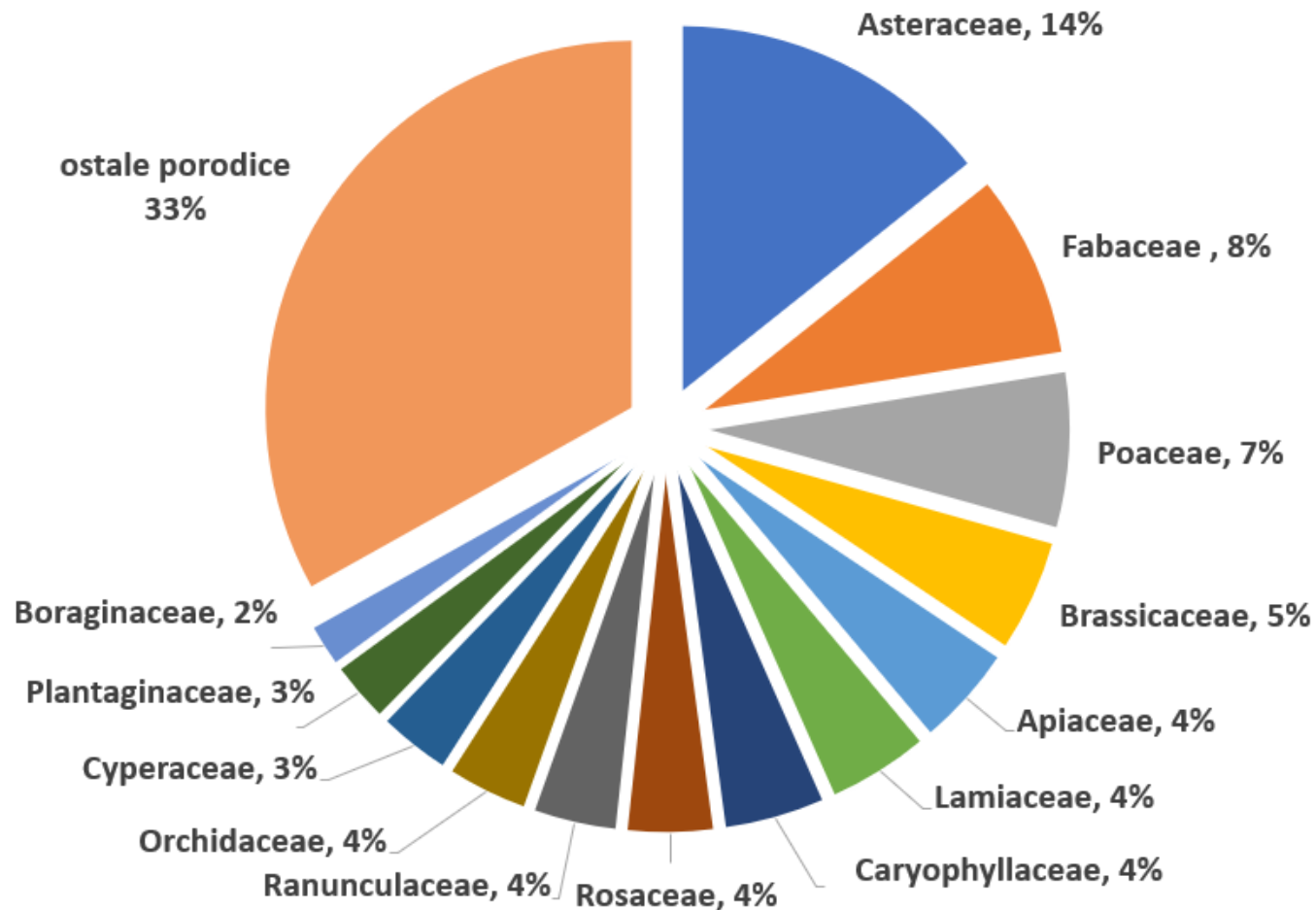


Asteraceae (Compositae, glavočike)

## Najveće porodice hrvatske flore

~65% flore gradi  
15 porodica

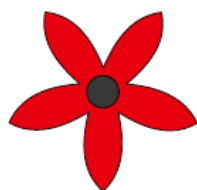


porodica	sp+subsp.
1 Asteraceae	793
2 Fabaceae	452
3 Poaceae	384
4 Brassicaceae	278
5 Apiaceae	250
6 Lamiaceae	250
7 Caryophyllaceae	249
8 Rosaceae	214
9 Ranunculaceae	207
10 Orchidaceae	200
11 Cyperaceae	179
12 Plantaginaceae	150
13 Boraginaceae	106
14 Orobanchaceae	99
15 Caprifoliaceae	87

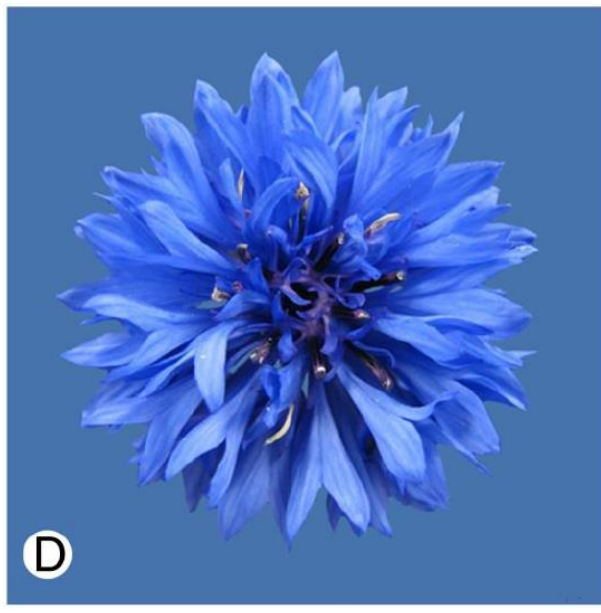
# Asterales – Asteraceae (glavočike, Composite)

$$* \uparrow K_{\text{papus}} [C_{(5)} A_{(5)}] \overline{G_{(2)}}$$

## Carduoideae



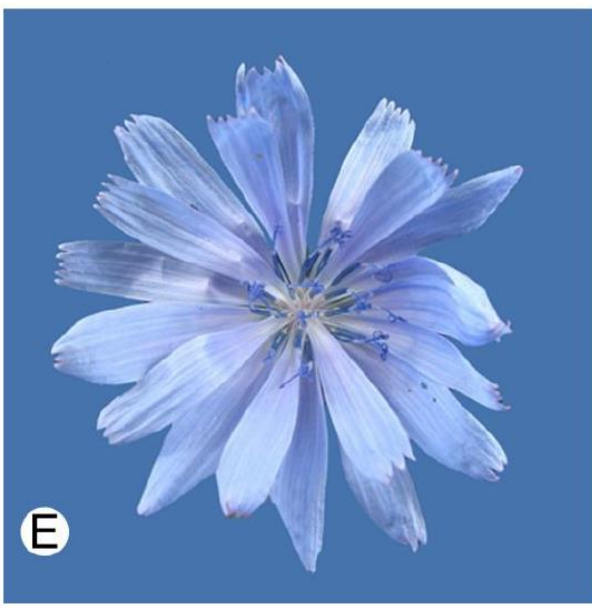
cjevasti cvjetovi



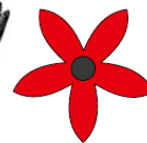
## Cichorioideae



jezičasti cvjetovi



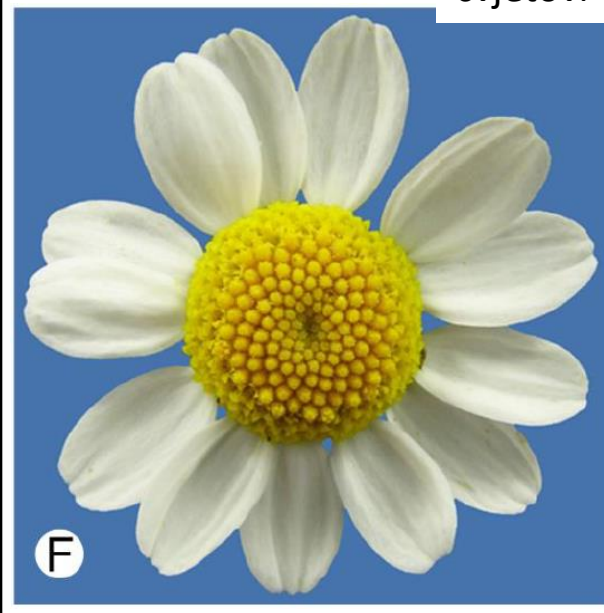
## Asteroideae



cjevasti  
cvjetovi



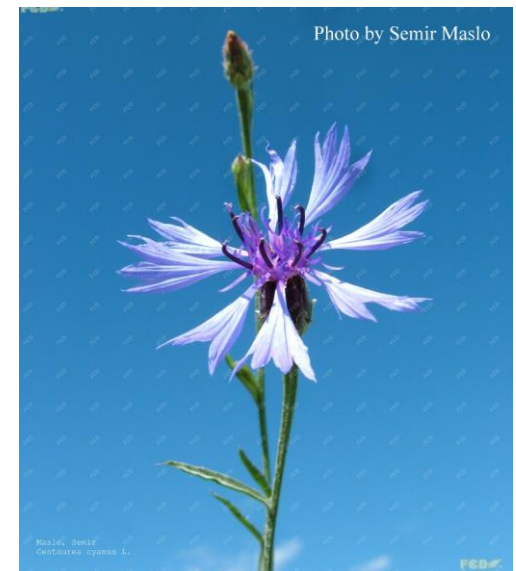
jezičasti  
cvjetovi







*Centaurea jacea* L.



*Centaurea cyanus* L.





*Centaurea calcitrapa* L.



*Centaurea solstitialis* L.



*Centaurea deusta* Ten.



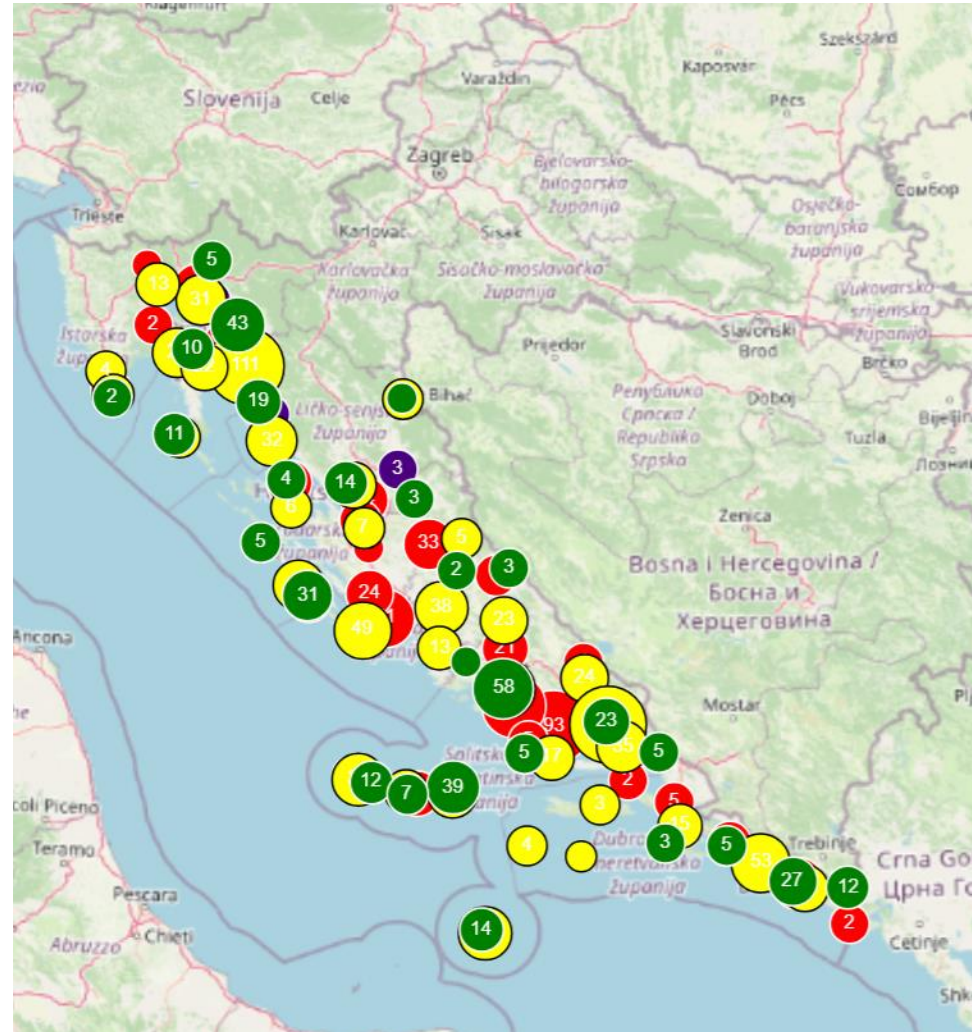
*Centaurea triumfettii* All.



*Centaurea rhenana* Boreau

## Endemi

- Centaurea biokovensis* Teyber NT  
*Centaurea brachtii* Rchb. f. NT  
*Centaurea ceratophylla* Ten.  
*Centaurea crithmifolia* Vis. VU  
*Centaurea cuspidata* Vis. NT  
*Centaurea dalmatica* A. Kern. NT  
*Centaurea dalmatica* A. Kern. ssp. *dalmatica*  
*Centaurea dalmatica* A. Kern. ssp. *lubenicensis* Trinajstić et Zi. Pavletić  
*Centaurea friderici* Vis.  
*Centaurea friderici* Vis. ssp. *friderici*  
*Centaurea friderici* Vis. ssp. *jabukensis* (Ginzb. et Teyber) Greuter NT  
*Centaurea glaberrima* Tausch NT  
*Centaurea haynaldii* Hayek  
*Centaurea incompta* Vis. NT  
*Centaurea lovricii* Bogdanović, Boršić, Ljubičić, Brullo et Giusso  
*Centaurea nicolai* Bald. DD  
*Centaurea radichii* Plazibat NT  
*Centaurea ragusina* L. LC  
*Centaurea ragusina* L. ssp. *lungensis* (Ginzb.) Hayek  
*Centaurea ragusina* L. ssp. *ragusina*  
*Centaurea salonitana* Vis.  
*Centaurea spinosociliata* Seenus NT  
*Centaurea spinosociliata* Seenus ssp. *cristata* (Bertol.) Dostál  
*Centaurea spinosociliata* Seenus ssp. *spinosociliata*  
*Centaurea spinosociliata* Seenus ssp. *tommasinii* (A. Kern.) Dostál DD  
*Centaurea stenolepis* A. Kern. ssp. *joannis* Kárpáti NT  
*Centaurea tuberosa* Vis.  
*Centaurea visianiana* Plazibat NT  
*Centaurea x aliena* J. Wagner  
*Centaurea x pomoensis* Teyber NT  
*Centaurea x rossiana* J. Wagner et Degen  
*Centaurea x velinacensis* Degen et Lengyel NT

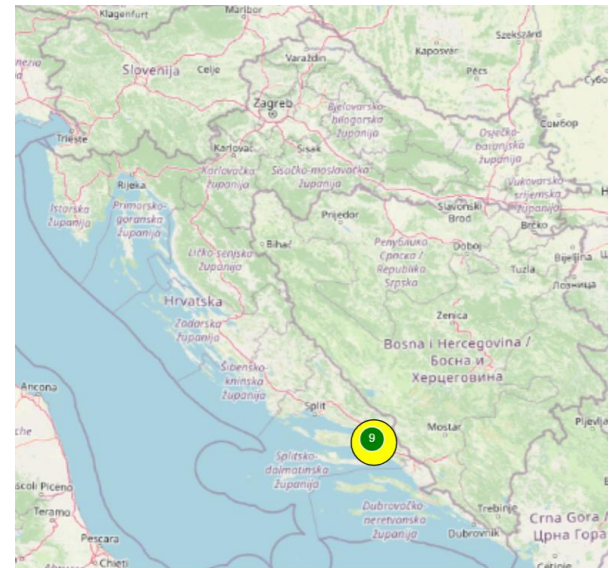
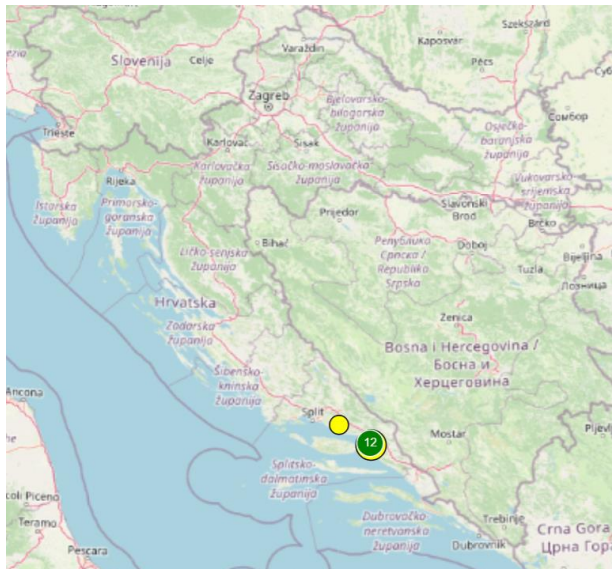




*Centaurea biokovensis* Teyber



*Centaurea cuspidata* Vis.





*Centaurea ragusina* L. ssp. *lungensis* (Ginzb.) Hayek

*Centaurea ragusina* L. ssp. *ragusina*



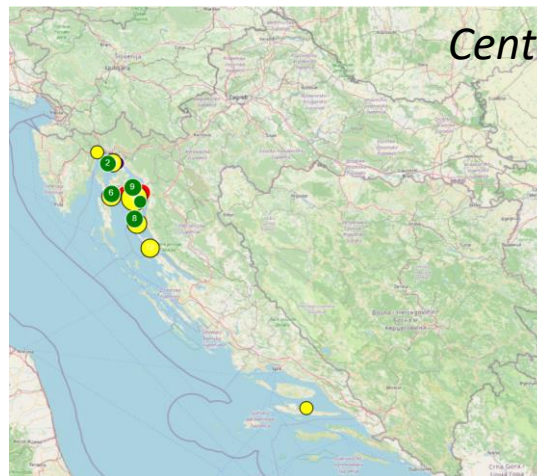
*Centaurea crithmifolia* Vis.



*Centaurea friderici* Vis. ssp. *friderici*



*Centaurea friderici* Vis. ssp. *jabukensis*  
(Ginzb. et Teyber) Greuter



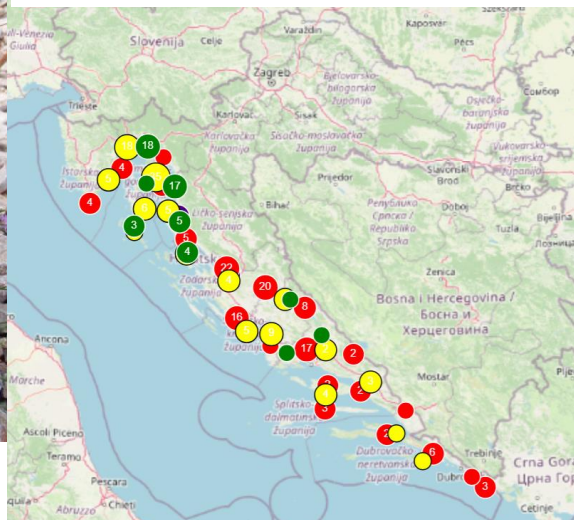
*Centaurea dalmatica* A. Kern.

*Centaurea spinosociliata* Seenus NT

*Centaurea spinosociliata* Seenus ssp. *cristata* (Bertol.) Dostál

*Centaurea spinosociliata* Seenus ssp. *spinosociliata*

*Centaurea spinosociliata* Seenus ssp. *tommasinii* (A. Kern.) Dostál DD



*Centaurea spinosociliata* Seenus

Topić, Jasenka  
*Centaurea spinosociliata*  
Seenus

## Senecio – 46 svojti

- Senecio abrotanifolius L.
- Senecio abrotanifolius L. ssp. abrotanifolius
- Senecio angulatus L. f.
- Senecio aquaticus Hill
- Senecio bicolor (Willd.) Tod.
- Senecio bicolor (Willd.) Tod. ssp. cineraria (DC.) Chater
- Senecio cacaliaster Lam.
- Senecio caroli-maly Horvatić
- Senecio doria L.
- Senecio doria L. ssp. doria
- Senecio doria L. ssp. umbrosus (Waldst. et Kit.) Soó
- Senecio doronicum (L.) L.
- Senecio doronicum (L.) L. ssp. doronicum
- Senecio erraticus Bertol.
- Senecio erraticus Bertol. ssp. barbareifolius (Wimm. et Graebn.) Beger
- Senecio erraticus Bertol. ssp. erraticus
- Senecio erucifolius L.
- Senecio erucifolius L. ssp. erucifolius
- Senecio erucifolius L. ssp. tenuifolius Schübl. et G. Martens
- Senecio germanicus Wallr.
- Senecio germanicus Wallr. ssp. germanicus
- Senecio germanicus Wallr. ssp. glabratus Herborg
- Senecio inaequidens DC.
- Senecio incanus L.
- Senecio jacobaea L.
- Senecio jacobaea L. ssp. jacobaea
- Senecio leucanthemifolius Poir.
- Senecio lycopifolius Desf. ex Poir.
- Senecio mikiანიoides Otto ex Walp.
- Senecio ovatus (P. Gaertn., B. Mey. et Scherb.) Willd.
- Senecio ovatus (P. Gaertn., B. Mey. et Scherb.) Willd. ssp. ovatus
- Senecio paludosus L.
- Senecio papposus (Rchb.) Less.
- Senecio papposus (Rchb.) Less. ssp. kitaibelii (Jáv.) Cufod.
- Senecio papposus (Rchb.) Less. ssp. papposus
- Senecio sarracenicus L.
- Senecio scopolii Hoppe et Hornsch. ex Bluff et Fingerh.
- Senecio squalidus L.
- Senecio subalpinus Koch
- Senecio sylvaticus L.
- Senecio thapsoides DC.
- Senecio thapsoides DC. ssp. visianianus (Vis.) Vandas
- Senecio vernalis Waldst. et Kit.
- Senecio viscosus L.
- Senecio vulgaris L.
- Senecio x lyratifolius Rchb.



Photo by Semir Maslo

*Senecio vulgaris* L.



*Senecio doronicum* (L.) L.



*Senecio ovatus* (P. Gaertn., B. Mey. et Scherb.) Willd.



*Senecio doria* L.

# Alohtone vrste roda *Senecio*



original scientific paper / izvorni znanstveni rad

## NEW LOCALITIES OF *SENECIO INAEQUIDENS* DC. IN CROATIA

MILENKO MILOVIĆ<sup>1</sup> & MARIJA PANDŽA<sup>2</sup>

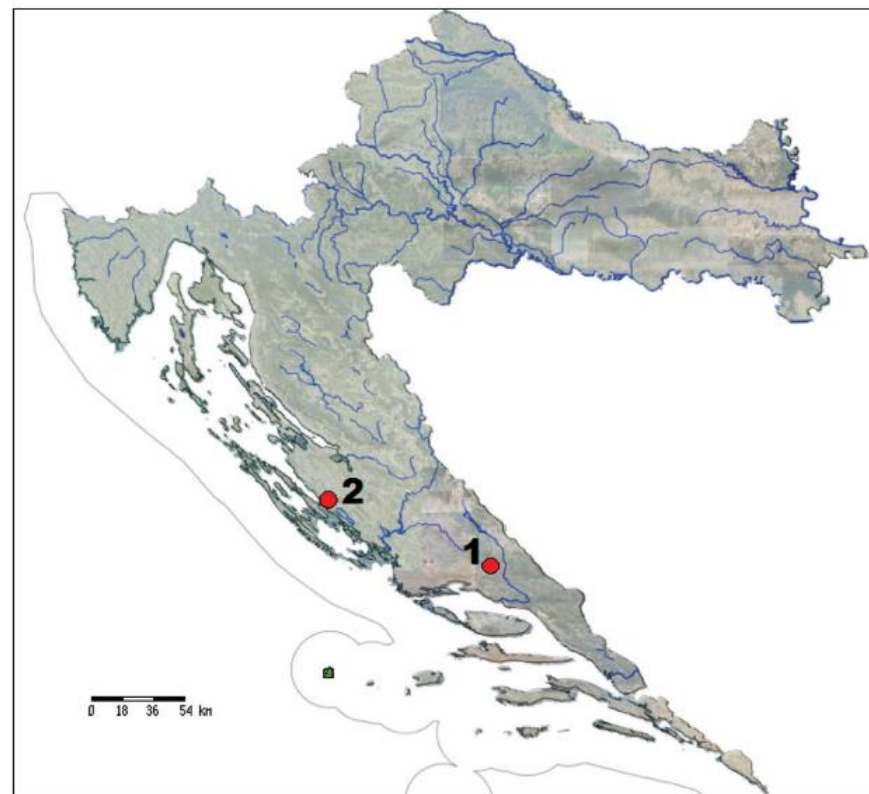


Fig. 1. The new finding sites of *S. inaequidens* in Dalmatia (1-Dicmo, 2-Biograd).

*Senecio angulatus* L. f.





**Fig. 16.** *Senecio angulatus* L. f. (Asteraceae)

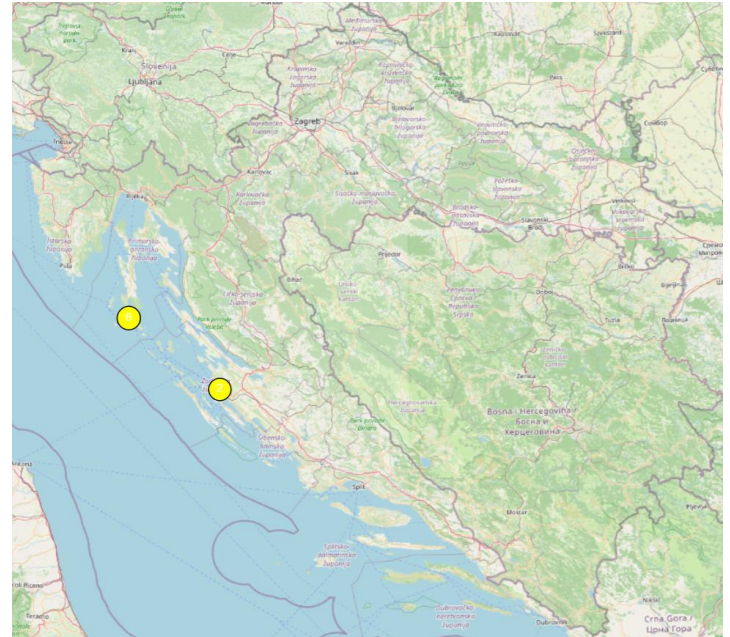


NEW NEOPHYTES IN THE FLORA OF CROATIA

MILENKO MILOVIĆ<sup>1</sup>, BOŽENA MITIĆ<sup>2</sup> & ANTUN ALEGRO<sup>2</sup>

In September 2005, *S. angulatus* was found in Zadar, in the city region of Arbanasi (x=5520181, y=4884515; MTB:1857–433), where several specimens have been growing in the courtyard of a house that has been abandoned for some time now. This plant was originally introduced into cultivation as an ornamental but in the meantime it managed not only to maintain itself but also to spread by runners all over the yard of the abandoned house. Most recently, this plant is observed growing as an ornamental plant in gardens as well as a garden escapee in the settlement of Vela Rava (x=5505167, y=4875267; MTB: 1956–341) on the island of Rava (Zadar archipelago).

*Delairea odorata*  
(syn. *Senecio mikanioides* Otto ex Walp.)





*Hladnikia* 7: 5-16 (1996)

5

## Neues zur Flora von Slowenien und Kroatien

Novosti k flori Slovenije in Hrvaške

Helmut MELZER

Buchengasse 14, A - 3740 Zellweg, Österreich

### *Senecio micanioides* OTTO

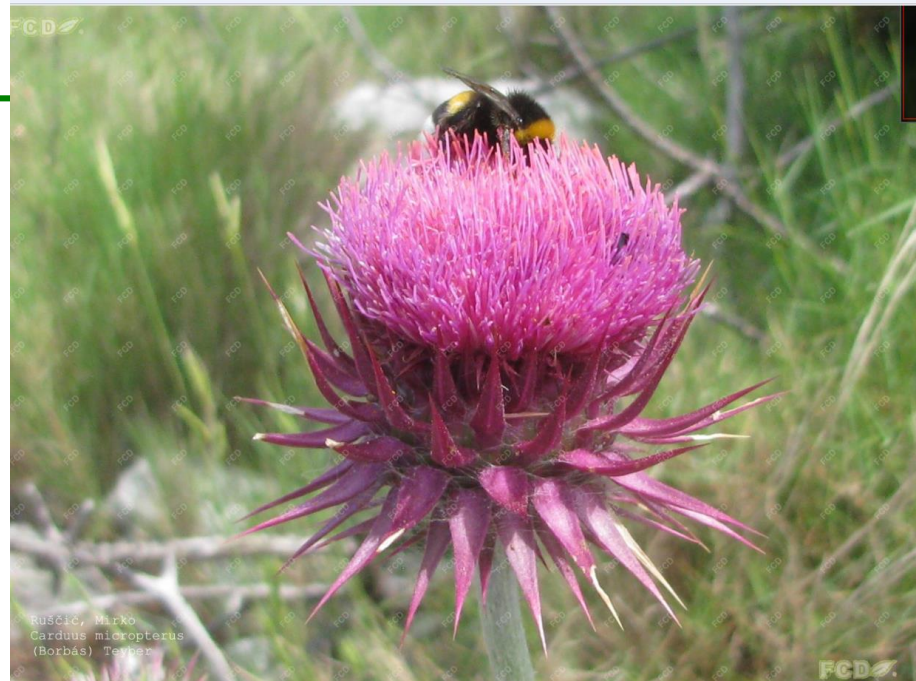
Syn.: *S. scandens* DE CANDOLLE, *Delairea odorata* LEMAIRE.

Quarnerische Inseln (Kvarner): Lošinj, in Čunski in einer Hausruine in der Unkrautflur auf Bruchsteinen und das restliche Mauerwerk überziehend, 1991, auch noch 1996 - 1452/3.

Diese selten kultivierte, sehr spät blühende Schlingpflanze stammt aus Südamerika (KRAINZ in ENCKE 1960:791). Nach STACE 1991:877 ist sie auf den Scilly- und Kanalinseln eingebürgert, seltener überzieht sie auch im östlichen und westlichen Cornwall Hecken und Mauern. Als englischen Namen führt er seltsamerweise "German-ivy" an, also "Deutscher Efeu". Verwilderungen sind auch aus Italien bekannt (PIGNATTI 1982b:130).

## *Carduus* – 28 svojti

- Carduus acanthoides* L.
- Carduus acicularis* Bertol.
- Carduus argemone* Pourr. ex Lam.
- Carduus argemone* Pourr. ex Lam. ssp. *obtusisquamosus* Franco
- Carduus candicans* Waldst. et Kit.
- Carduus carduelis* (L.) Gren.
- Carduus carlinifolius* Lam.
- Carduus collinus* Waldst. et Kit.
- Carduus collinus* Waldst. et Kit. ssp. *collinus*
- Carduus collinus* Waldst. et Kit. ssp. *cylindricus* (Borbás) Soó
- Carduus crispus* L.
- Carduus crispus* L. ssp. *crispus*
- Carduus defloratus* (L.) ssp. *glaucus* (Rchb. f.) Nyman
- Carduus defloratus* L.
- Carduus defloratus* L. ssp. *defloratus*
- Carduus hamulosus* Ehrh.
- Carduus hamulosus* Ehrh. ssp. *hamulosus*
- Carduus macrocephalus* Desf.
- Carduus macrocephalus* Desf. ssp. *macrocephalus*
- Carduus micropterus* (Borbás) Teyber
- Carduus micropterus* (Borbás) Teyber ssp. *micropterus*
- Carduus nutans* L.
- Carduus nutans* L. ssp. *nutans*
- Carduus nutans* L. ssp. *platylepis* (Rchb. et Saut.) Nyman
- Carduus personata* (L.) Jacq.
- Carduus personata* (L.) Jacq. ssp. *personata*
- Carduus pycnocephalus* L.
- Carduus pycnocephalus* L. ssp. *pycnocephalus* DD



*Carduus micropterus* (Borbás) Teyber



*Carduus nutans* L.

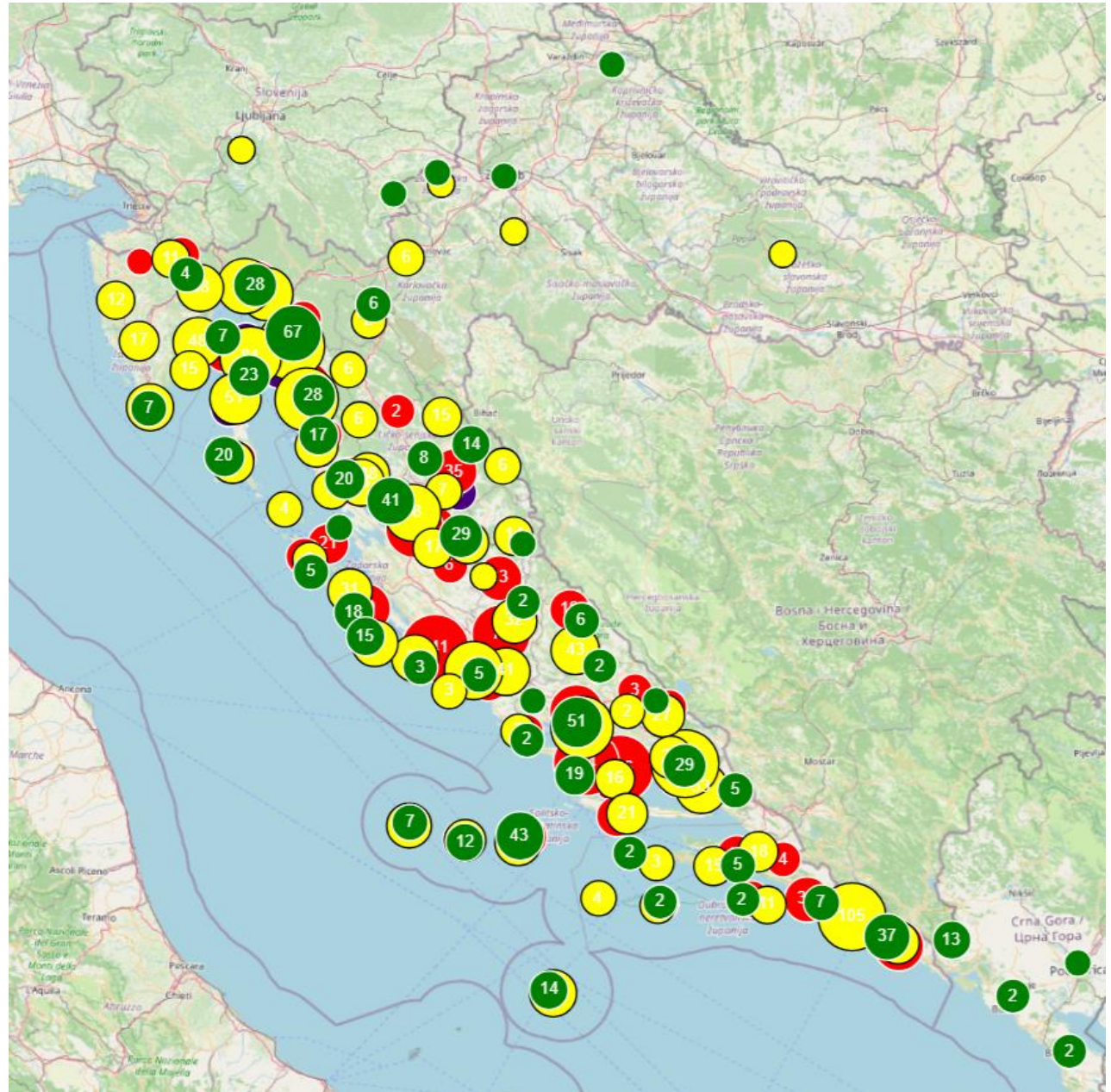


*Carduus pycnocephalus* L.

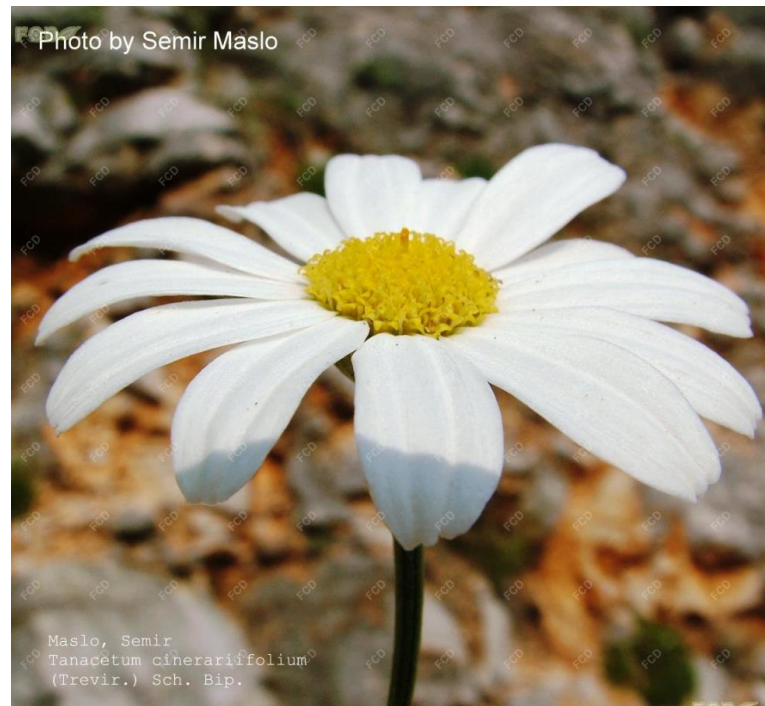


	Family	no. of endemic taxa	% of the total number	indigenous taxa	% endemics in the family
1	Asteraceae	73	17.55	793	9.21
2	Ranunculaceae	39	9.38	207	18.84
3	Fabaceae	37	8.89	452	8.19
4	Brassicaceae	34	8.17	278	12.23
5	Caryophyllaceae	34	8.17	249	13.65
6	Campanulaceae	20	4.81	86	23.26
7	Orchidaceae	20	4.81	200	10.00
8	Apiaceae	16	3.85	250	6.40
9	Caprifoliaceae	16	3.85	87	18.39
10	Boraginaceae	13	3.13	106	12.26
11	Rubiaceae	13	3.13	82	15.85
12	Lamiaceae	11	2.64	250	4.40
13	Orobanchaceae	11	2.64	99	11.11
14	Iridaceae	9	2.16	40	22.50
15	Plumbaginaceae	8	1.92	15	53.33
16	Asparagaceae	7	1.68	62	11.29
17	Plantaginaceae	6	1.44	150	4.00
18	Amaryllidaceae	5	1.20	65	7.69
19	Poaceae	5	1.20	384	1.30
20	Rosaceae	5	1.20	214	2.34

Endemi Asteraceae



*Tanacetum cinerariifolium* (Trevir.) Sch. Bip.



*Tripolium pannonicum* (Jacq.) Dobrocz.  
(syn. *Aster tripolium* L. subsp. *pannonicus* (Jacq.) Soó)



*Ligularia sibirica* (L.) Cass. (CR)



Acta Bot. Croat. 49, 137—142, 1990.

CODEN: ABCRA2  
YU ISSN 0365—0588

UDC 582.998.2:581.9(497.1) = 30  
Original scientific paper

*LIGULARIA SIBIRICA* (L.) CASS. — EINE  
NEUE ART DER JUGOSLAWISCHEN FLORA

NEDELJKA ŠEGULJA und MILAN KRGA

*Arnica montana* L.



Kranjčev, Radovan  
*Arnica montana* L.

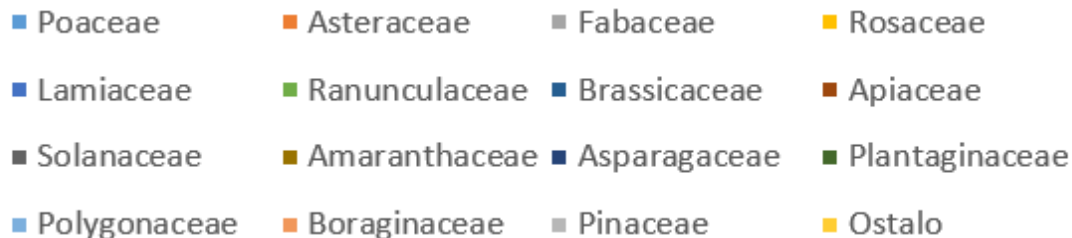


Serić, Samso  
*Arnica montana* L.

*Leontopodium alpinum* Cass. ssp. *krasense* Derganc



# Korisno bilje

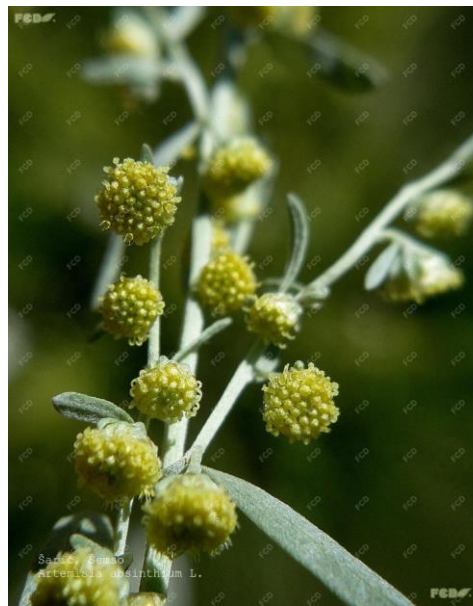


Poaceae	110
Asteraceae	91
Fabaceae	79
Rosaceae	74
Lamiaceae	67
Ranunculaceae	54
Brassicaceae	47
Apiaceae	44
Solanaceae	27
Amaranthaceae	21
Asparagaceae	21
Plantaginaceae	20
Polygonaceae	20
Boraginaceae	18
Pinaceae	18



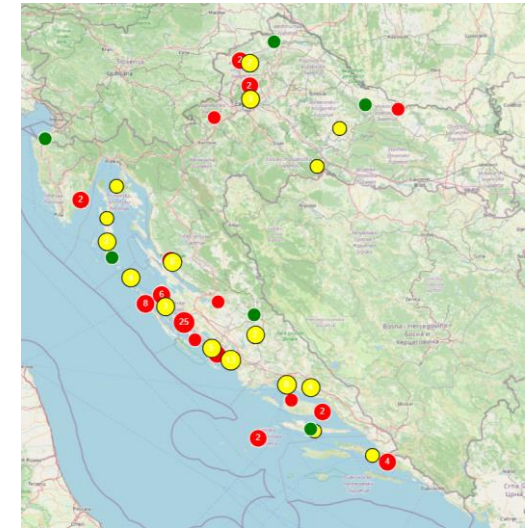
Saric, Semso  
*Achillea millefolium* L.

*Achillea millefolium* L.



Saric, Semso  
*Artemisia absinthium* L.

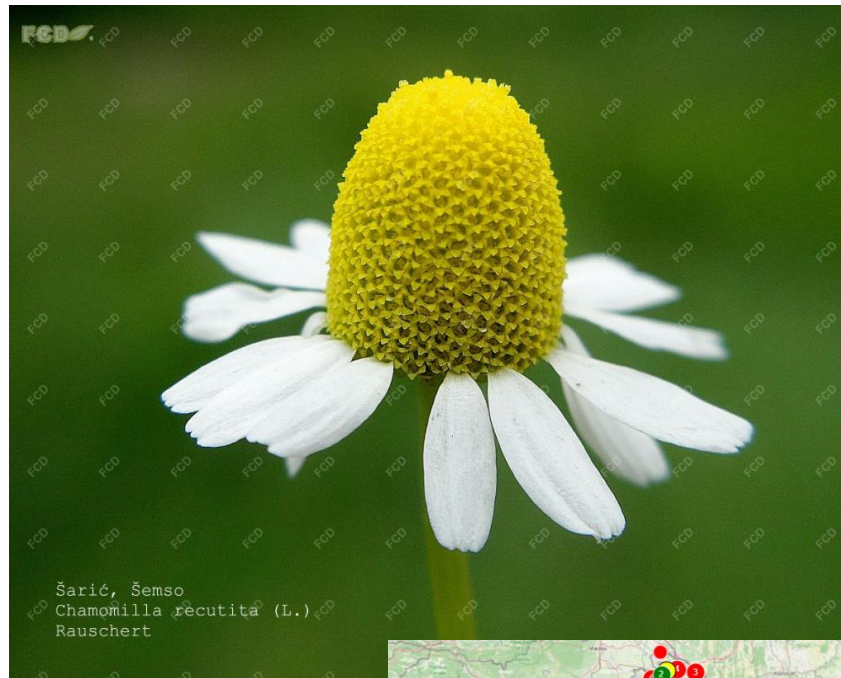
*Artemisia absinthium* L.



*Calendula officinalis* L.

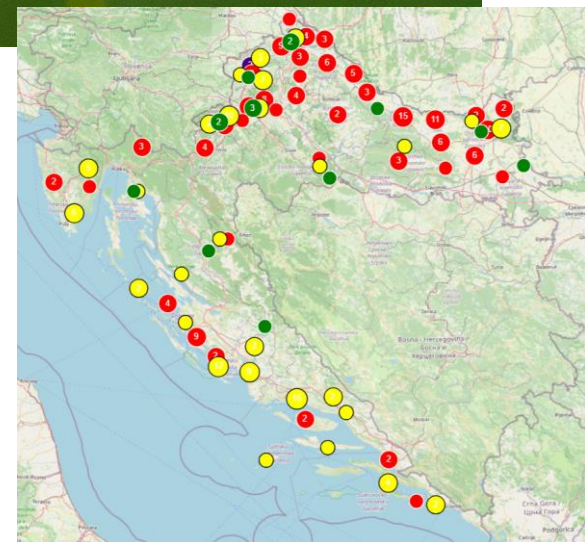
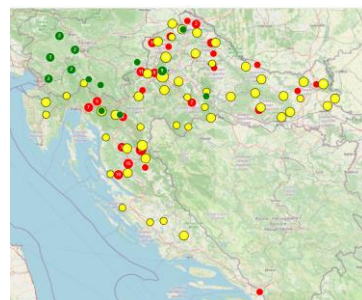


*Calendula arvensis* (Vaill.) L.

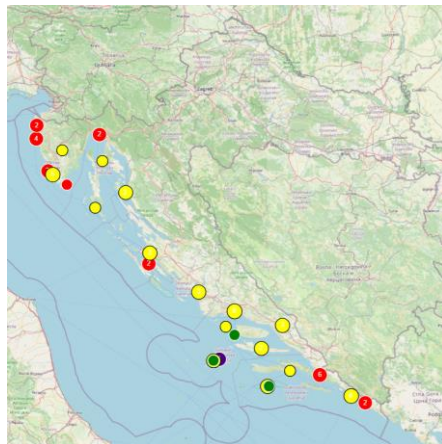


Šarić, Šemso  
*Chamomilla recutita* (L.)  
Rauschert

*Chamomilla recutita* (L.) Rauschert



*Chamomilla suaveolens* (Pursh) Rydb.



*Silybum marianum* (L.) Gaertn. NT

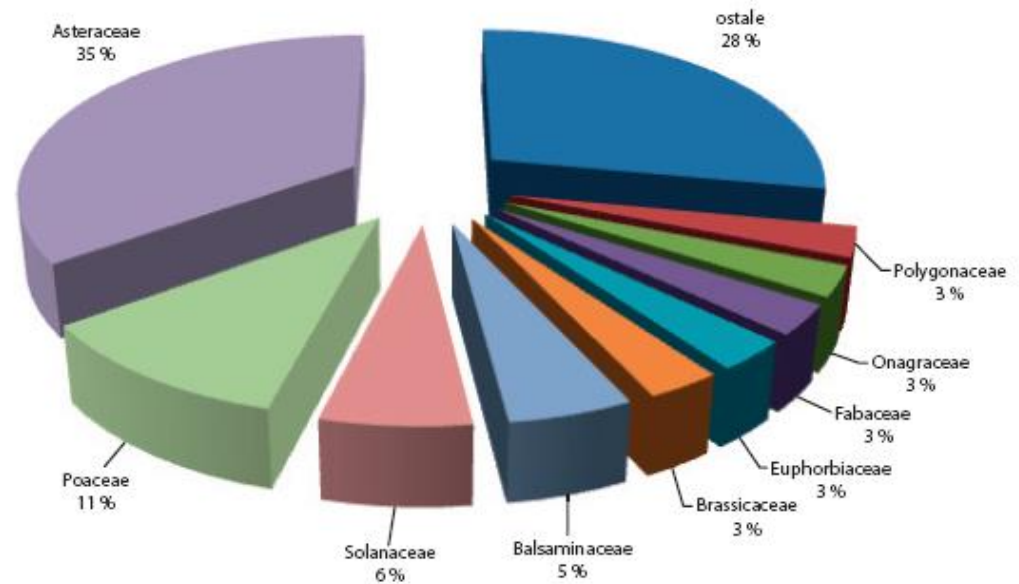


*Helianthus tuberosus* L.

## Flora Hrvatske

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Ambrosia artemisiifolia L.  
Artemisia annua L.  
Artemisia verlotiorum Lamotte  
Bidens frondosa L.  
Bidens subalternans DC.  
Chamomilla suaveolens (Pursh) Rydb.  
Conyza bonariensis (L.) Cronquist  
Conyza canadensis (L.) Cronquist  
Conyza sumatrensis (Retz.) E. Walker  
Erigeron annuus (L.) Desf.  
Erigeron annuus (L.) Pers. ssp. annuus  
Erigeron annuus (L.) Pers. ssp. septentrionalis (Fernald et Wiegand) Wagenitz  
Erigeron annuus (L.) Pers. ssp. strigosus (Mühlenb. ex Willd.) Wagenitz  
Galinsoga ciliata (Raf.) S. F. Blake  
Galinsoga parviflora Cav.  
Helianthus tuberosus L.  
Rudbeckia laciniata L.  
Solidago canadensis L.  
Solidago gigantea Aiton  
Symphyotrichum squamatum (Spreng.) G. L. Nesom  
Tagetes minuta L.  
Xanthium spinosum L.  
Xanthium strumarium L. ssp. italicum (Moretti) D. Löve



**SLIKA 3.** Udio porodica zastupljenih invazivnim vrstama u flori Hrvatske (ostale – 18 porodica unutar kojih dolazi samo po jedna vrsta)

Invazivne svojte

-> 23 svojte



*Ambrosia artemisiifolia* L.



*Artemisia verlotiorum* Lamotte



Photo by Semir Maslo



*Bidens frondosa* L.



Maslo, Semir  
*Bidens frondosa* L.



Photo by Semir Maslo

*Bidens subalternans* DC.

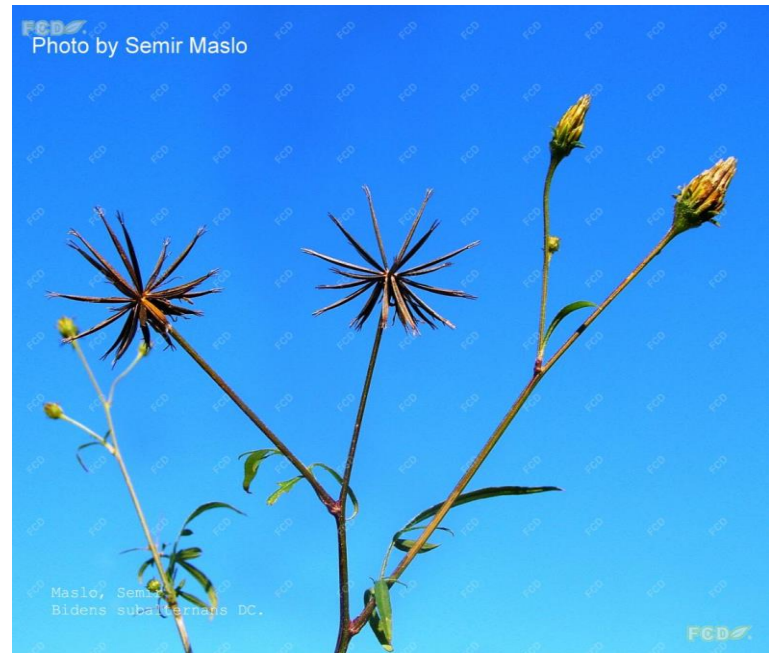


Photo by Semir Maslo

Maslo, Semir  
*Bidens subalternans* DC.



Šarić, Šemso  
*Conyza canadensis* (L.)  
Cronquist

### *Conyza canadensis* (L.)

Cronquist

- Biljka živo zelena
- Rub listova s gustim tankim dlačicama
- Sjeverna Amerika



Šemso  
*Conyza bonariensis* (L.)  
Cronquist

### *Conyza bonariensis* (L.)

Cronquist

- Biljka sivozelena
- Rub listova s rijedim dužim trepljama
- tropska Amerika



by Semir Maslo  
Walker

### *Conyza sumatrensis*

(Retz.) E. Walker

- Listovi nisu linearni
- Postrani ogranci cvata ne nadvisuju glavnu os
- Južna Amerika



*Erigeron annuus* (L.) Desf.



*Rudbeckia laciniata* L.





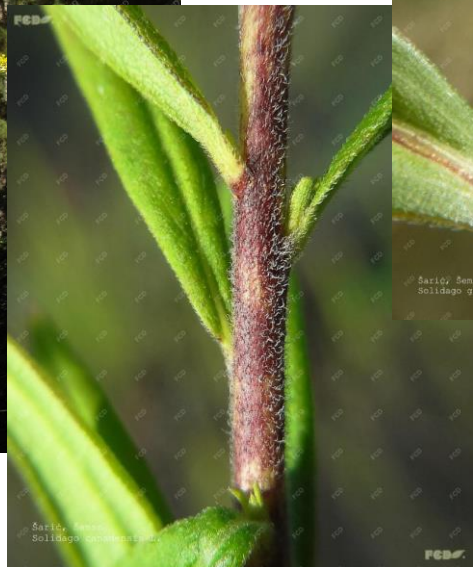
### *Galinsoga ciliata* (Raf.) S. F. Blake

- Stabljika gusto sivo pustenasta
- Stapke cvjetnih glavica i ovojni listići s gustim, crvenkastim ili ljubičastim žljezdanim dlakama
- Južna i srednja Amerika



### *Galinsoga parviflora* Cav.

- Stabljika gola ili vrlo rijetko kratkodlakava
- Stapke cvjetnih ponekad dlakave, ali nikad s crvenkastim ili ljubičastim žljezdanim dlakama
- Tropski dijelovi Južne i JZ sjeverne Amerika



*Solidago canadensis* L.

- Stabljika dlakava
- Jezičasti cvjetovi jedva nadvisuju ovoj

*Solidago gigantea* Aiton

- Stabljika gola
- Jezičasti cvjetovi znatno nadvisuju ovoj



*Xanthium strumarium* L. ssp. *italicum* (Moretti) D. Löve



*Xanthium spinosum* L.

