

Lilianae

(monokotiledone)

Nekomelinide

Acorales

Alismatales

Petrosaviales

Dioscoreales

Pandanales

Liliales

Asparagales

Komelinide

Arecales

Poales

Commeliniales

Zingiberales

Nekomelinide

- Acorales (Acoraceae)
- Alismatales (Alismataceae, Butomaceae, Araceae, Hydrocharitaceae, Lemnaceae, Najadaceae, Posidoniaceae, Potamogetonaceae, Zosteraceae)
- Petrosaviales (Petrosaviaceae)
- Dioscoreales (Dioscoreaceae)
- Pandanales (Pandanaceae)
- Liliales (Asphodelaceae, Melanthiaceae, Colchicaceae, Liliaceae, Smilacaceae)
- Asparagales (Asparagaceae, Alliaceae, Amaryllidaceae, Iridaceae, Orchidaceae)

o. Acorales

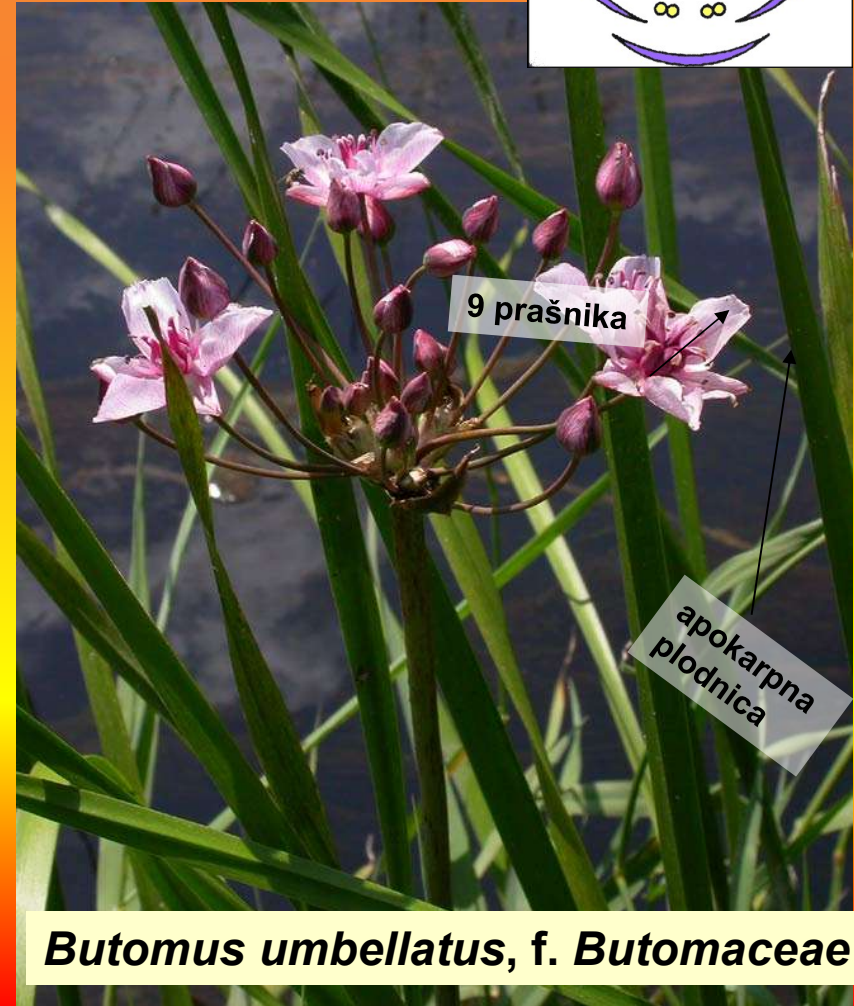
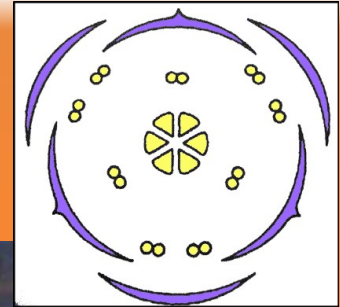
* P3+3 A3+3 G(3)



Acorus calamus, f. Acoraceae

o. Alismatales

* K3 C3 A6+3 G6-9



Butomus umbellatus, f. Butomaceae

o. Alismatales
f. Alismataceae



* K3 C3 A3+3 G_٤

Alisma plantago-aquatica

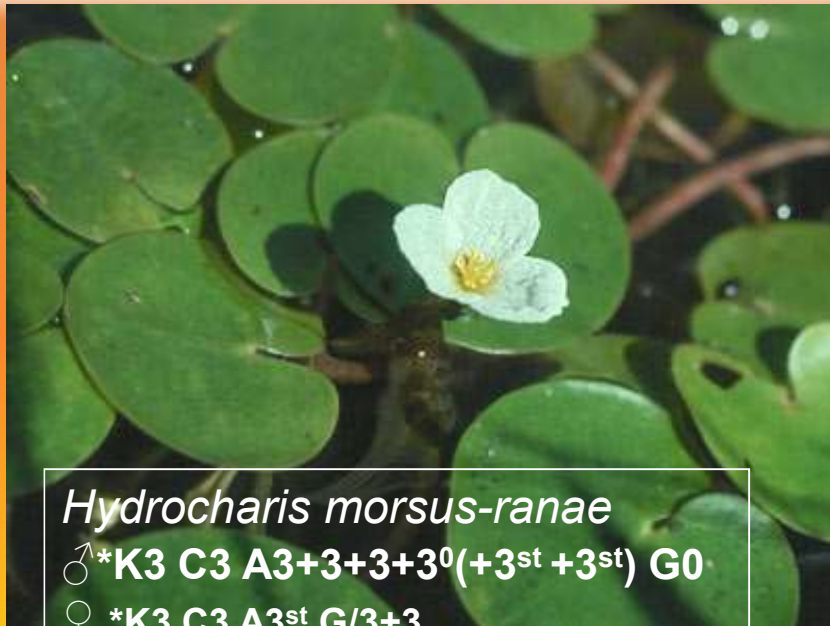


*K3 C3 A_٤ G 3⁰+3⁰
*K3 C3 A⁰ G_٤



Sagittaria sagittifolia

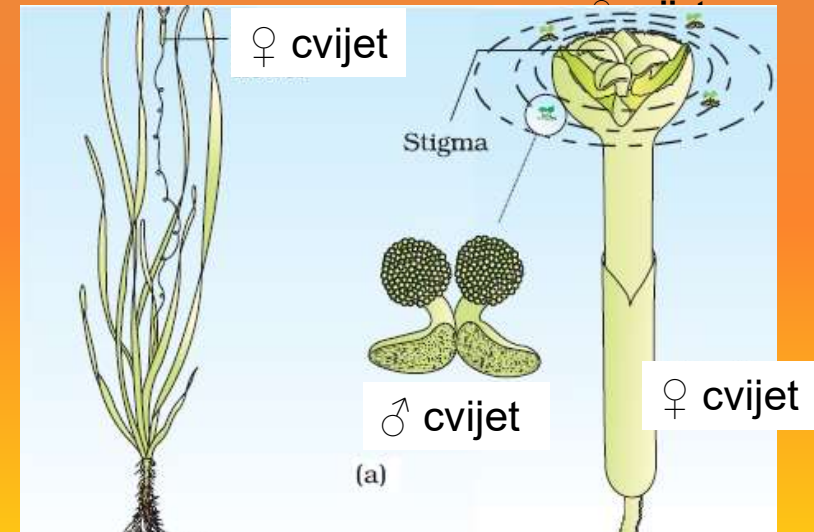
f. *Hydrocharitaceae*



Hydrocharis morsus-ranae

♂ *K3 C3 A3+3+3⁰(+3st +3st) G0

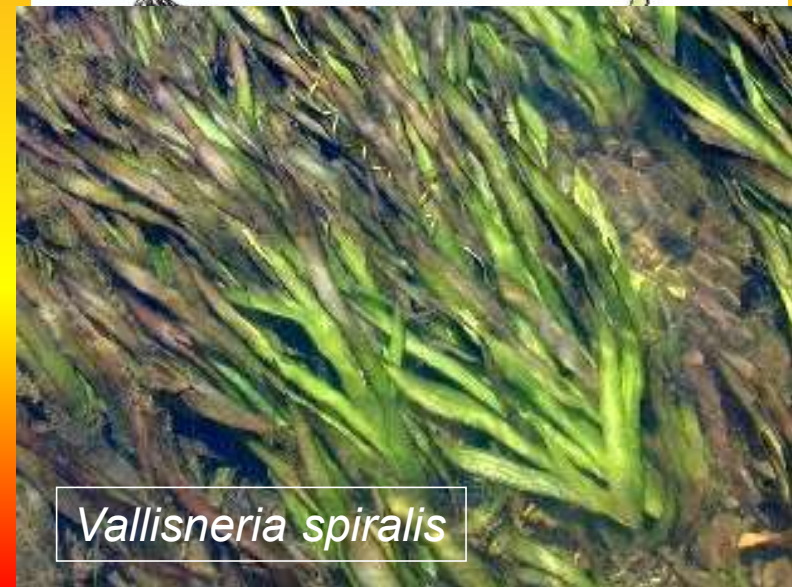
♀ *K3 C3 A3st G/3+3



Elodea canadensis

♂ *K3 C3 A3+3+3

♀ *K3 C3 G/(3)



Vallisneria spiralis

Najas marina, f. *Najadaceae*

♂ A1
♀ G1



Zoostera marina,
f. *Zosteraceae*

♂ A1
♀ G1



Posidonia oceanica,
Posidoniaceae

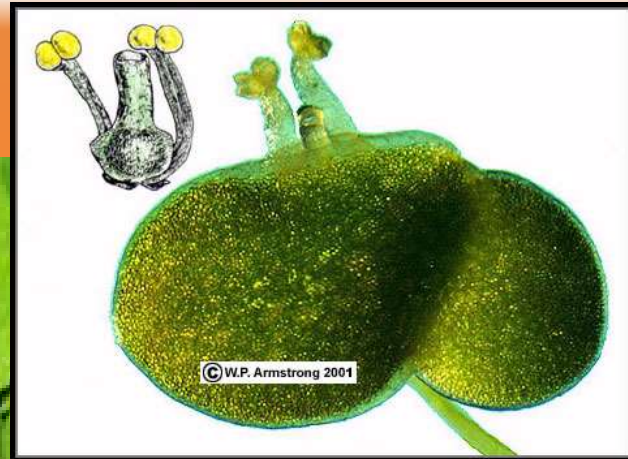
A3 G1

© Ramón Esteban (SUB San José) para <http://marenostrum.org>

f. *Lemnaceae*



Lemna minor



Wolfia arrhiza

f. *Potamogetonaceae*

* (P4 A4) G4



Potamogeton natans



Potamogeton perfoliatus

o. Dioscoreales



Dioscorea balcanica

* P3+3 A3+3 G0

*P3+3 A0 G(3)

f. *Dioscoreaceae*



Tamus comunis

* P3+3 A3+3 G(3)

o. Pandanales
f. *Pandanaceae*



ص P0 A
ص P0 G

Pandanus gracilis

o. Liliales

- f. Asphodelaceae (Asphodelus)
- f. Colchicaceae (Colchicum)
- f. Liliaceae (Lilium, Tulipa, Fritillaria)
- f. Melanthiaceae (Veratrum, Paris)
- f. Smilacaceae (Smilax)

f. *Asphodelaceae*, *Asphodelus albus* - čapljan

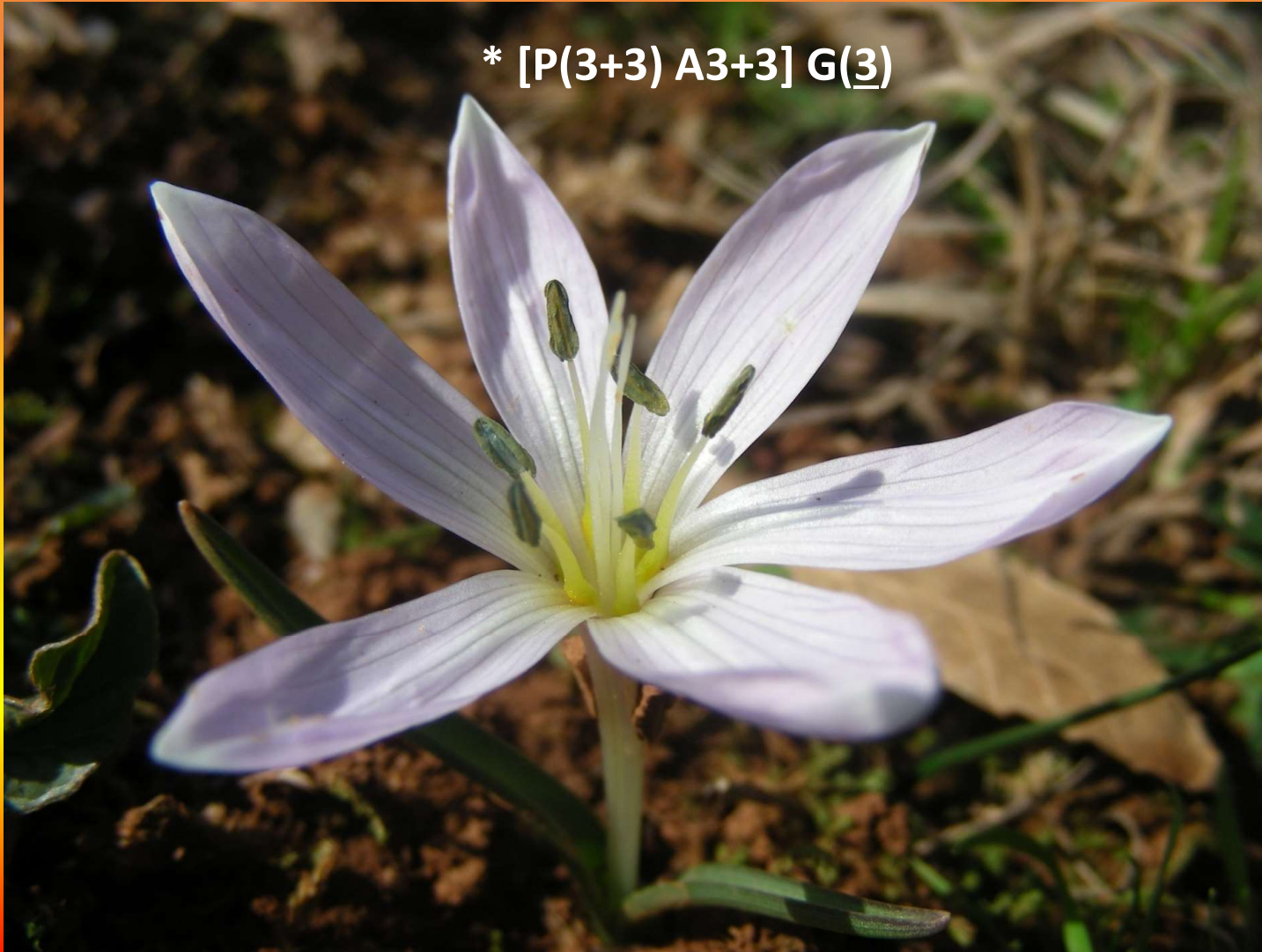


* P3+3 A3+3 G(3)



f. Colchicaceae, *Colchicum hungaricum*, mrazovac

* [P(3+3) A3+3] G(3)



f. *Liliaceae*

P₃₊₃ A₃₊₃ G(3)

Tulipa sylvestris – lala, tulipan



Fritillaria gracilis-kockalica



Erythronium dens-canis- pasji zub



Lilium martagon- ljiljan

f. *Melanthiaceae*



Paris quadrifolia- Petrov krst *K₄ C₄ A₄₊₄ G₍₄₎



Veratrum album- čemerika
P₃₊₃ A₃₊₃ G₍₃₎

f. *Smilacaceae*



o. Asparagales

f. Alliaceae (Allium)

f. Amaryllidaceae (Narcissus, Galanthus, Leucojum)

f. Asparagaceae (Convallaria, Polygonatum, Asparagus, Ruscus)

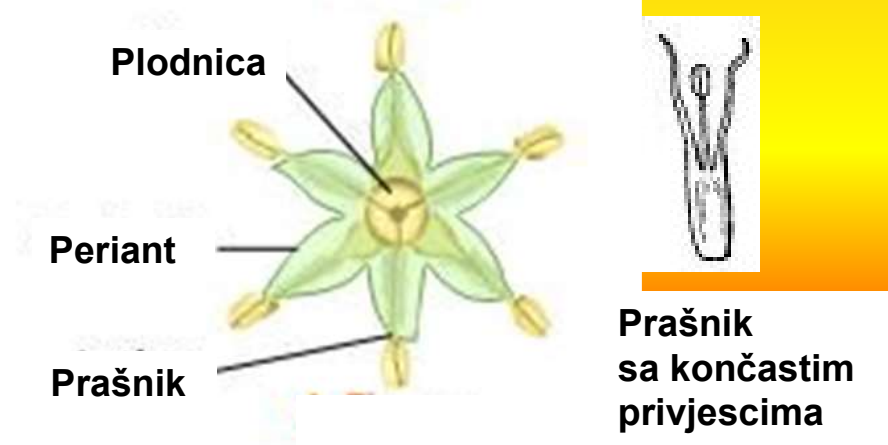
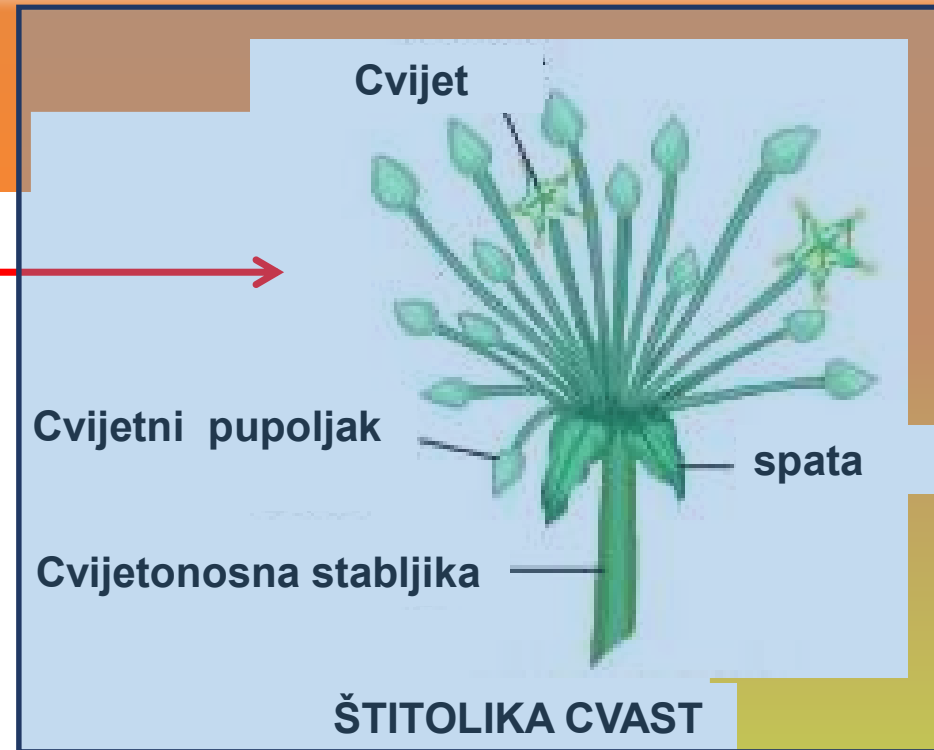
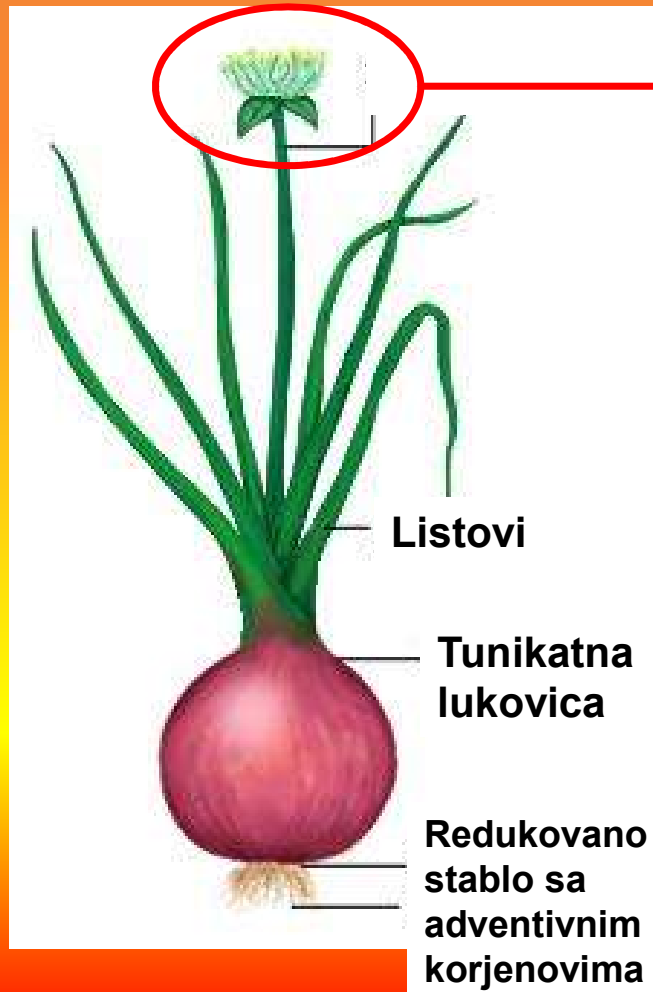
f. Araceae (Arum),

f. Iridaceae (Iris, Crocus, Gladiolus)

f. Orchidaceae (Ophrys, Orchis, Spiranthes, Gymnadenia...)

f. *Alliaceae*

* $[P_{3+3} A_{3+3}] G_{(3)}$





Allium cepa- crni luk



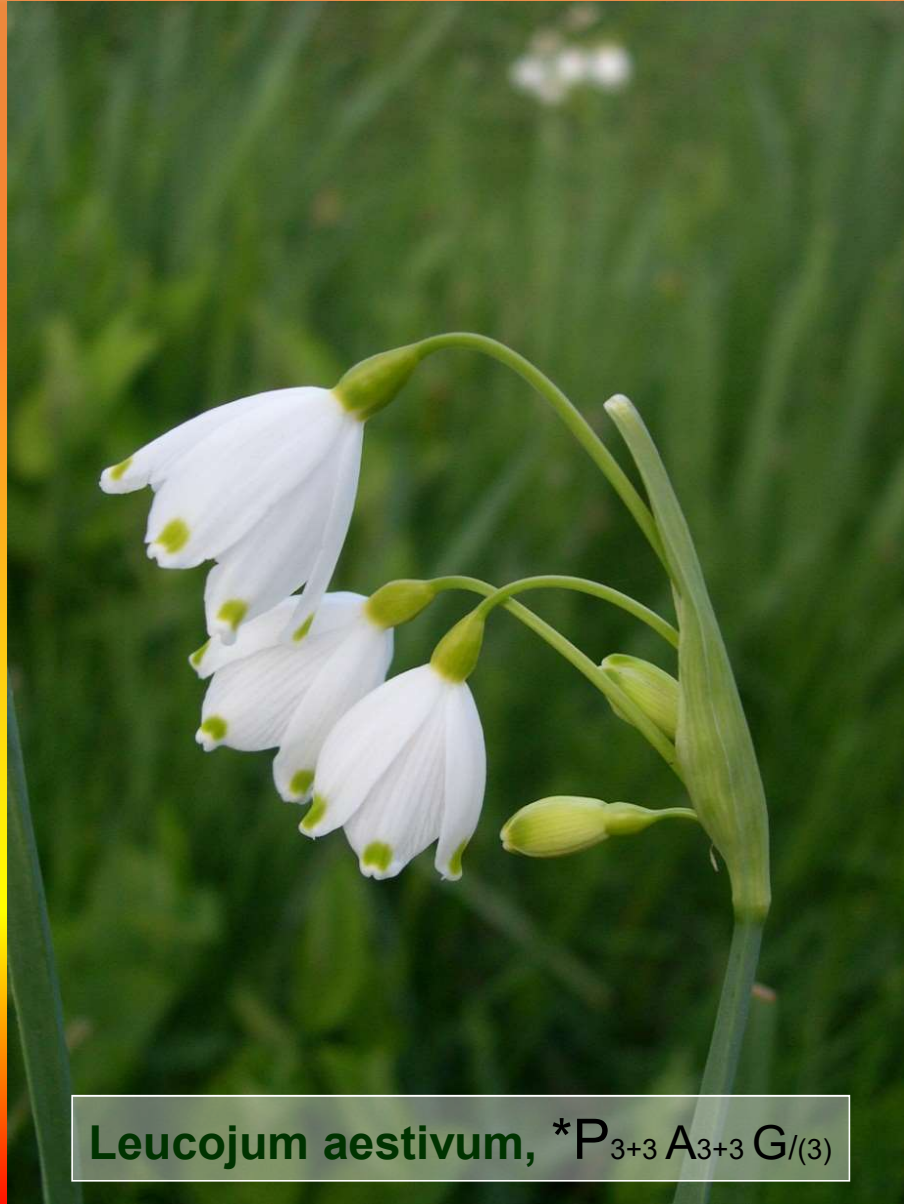
Allium ursinum- srijemuš

Ovojni list (spata)
nadvisuje cvast

Rasplodni bulbili u zoni cvasti



Allium carinatum



Leucojum aestivum, $*P_{3+3} A_{3+3} G_{/3}$

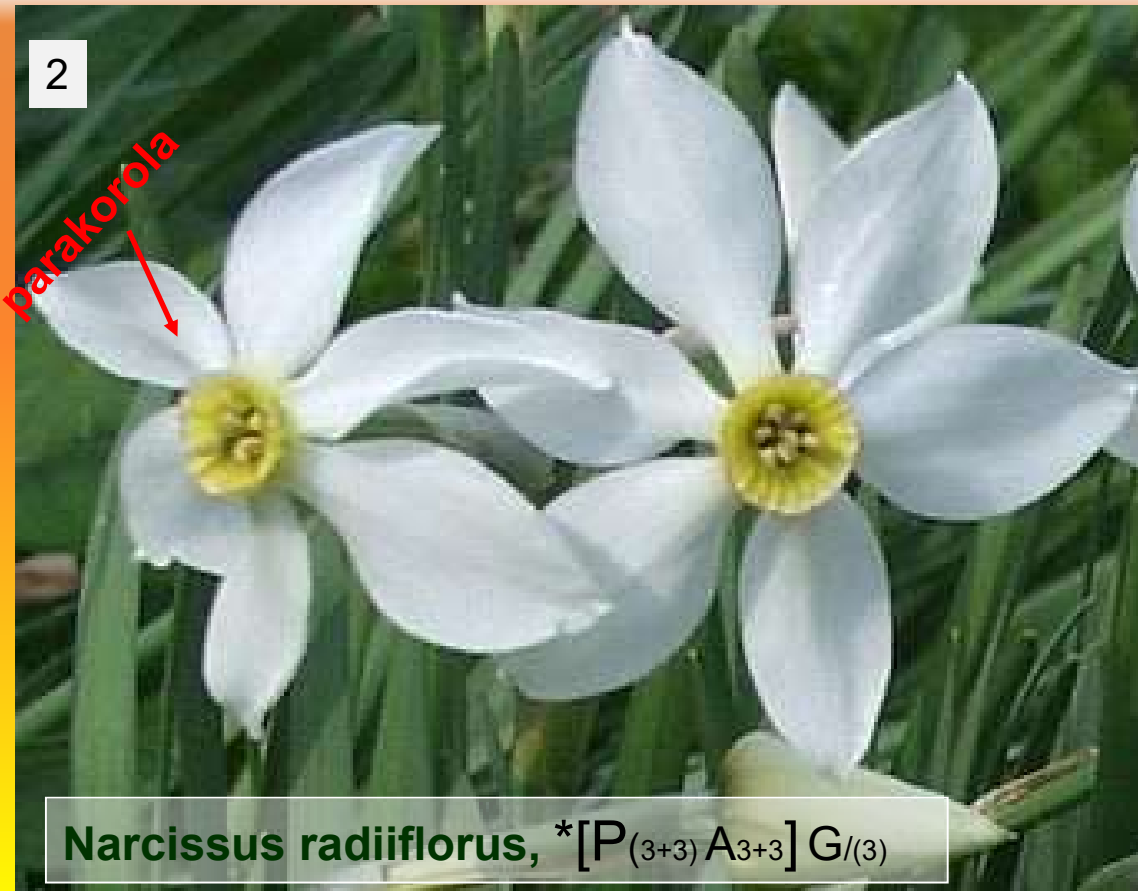
f. *Amaryllidaceae*



Galanthus nivalis, $*P_{3+3} A_{3+3} G_{/3}$



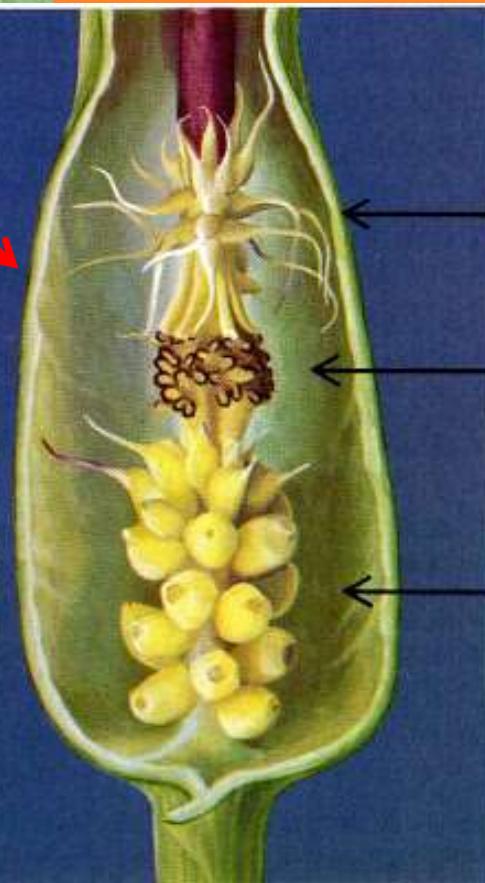
Pancratium maritimum



Narcissus radiiflorus, $*[P_{(3+3)} A_{3+3}] G_{/ (3)}$

Parakorola izvodi porijeklo od prašničkih niti (1) ili cijevi vijenca (2)...

f. *Araceae*



Sterilni muški cvijet

Muški cvijet

♂ P₀ A(2-4)

Ženski cvijet

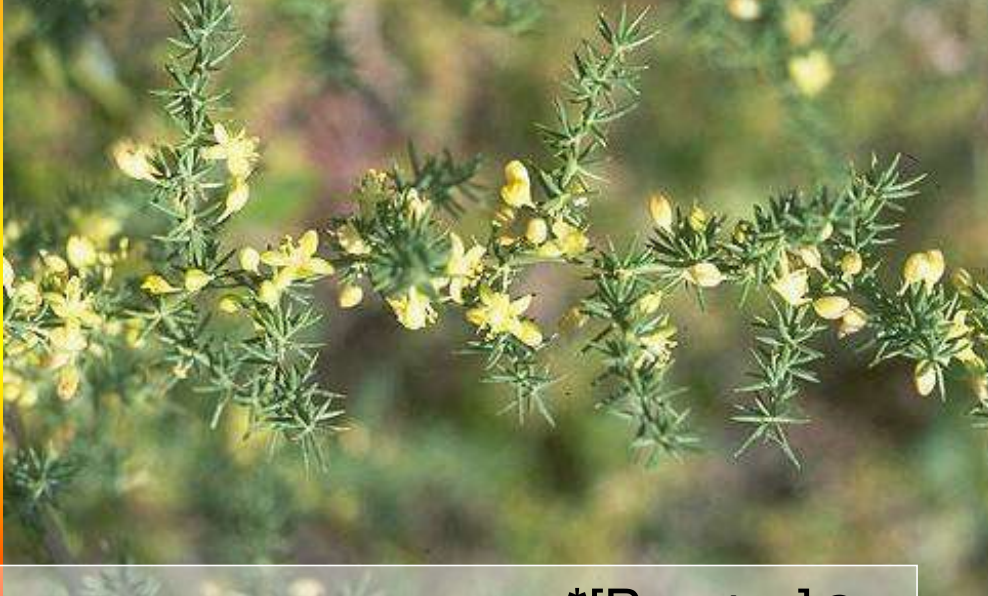
♀ P₀ G₁



Plod

f. Asparagaceae

Subfam. Asparagoideae



Asparagus acutifolius- šparoga, $*[P_{(3+3)} A_{3+3}] G_{(3)}$

Subfam. Nolinoideae



Ruscus aculeatus- kostruika,

$*P_{(3+3)} A_{(3+3)} G_{(3)}^r$

$*P_{(3+3)} (A_{3+3})^r G_{(3)}$

Subfam. Nolinoideae



Convallaria majalis- đurđevak



Polygonatum multiflorum

*[P₍₃₊₃₎A₃₊₃]G₍₃₎

Subfam. Scilloideae





Scilla bifolia

f. Agavaceae



f. *Iridaceae* [$P_{3+3} A_3$] $G_{/(3)}$

Gladiolus palustris- gladiola



Zigomorfan cvijet



Iris pseudoacorus- iris

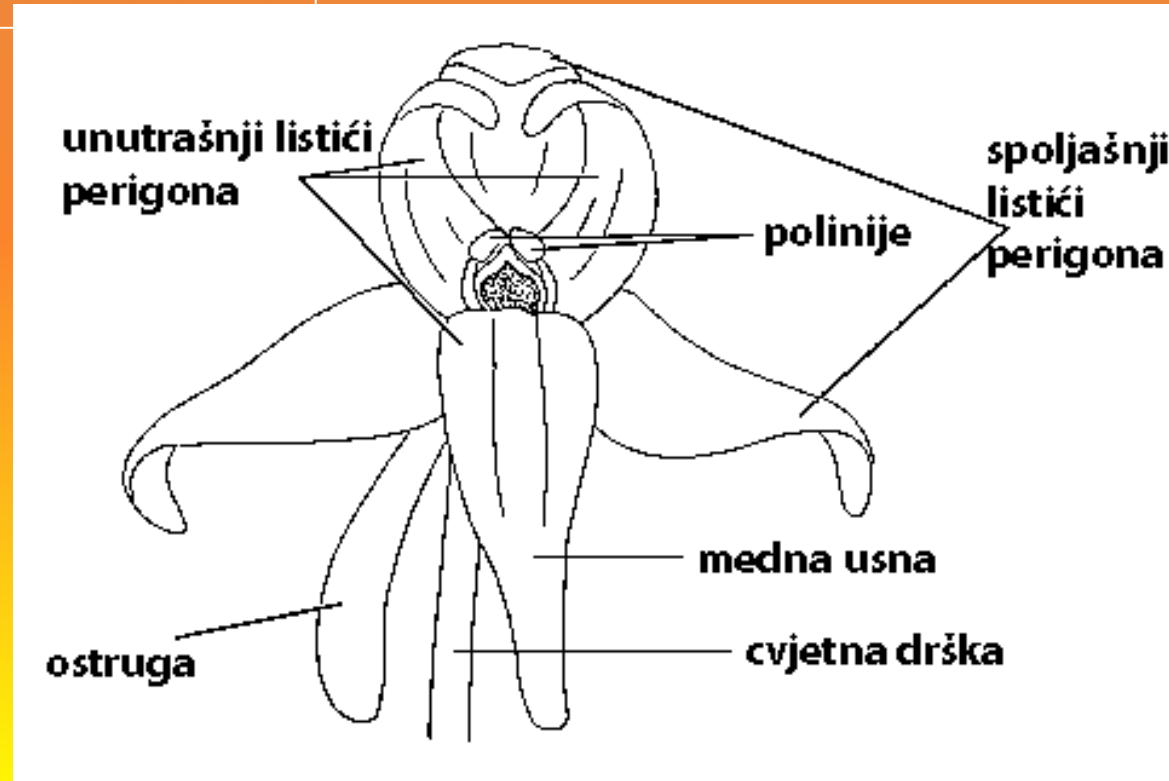
3 spoljašnja lista perigona
prema nazad savijena

Crocus dalmaticus- šafran



Romulea bulbocodium

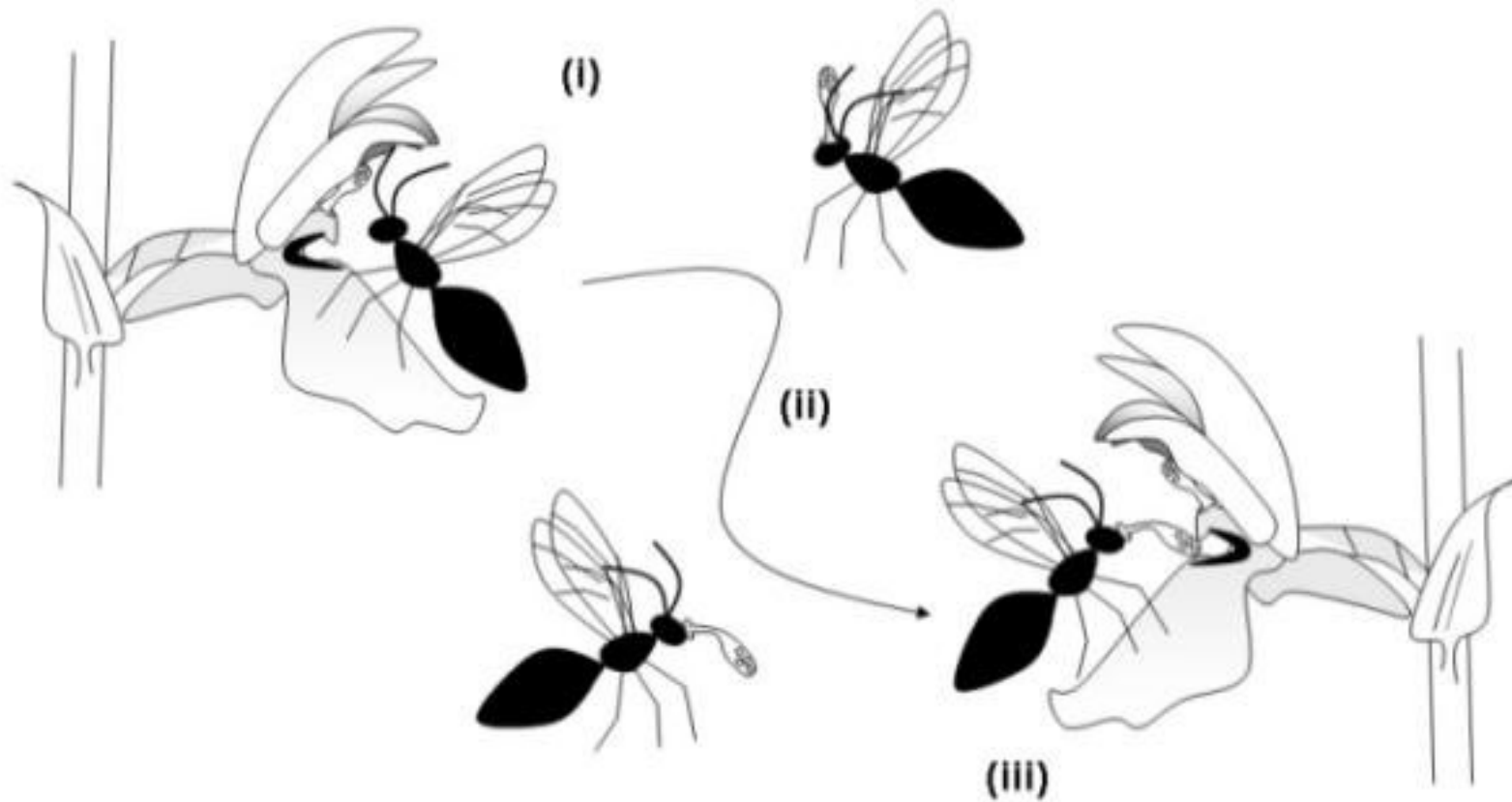
f. *Orchidaceae*



Subfam. *Apostasioideae*, $\uparrow/*P_{3+3} [A_{2-3} G_{/(3)}]$

Subfam. *Cypripedioideae*, $\uparrow P_{3+3} [A_{1^{st}+2} G_{/(3)}]$

Subfam. *Orchideoideae*, $\uparrow P_{3+3} [A_{1+2^{st}} G_{/(3)}]$



Mehanizam opašivanja



Himanthoglossum adriaticum

Medna usna sa
ostrugom!

Orchideoideae (Monoandre)

Anacamptis pyramidalis





Ophrys insectifera - pčelica



Medna usna
bez ostruge!

Ophrys cornuta - pčelica



Ophrys bertochonii - pčelica





Neottia nidus-avis- ptičje gnijezdo



Spiranthes spiralis



Serapias sp.

Cypripedioideae
(Diandre)



Cypripedium calceolum