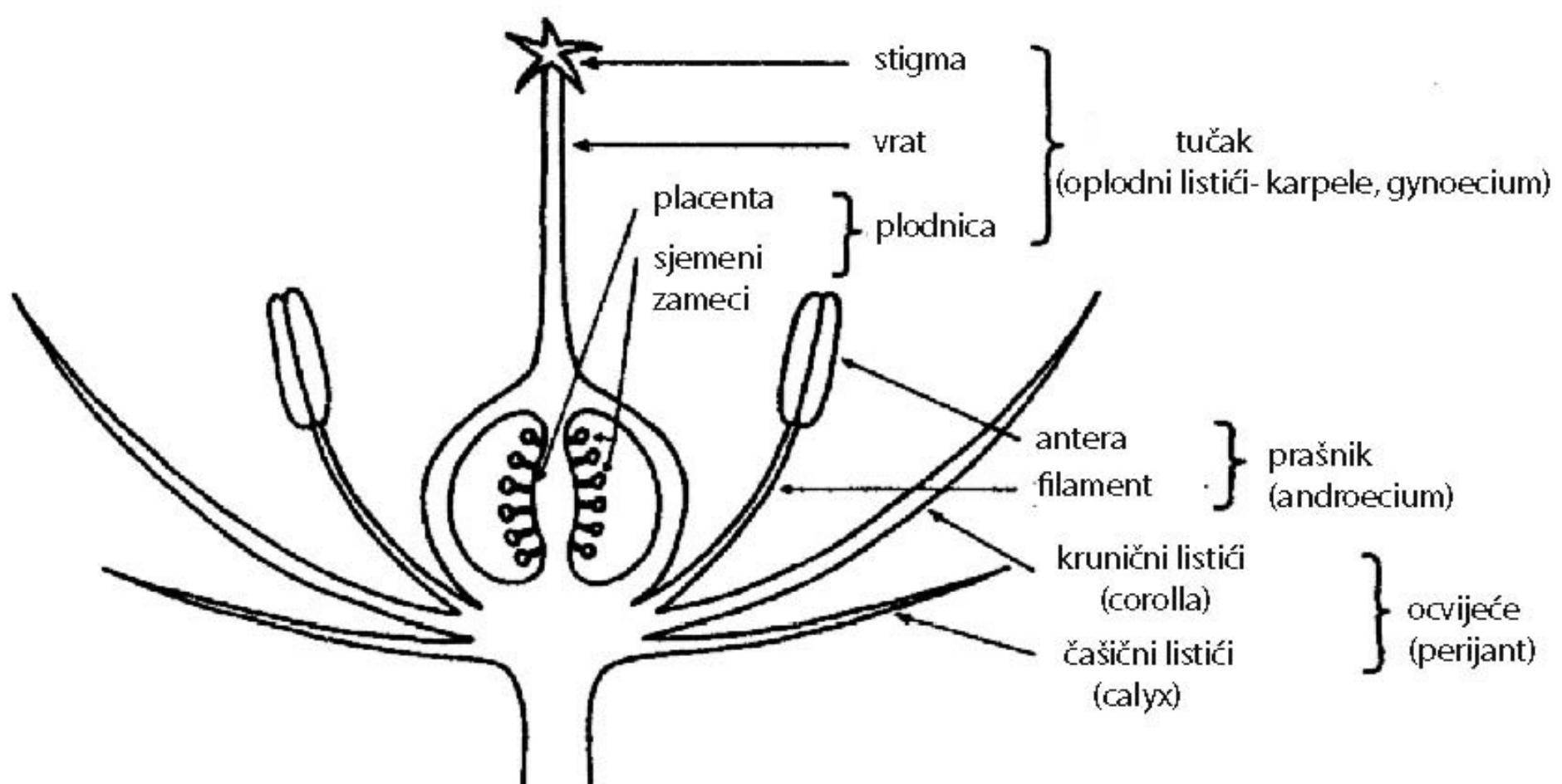


# Magnoliidae

## Skrivenosjemenjače, cvjetnice



# Savremena klasifikacija cvjetnica

(APG III (2009), Chase & Reveal 2009)

1. Bazalne skrivenosjemenjače (ANITA)

2. Magnolidni kompleks

3. Prave dikotile

4. Monokotile

U nekadašnjem sistemu  
klasa dikotila

U nekadašnjem sistemu klasa monokotila

Odabrani predstavnici  
(redovi, porodice, vrste)

# MAGNOLIDNI KOMPLEKS



## Red: Laureales

Fam: Lauraceae

*Laurus nobilis* – lovor

Ovoj porodici pripada i cimet – *Cinnamomum zeylanicum*, koji je za razliku od lovora jednodom i ima dvopolne cvjetove.

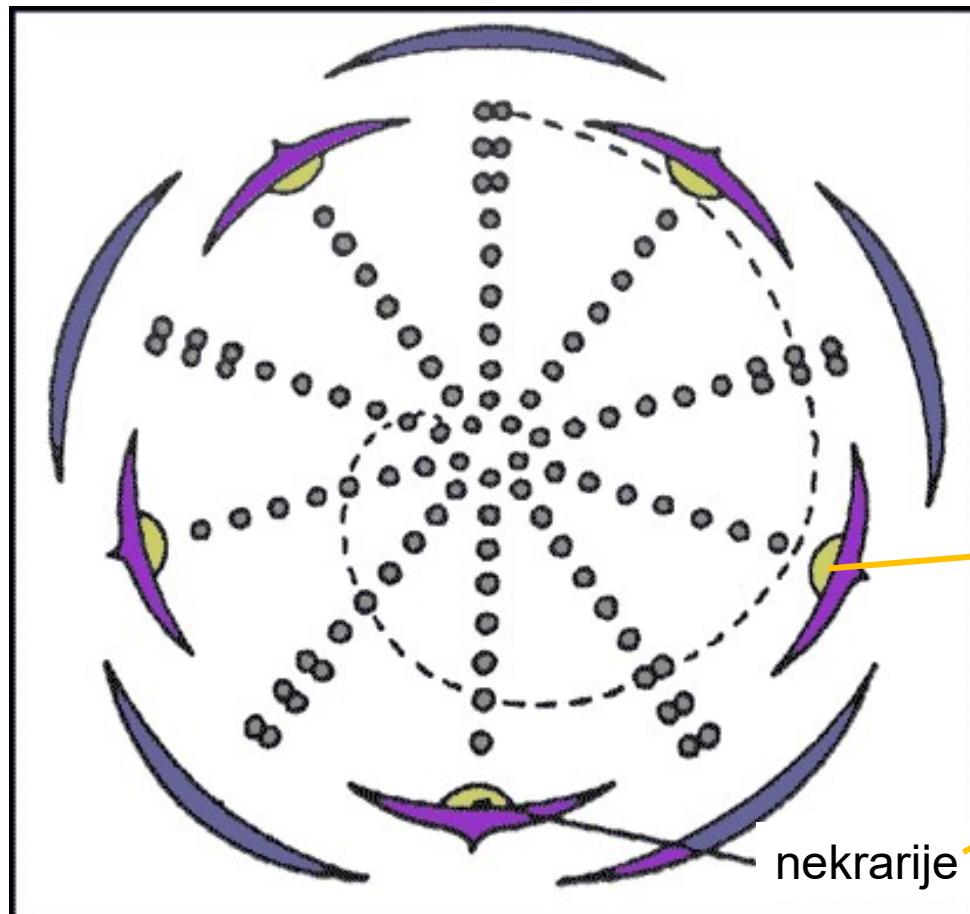




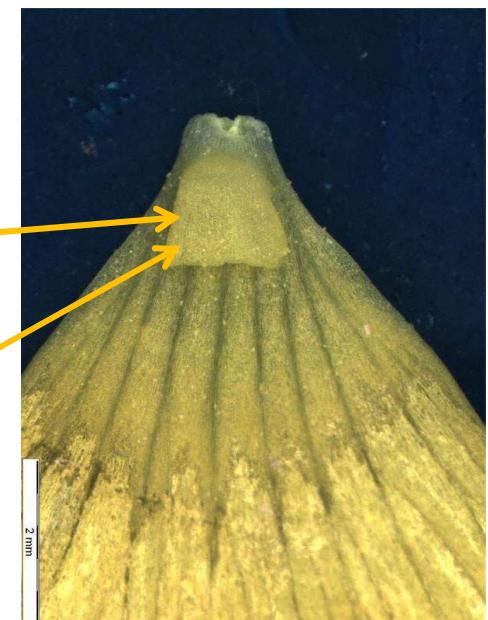
# PRAVE EUDIKOTILE

Red: Ranunculales  
Fam. Ranunculaceae

Opšti cvjetni dijagram roda *Ranunculus*



\*K5 C5 A $\infty$  G $\infty$





*Ranunculus ficaria-*  
ledinjak \*K3 C8-12 A $\infty$  G $\infty$

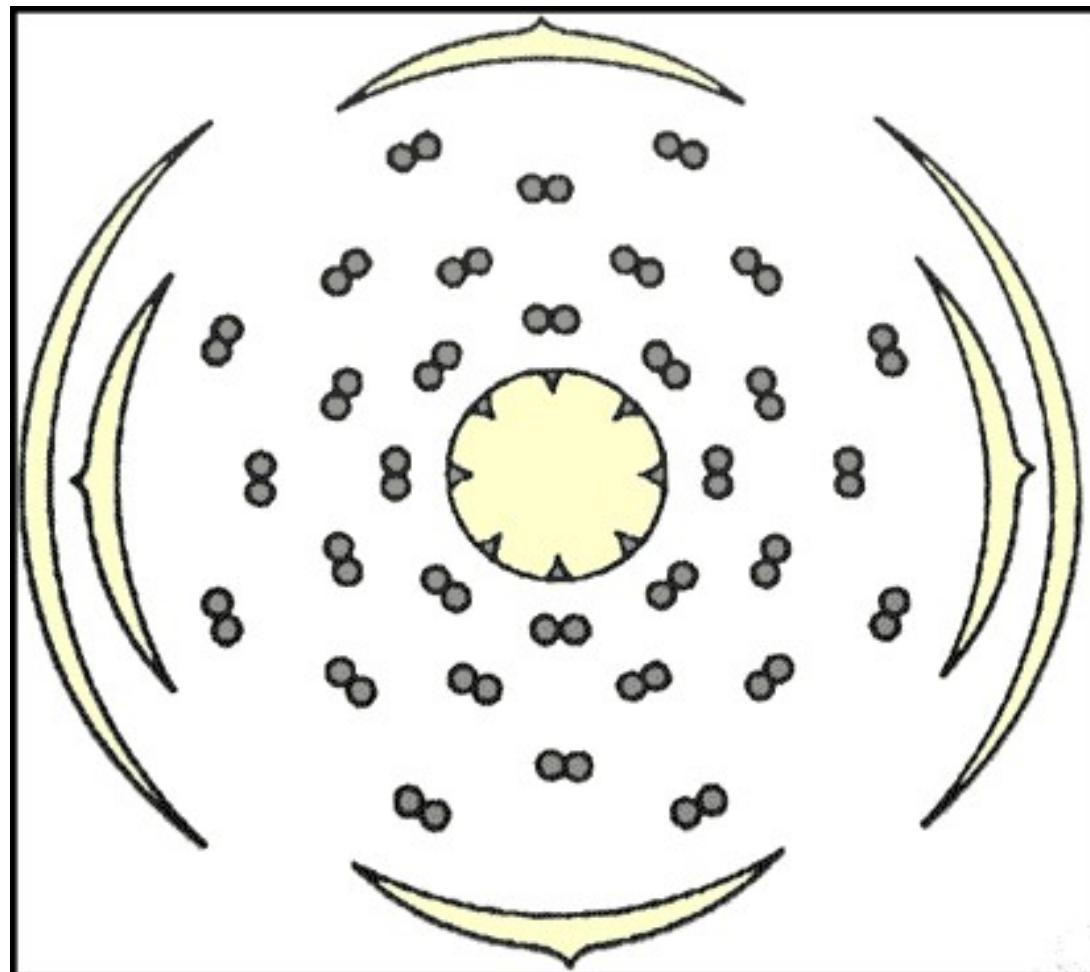
oraščica

*Helleborus odorus*- kukurijek



# Red. Papaverales

fam: Papaveraceae

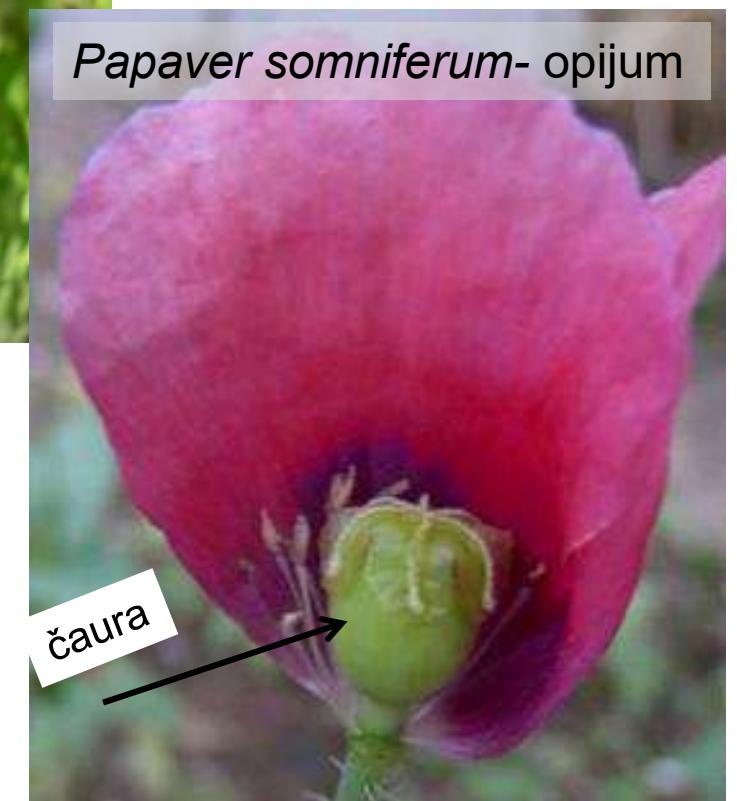


\*K<sub>2</sub> C<sub>4</sub> A<sub>∞</sub> G(8)/

Kratkotrajna čašica  
mliječni sok...



*Papaver rhoeas*- poljski mak



Red. Papaverales  
fam. Fumariaceae  
↑K2 C4 A(3)+(3) G(2)/



ostruga



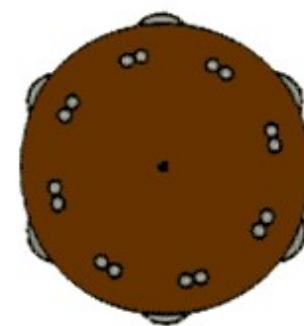
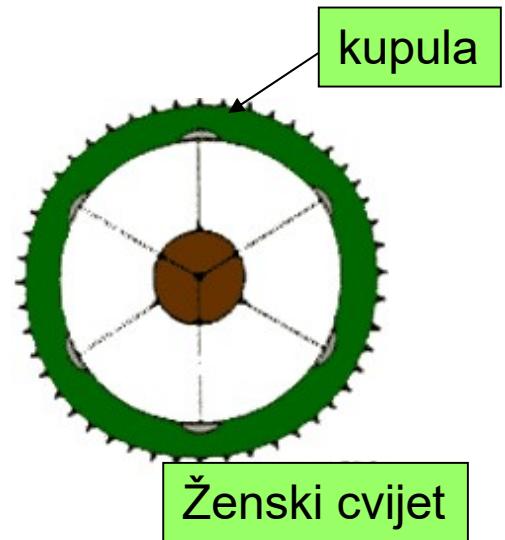
*Fumaria officinalis*- dimnjača

# Red: Fagales

## Fam. Fagaceae



*Fagus sylvatica*- bukva

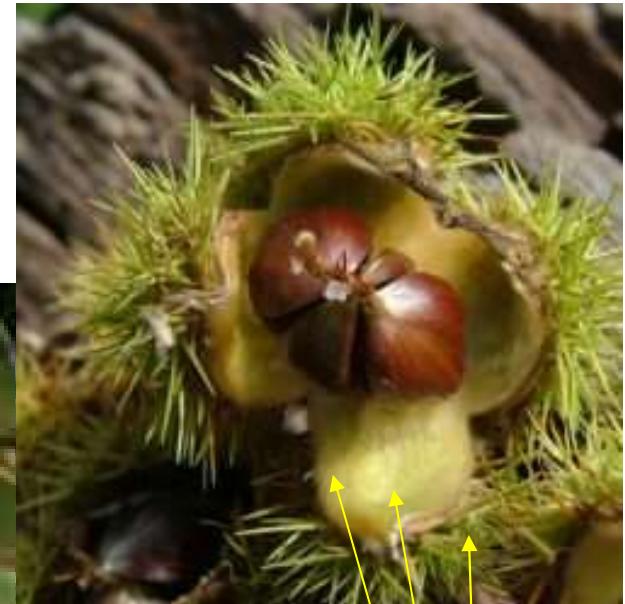


Muški cvijet

\* ♀ **P(3+3) G(3)**

\* ♂ **P(3+3) A6-12**

*Castanea sativa*- koštanj



Tri oraščice u kupuli

Muška cvast

Bodljikava kupula

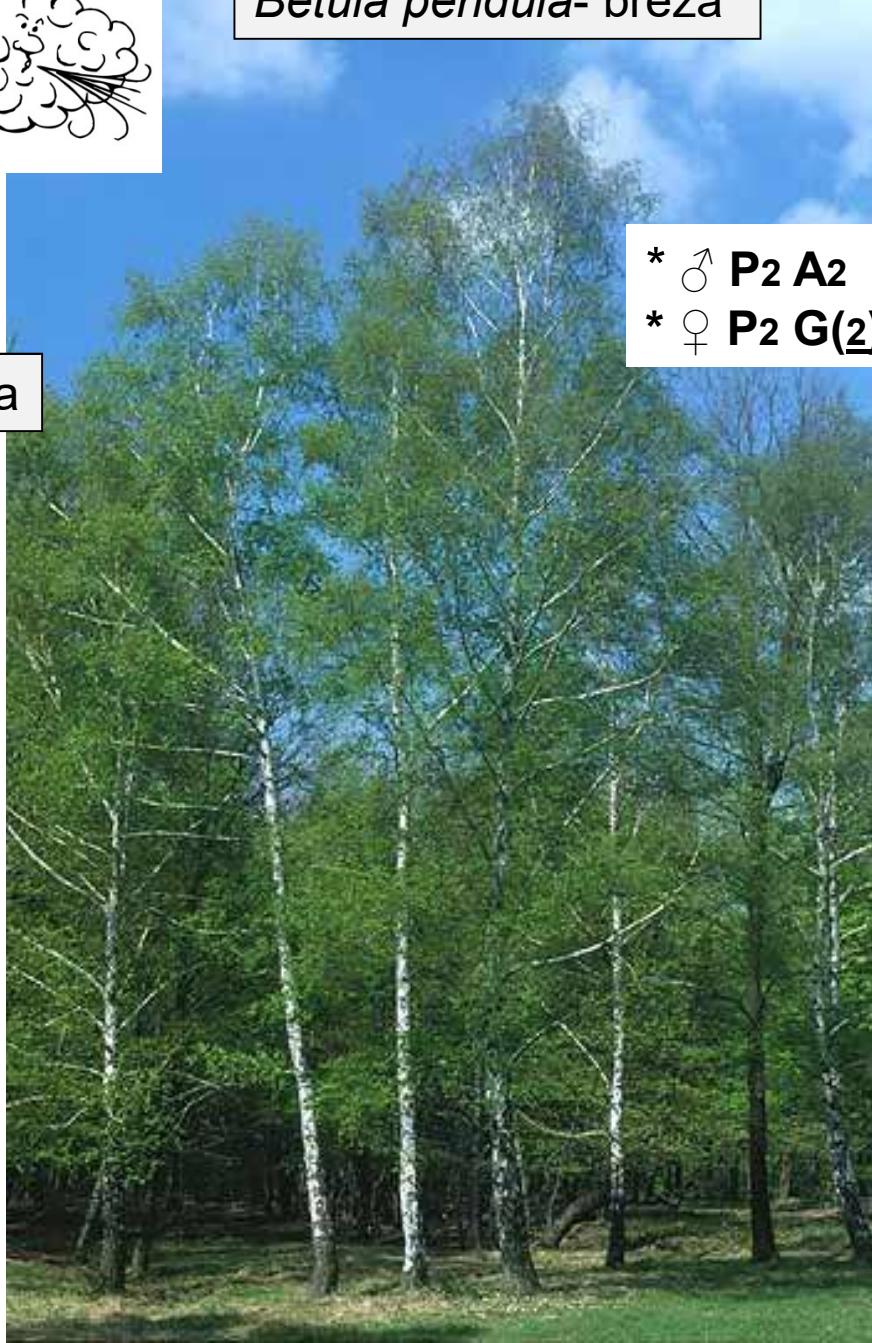


# Red: Fagales

Fam. Betulaceae



*Betula pendula*- breza



\* ♂ P<sub>2</sub> A<sub>2</sub>  
\* ♀ P<sub>2</sub> G(2)



*Corylus avellana*- lijeska

\* ♂ P0 A4  
\* ♀ P4-8 G(2)



## *Carpinus orientalis*- bjelograbić



Muška resa



Oraščica sa krilatim  
prcvjetnim listićima  
koji pomažu  
rasijavanje

- \* ♂ **P0 A4-10**
- \* ♀ **P6-10 G(2)**

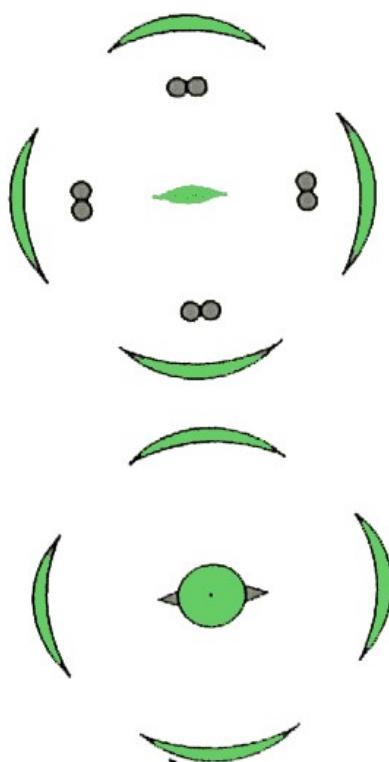


*Ostrya carpinifolia*- crni grab

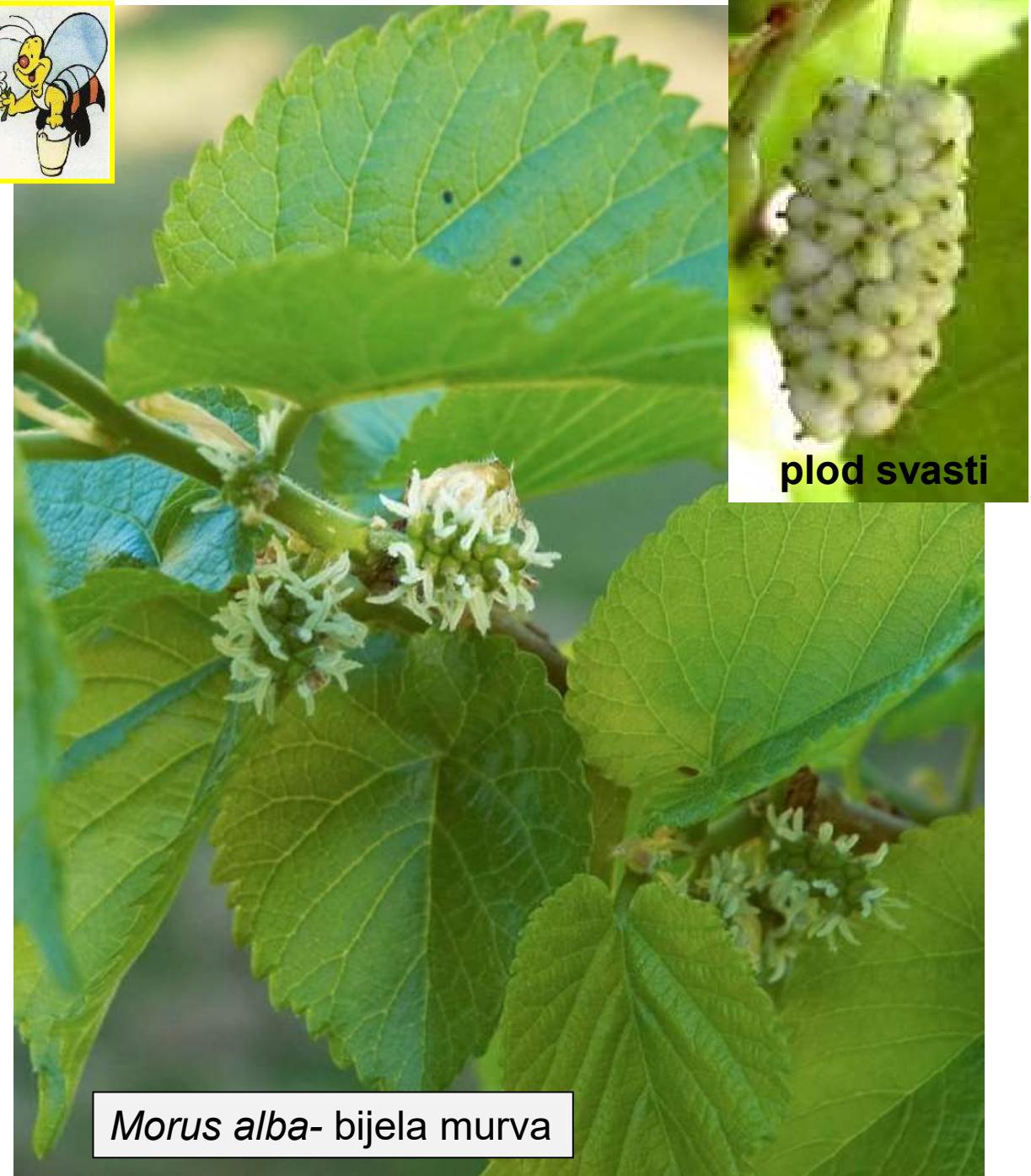
# Red. Urticales Fam. Moraceae

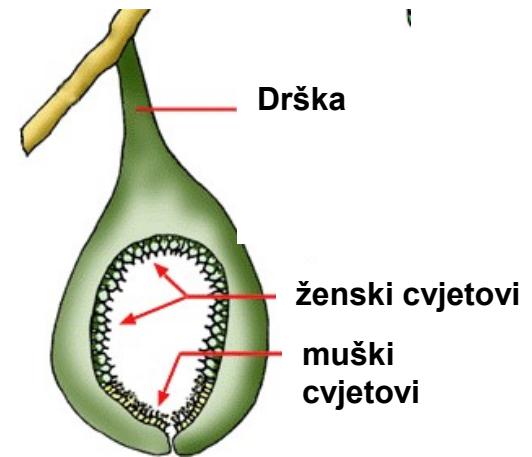


Muški cvjetovi



Ženski cvjetovi





*Ficus carica*- smokva

Red. Urticales  
Fam. Cannabaceae

\* ♂ P<sub>5</sub> A<sub>5</sub>, \* ♀ P<sub>5</sub>G<sub>1</sub>



**Cannabis sativa - konoplja**  
Muška i ženska jedinka





*Humulus lupulus*- hmelj  
Muška i ženska jedinka



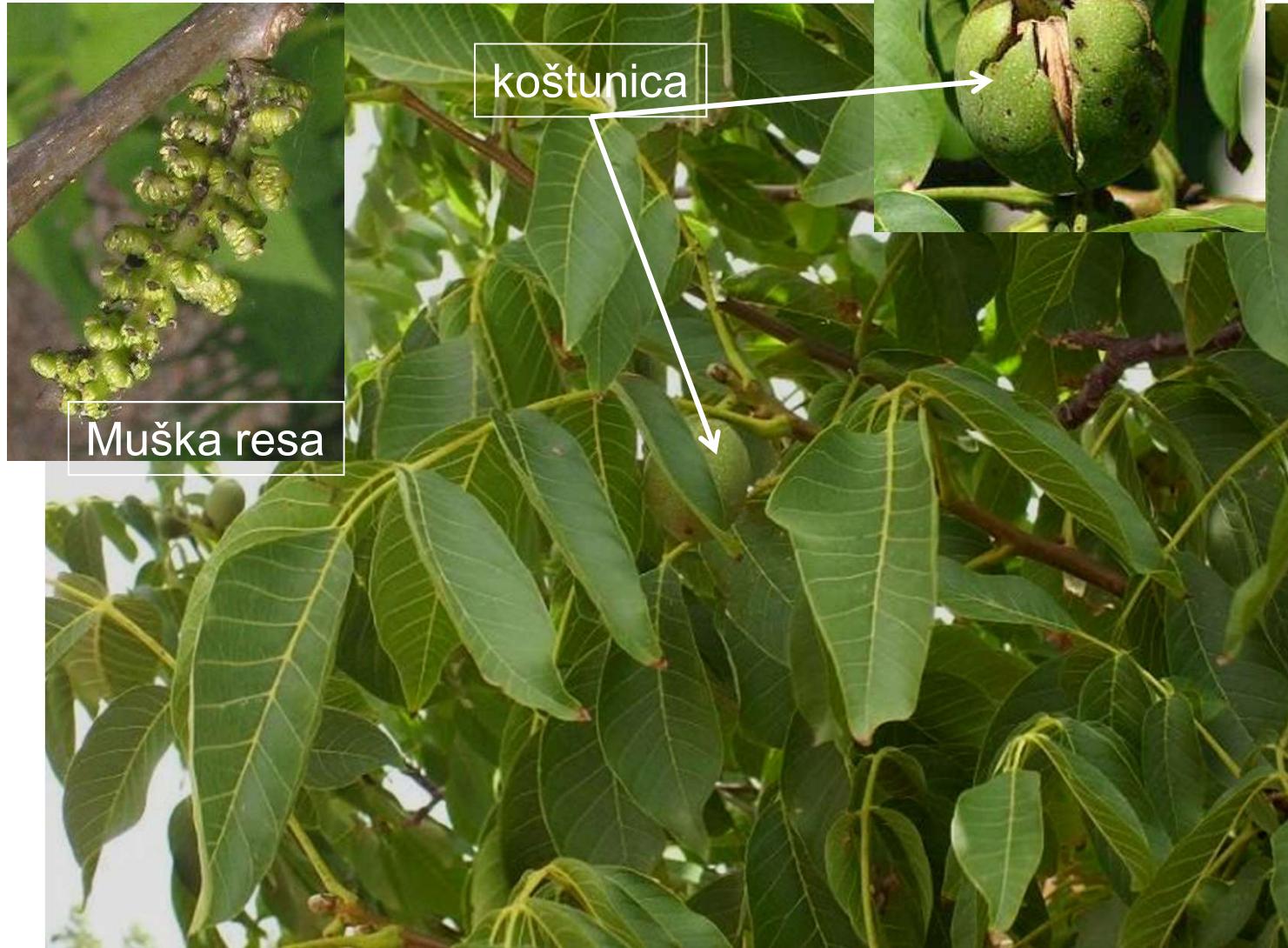
Red. Urticales  
Fam. Urticaceae

\*♂P4-5A4-5, \*♀P4-5 G1



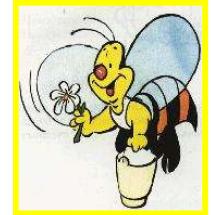
Red. Juglandales  
fam. Juglandaceae  
*Juglans regia*- orah

\* ♂ P<sub>3-5</sub> A<sub>8-40</sub> \* ♀ P<sub>3-5</sub> G<sub>/(2)</sub>



# Red: Rosales

## Fam. Rosaceae

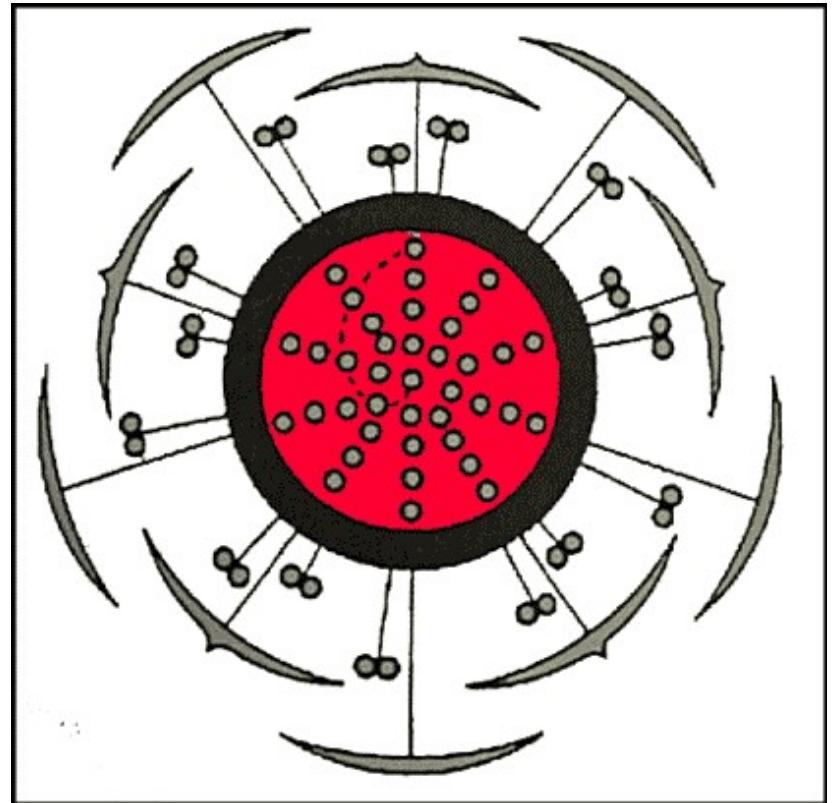


Subfam. Spiroideae \*K5 C5 A $\infty$  G 2-5  
(gineceum apokarpan, plod je miješak),  
g. *Spiraea*

Subfam. Rosoideae \*K5 C5 A $\infty$  G  $\infty$   
(gineceum apokarpan, plod je zbirna  
oraščica, koštunica), g. *Rosa*, *Rubus*,  
*Fragaria*...

Subfam. Maloideae \*K5 C5 A $\infty$  G 1(5)  
(gineceum sinkarpan, plod je pomum),  
g. *Malus*, *Cydonia*, *Sorbus*,  
*Crataegus*, *Pyrus*

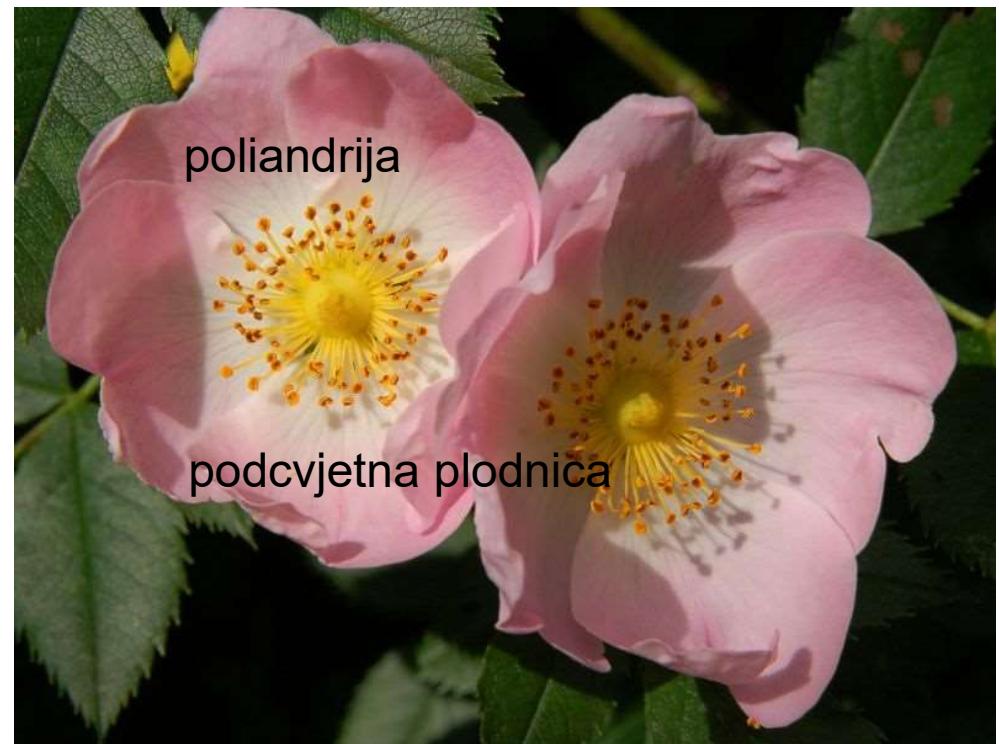
Subfam. Prunoideae \*K5 C5 A $\infty$  G 1  
(gineceum monokarpan, plod je  
koštunica), g. *Prunus*



## Subfam: Rosoideae



Zalisci srasli  
sa lisnom drškom



Rosa canina- šipurak

Neparno perasto dijeljeni listovi

*Rubus ulmifolius* - kupina

Zbirni plod, koštunica

Nadcvjetna plodnica



Poliandrija



Zbirni plod, oraščica

*Fragaria vesca*- jagoda



Epikaliks  
(spoljašnja čašica)



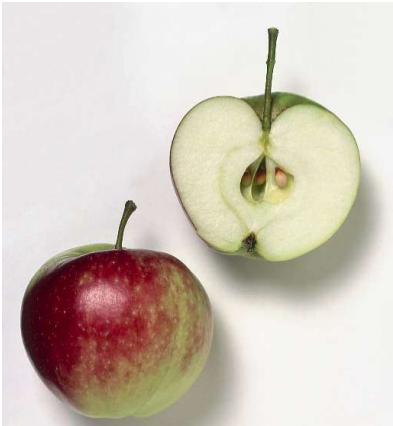
Stolone



Epikaliks  
(spoljašnja čašica)

Puzeće stablo  
Dlanoliki listovi

## Subfam. Maloideae



*Malus domestica- jabuka*

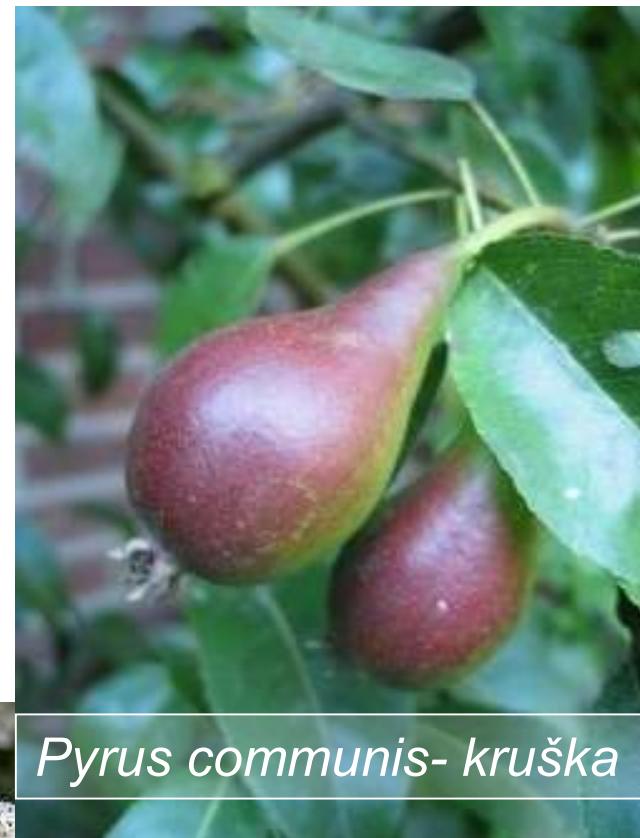


*Cydonia oblonga- dunja*





*Sorbus aucuparia*  
*jarebika*



*Pyrus communis*- kruška



*Crataegus monogyna*- glog



## Subfam. Prunoideae

*Prunus webbii*- divlji badem



Plodnica slobodna, obrasla



*Prunus cerasus*- višnja

*Prunus domestica* Šljuka



*Prunus domestica* - šlijva



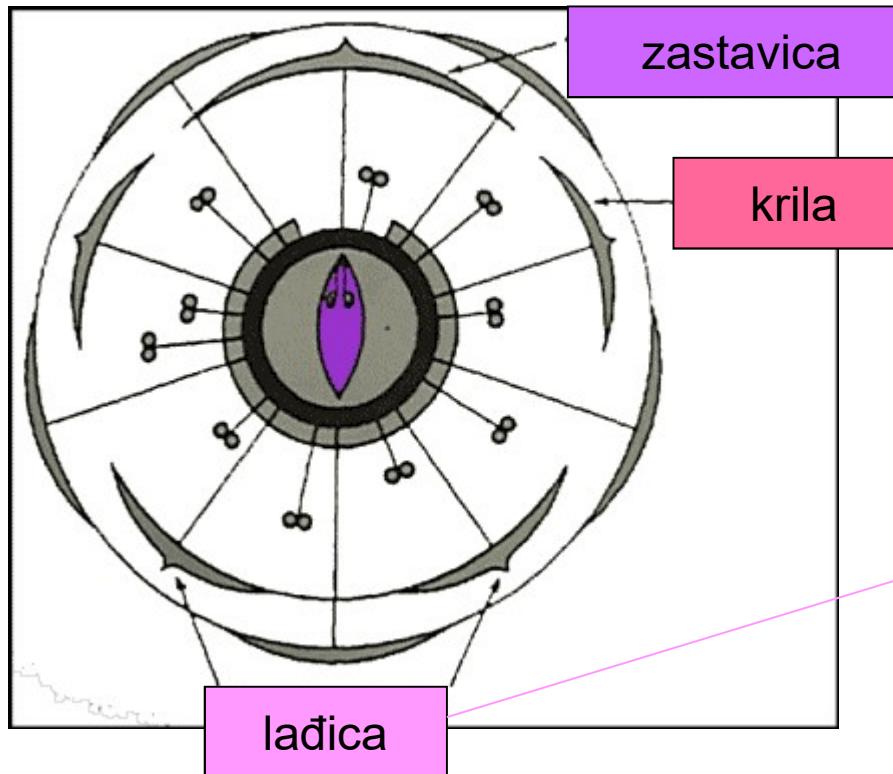
*Prunus armeniaca*- kajsija

# Red: Fabales



Fam: Fabaceae (Leguminosae, Papilionaceae)

K(5) C5 A(10) ili (9)+1 G1



vitice ili rašljike

*Petteria ramentacea*- zanovjet

Prva novoopisana biljka u flori Crne Gore!!!



A(10)- filamenti svih prašnika srasli

*Robinia pseudoacacia* - bagrem

gAe(m)-1- filamenti 9 prašnika srasli



Zalisci metamorfozirani u trn

*Phaseolus vulgaris* - pasulj



*Pisum sativum* - grašak



Krupni zalisci



*Glycine max- soja*

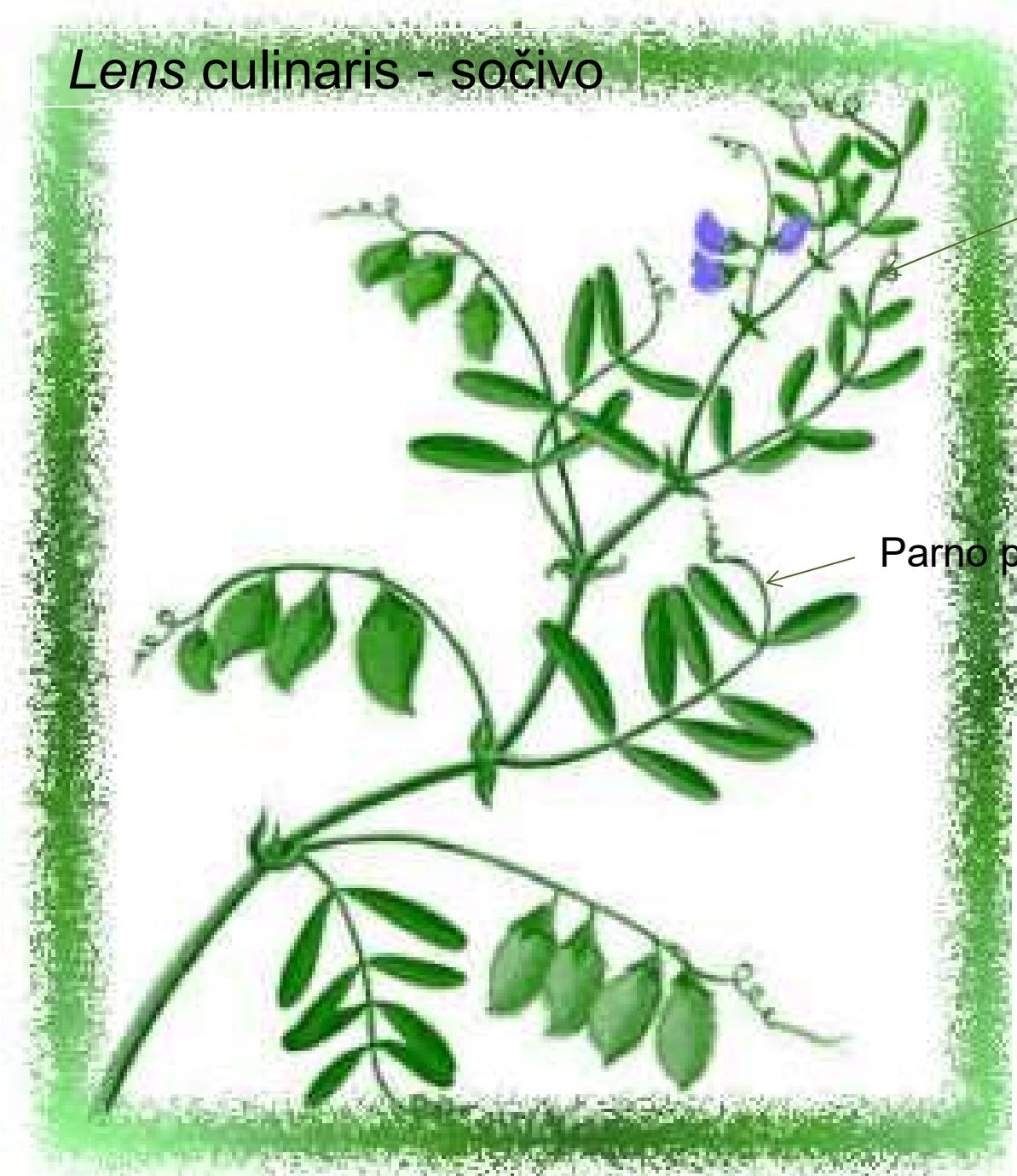


*Arachys hypogaea*- kikiriki



Plod razvijen iz  
kleistogamnih cvjetova!

## *Lens culinaris* - sočivo



Rašljika, vitica

Parno perast list





*Vicia faba*- bob  
(syn. *Faba sativa*)

Listovi bez rašljike!





*Cicer arietinum*- leblebija,  
slanutak

*Medicago sativa* - lucerka



### Lucerke – rod *Medicago*

Trodjelni listovi, zalisci ne srastaju sa lisnom drškom.  
Mahune ili srpaste ili pužasto uvijene, čašica otpada....





Plodići kod lucerki



**Djeteline – rod *Trifolium*, trodjelni listovi, zalisci srastaju sa lisnom drškom. Mahune ostaju obavijene čašičnim listićima.**

*Trifolium repens* - bijela djetelina



*Trifolium pratense* - crvena djetelina



*Lotus corniculatus*- zvjezdan



List petodjelan.

