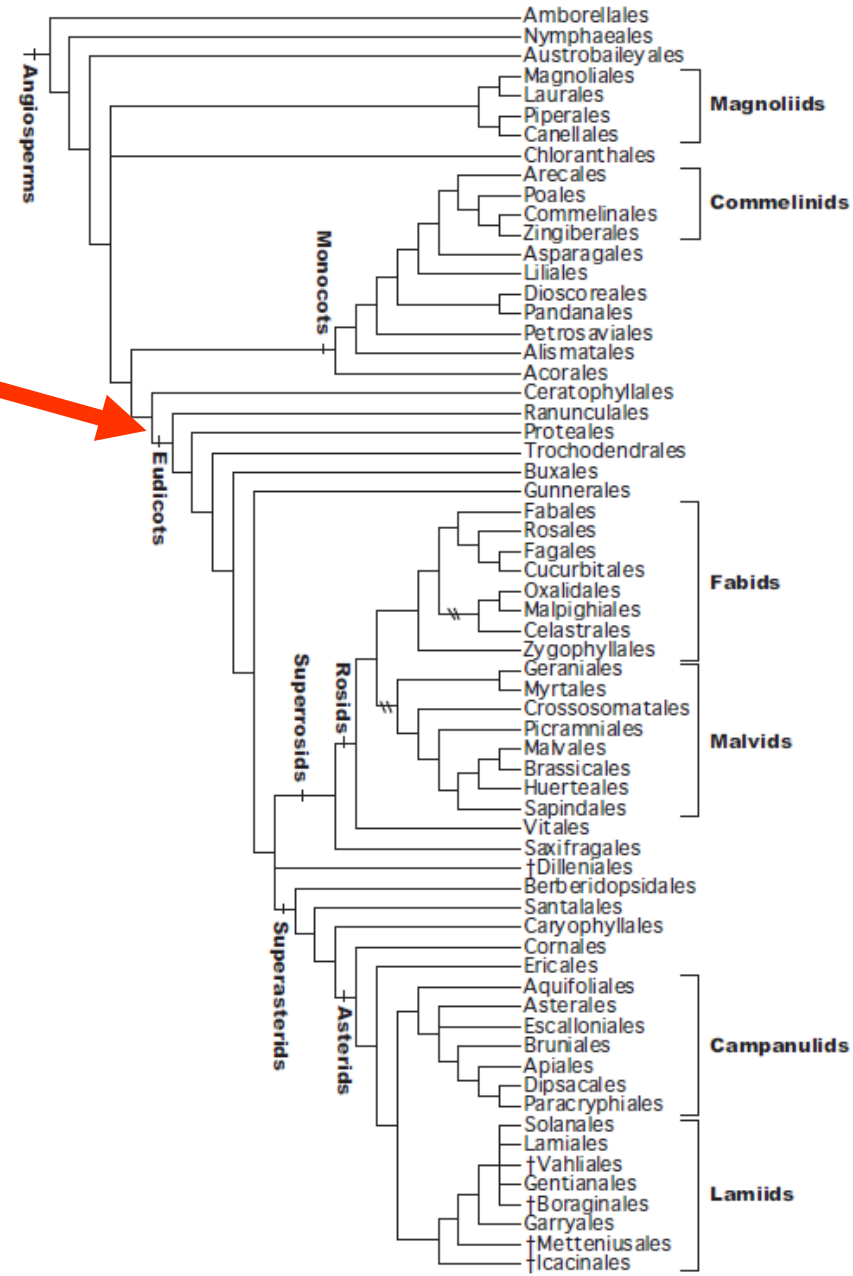


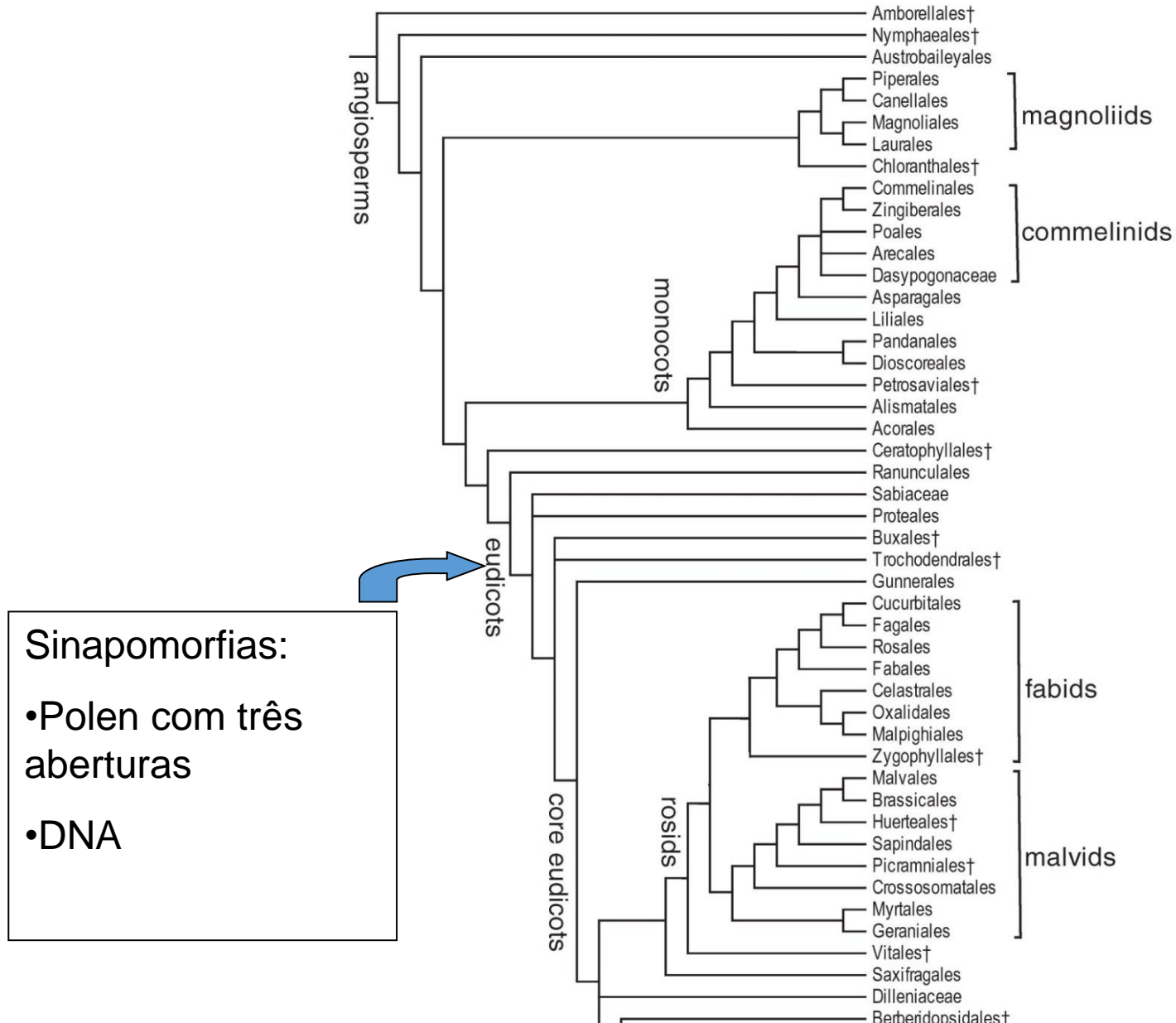
Apocynaceae

Família das Perobas



APG IV
2016)

Figure 1. Interrelationships of the APG IV orders and some families supported by jackknife/bootstrap percentages >50 or Bayesian posterior probabilities >0.95 in large-scale analyses of angiosperms. See text for literature supporting these relationships. The alternative placements representing incongruence between nuclear/mitochondrial and plastid results for the Celastrales/Oxalidales/Malpighiales (COM) clade are indicated by slash marks (//). †Orders newly recognized in APG.



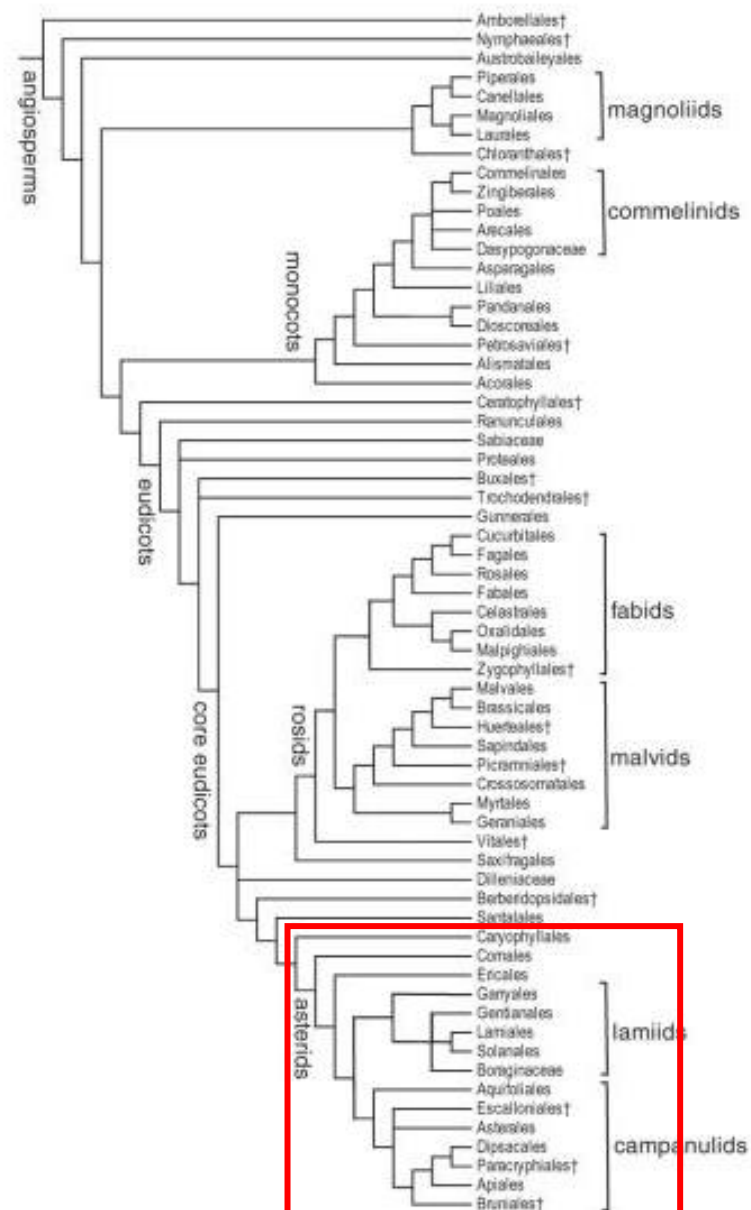
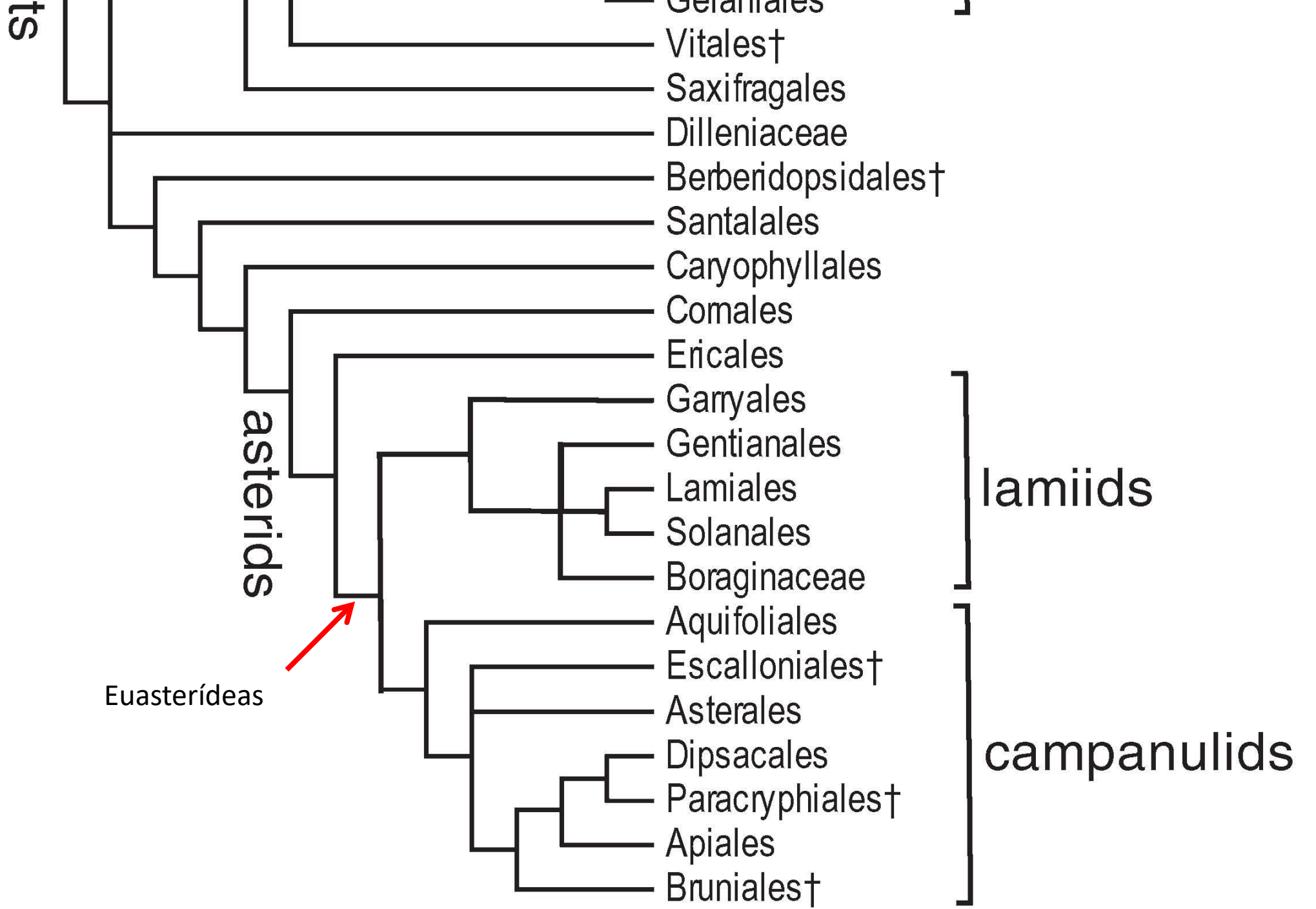
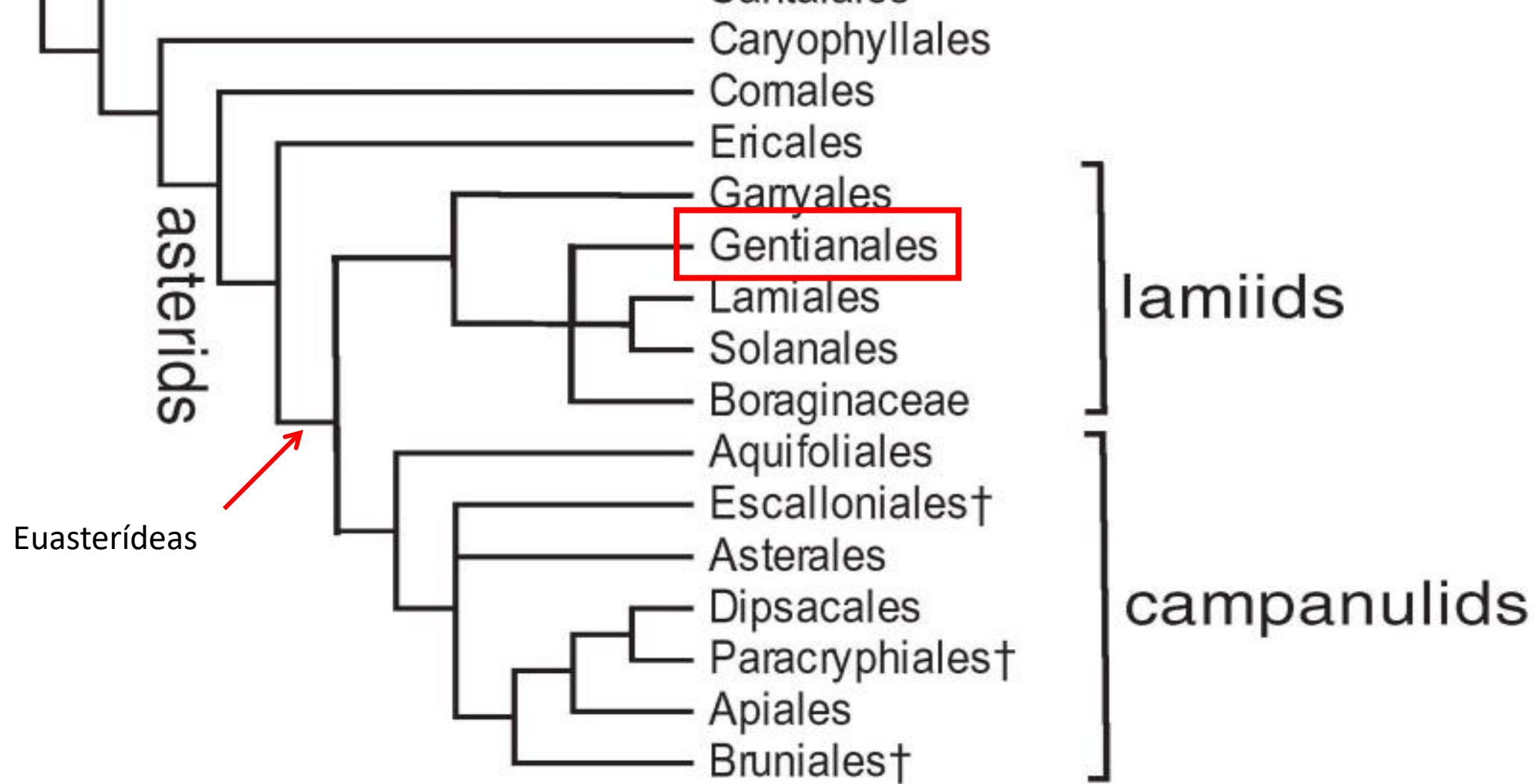


Figure 1. Interrelationships of the APG III orders and some families supported by jackknife/bootstrap percentages greater than 50 or Bayesian posterior probabilities greater than 0.95 in large-scale analyses of angiosperms. See text for literature supporting these relationships. Newly-recognized-for-APG orders are denoted (†). Some eudicot families not yet classified to order are not shown.



Características de Euasterídeas

- Corola gamopétala
- Androceu oligostêmone ou isostêmone
- Estames epipétalos
- Geralmente dois carpelos



APG III orders and some families supported by jackknife/bootstrap percent probabilities greater than 0.95 in large-scale analyses of angiosperms. See text for details. Newly-recognized-for-APG orders are denoted (†). Some eudicot families not shown.

Gentianales

- Plantas com ou sem estípulas interpeciolares
- Floema interno (exceto Rubiaceae)
- Folhas geralmente opostas
- Flores actinomorfas
- Androceu isostêmone
- Ovário súpero (exceto Rubiaceae)

Gentianales

- Gentianaceae
- **Apocynaceae**
- **Rubiaceae**
- Loganiaceae
- Gelsemiaceae

Rubiaceae









Calycophyllum spruceanum- Pau mulato/ escorrega macaco etc

Apocynaceae



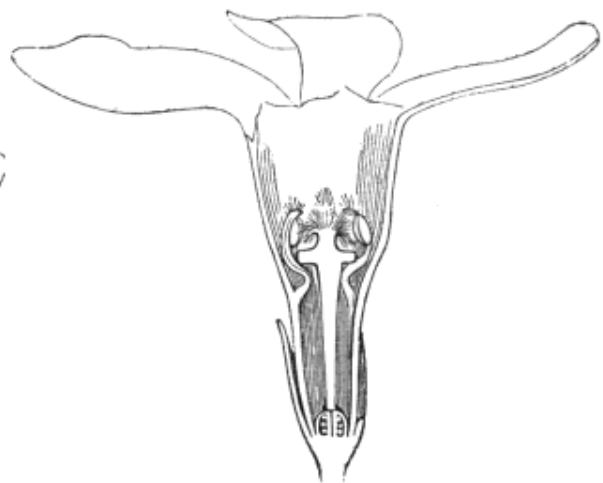
- Látex
- Gineceu dialicarpelar, com união apenas pelos estiletos

Apocynaceae- Família das Perobas

- Aproximadamente 400 **gêneros** e 3700 espécies (neotropical). Brasil: 70 gen. e 750 spp
- Árvores, arbustos, ervas e frequentemente lianas (trepadeiras), **geralmente latescentes**
- Folhas **opostas**, menos frequentemente **alternas** (*Aspidosperma*) ou verticilada (*Allamanda*), **simples, sem estípulas**, com margem **inteira**.
- Flor vistosa, **monoclina** (bissexuada), **actinomorfa**, raro zigomorfa, **diclamídeas, pentâmera**.
- Cálice dialissépalo ou gamossépalo, Corola **gamopétala, prefloração imbricada (Hélice)**.
- O androceu **isostêmone**, epipétalos, as vezes pólen em políneas (agrupados) nas Asclepiadoideae.
- O gineceu de **ovário súpero** (raro ínfero), **bicarpelar, dialicarpelar**, mas com os 2 **estiletos unidos**, muitos óvulos por carpelo. Disco nectarífero presente ao redor do ovário.
- Fruto folículo** (origem de 2 carpelos que se separam 1+1), **seco**, raro carnosos. Raro cápsula, drupa ou baga.



Small-flowered Periwinkle.



Periwinkle. Vertical section of flower (mag.).



Periwinkle. Open follicle.



Periwinkle. Pistil (mag.).



Periwinkle. Seed cut transversely (mag.).



Periwinkle. Diagram.



Periwinkle Stamen (mag.).



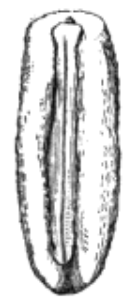
Periwinkle. Ovaries and calyx (mag.).



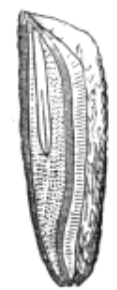
Periwinkle. Young fruit.



Periwinkle. Ripe fruit separated into 2 follicles.



Periwinkle. Seed, ventral face (mag.).



Periwinkle. Seed cut vertically (mag.).



Oleander. Stamen (mag.).



APOCYNACEAE
(+Asclepiadaceae)



Nerium



Plumeria



Allamanda



Catharanthus

Apocynaceae





Thabata Borine



Aspidosperma spp. (perobas e guatambus)

ALEXANDRE KOWTE, 2010



Aspidosperma spp – perobas



Aspidosperma polyneuron – peroba rosa



Aspidosperma polyneuron – peroba rosa



Aspidosperma ramiflorum- Guatambú

Apocynaceae



Pau Falho

Aspidosperma discolor



Aspidosperma "Peroba"





Vinca minor

Nativas: madeiras e outras

Aspidosperma polyneuron – Peroba rosa

A. ramiflorum – Guatambú

A. cylindrocarpum – Peroba poca

A. subincanum – Perobinha

A. discolor – Pau falho

A. tomentosum - Peroba do cerrado

Aspidosperma spp – Perobas

Mandevilla spp, *Ditassa* spp, *Condylocarpus* spp, *Forsteronia* spp etc Trepadeiras ou Lianas

Hancornia speciosa - mangaba -Frutífera

Invasora

Tabernaemontana hystrix, *T catharinensis*,... Leiteiro- **uso em restauração**

Asclepias curassavica – Oficial de sala

Ornamental (exóticas e muitas tóxicas)

Plumeria rubra- *P. acuminata*- Jasmim manga

Nerium oleander – espirradeira

Catharanthus rosea, *Vinca minor* - Vinca

Thevetia peruviana- Chapeu de napoleão

Allamanda cathartica- Alamanda

Hoya spp- Flor de cera