

## Eudicotiledôneas ASTERÍDEAS

- Estabilização da fórmula floral (flores pentâmeras)
- Androceu isostêmone ou oligostêmone (raro polistêmone), comum epipétalos
- Gineceu bicarpelar, carpelos concrecidos
- Corola fusionada e simetria bilateral
- Óvulos tenuinucelares e unitegmáticos
- Endosperma celular



# Quimiotaxonomia

## Alcalóides

(de *álcali* = básico, com o sufixo *oide* = semelhante a; nome com terminação "ina")  
é uma substância nitrogenada de caráter básico.



*Coffea arabica*



*Atropa belladonna*



*Antiespasmódico e antissecretor, Indução a anestesia geral; espasmo gastrointestinal, arritmia pos-infarto de miocárdio.*



*Mandragora officinalis*



*Hyoscyamus niger*



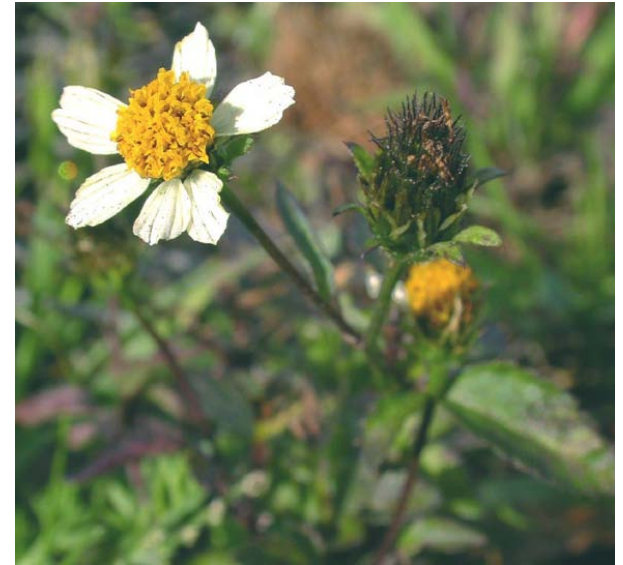
*Escopolamina, Hiosciamina (antiespasmódicos, atuam diretamente no S.N. parassimpático)*

# Quimiotaxonomia

Acetileno (hidrocarbonetos  $C_nH_{2n-2}$ ),  
óleos voláteis com uso combustível



*Dahlia*



*Bidens pilosa* "picão"

*Eramanthus* "candeia"

# Quimiotaxonomia

Lactonas sesquiterpênicas, iridóides e diversos óleos voláteis.



*Leonorus*



*Hymatanthus*



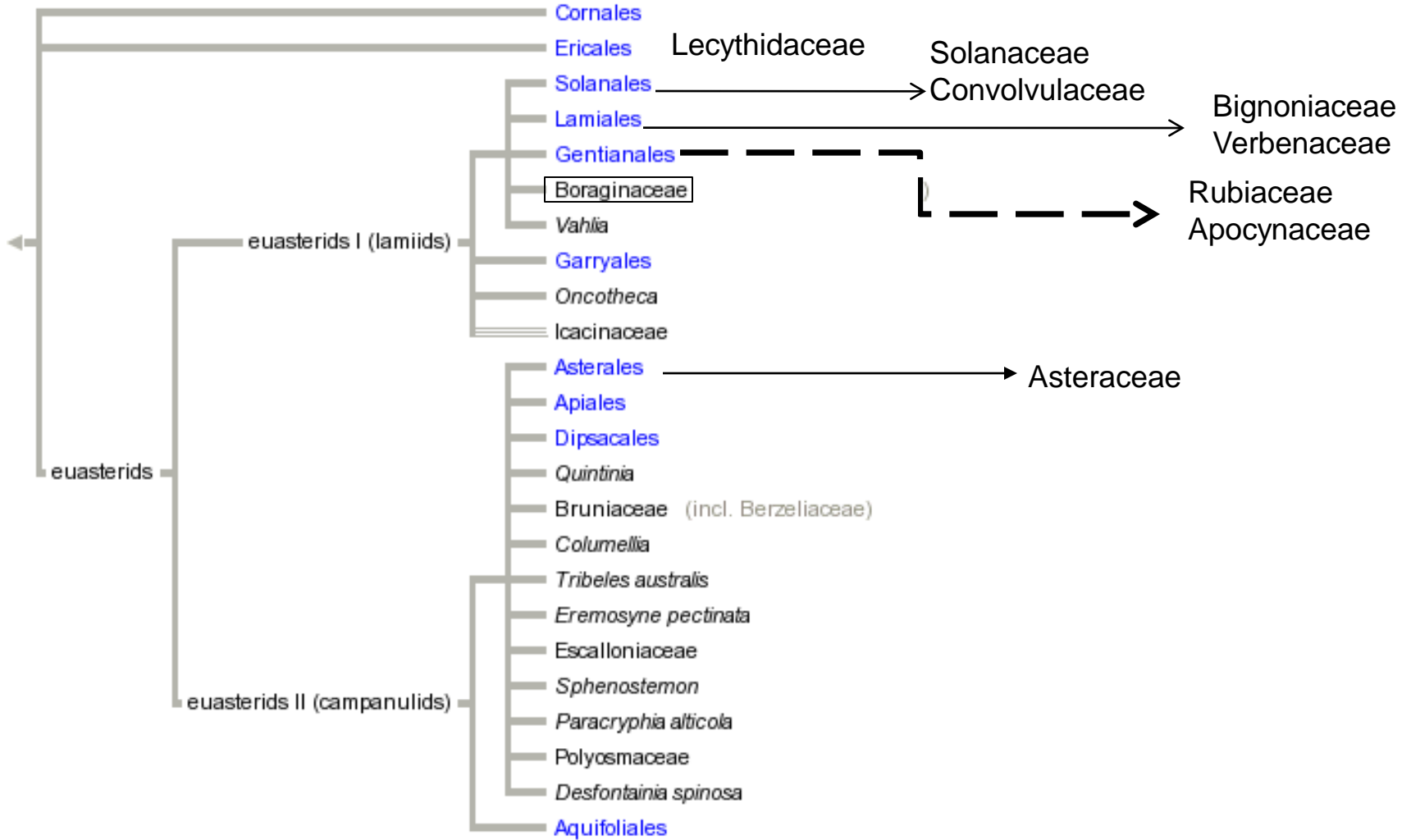
*Artemisia*



*Lavandula*



# Eudicotiledôneas Asterídeas



# Asterídeas Basais - Lecythydaceae



# Lecythidaceae

O  $\Phi$  K2-12  $\overline{C4-8}$  A  $\infty$  G (2-6)



*Bertholletia* “Castanha-do-Pará”



# Lecythidaceae



*Lecythis* “sapucaia”

# Lecythidaceae



*Couropita* “abricó-de-macaco”

# Asterídeas Basais

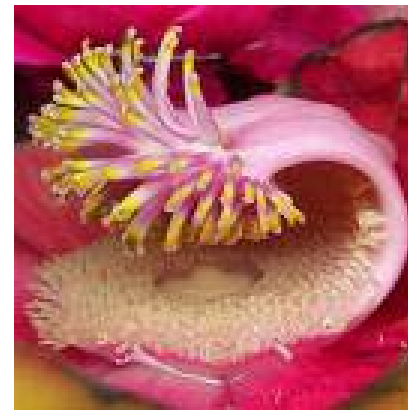


Pétalas

→ Estames

→ Estigma, curto estilete e ovário

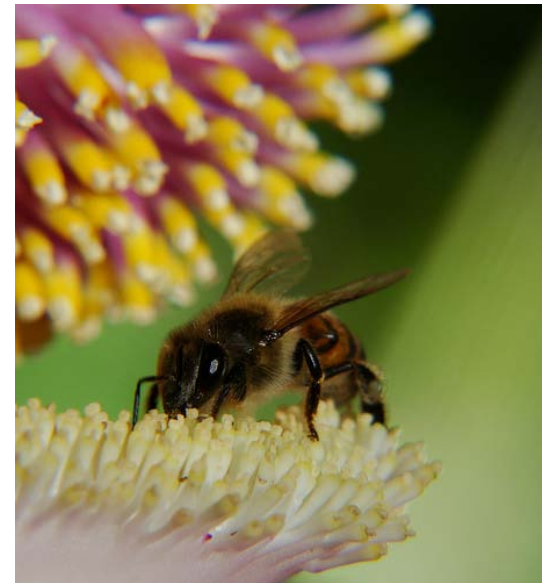
→ Estaminódios sobre andróforo



# Visitantes Abricó



# Visitantes Abricó



# Frutos Abricó-de-macaco

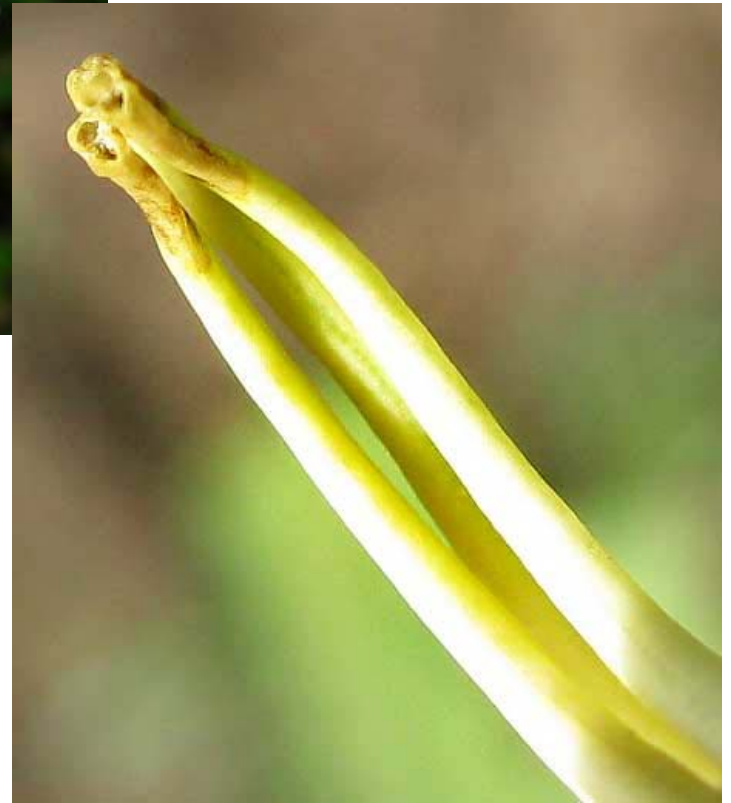


# Solanaceae

O K5 [C(5) A5] G (2)



Corola rotácea



*Solanum*

# Solanaceae

O K5 [C(5) A5] G (2)



Corola tubulosa

*Cestrum* “dama-da-noite”



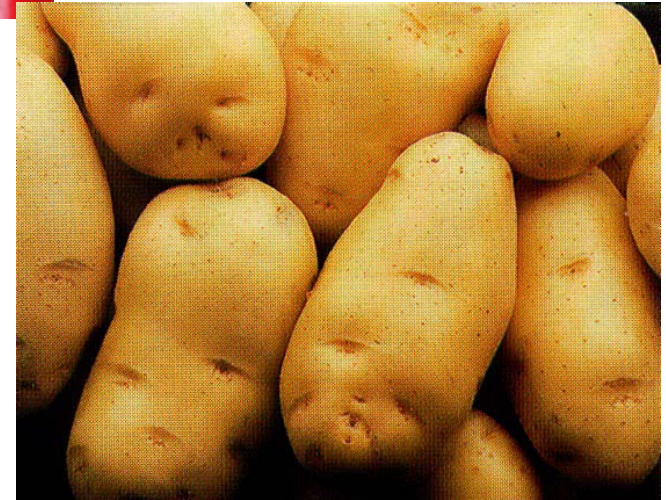
# Solanaceae



Corola infundibuliforme,  
Fruto cápsula

*Datura* "Estramônio"

# Solanaceae



*Nicotiana*

*Solanum*

# Solanaceae



# Solanaceae

*Datura stramonium*



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*Atropa belladonna*

*Datura stramonium*

# Solanaceae

The International Solanaceae Genome Project (SOL):  
Systems Approach to Diversity and Adaptation



*Solanum*

# Convolvulaceae



*Ipomoea*

# Convolvulaceae

O K5 [C(5) A 5]G (2)



Corola infundibuliforme  
(em forma de funil)

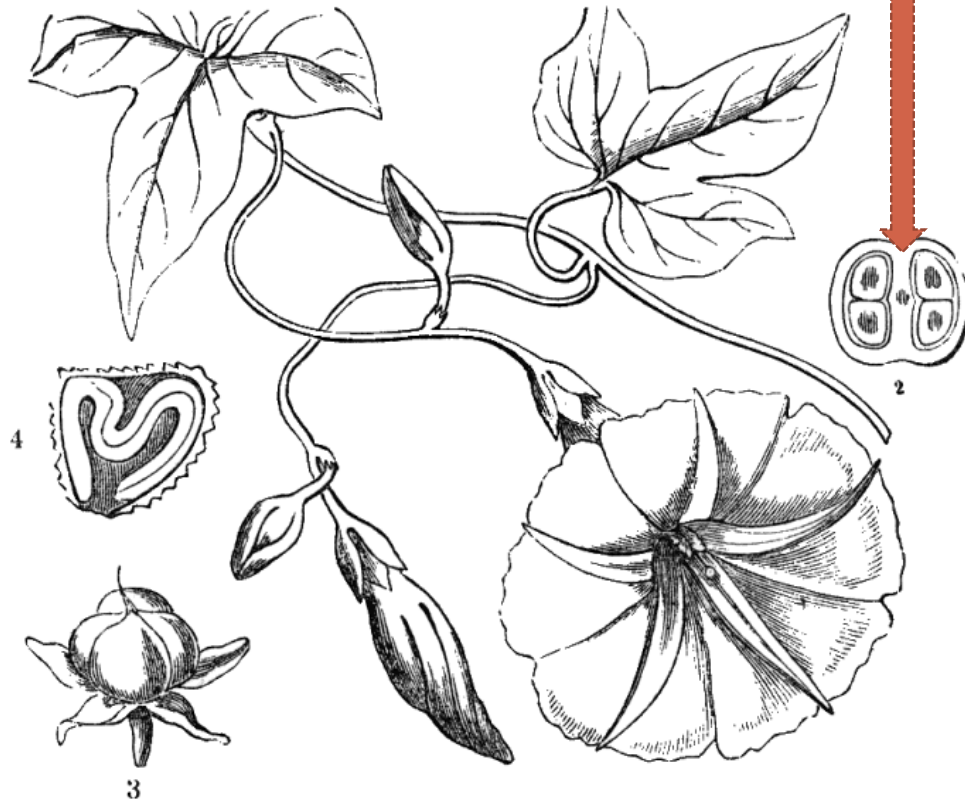


*Ipomoea*

# Convolvulaceae

O K5 [C(5) A 5]G (2)

2 ov./lóculo



Estigma capitado, plumoso



Heterodímanos

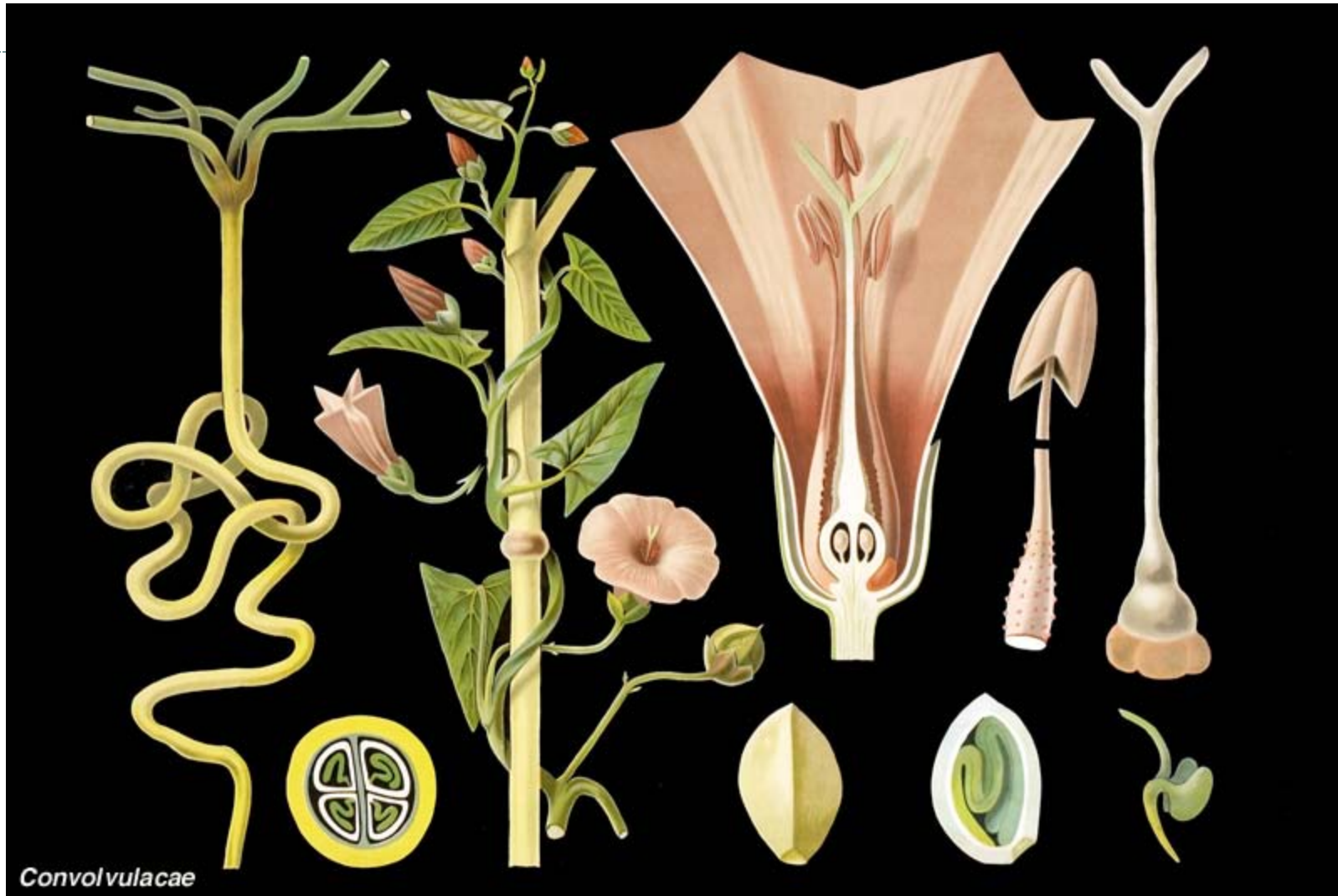
Disco nectarífero



*Ipomoea*



# Convolvulaceae



# Apocynaceae



# APOCYNACEAE (+Asclepiadaceae)



*Nerium*



*Plumeria*

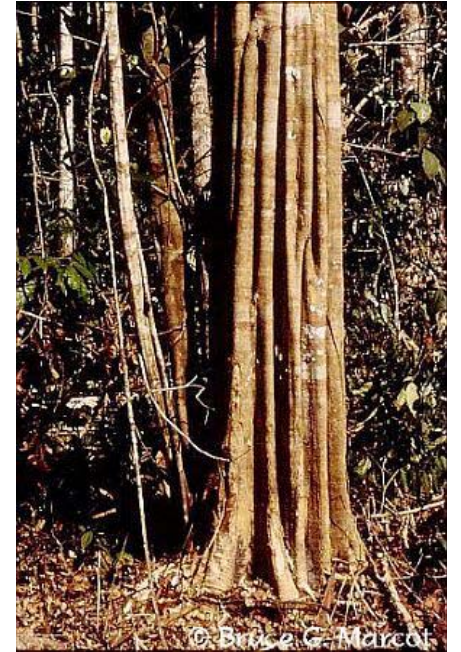


*Allamanda*



*Catharanthus*

# Apocynaceae

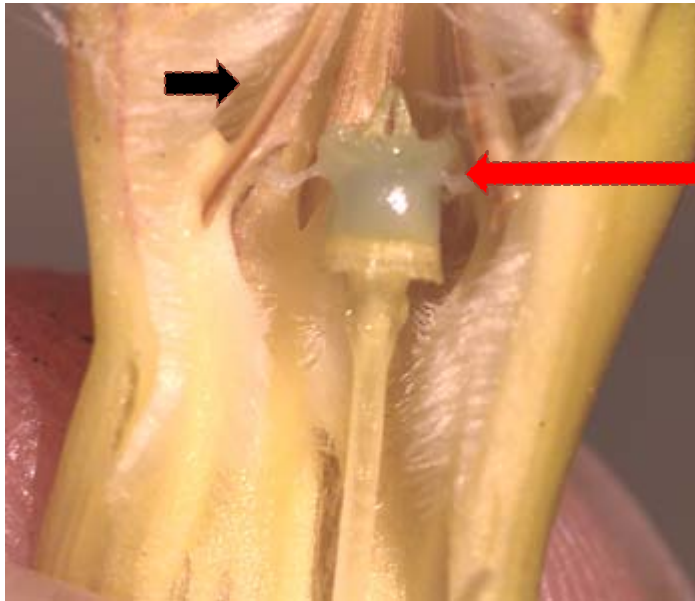


*Aspidosperma* "Peroba"

# Apocynaceae



# Apocynaceae

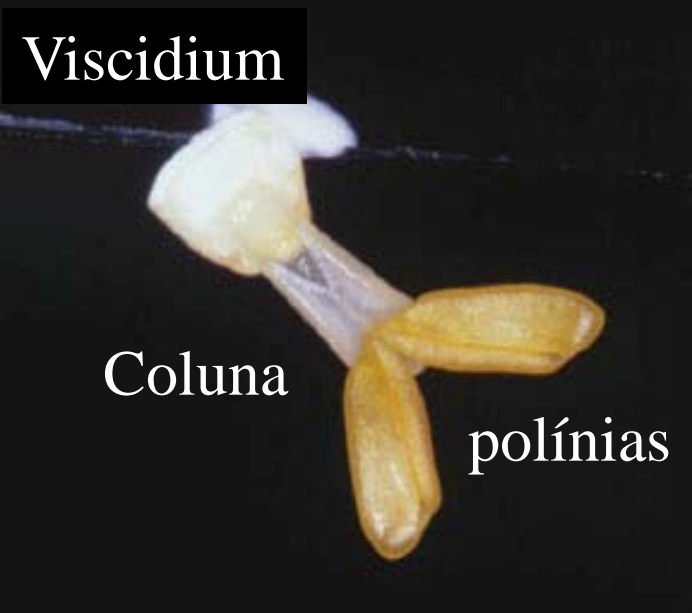


**APOCYNACEAE**

**(+Asclepiadaceae Cronquist)**

**Subfamília Asclepiadoideae**

O K5 [C(5) A 5]G (2)



*Stapelia*

**APOCYNACEAE**  
**(+Asclepiadaceae)**

O K5 [C(5) A 5]G (2)





# Apocynaceae (+Asclepiadaceae)

O K5 [C(5) (A 5)G (2)]

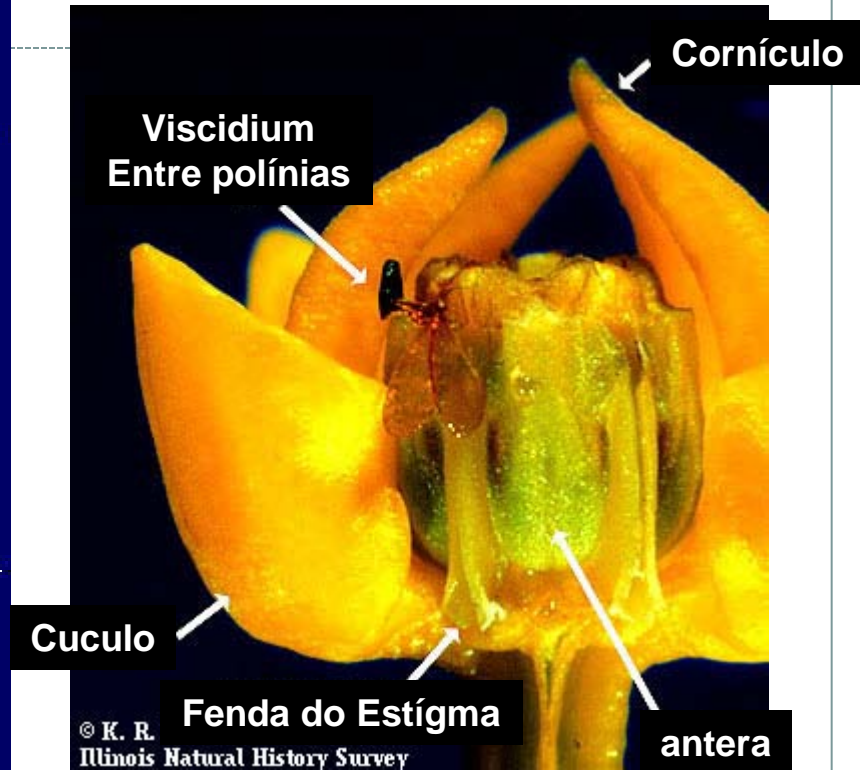
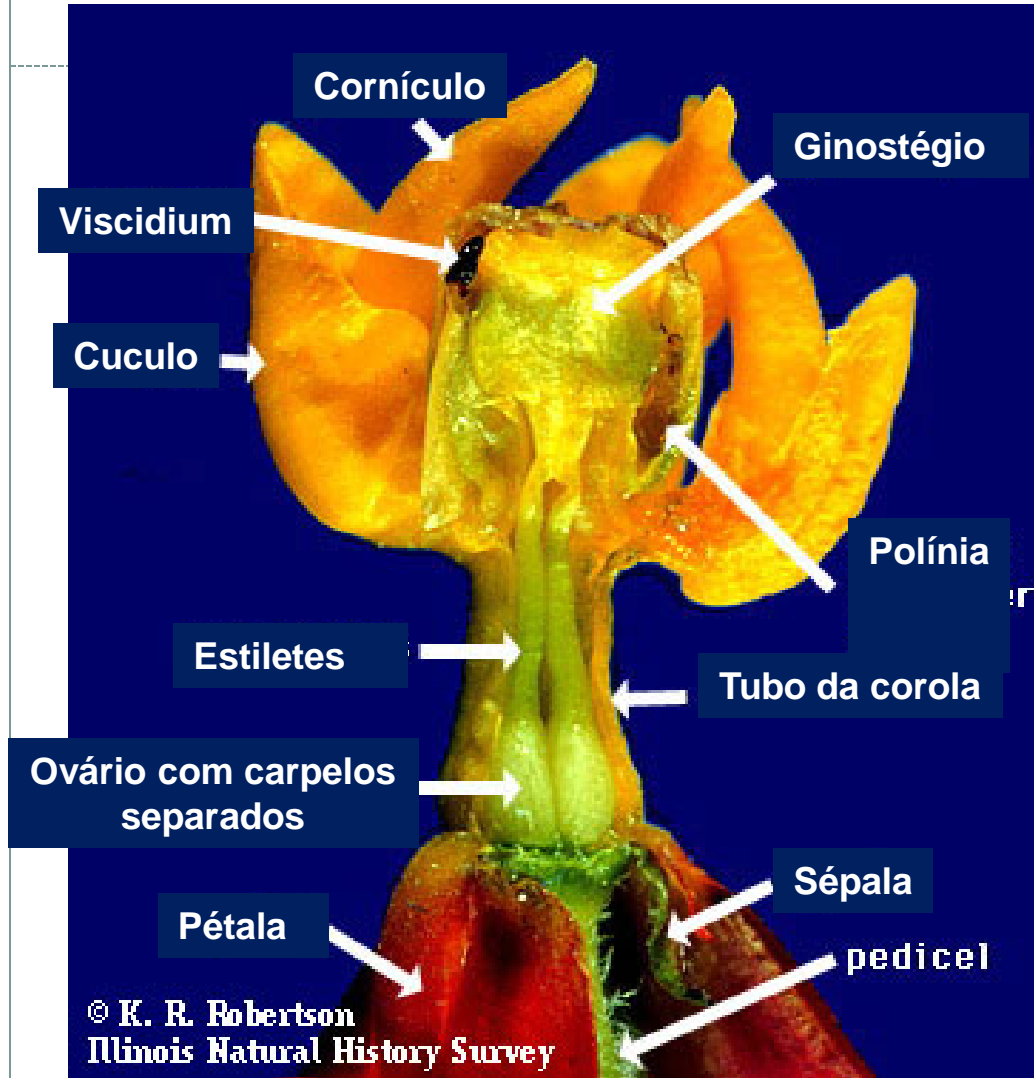


© W J Hayden

*Calotropis*

*Asclepias*

# Apocynaceae (+Asclepiadaceae)

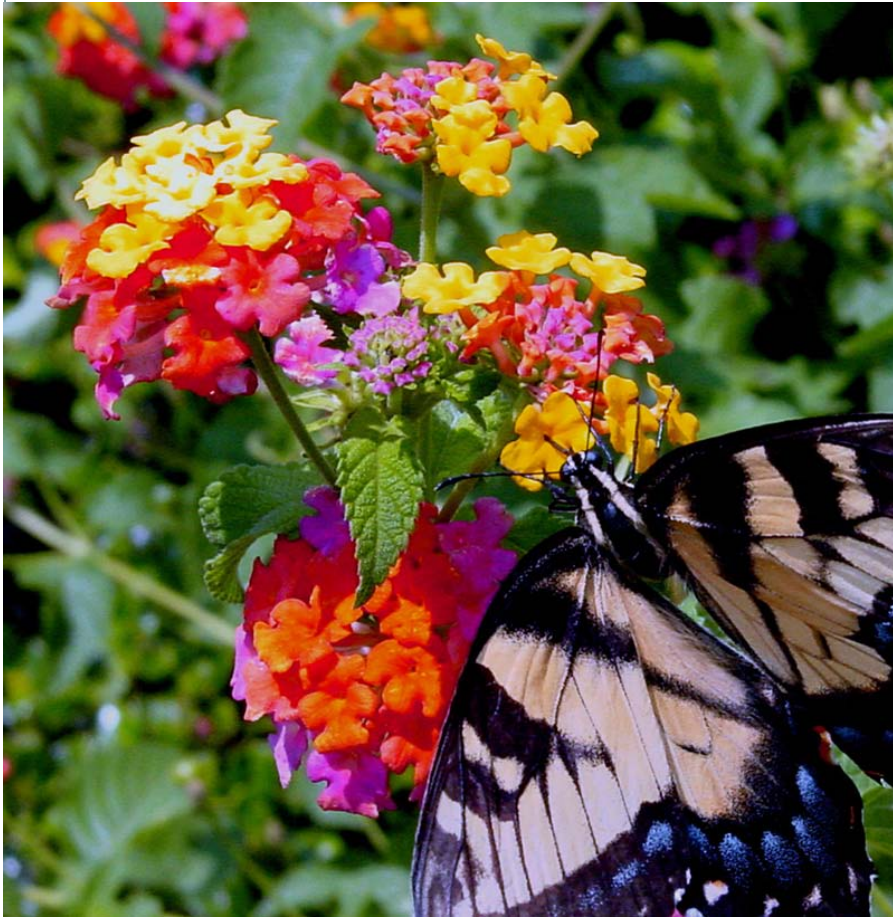


# Apocynaceae Asclepiadoideae



# VERBENACEAE

Φ K4-5 C4-5 A 4 G (2)



*Lantana*



*Petrea*



*Duranta*

# VERBENACEAE

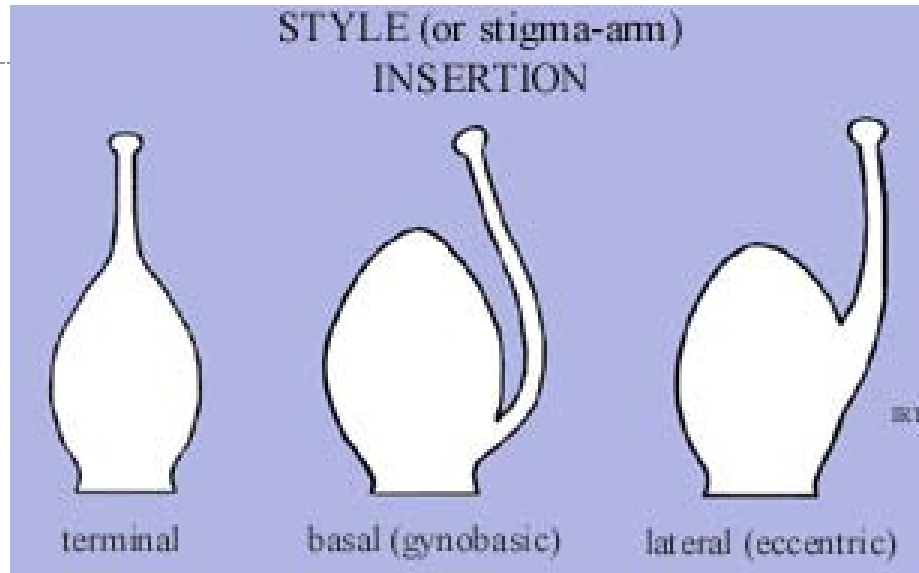
Ο Φ Κ4-5 C4-5 A 4 G (2)



# VERBENACEAE



# Posição do estilete



Demais Verbenaceae

*Lantana*

Boraginaceae

# BORAGINACEAE





# BORAGINACEAE



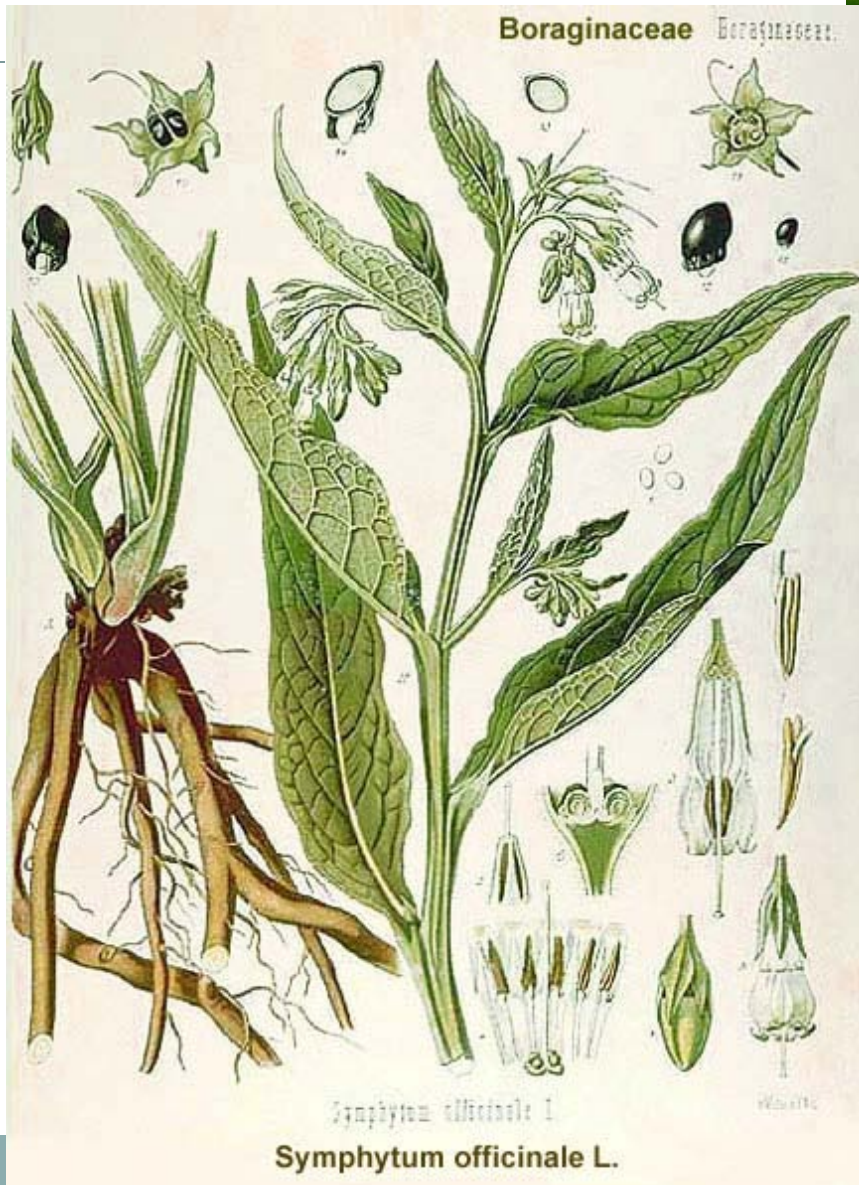
# BORAGINACEAE

O K4-5 C4-5 A 4 G (2)



*Heliotropium*

# BORAGINACEAE



*Symphytum* “confrei”

# BORAGINACEAE, Cordiaceae

O K4-5 C4-5 A 4 G (2)



© Hanno Schäfer

*Cordia*

# RUBIACEAE

O K5 [C5 A 5] G (2)



5ª maior família em diversidade. 600 gen., 10.000 spp.

# RUBIACEAE

*Genipa americana* “jenipapo”



*Calycophyllum* “pau-mulato”



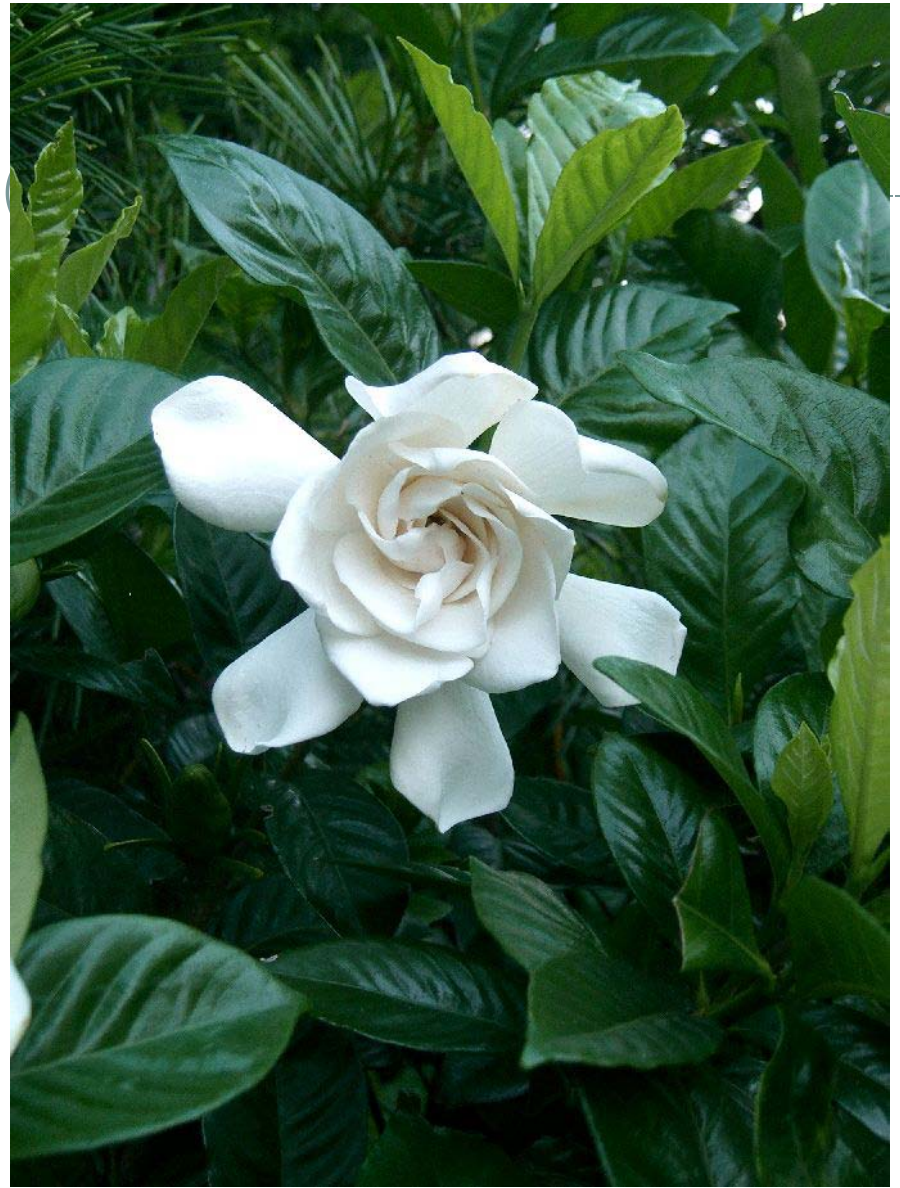
*Coffea arabica* “café”

# RUBIACEAE

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*Pentas*

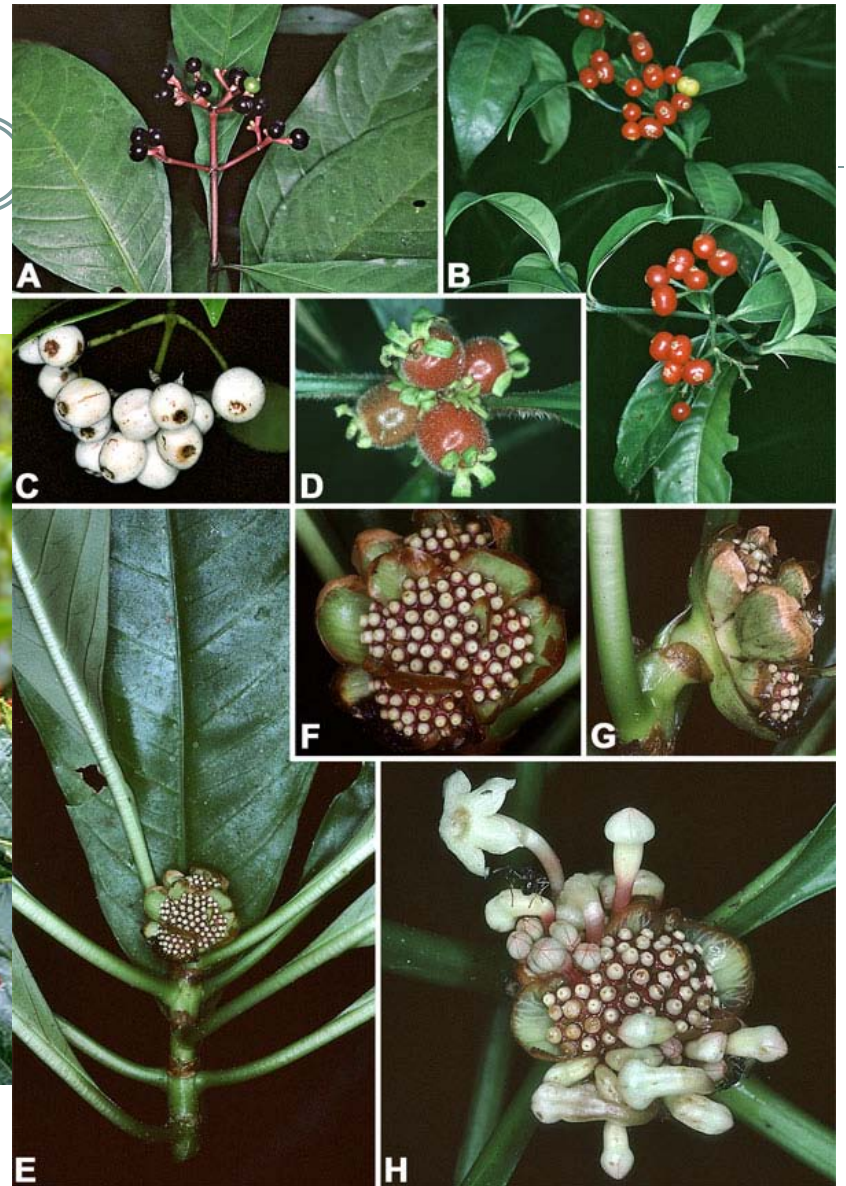


*Gardenia*

# RUBIACEAE



*Palicourea*



*Psychotria*



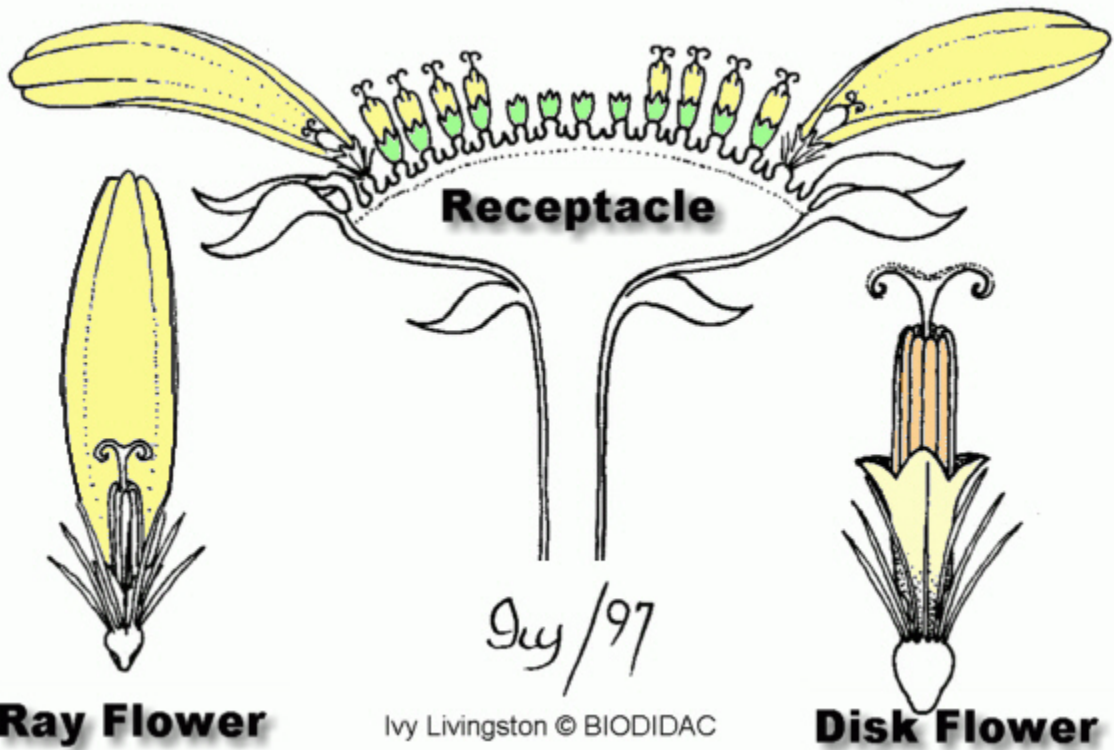
# RUBIACEAE



# ASTERACEAE

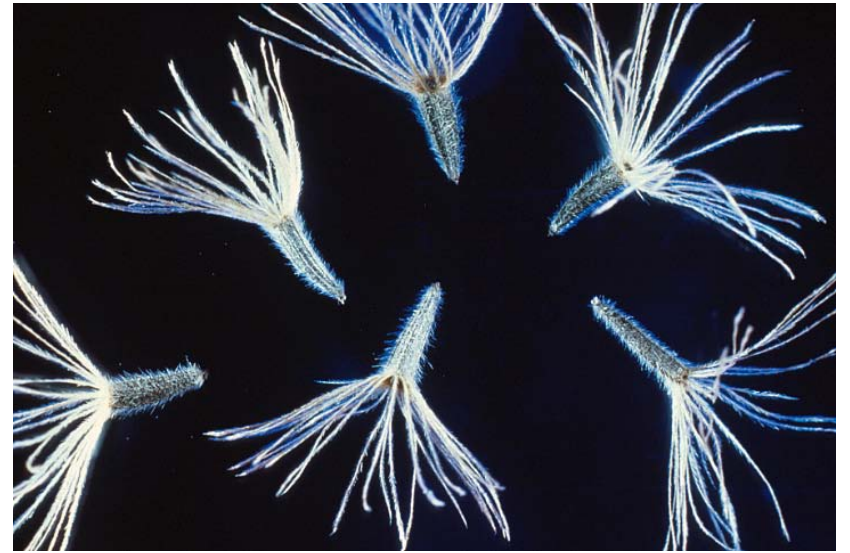
O Φ Krapus C(5) A (0-5) G (2)

1a família em riqueza spp.



Ray Flower

Disk Flower



# Ornementaux





# ASTERACEAE



*Lactuca "alface"*



*Cynara "chicoria, almeirão e escarola"*

*Cichorium "chicória"*

# ASTERACEAE

*Matricaria "camomila"*



*Stevia*



*Mikania "guaco"*



*Baccharis "carqueja"*

# Eudicotiledôneas



Faça uma chave com as famílias de Rosídeas e Asterídeas