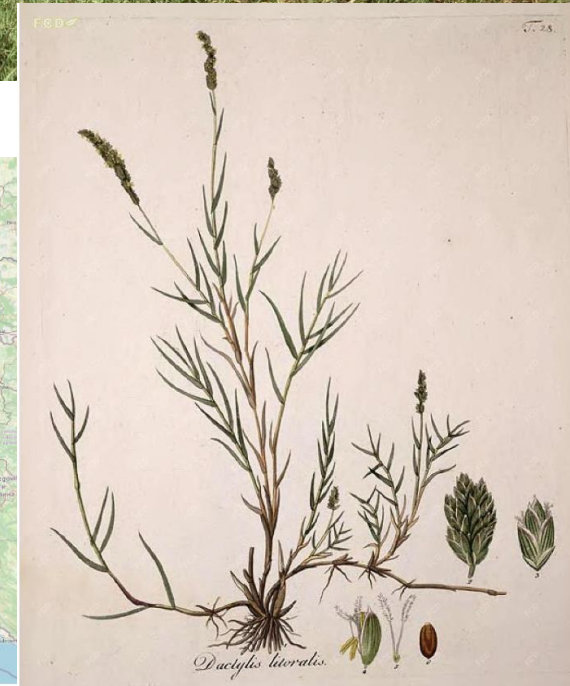
Cutandia maritima (L.) Barbey (CR)



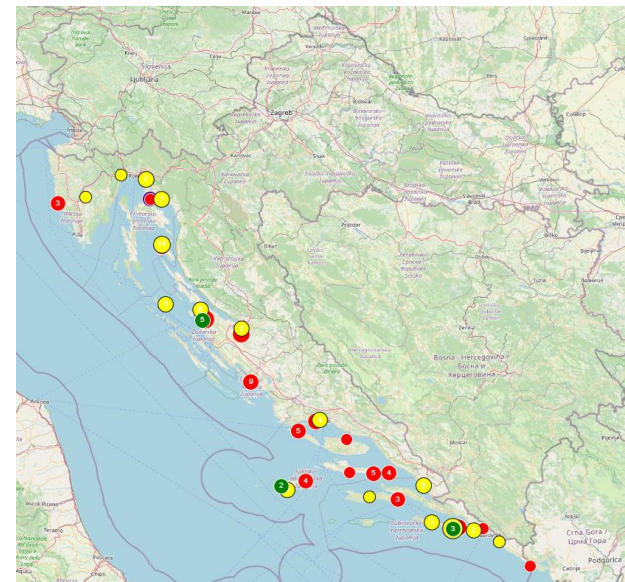
<https://www.inaturalist.org/observations/137319076>

Aeluropus littoralis (Gouan) Parl. (CR)

Prokljansko jezero



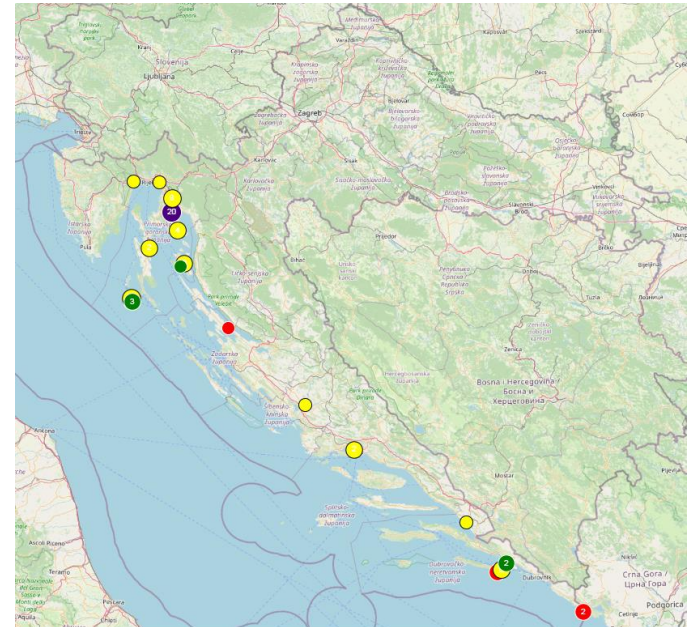
Elymus farctus (Viv.) Runemark ex Melderis (CR)



Saccharum ravennae (L.) Murray (CR)



otok Krk, Polje, uvala Petrina

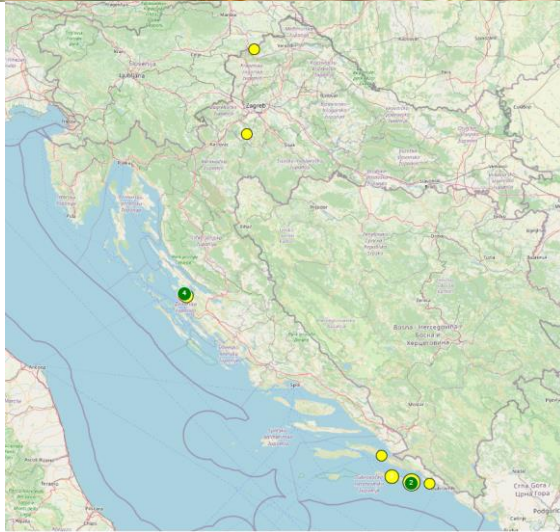


Cyperus capitatus Vand. (CR)



Bogdanović, Sandro
Cyperus capitatus Vand.

FCD



Mljet, uvala Blace



Bogdanović, Sandro
Cyperus capitatus Vand.

FCD

Sporobolus pungens (Schreb.) Kunth (VU)



Bogdanović, Sandr
Sporobolus pungens
(Schreb.) Kunth



uvala Blace, otok Mljet

Imperata cylindrica (L.) Raeusch. (NT)



Topić, Jasenka
Imperata cylindrica (L.)
Raeusch.



otočić Supetar kod Cavtata

Jasprica, Nenad
Imperata cylindrica (L.)
Raeusch.

Calystegia soldanella (L.) Roem. et Schult. (NT)



Pancratium maritimum L. (NT)



Borovečki-Voska, Biljana
Panocratium maritimum L.

Otok Vis, uvala Vela Smokova



Bodružić, Smokovo
Panocratium maritimum L.

Echinophora spinosa L. (NT)

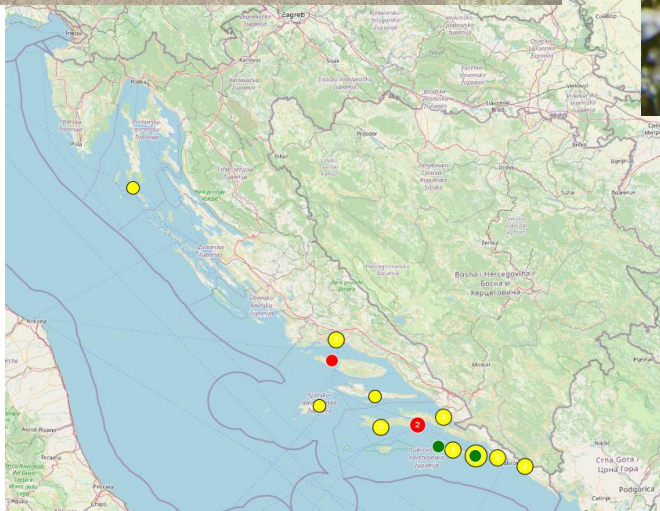


Borovečki-Voska, Ljiljana
Echinophora spinosa L.



Borovečki-Voska, Ljiljana
Echinophora spinosa L.

Mljet, uvala Blaca



Kontinentalni pijesci

- u Hrvatskoj iznimno rijetka staništa
- vezana uz šire područje rijeke Drave (Podravski pijesci)
- najveće površine prekrivaju Đurđevački pijesci
- psamofitske vrste (biljke pješčarke)

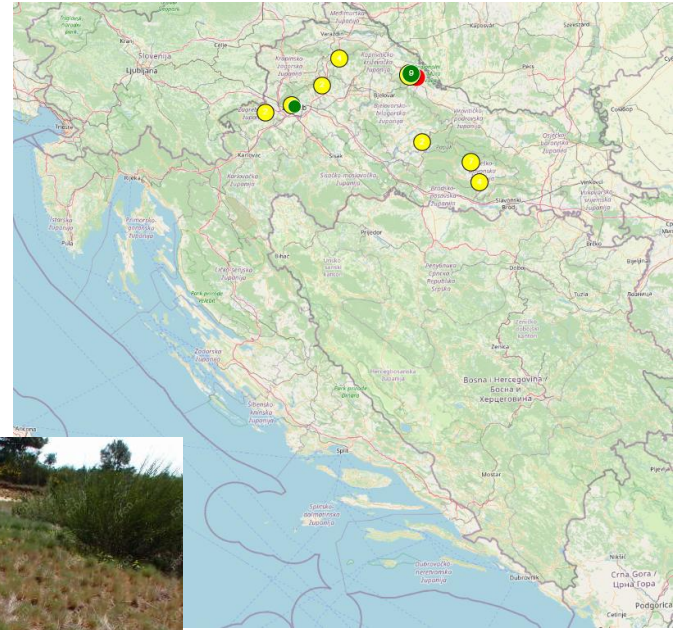
Đurđevački pijesci



Corynephorus canescens (L.) P. Beauv. (CR)



Đurđevački peski



Festuca vaginata Waldst. et Kit. ex Willd. (CR)



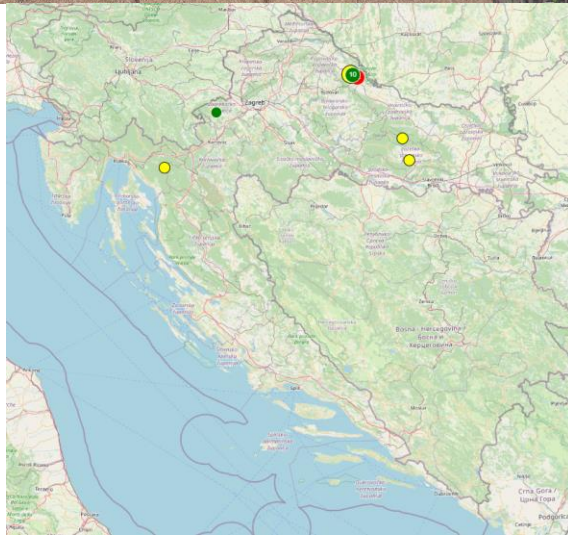
Borovečki-Veški, Ljuzgana
Festuca vaginata Willd.



Donji Miholjac

Topić, Jasenka
Festuca vaginata Willd.

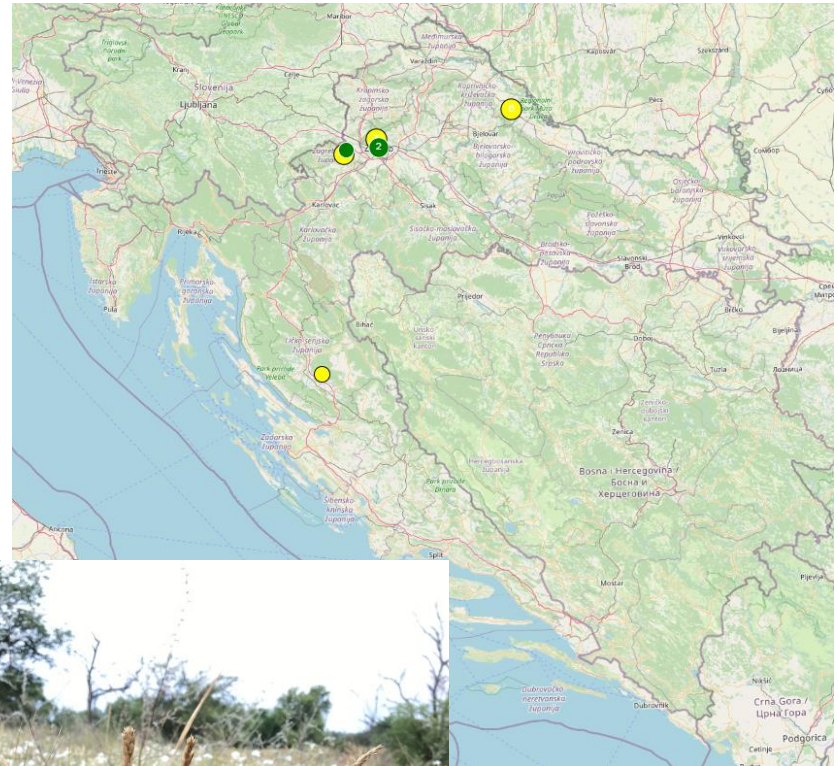
Đurđevački peski



Plantago indica L. (CR)



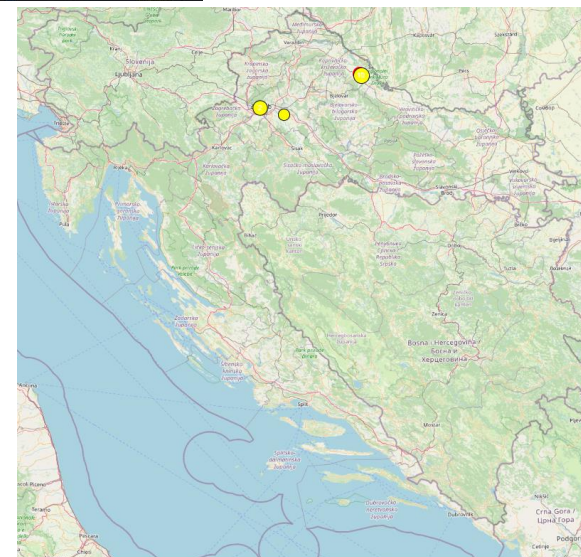
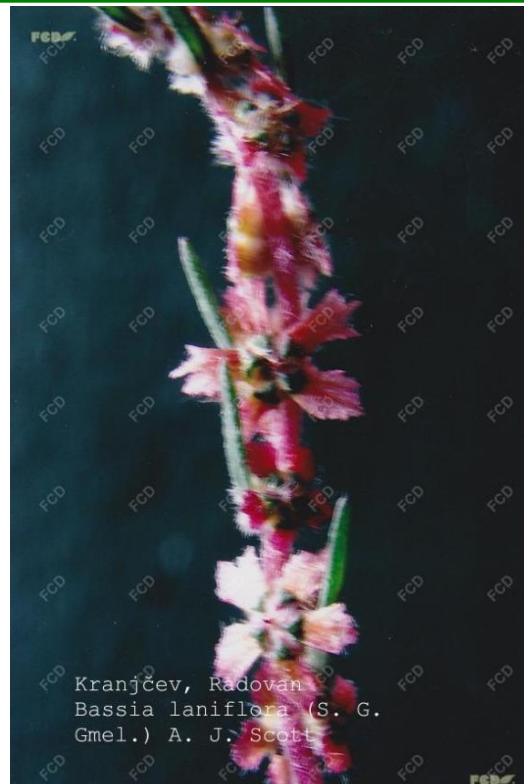
Koeleria glauca (Schrad.) DC. (CR)



Mađarska

<https://www.inaturalist.org/observations/174854651>

Bassia laniflora (S. G. Gmel.) A. J. Scott (CR)



Veronica dillenii Crantz (CR)

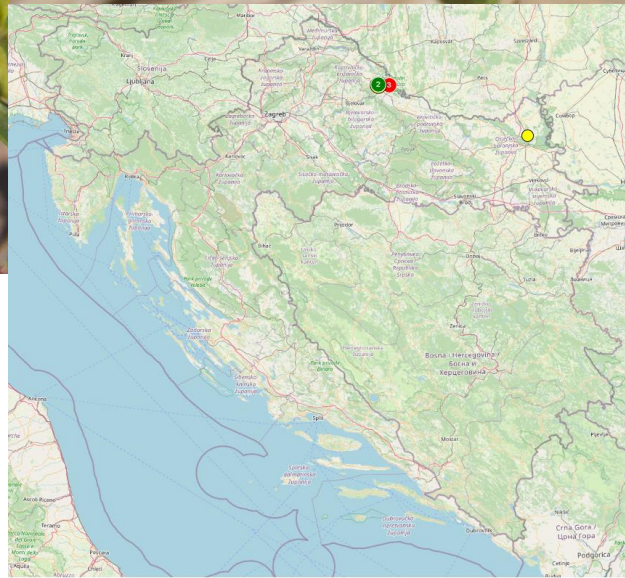


Borovečki-Voska, Ljiljana
Veronica dillenii Crantz



ek, Dubravko
Veronica dillenii Crantz

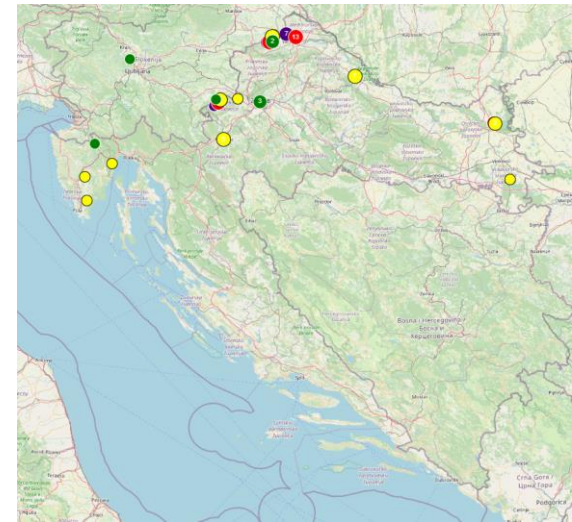
Đurđevački peski



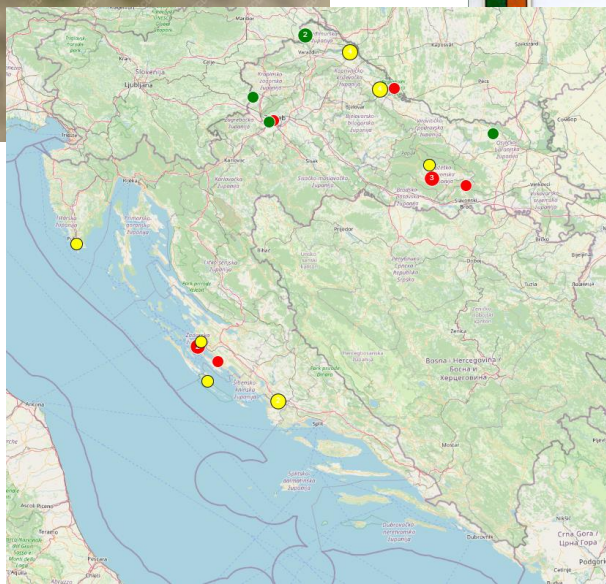
Pulsatilla pratensis (L.) Miller ssp. *nigricans* (Störck) Zam. (CR)



naselje Bilje, mjesno groblje, Natura 2000



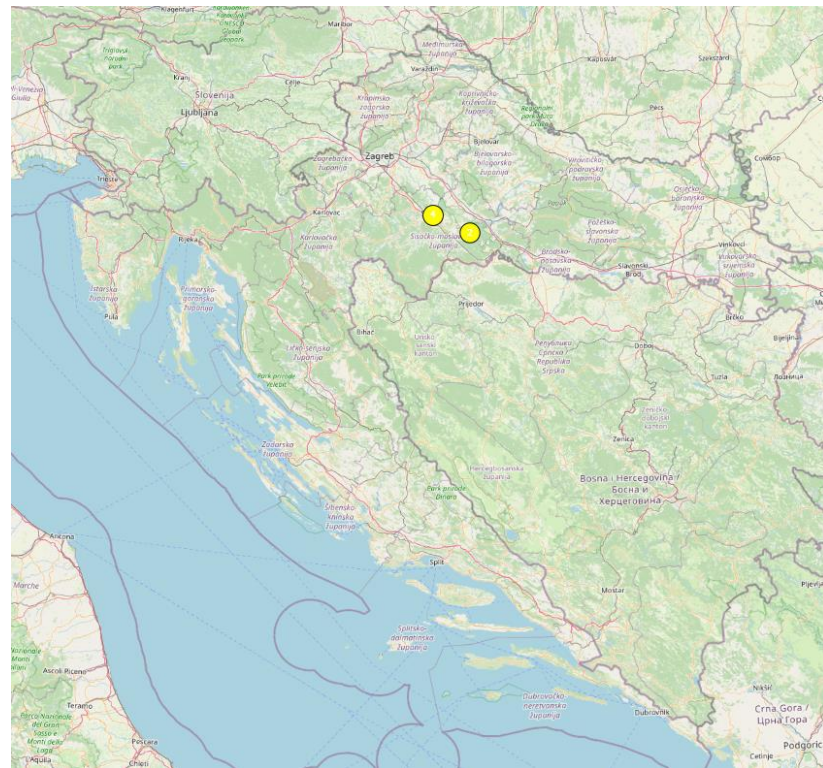
Polygonum arenarium Waldst. et Kit. (CR)





Rezervat Đurđevački peski

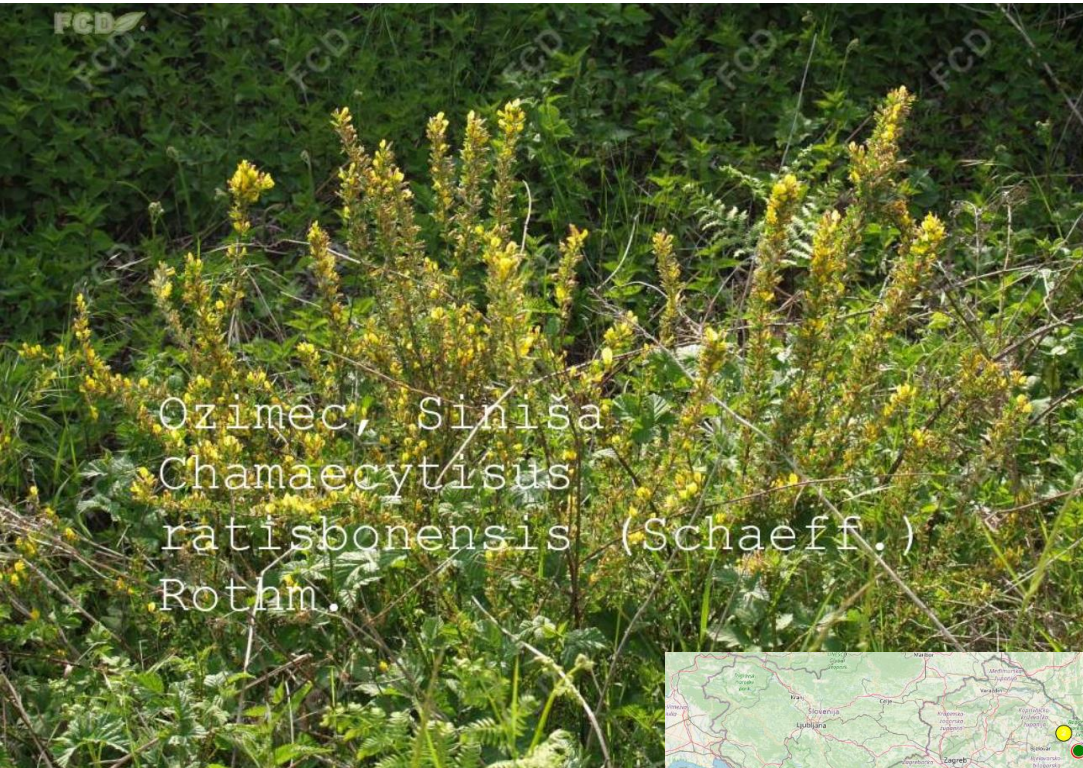
Eryngium planum L. (RE)



Švedska

Opis nalazišta	Autori	Godina
oko Siska	Schlosser, J.C.K.; Vukotinović, Lj.	1869
Prelošćica	Schlosser, J.C.K.; Vukotinović, Lj.	1869
Mužilovčica	Schlosser, J.C.K.; Vukotinović, Lj.	1869
Sisak (Moslavina)	Schlosser, J.C.K.; Vukotinović, Lj.	1869
Prelošćica (Moslavina)	Schlosser, J.C.K.; Vukotinović, Lj.	1869
Mužilovčica (Moslavina)	Schlosser, J.C.K.; Vukotinović, Lj.	1869

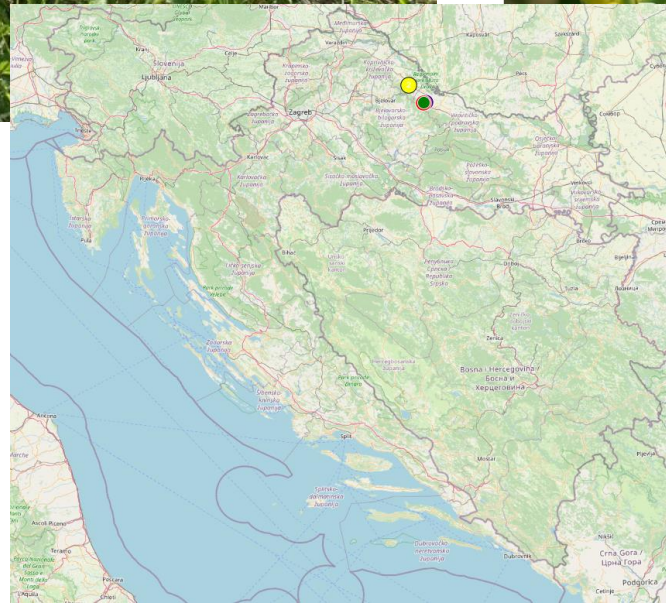
Chamaecytisus ratisbonensis (Schaeff.) Rothm. (CR)



Ozimec, Siniša
Chamaecytisus
ratisbonensis (Schaeff.)
Rothm.



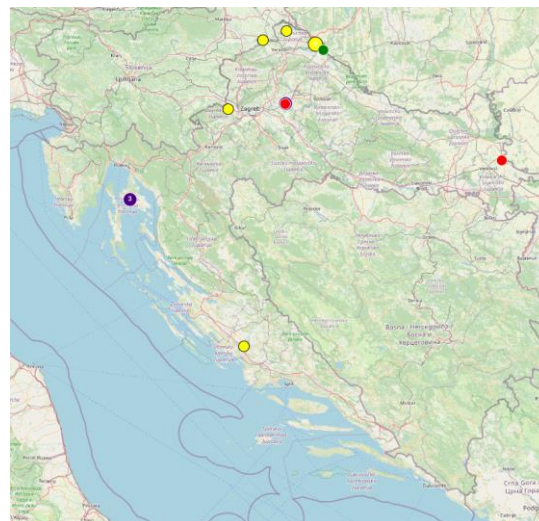
Ozimec, Siniša
Chamaecytisus
ratisbonensis (Schaeff.)
Rothm.



Hippophae rhamnoides L. (RE -> CR)



Vrbovec, Brčevac; uz brzu cestu



Franjić J., Horvat G., Krstonošić D. (2016):
Novo nalazište i sintaksonomske značajke
pasjeg trna (*Hippophaë rhamnoides* L.,
Elaeagnaceae) u Hrvatskoj. Šumarski list
140(3-4): 111-116.

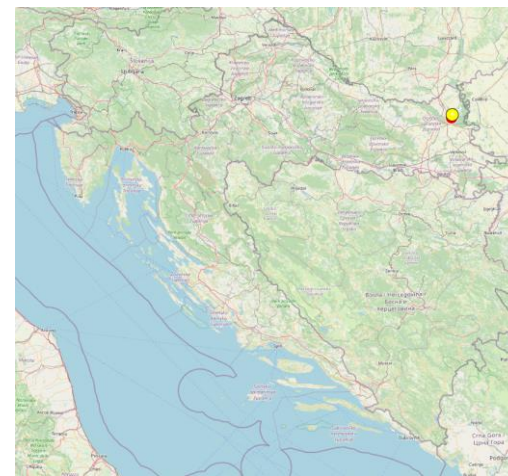
Praporni strmci (lesni odsjeci) i stepski travnjaci

- oboje dolaze samo u istočnoj Hrvatskoj
- postankom su vezani uz rijeku Dunav

Doronicum hungaricum Rchb. f. (CR)



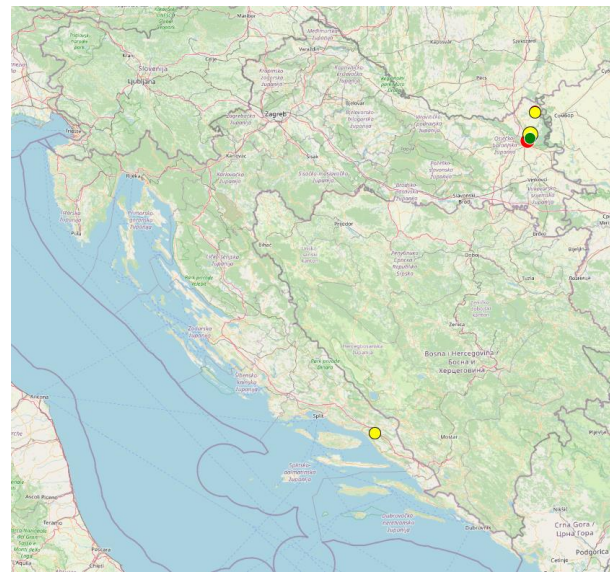
naselje Bilje, mjesno groblje, Natura 2000



Prunus tenella Batsch (CR)



naselje Bilje, mjesno groblje, Natura 2000



Xeranthemum annuum L. (EN)



Agropyron cristatum (L.) Gaertn. ssp.
pectinatum (M. Bieb.) Tzvelev (EN)



uzimec, Sinisa
Agropyron cristatum (L.)
Gaertn. ssp. *pectinatum*
(M. Bieb.) Tzvelev

13/06/2024 11:18

Obradive površine

- staništa rijetkih korova
- vrste ugrožene pesticidima, umjetnim gnojivima, intenzivnom poljoprivredom i monokulturama



*Consolida
ajacis* (L.) Schur
(CR)

Dalmacija,
Prgomet

***Cuscuta epilinum* Weihe (RE)**

- Forenbacher (1908)

- herbarij ZA (1957)

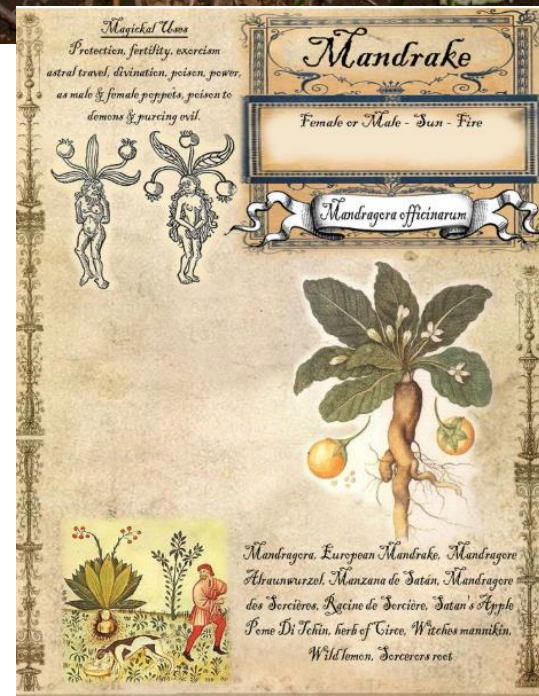
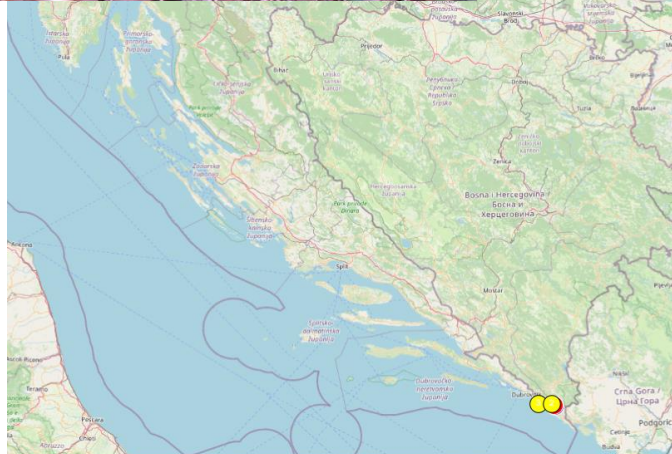


<https://www.inaturalist.org/observations/120659613>



Linum usitatissimum L. -> domadar

Mandragora officinarum L. (CR)



Bupleurum lancifolium Hornem. (CR)



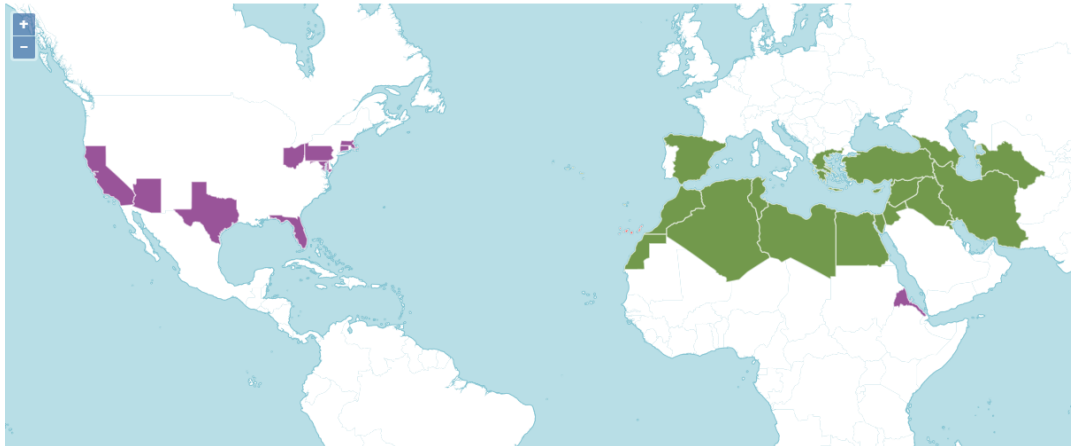
Bupleurum lancifolium - S Israel, N Negev Highlands, road 31 W of Kseifa, 1500m

© Ori Fragman-Sapir

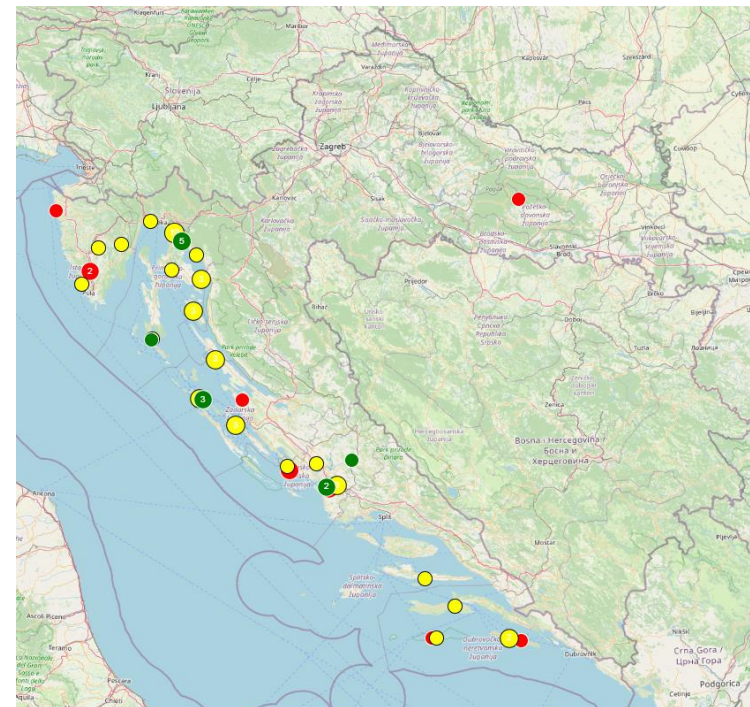


Bupleurum lancifolium - S Jordan, S Rajif, 1500m

11 of 20



18 of 20



Consolida ajacis (L.) Schur (CR)

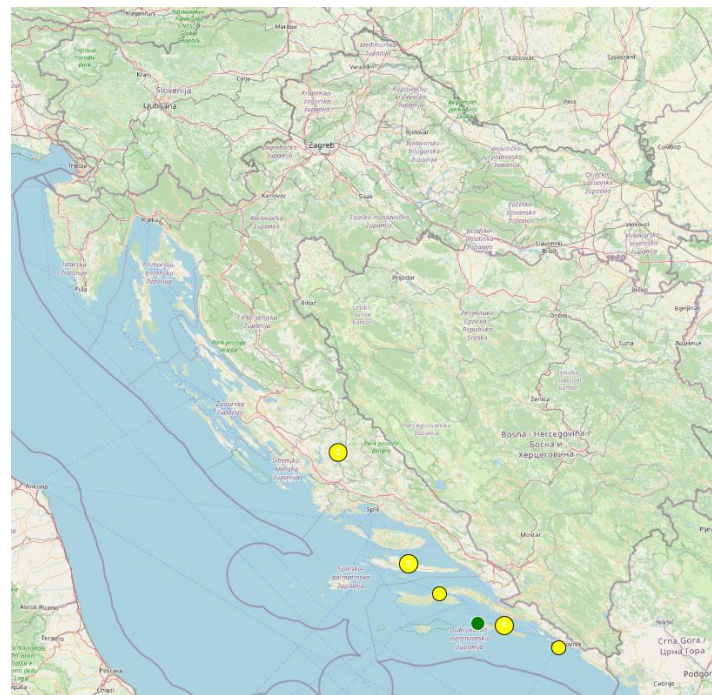


Consolida orientalis (Gay) Schrödinger (CR)

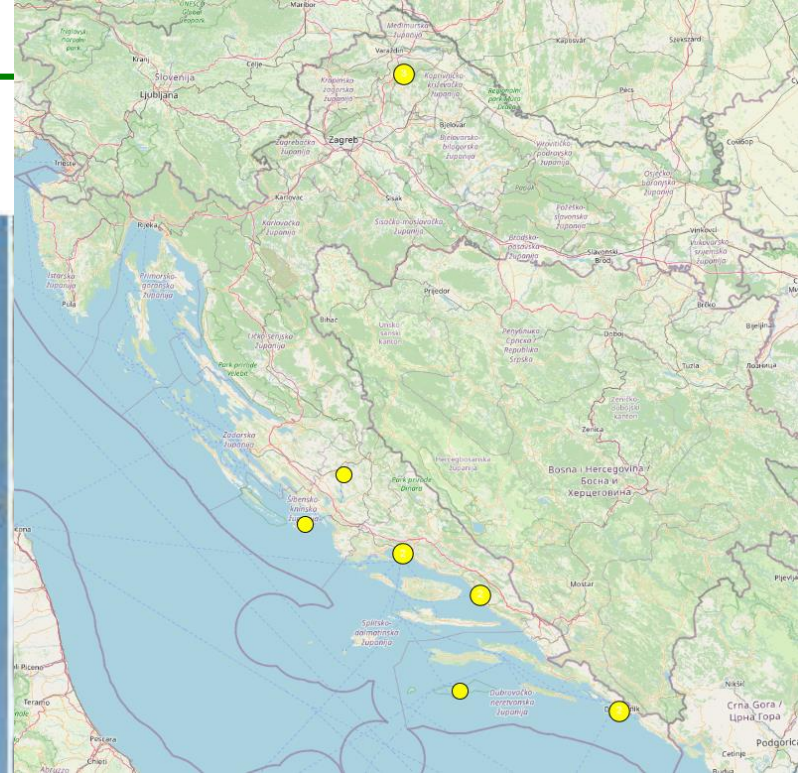
-> prema POWO i WFO sinonim od *C. ajacis*



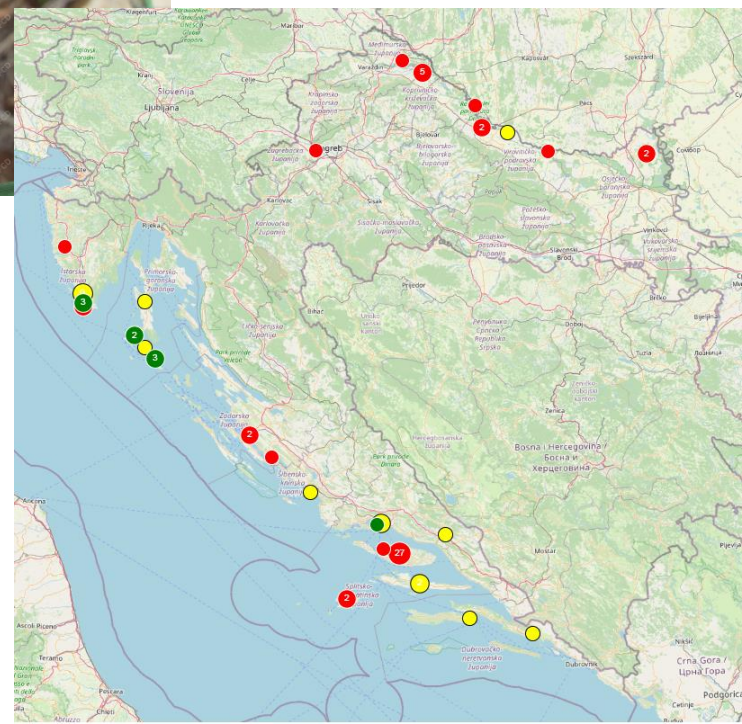
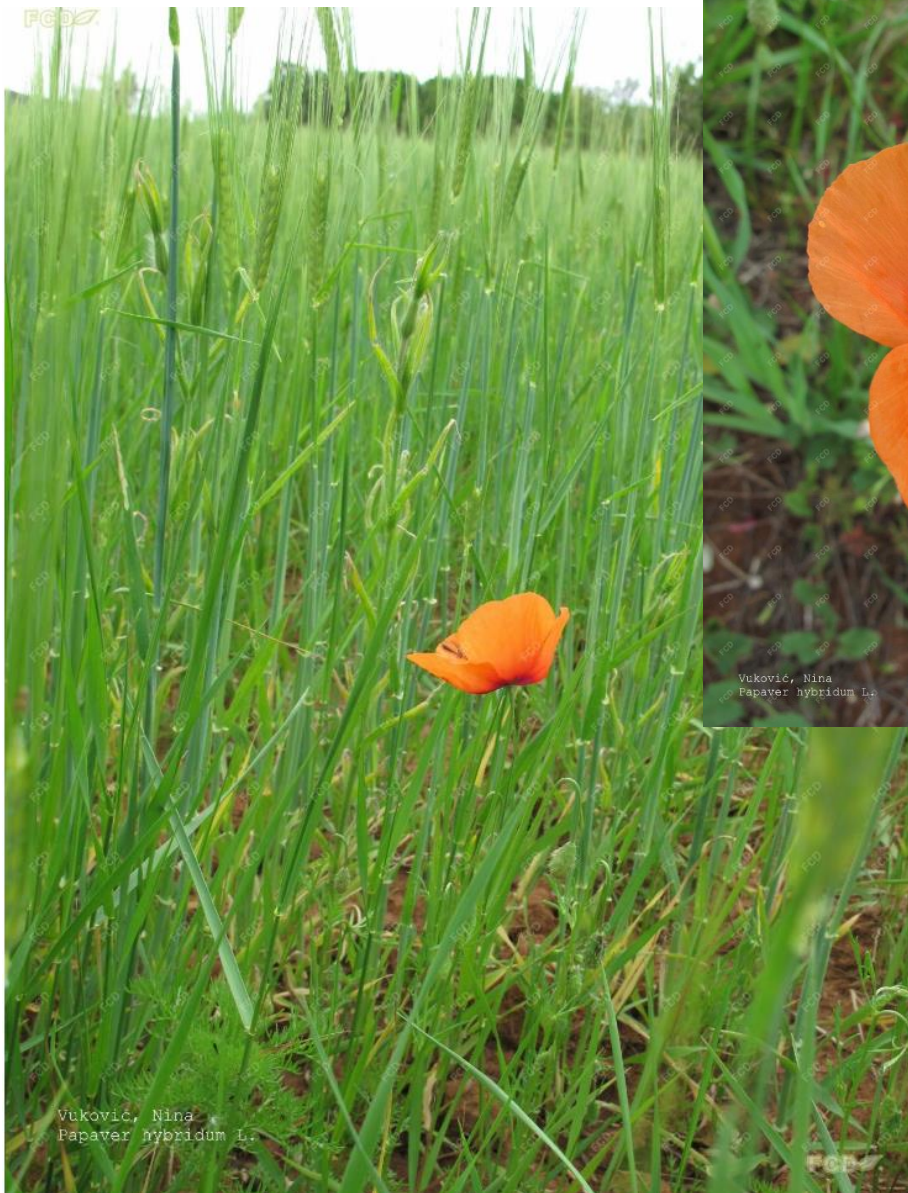
Consolida brevicornis (Vis.) Soó (CR)



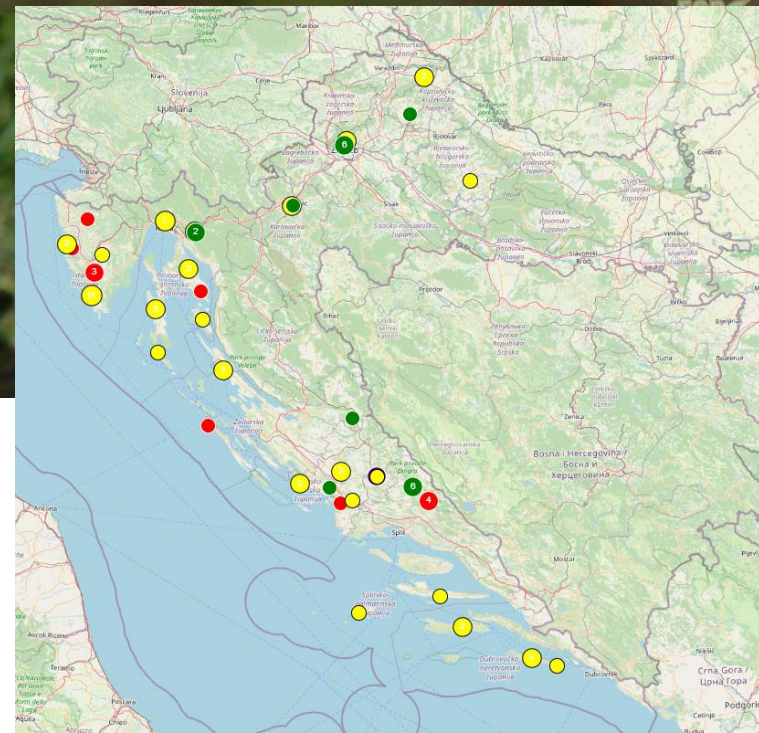
Delphinium halteratum Sm. (CR)



Papaver hybridum L. (CR)



Vaccaria hispanica (Mill.) Rauschert (CR)



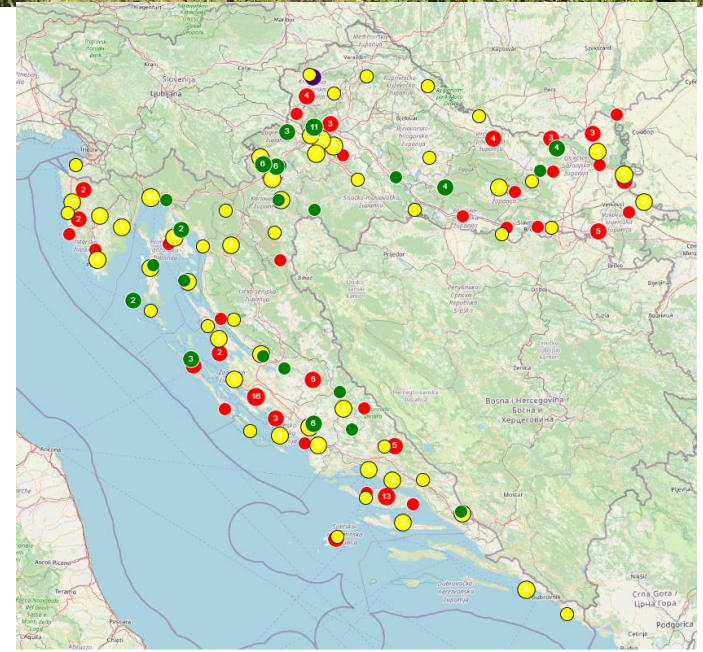
Adonis annua L. (EN)



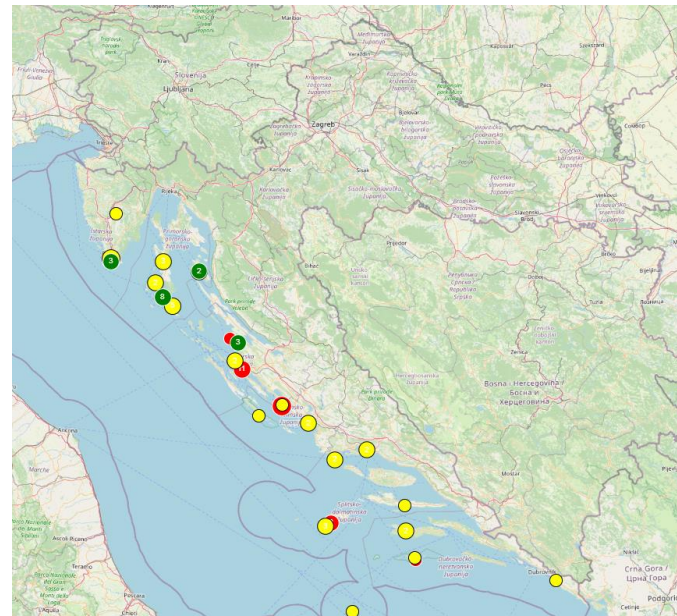
Hibiscus trionum L. (NT)



Borovečki-Voska, Ljiljana
Hibiscus trionum L.



Lathyrus ochrus (L.) DC. (NT)



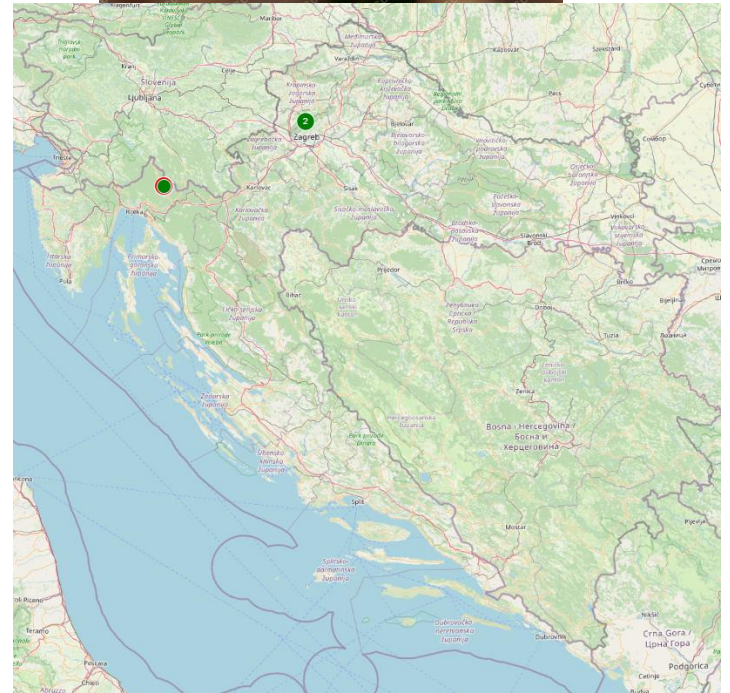
Šume i šumski rubovi

- stabilni ekosustavi
- nezakonito sabiranje biljaka
- nekontrolirana sječa

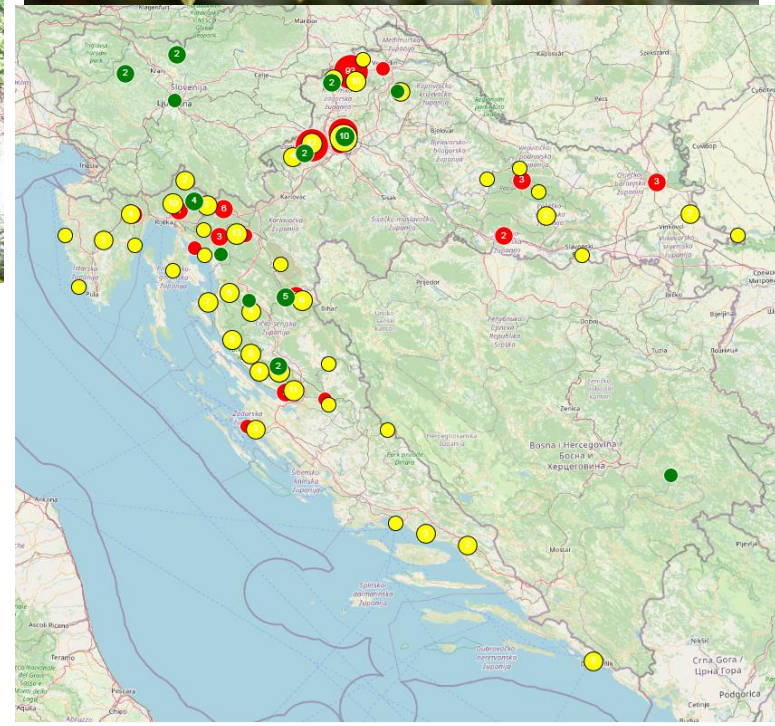


prašuma Čorkova uvala u NP Plitvička jezera

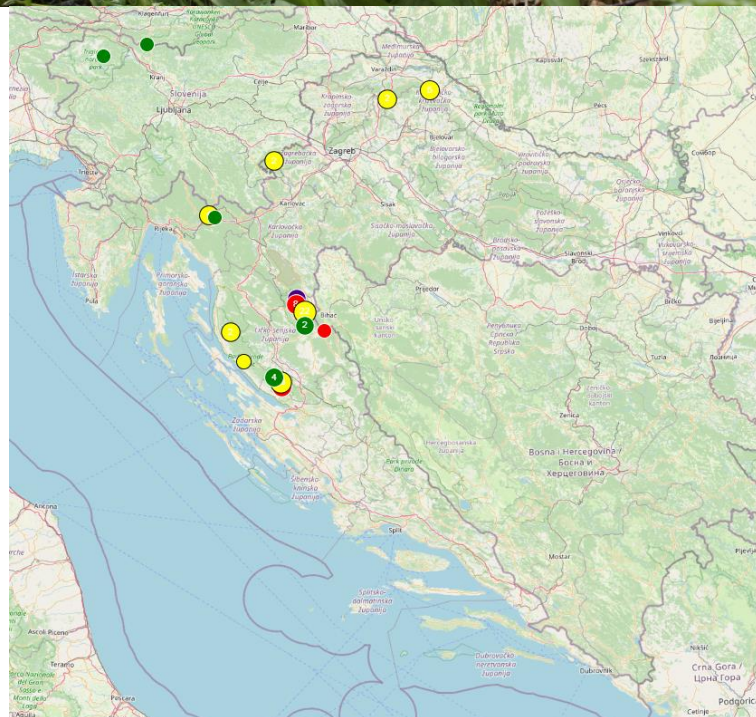
Botrychium matricariifolium (Retz.) A. Br. ex Koch (CR)



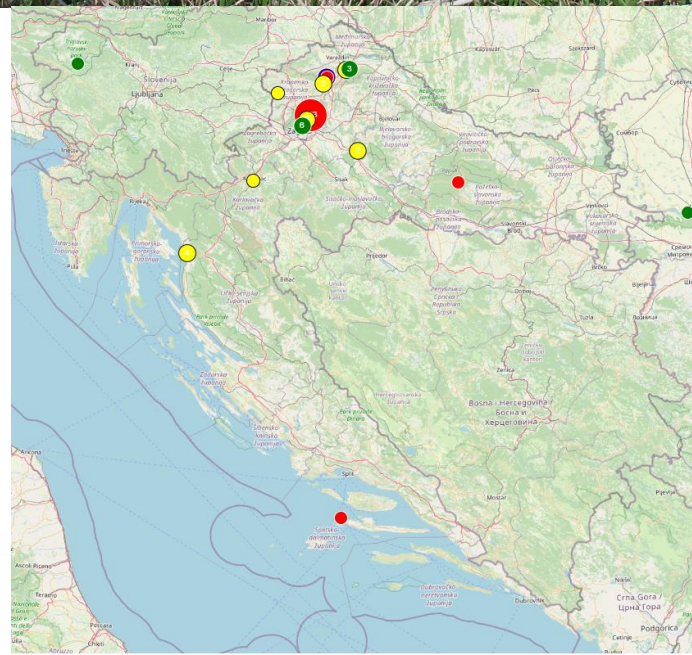
Taxus baccata L. (VU)



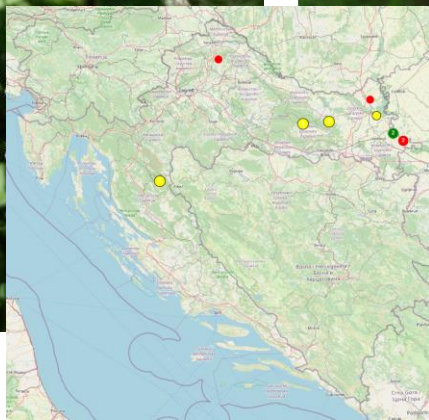
Cypripedium calceolus L. (VU)



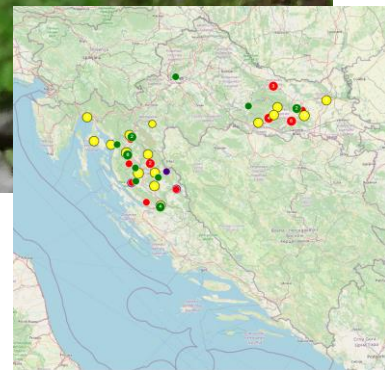
Anemone sylvestris L. (VU)



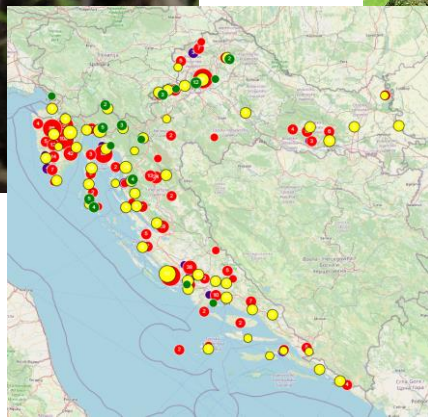
Digitalis lanata Ehrh. (CR)



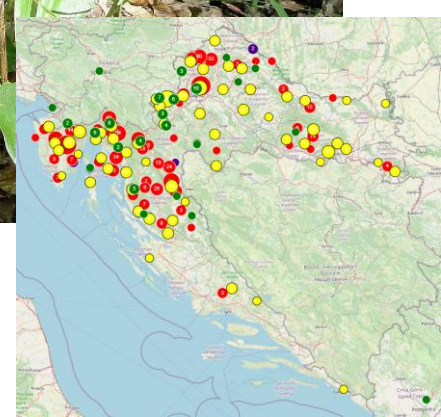
Digitalis ferruginea L. (VU)



Orchis purpurea Huds. (VU)



Platanthera bifolia (L.) Rich. (LC)



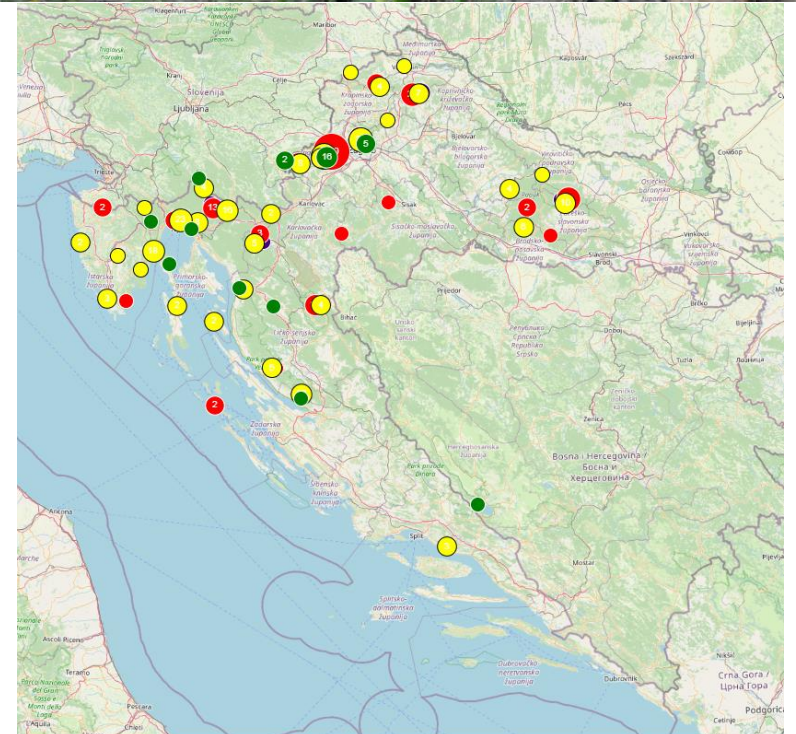
Ilex aquifolium L. (LC)



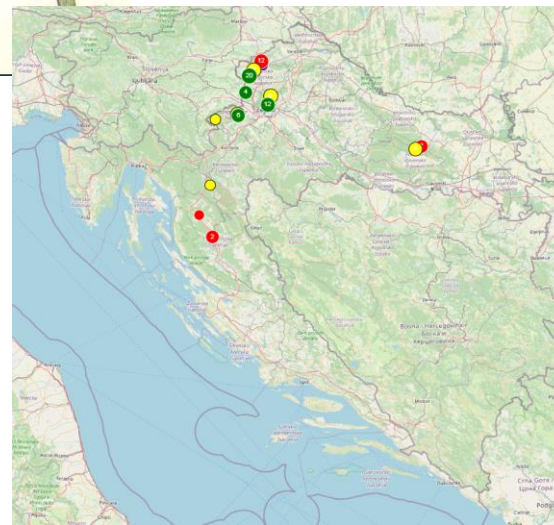
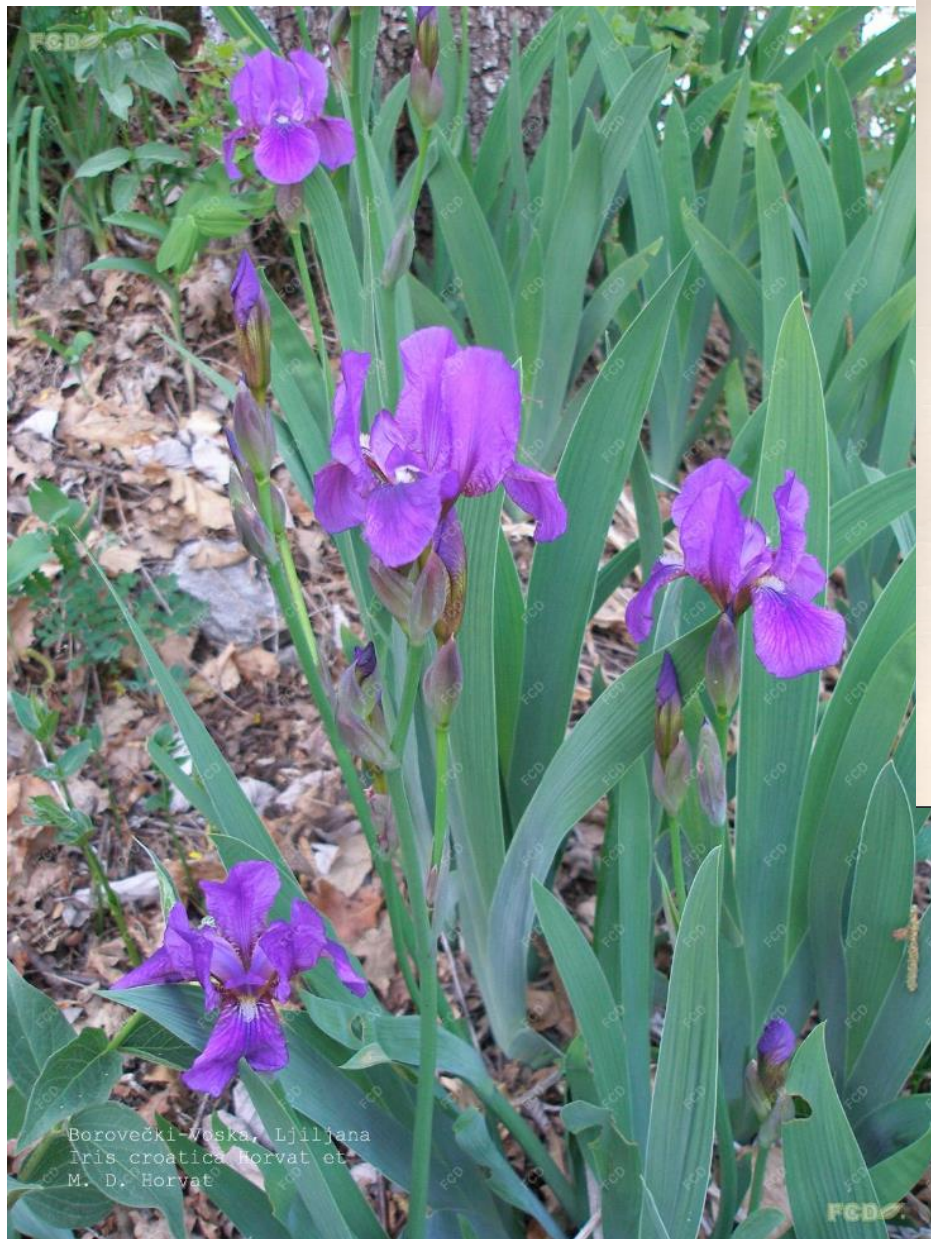
Sarić, Semso
Ilex aquifolium L.



Šimek, Štravro
Ilex aquifolium L.



Iris croatica Horvat et M. D. Horvat (NT)



Travnjaci

- travnjaci su u Hrvatskoj uglavnom poluprirodna staništa, održavana stoljećima ispašom i košnjom
- socio-ekonomske promjene u 20.st. dovele su do depopulacija ljudi, opadanja stočarstva i tradicionalnog korištenja ruralnog prostora
- posljedica je prirodni proces progresivne vegetacijske sukcesije (zaraštavanja) travnjaka



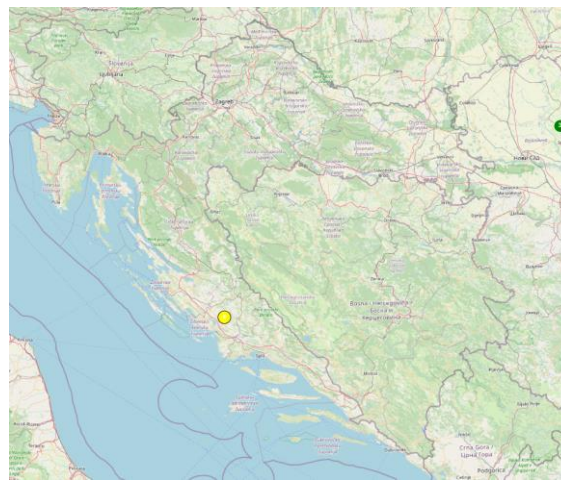
Beckmannia eruciformis (L.) Host (CR)



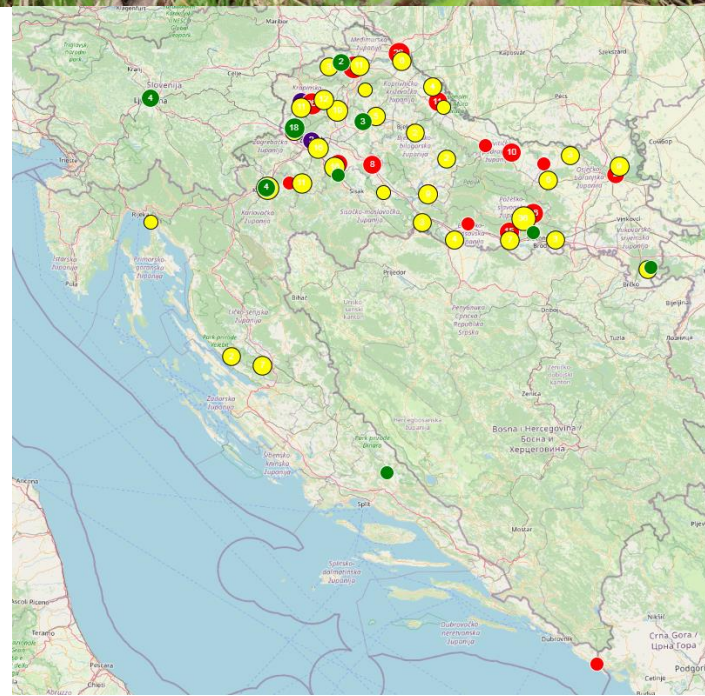
<https://www.inaturalist.org/observations/238999016>



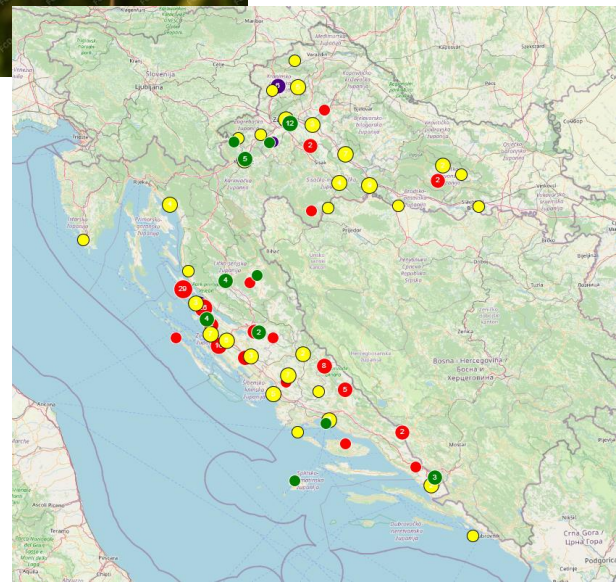
<https://www.inaturalist.org/observations/244359163>



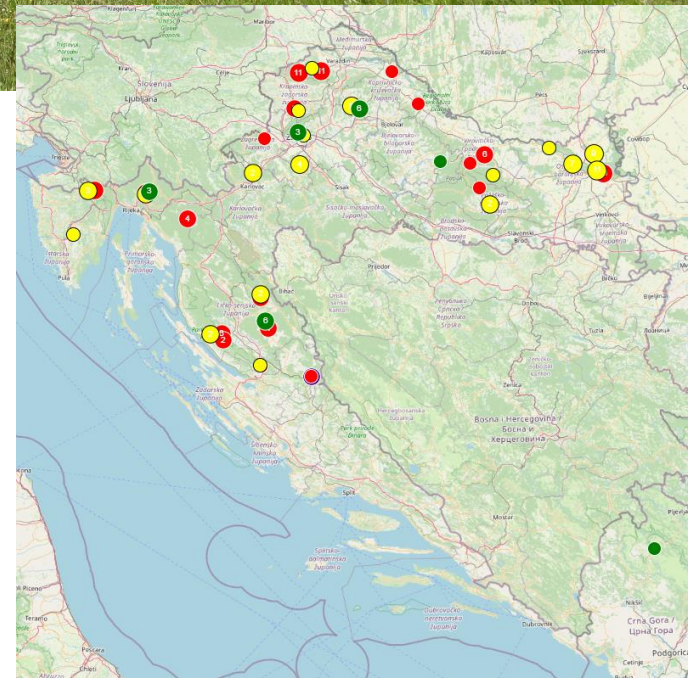
Fritillaria meleagris L. (VU)



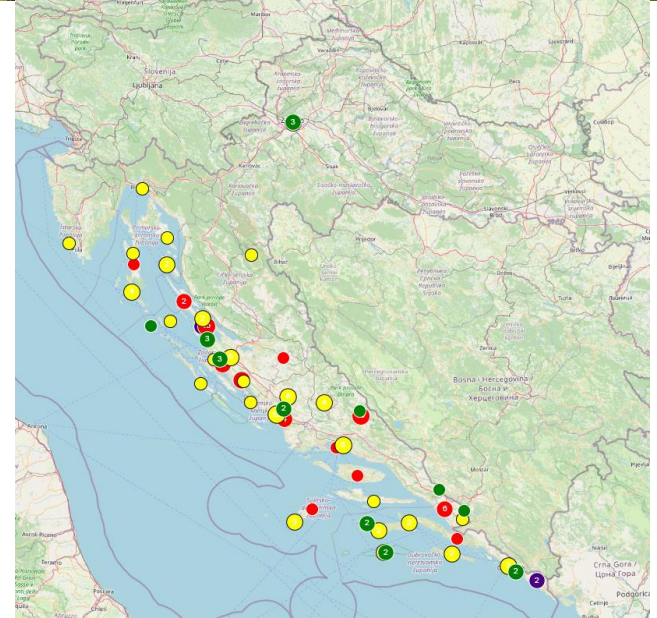
Alopecurus rendlei Eig (VU)



Iris sibirica L. (NT)

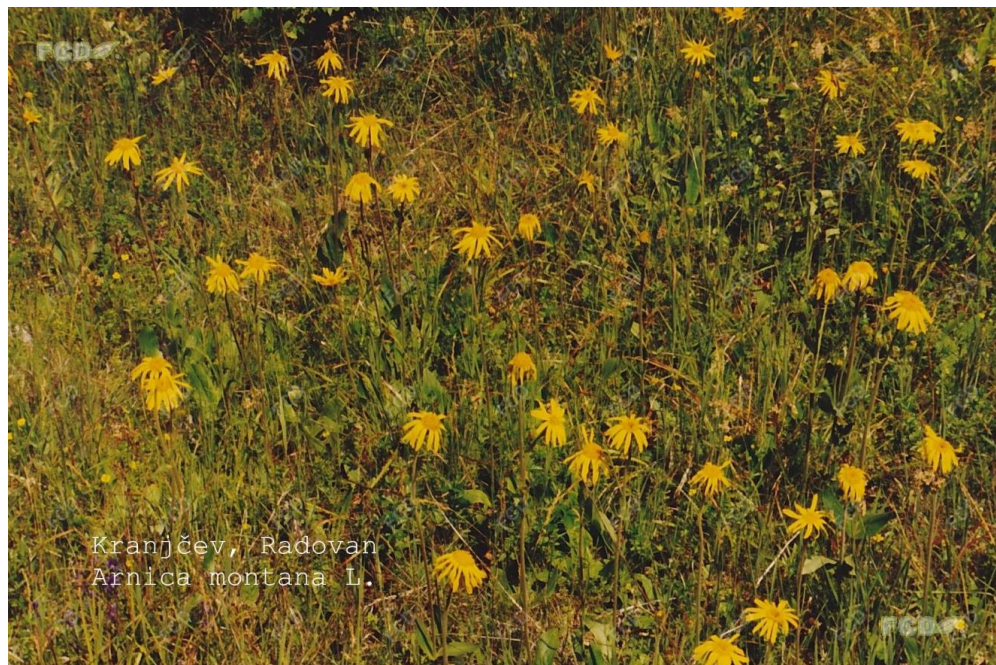


Trifolium resupinatum L. (VU)

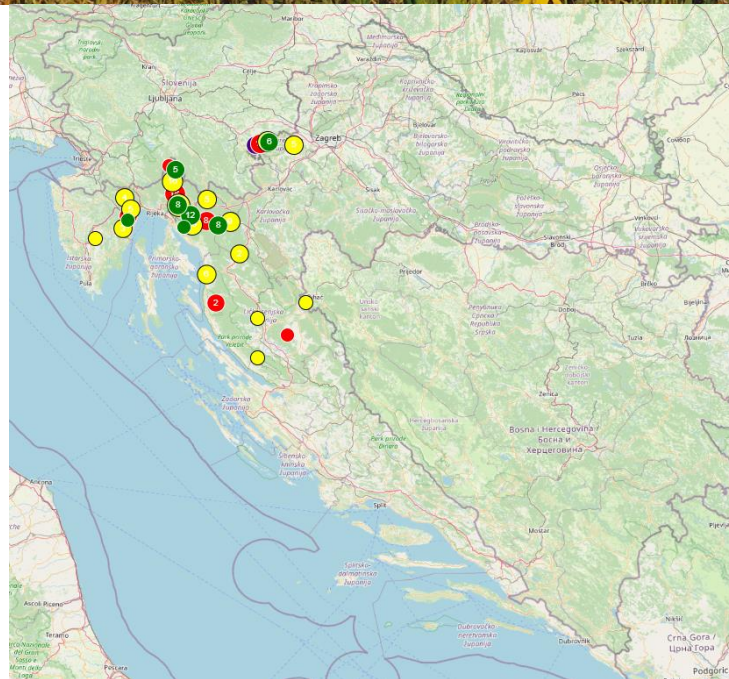


Arnica montana L. (VU)

Photo by Semir Maslo

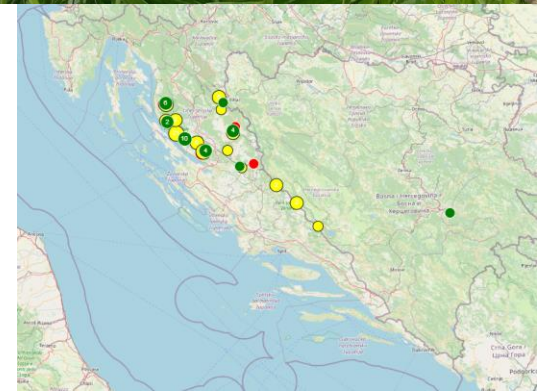
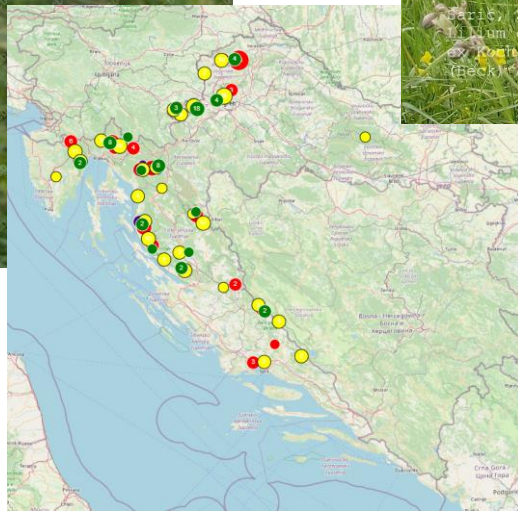


Kranjčev, Radovan
Arnica montana L.

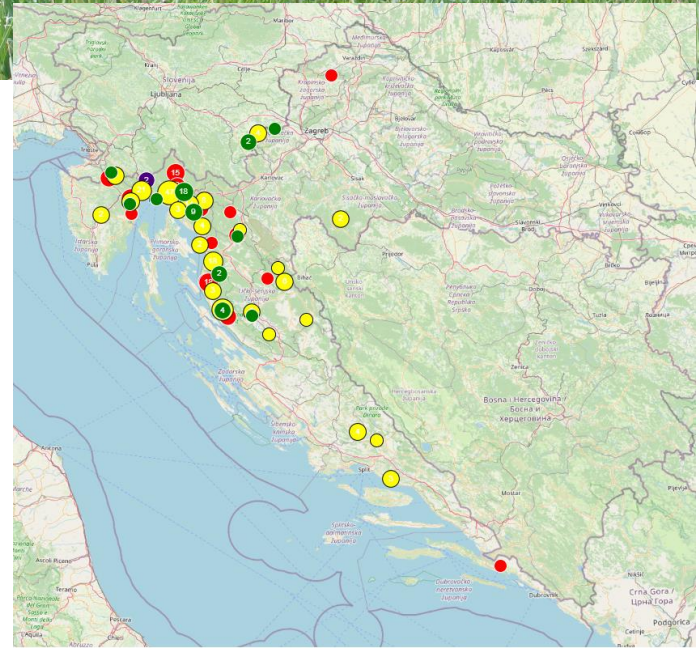


Lilium carniolicum Bernh. ex Koch (VU)

Lilium carniolicum Bernh. Ex Koch ssp.
bosniacum (Beck) Asch. et Graebn. (VU)



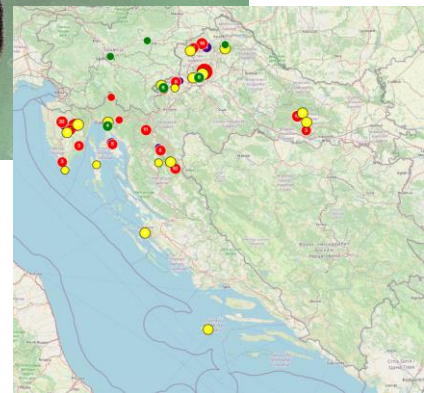
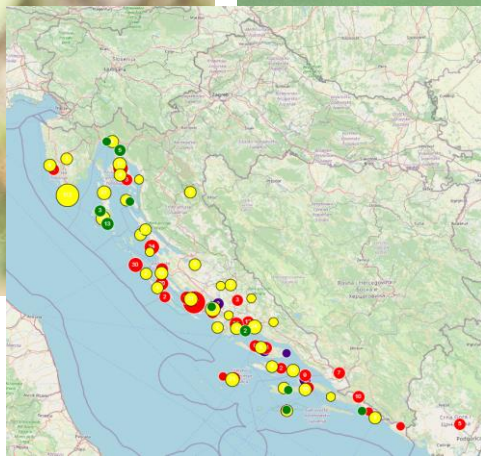
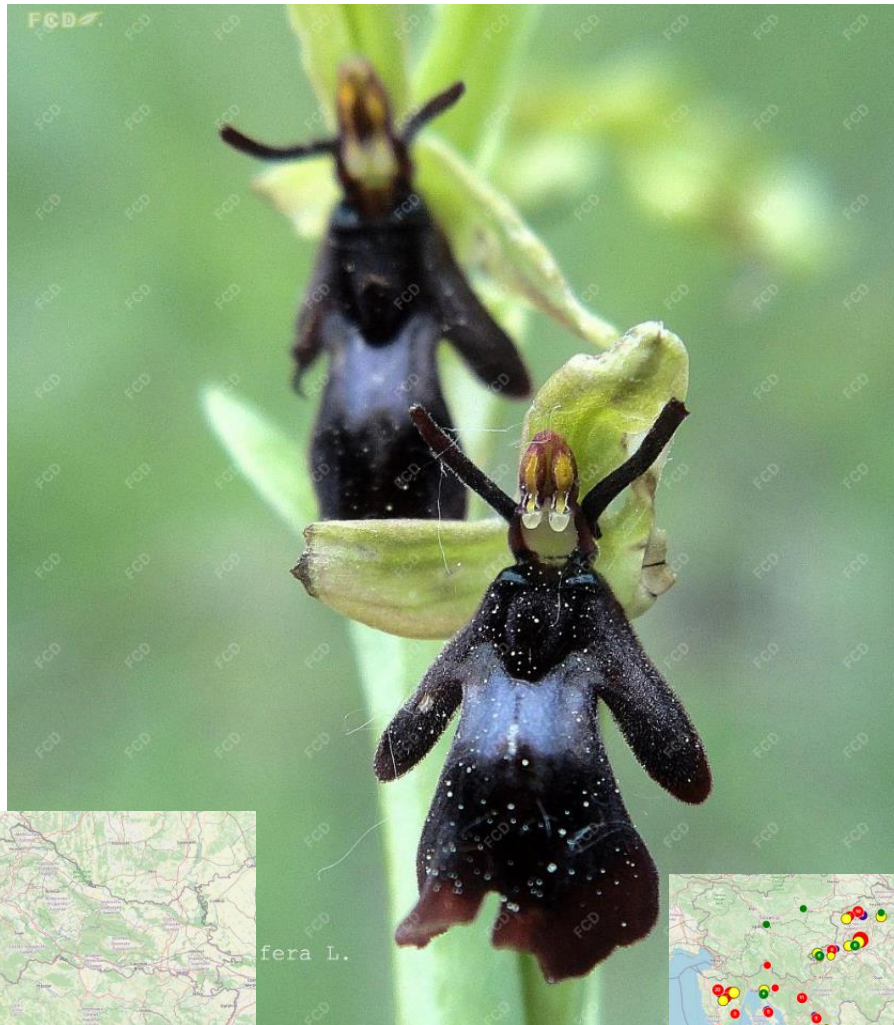
Lilium bulbiferum L. (VU)



Ophrys bertolonii Moretti (VU)



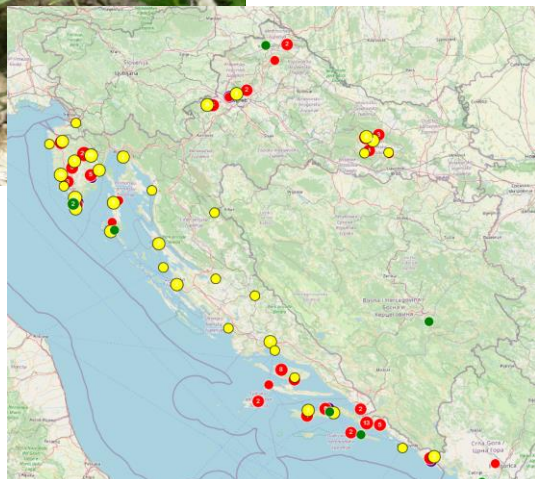
Ophrys insectifera L. (VU)



Orchis simia Lam. (VU)



Šarić, Bemso
Orchis simia Lam.



Serapias vomeracea (Burm. f.) Briq. (NT)



Trnkoczy, Amadej
Serapias vomeracea (Burm.
f.) Briq.

Nacionalni park Krka – projekt kontroliranog paljenja

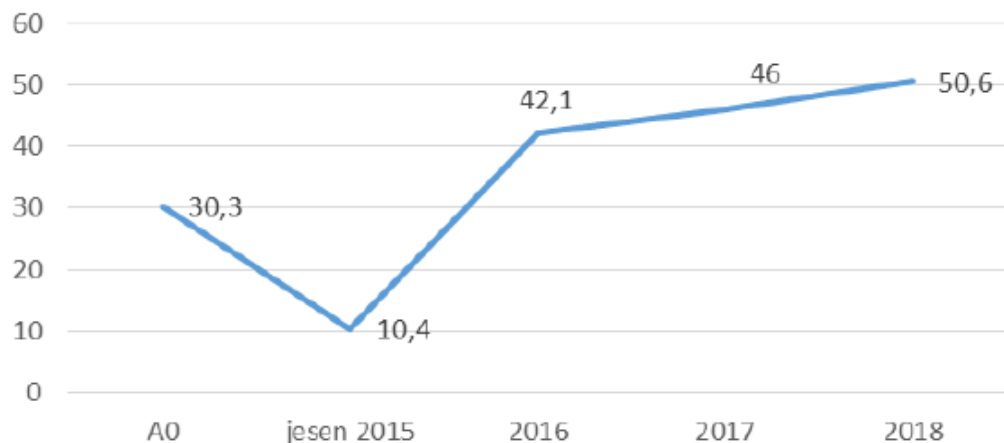


Na satelitskim slikama prikazane su nekadašnje pašnjačke površine u NP Krka koji su danas obrasli u gustu grmoliko vegetaciju šmrike (*Juniperus oxycedrus*).



Na odabranim trajnim ploham grmolika se vegetacija uklonila kontroliranim požarom.

Ploha A srednji broj vrsta S

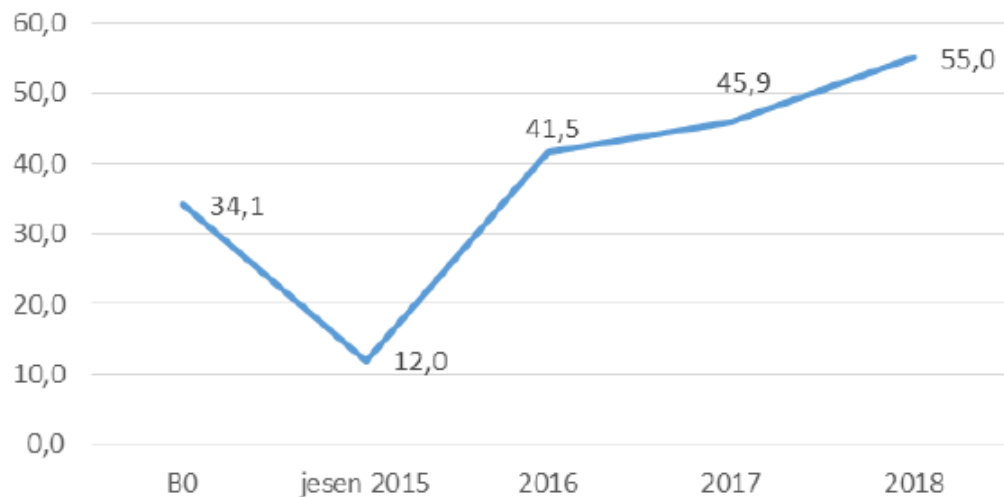


Na grafovima možete pratiti promjenu u florističkom diverzitetu na dvije trajne plohe.

Diverzitet je prikazan kao prosječni broj vrsta na plohi.

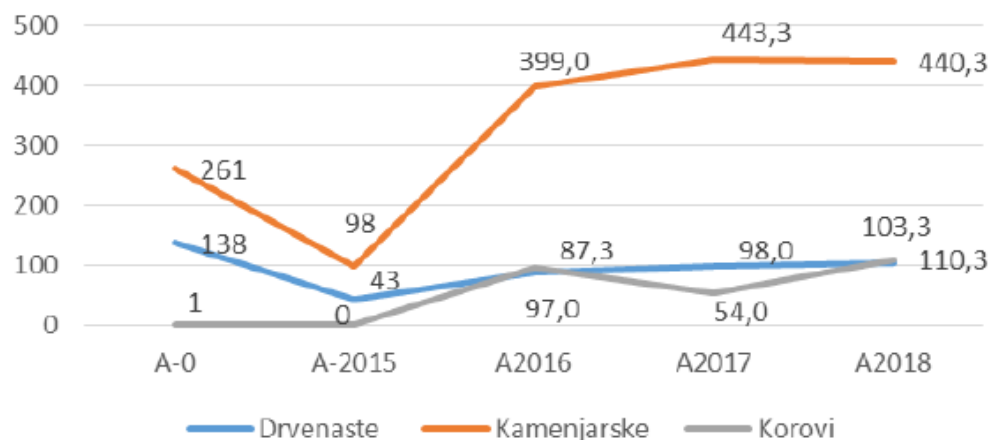
A0 i B0 su početna (nulta) stanja prije požara, jesen 2015 je prvi monitoring nakon požara.

Ploha B srednji broj vrsta S



Očita je vrlo brza regeneracija vrstama bogatih travnjaka.

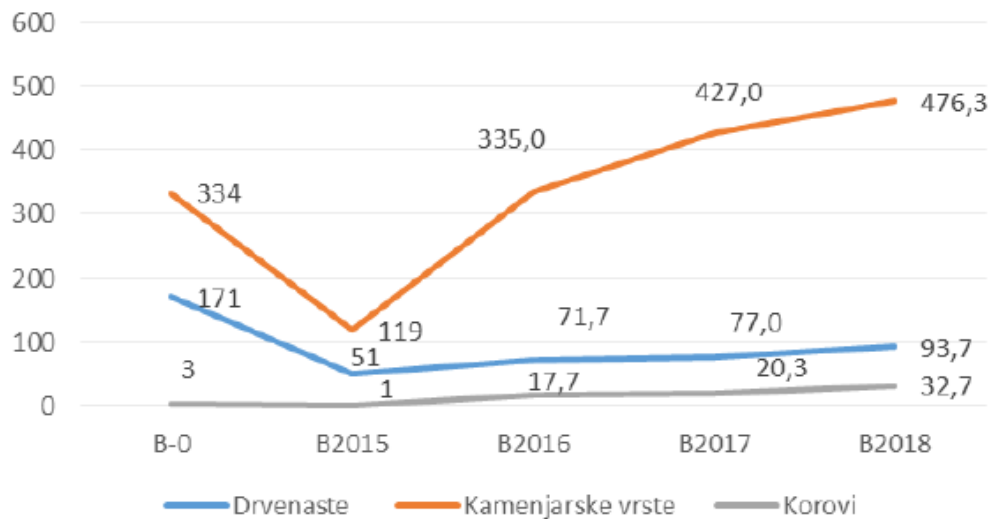
Ploha A pokrovnost funkcionalnih grupa



Na grafovima su vrste zabilježene na ploham razdvojene u tri funkcionalne grupe, a brojevi pokazuju ukupnu sumu pokrovnosti.

Vidljivo je da nakon požara pada pokrovnost drvenastih, a brzo raste pokrovnost vrsta kamenjarskih travnjaka.

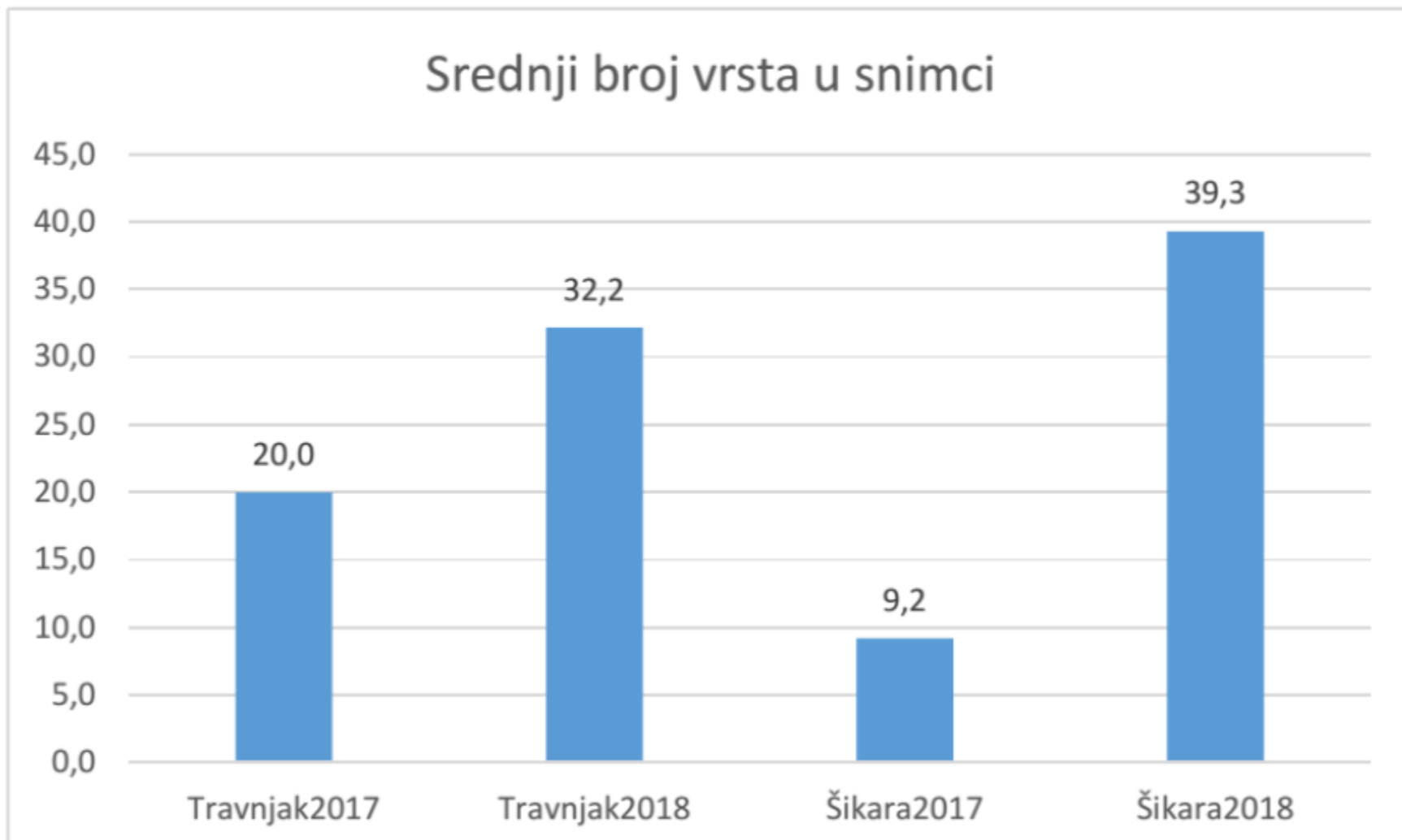
Ploha B pokrovnost funkcionalnih grupa





Obnova travnjačke vegetacije bogate vrstama u periodu od pet godina.

Nacionalni park Krka – projekt ponovnog uvođenja ispaše



Porast biljnog diverziteta već u prvoj godini nakon uvođenja ispaše i to na travnjačkim i šikarastim plohama.

Nacionalni park Sjeverni Velebit – projekt ponovnog uvođenja ispaše





U sklopu projekta na travnjake su vraćena goveda i ovce.

Tradicionalna ispaša uvijek je uključivala više vrsta stoke, jer svaka vrsta ima različit način ispaše travnjaka.



2017.



Prikazane su sheme rotacijskog stočarenja na tri bliska travnjaka u NP Sjeverni Velebit.

Time se smanjuje mogući potencijalni negativni utjecaj stoke na pojedine osjetljivije biljne vrste.

2018.

