

**Divisio: EUMYCOTA**

**Subdivisio: BASIDIOMYCOTINA**

# Classis: **GASTEROMYCETES**

Ordo: **LYCOPERDALES**

Familia: **Lycoperdaceae**

*Lycoperdon parlatum*

*Lycoperdon pyriforme*

*Calvatia gigantea*

Familia: **Geastraceae**

*Geastrum triplex*



*Lycoperdon perlatum*

tikvasta puhara



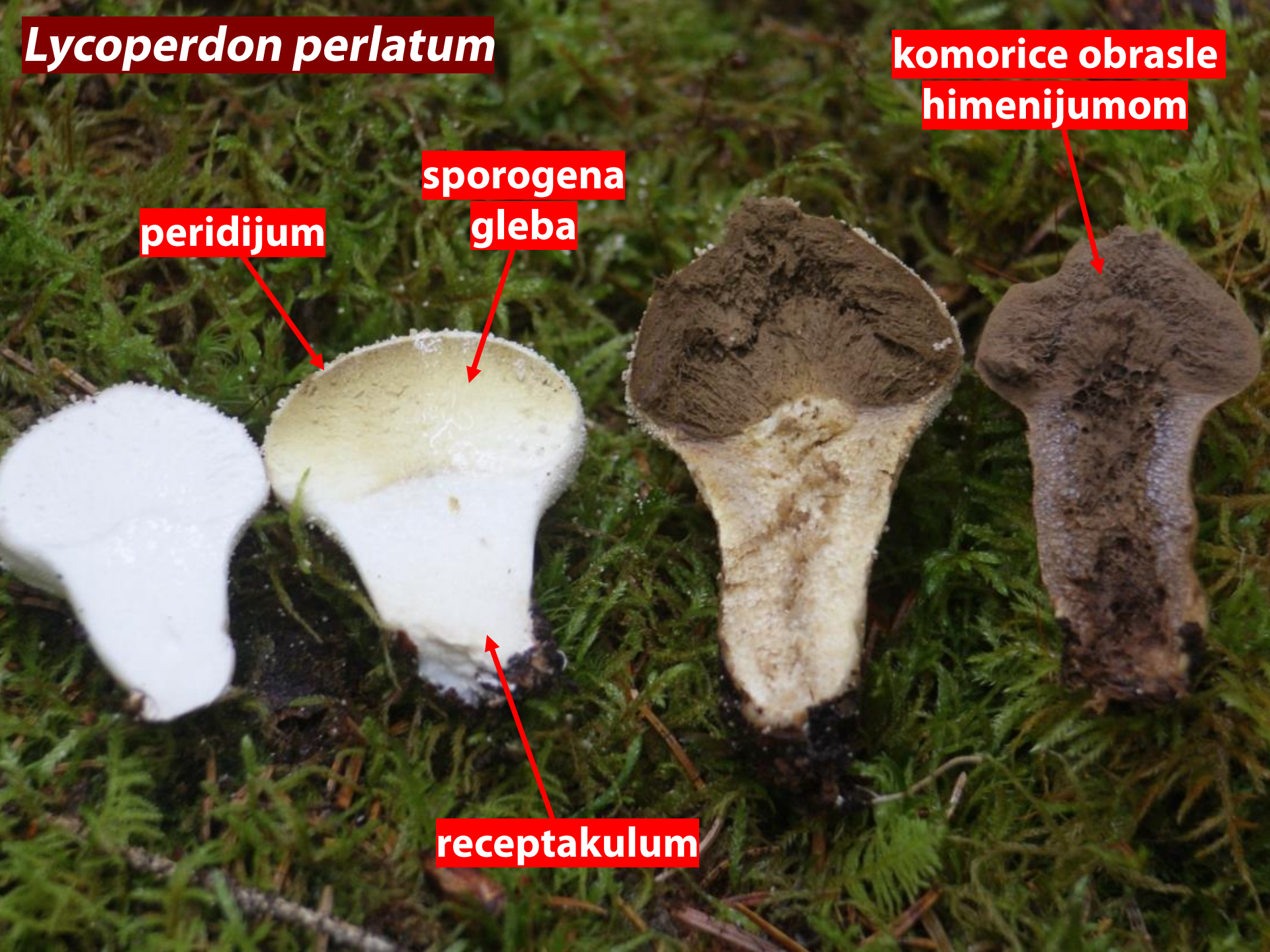
***Lycoperdon perlatum***

**komorice obrasle  
himenijumom**

**peridijum**

**sporogena  
gleba**

**receptakulum**



*Lycoperdon pyriforme*

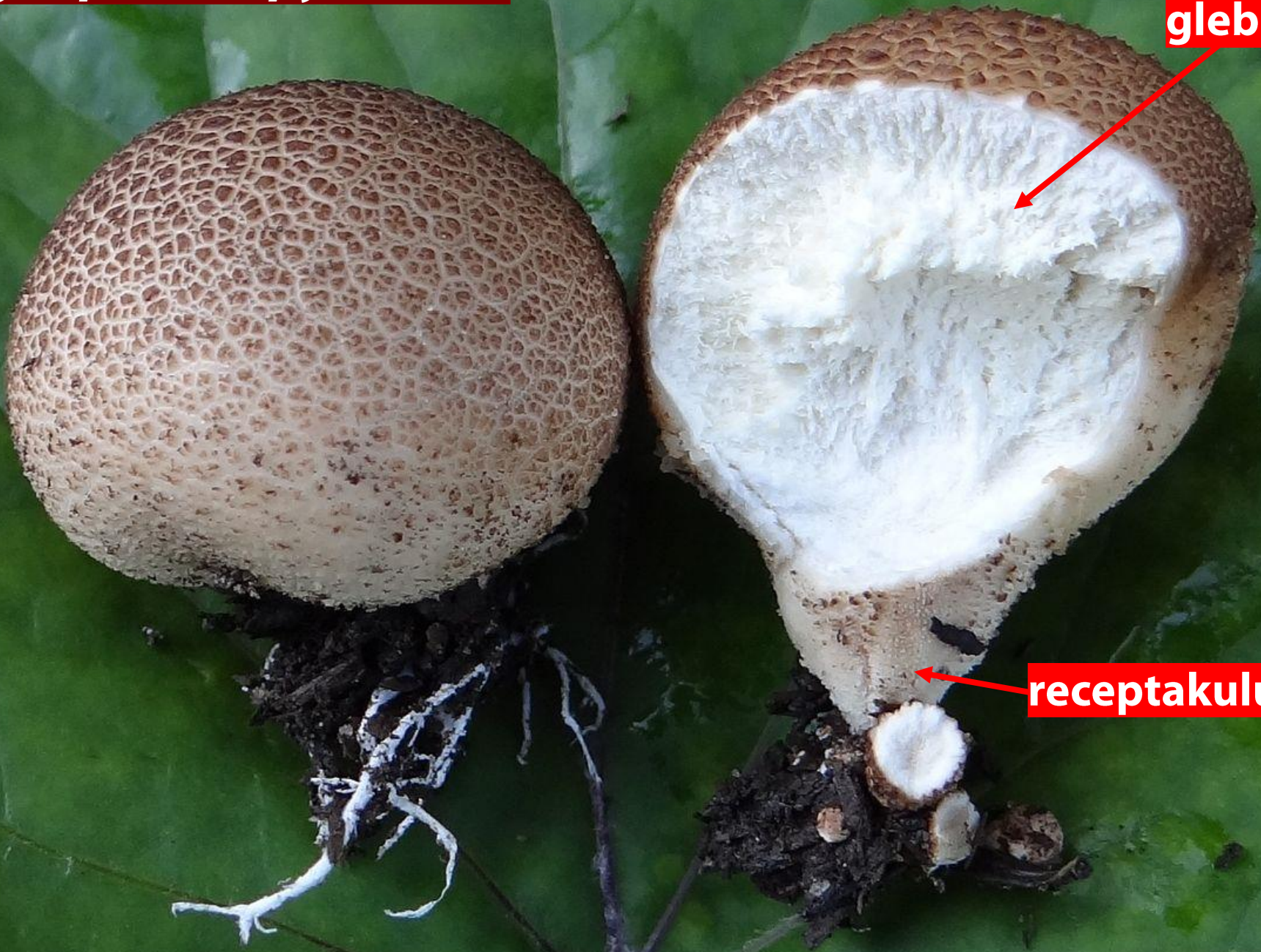
kruškasta puhara



***Lycoperdon pyriforme***

**sporogena  
gleba**

**receptakulum**





**rasijavanje  
bazidiospora**

**unutrašnjost potpuno zrelog  
plodonosnog tijela koju  
ispunjava praškasta masa  
nastala od sporogene glebe**



***Lycoperdon* spp.**

*Calvatia gigantea*

džinovska/velika puhara





***Calvatia gigantea***



zreli karpofor

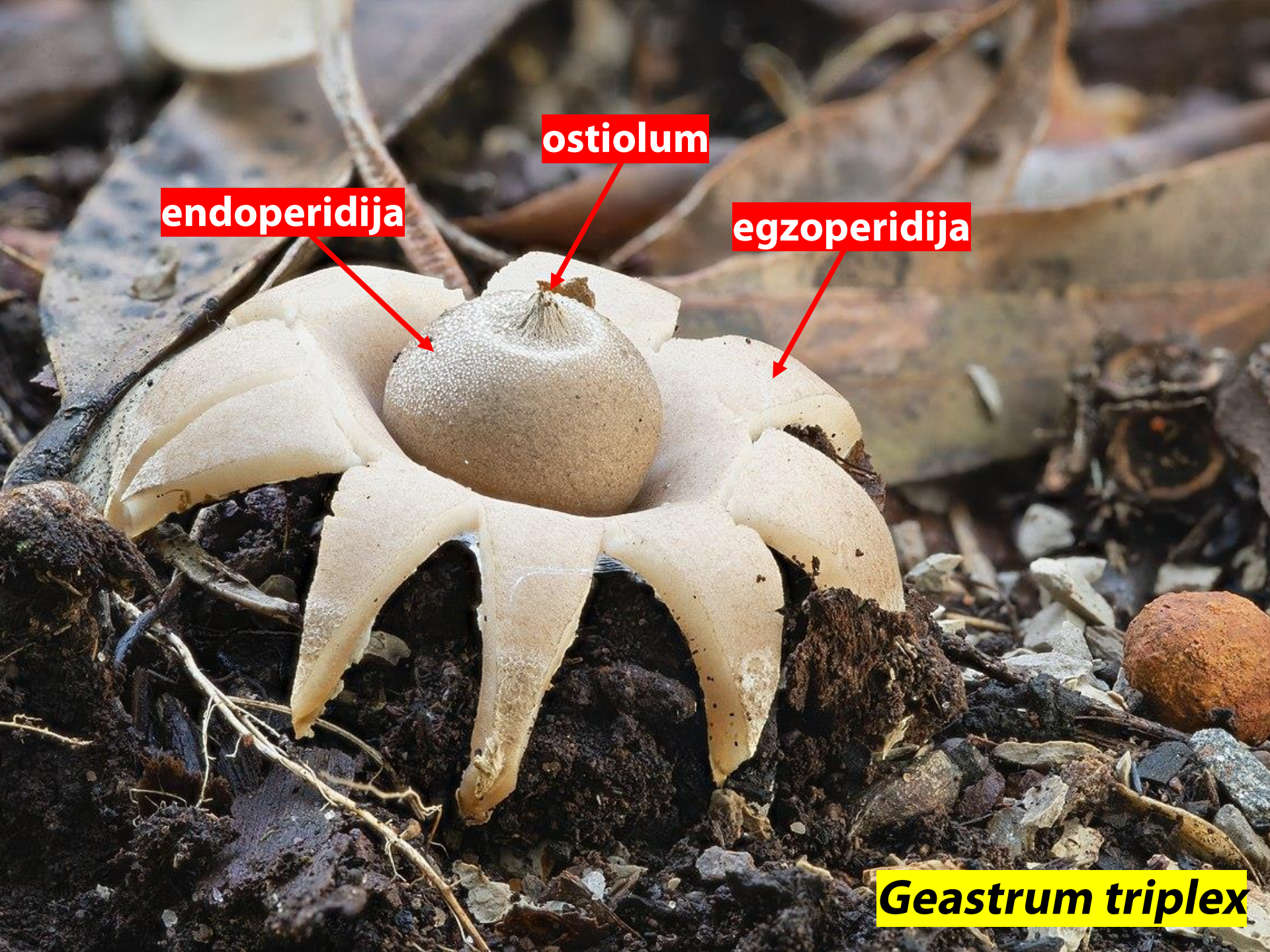
*Calvatia gigantea*



*Geastrum triplex*

zvjezdasta puhara





**ostiolum**

**endoperidija**

**egzoperidija**

***Geastrum triplex***

***Geastrum triplex***



**rasijavanje  
bazidiospora**

# Classis: **GASTEROMYCETES**

Ordo: **NIDULARIALES**

Familia: **Nidulariaceae**

*Ciathus striatus*

Ordo: **PHALLALES**

Familia: **Phallaceae**

*Phallus impudicus*

*Phallus indusiatus*





ptičije gnijezdo/prugasta korpica

*Cyathus striatus*

# *Cyathus striatus*

peridiole čija je  
unutrašnjost  
ispunjenja  
himenijumom







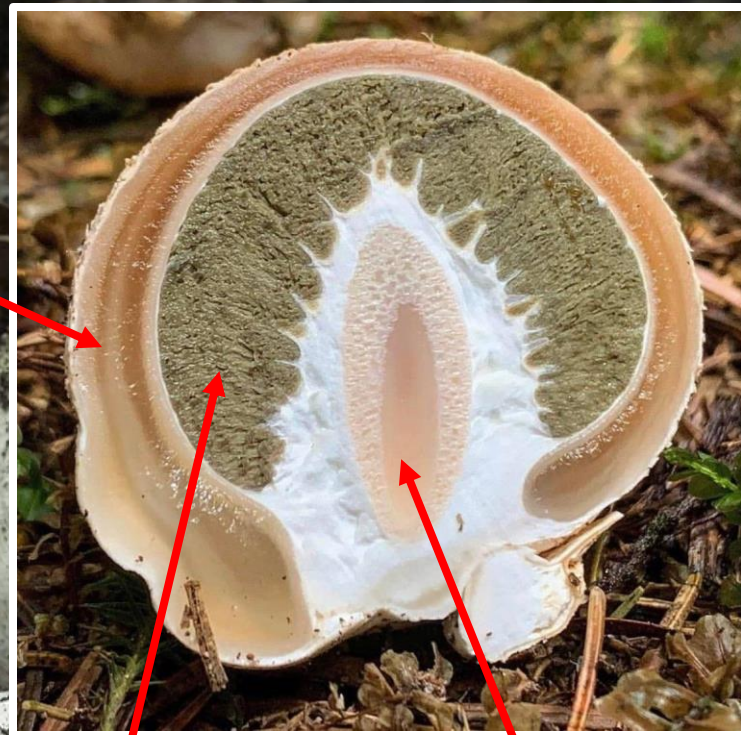
smrdljivi pijevac/đavolje jaje

*Phallus impudicus*

presjek kroz mlado  
plodonosno tijelo

debeli sloj sluzi  
između dvije peridije

egzoperidija



sporogena  
gleba

receptakulum

endoperidija

*Phallus impudicus*

*Phallus indusiatus*

bambusova pečurka



# Classis: TELIOMYCETES

Ordo: **USTILAGINALES**

Familia: **Ustilaginaceae**

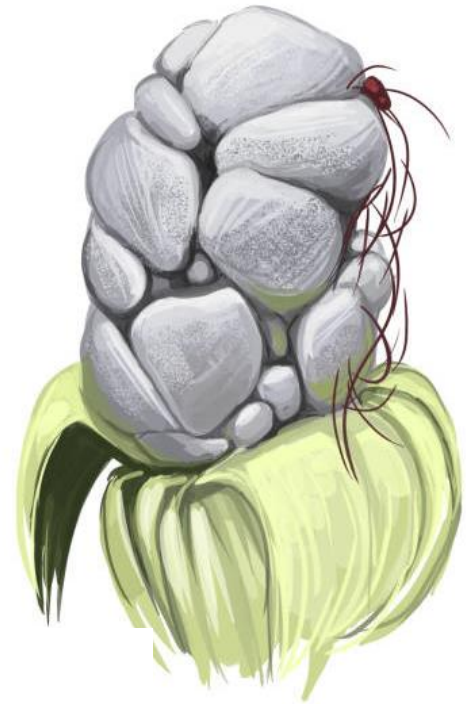
*Ustilago nuda*

*Ustilago avenae*

*Sorosporium reilianum*

Familia: **Tilletiaceae**

*Tilletia tritici*

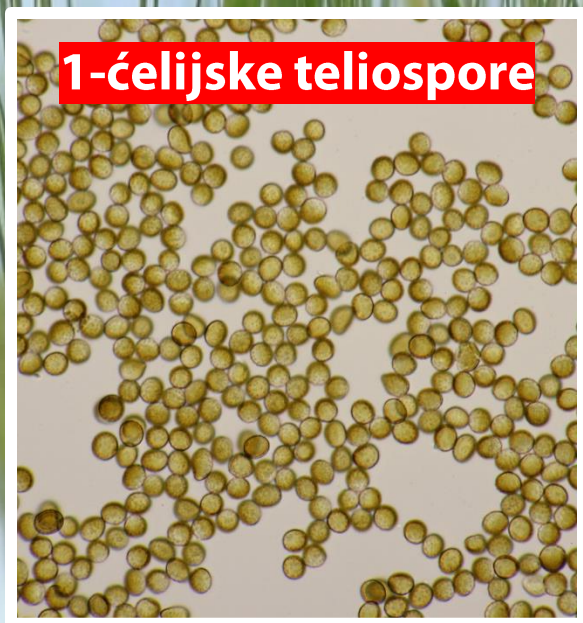


*Ustilago nuda*

otvorena gar ječma



# *Ustilago nuda*



zaraženi klasovi

A close-up photograph of oat spikes. The left spike shows healthy, green, elongated grains. The right spike shows grains that are dark brown/black, indicating infection by the fungus Ustilago avenae. The background is a blurred green field.

otvorena gar ovsá

*Ustilago avenae*

**zaraženi klasovi**



**1-ćelijske teliospore**

***Ustilago avenae***



*Sorosporium reilianum*

prašna gar kukuruza



**zaražene  
cvasti  
domaćina**



**1-ćelijske teliospore**

***Sorosporium reilianum***

*Tilletia tritici*

tvrda gar pšenice





**zaraženi  
klasovi**



**1-ćelijske teliospore**

***Tilletia tritici***

# Classis: TELIOMYCETES

Ordo: UREDINALES

Familia: Pucciniaceae

*Puccinia graminis*

*Puccinia triticina*

*Puccinia malvacearum*

*Phragmidium mucronatum*





**rđa strnog žita**

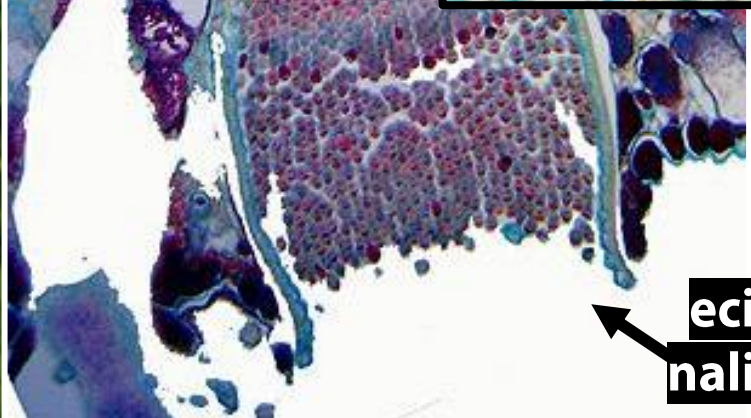
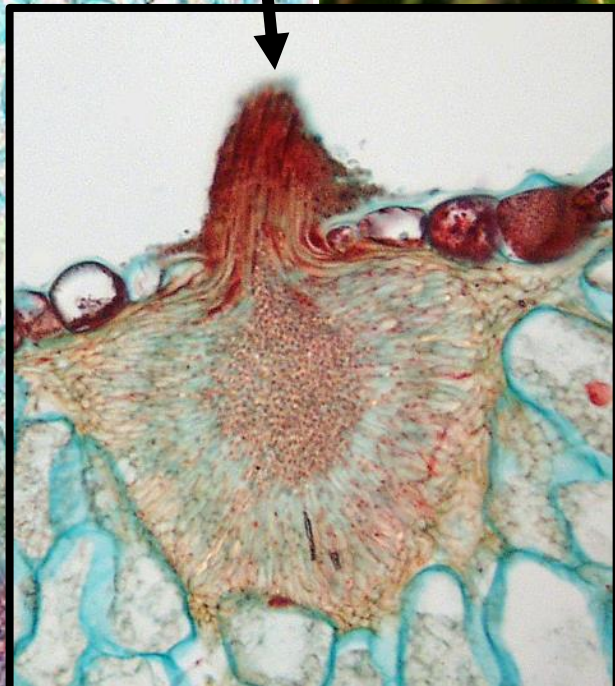
***Puccinia graminis***

# *Puccinia graminis*

(prvi domaćin,  
*Berberis vulgaris*)



piknidija na  
površini lista



ecidije na  
naličju lista

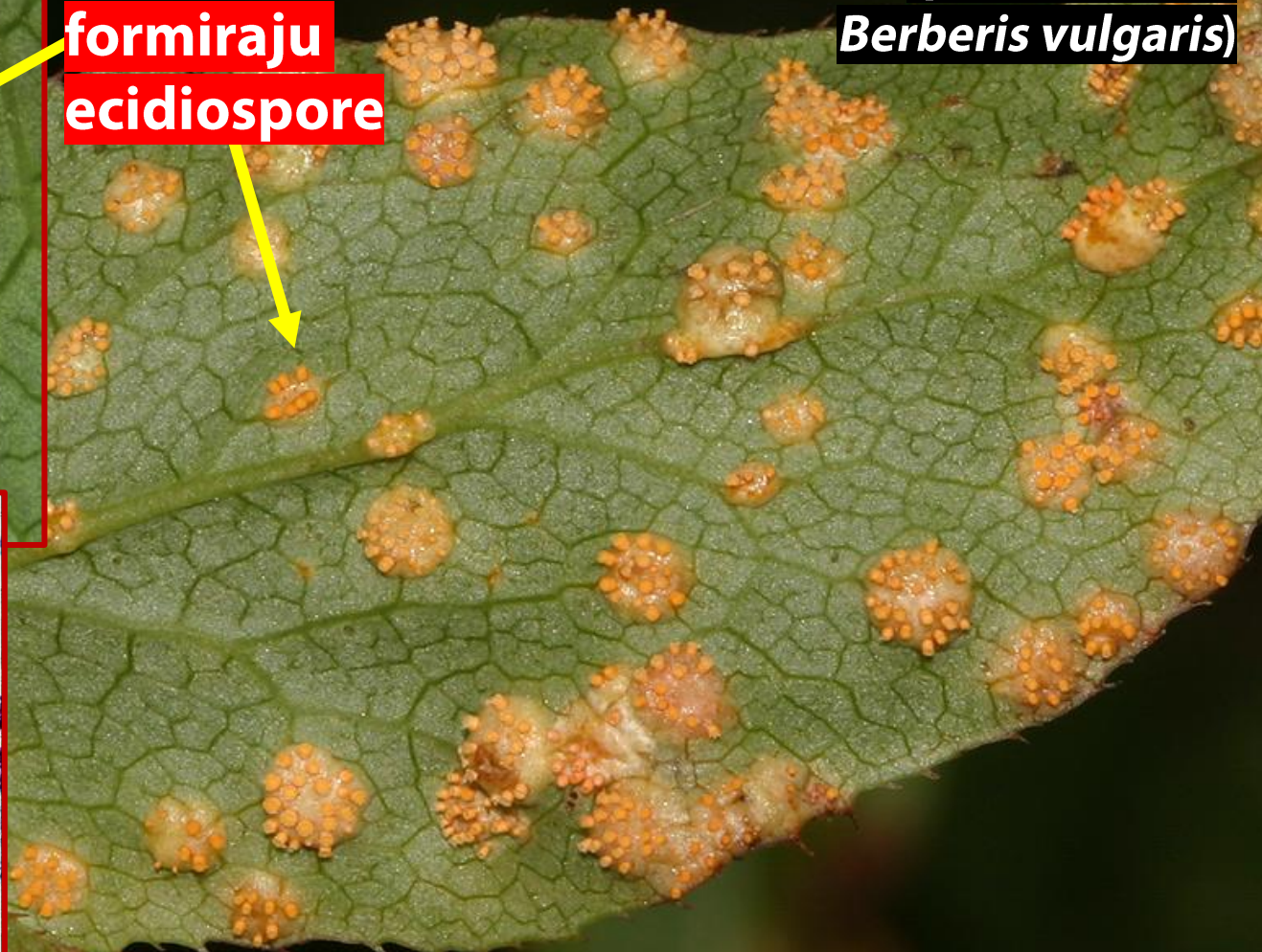


žučkasno-narandžaste  
mrlje po listovima

***Puccinia graminis***

(prvi domaćin,  
***Berberis vulgaris***)

ecidije  
u kojima se  
formiraju  
ecidiospore



ecidija sa  
ecidiosporama



uredije sa  
uredosporama



uredospore

***Puccinia graminis***

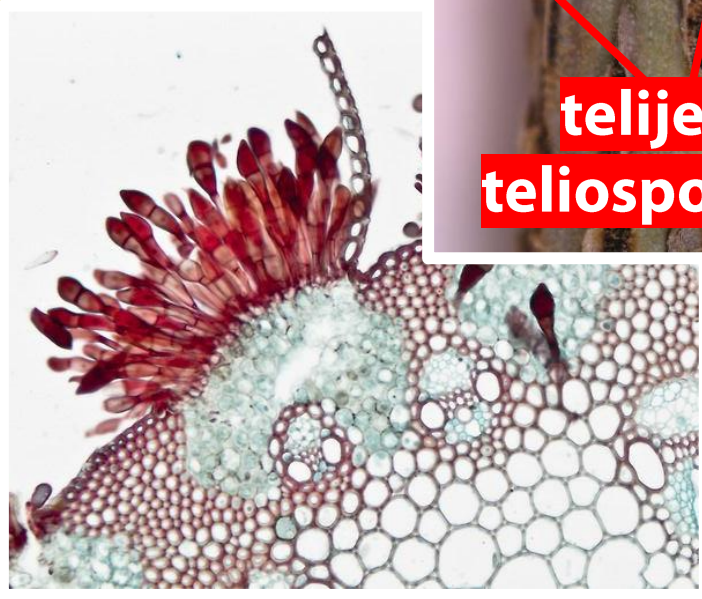
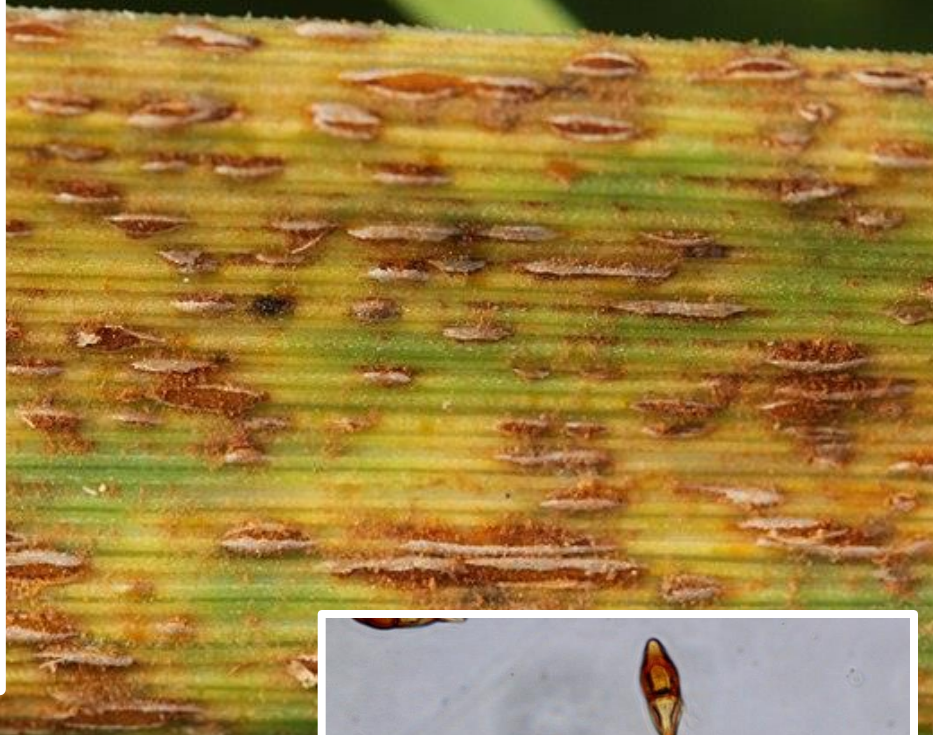
(drugi domaćin,  
*Poaceae* vrsta)

# *Puccinia graminis*

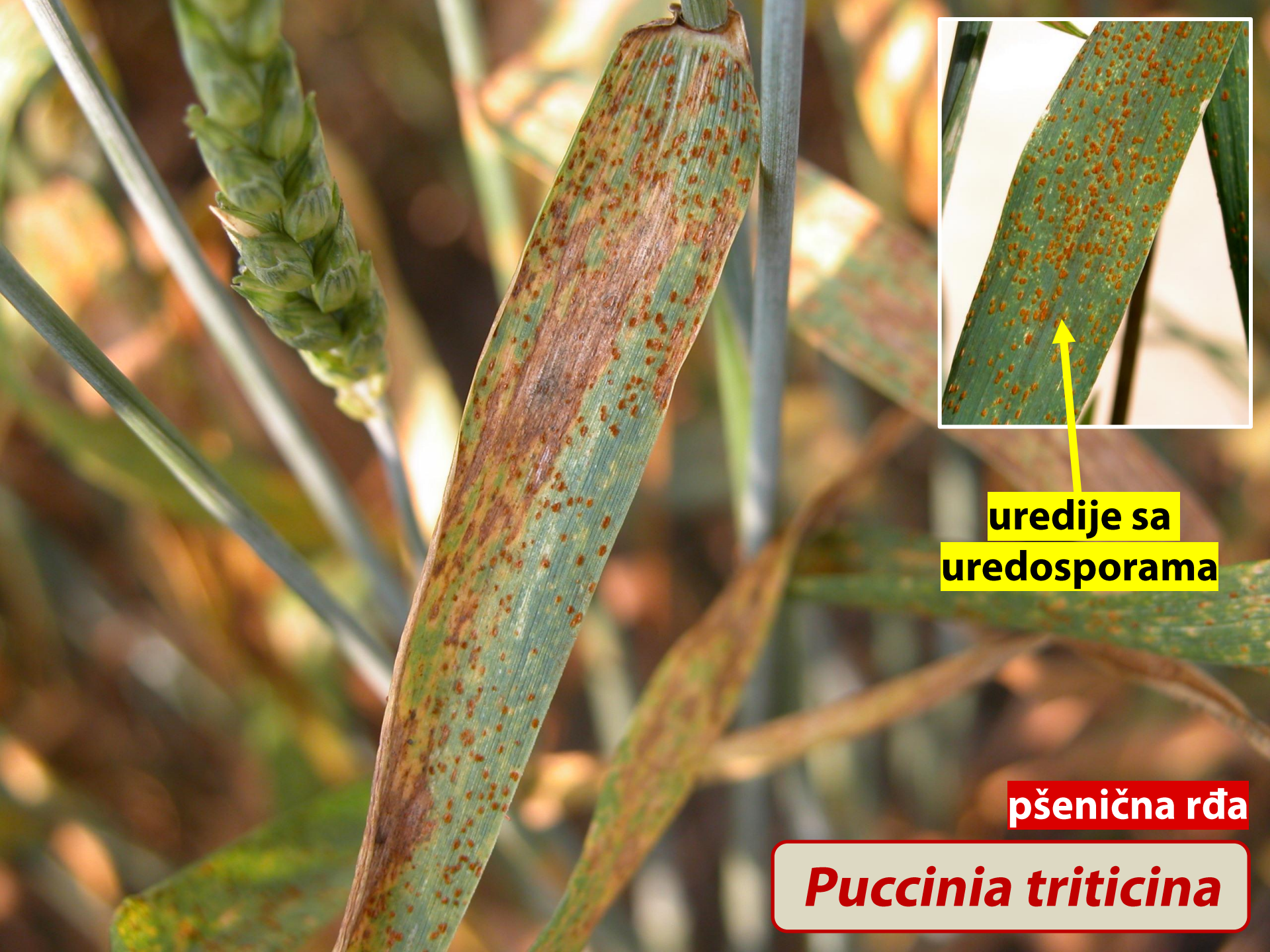
(drugi domaćin,  
*Poaceae* vrsta)



telije sa  
teliosporama



2-ćelijske teliospore

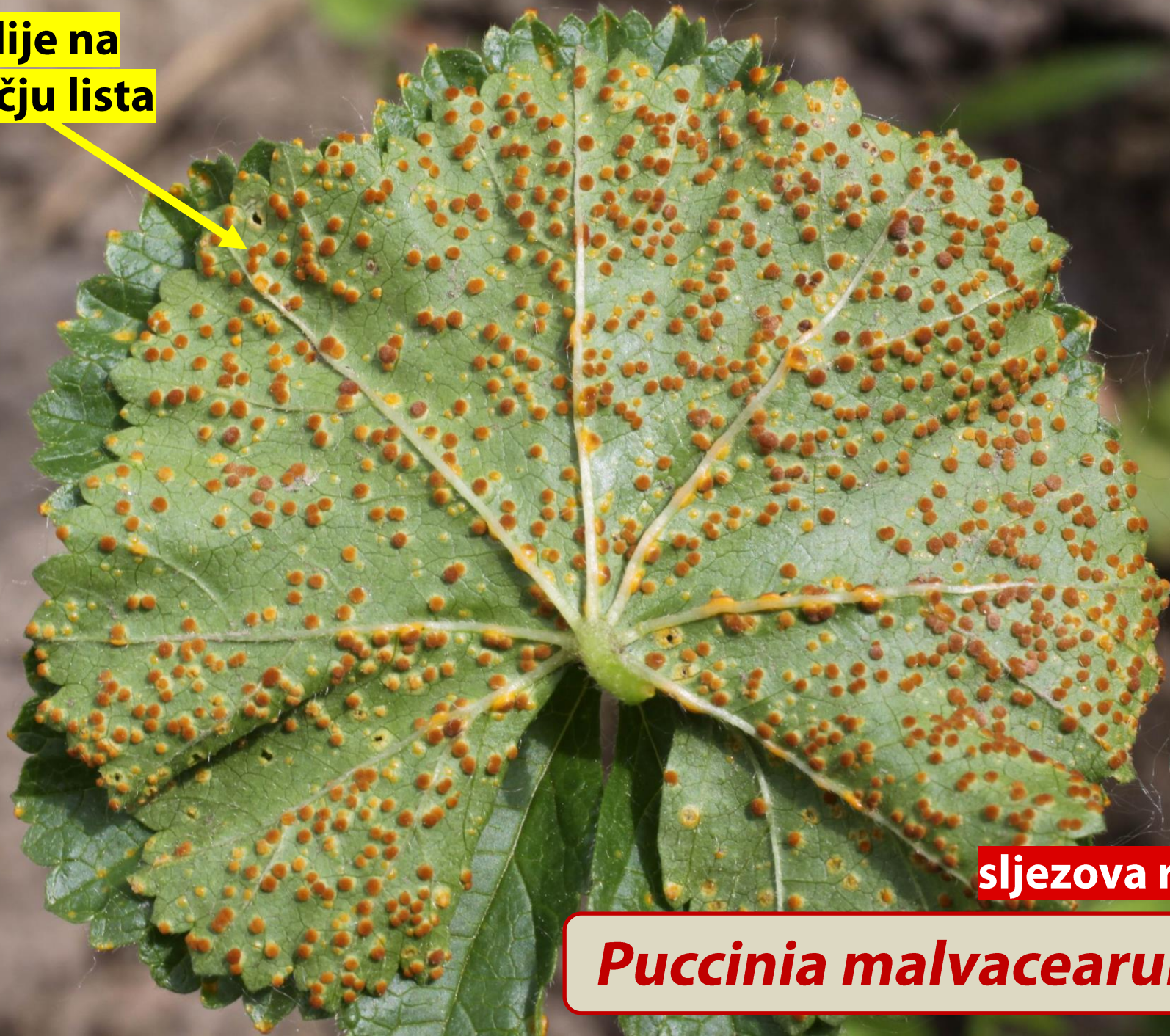


uredije sa  
uredosporama

pšenična rđa

*Puccinia tritricina*

telije na  
naličju lista



sljezova rđa

*Puccinia malvacearum*



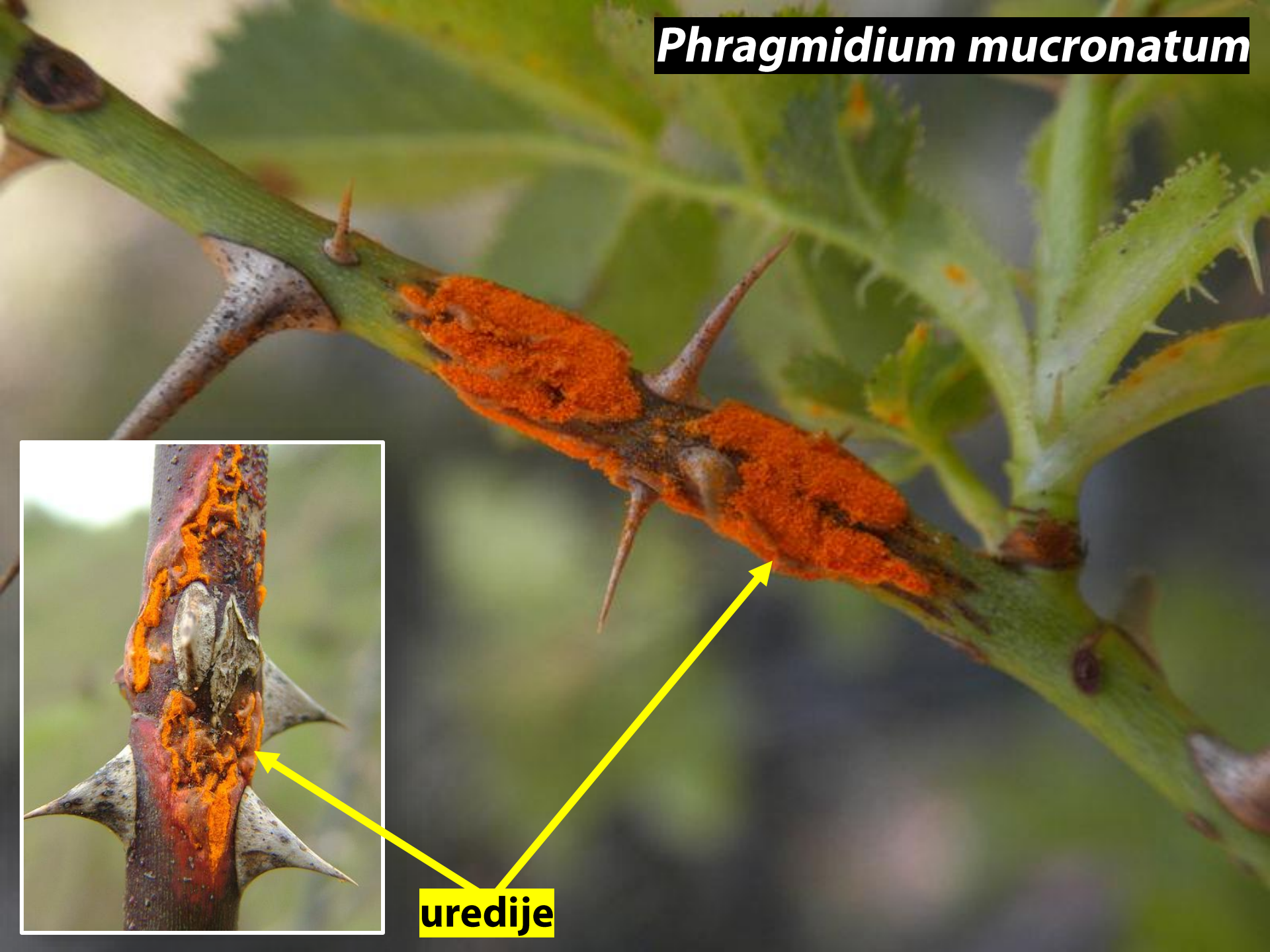
rđa ruže

*Phragmidium mucronatum*

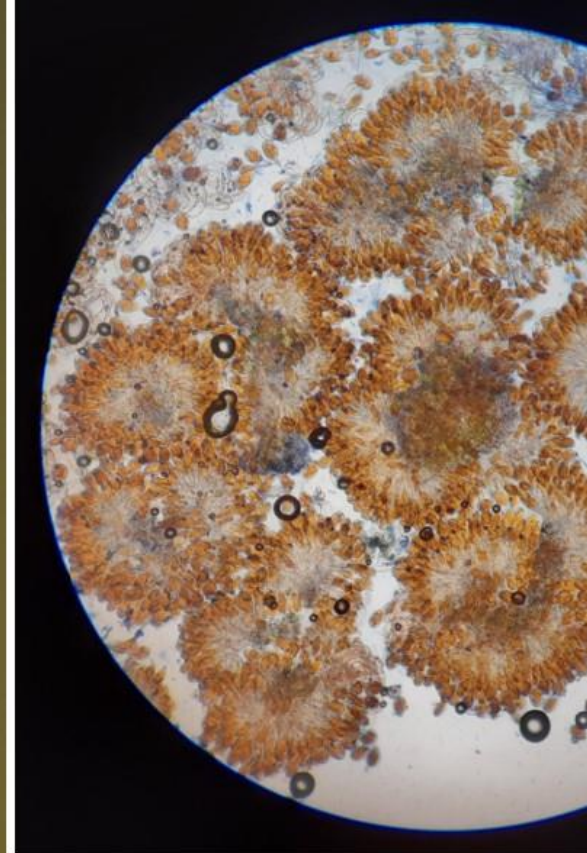
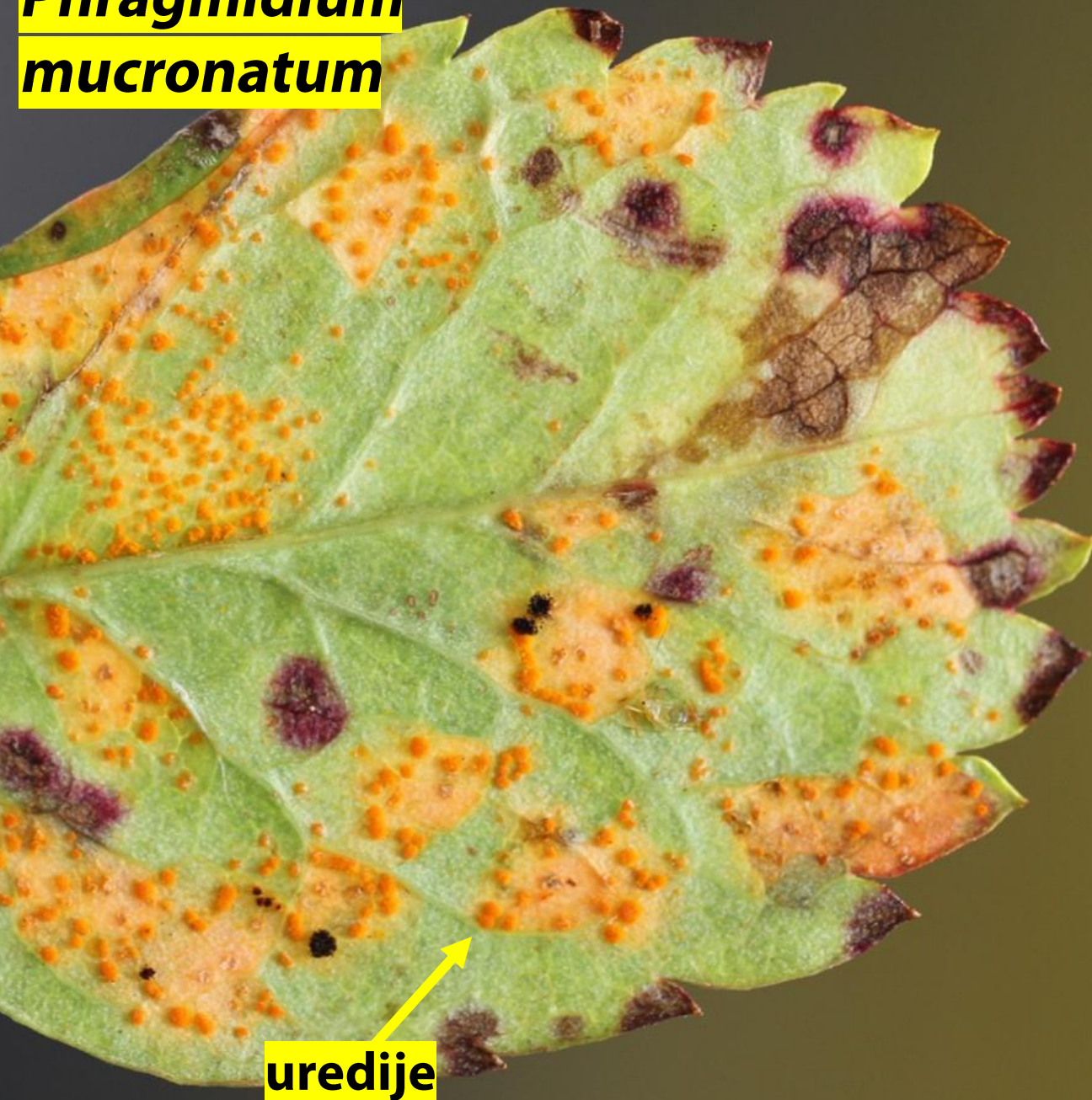
***Phragmidium mucronatum***



**uredije**



**Phragmidium  
mucronatum**



**uredospore**



**Phragmidium  
mucronatum**



**telije**

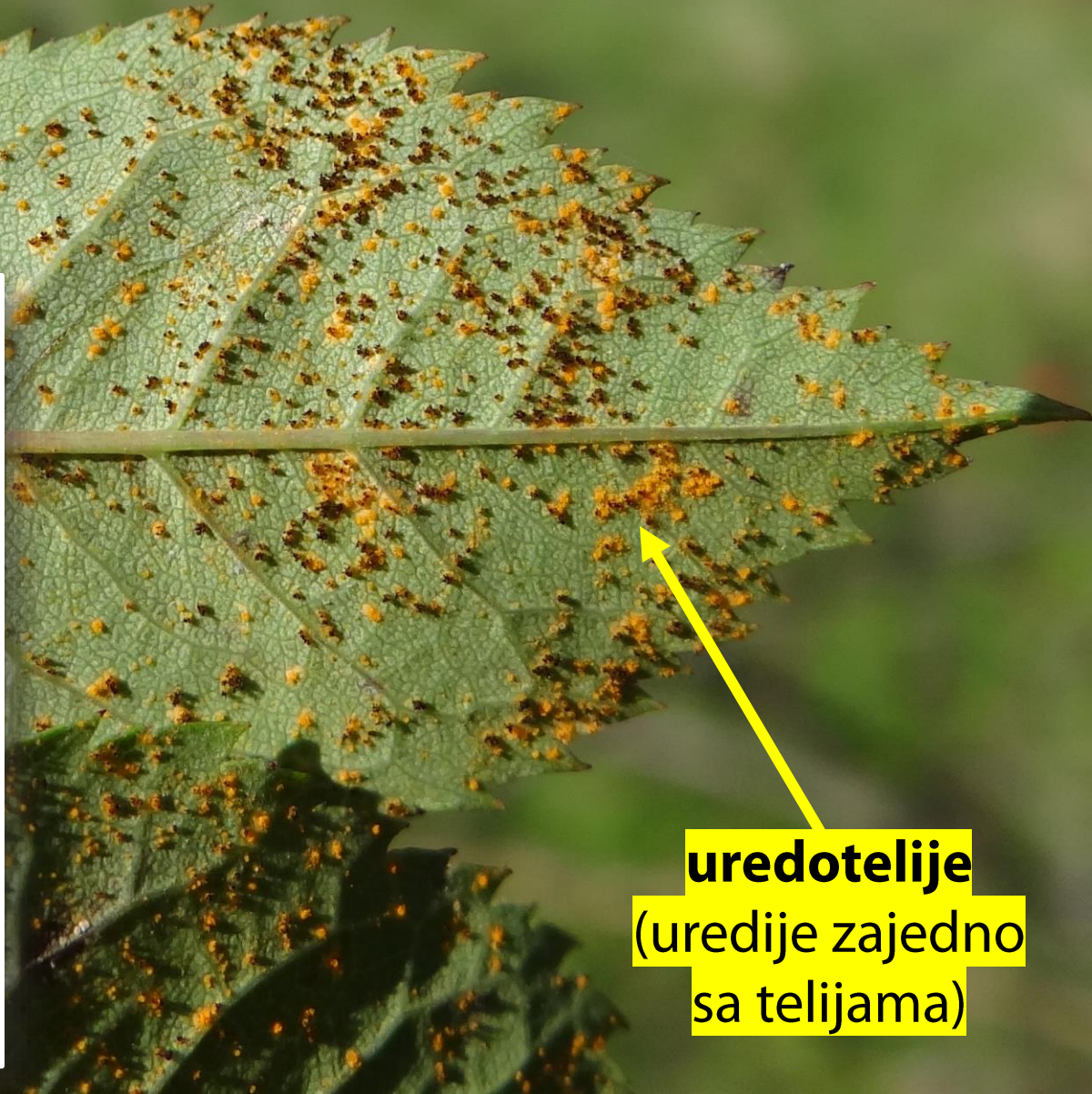


**višećelijske  
teliospore**





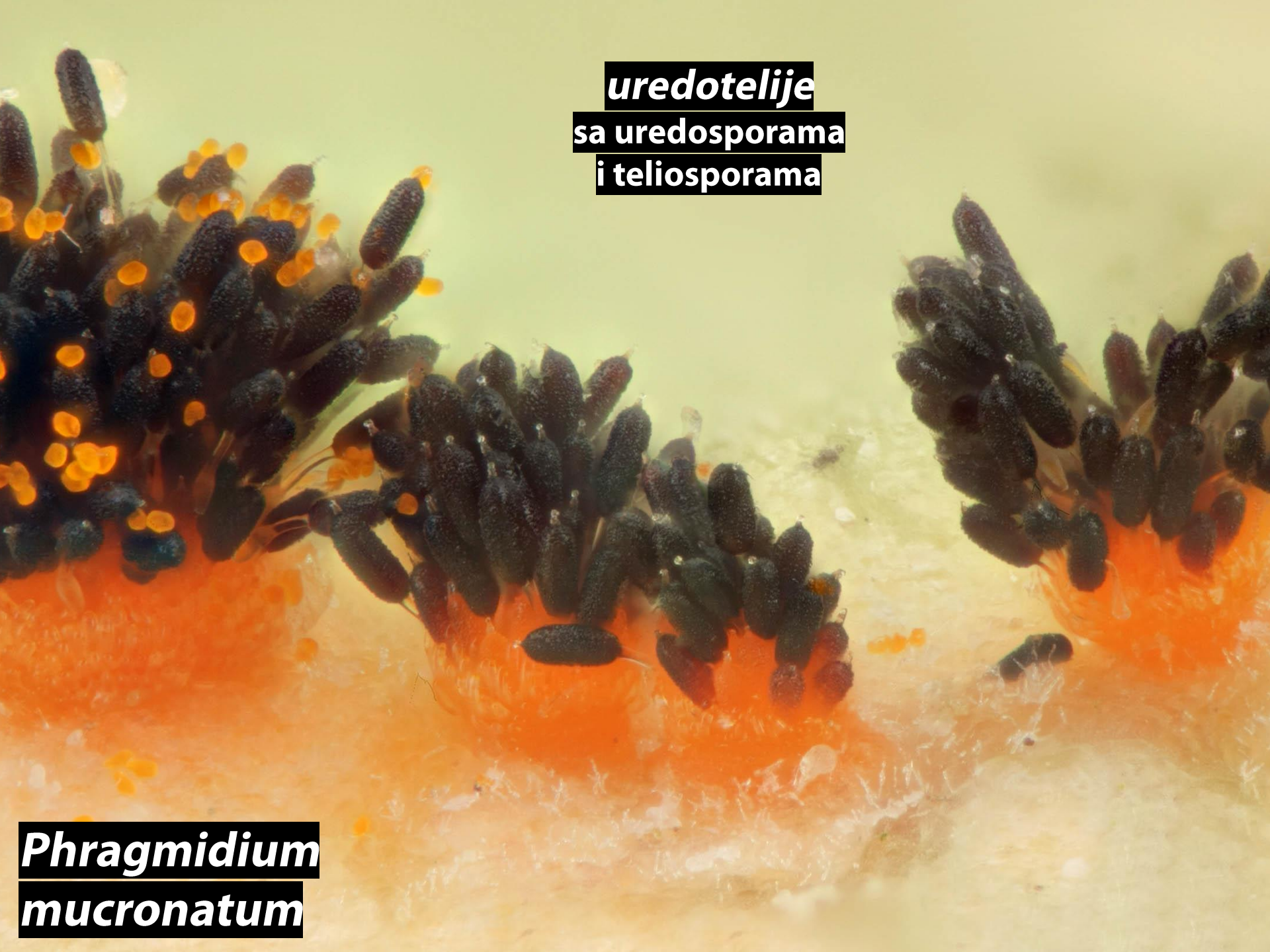
# *Phragmidium mucronatum*



**uredotelije**  
(uredije zajedno  
sa telijama)

***uredotelije***  
**sa uredosporama**  
**i teliosporama**

***Phragmidium***  
***mucronatum***



**Phragmidium  
mucronatum**

**uredospore**



**teliospore**



**Phragmidium  
mucronatum**