

Systematic Botany. Lecture 35

Alexey Shipunov

Minot State University

November 28, 2011

Outline

Questions and answers

Angiosperms
Magnoliidae

Outline

Questions and answers

Angiosperms

Magnoliidae

Previous final question: the answer

Which of four subclasses is basal? Why?

Previous final question: the answer

Which of four subclasses is basal? Why?

- ▶ Magnoliidae, they retained more primitive characters than all others

Angiosperms

Magnoliidae

Subclassis *Magnoliidae* [^{4,8}*Magnolia*]*³⁴Ordo 6. NYMPHAEALES [⁴*Nymphaea*]

- Familia 1(61). *Hydatellaceae* U. Hamann [³*Hydatella*]
2(62). *Cabombaceae* Rich. ex A. Rich. [³*Cabomba*]³⁵
3(63). *Nymphaeaceae* Salisb. [³*Nymphaea*]³⁶

Ordo 7. AMBORELLALES [⁴*Amborella*]*Subordo *Amborellineae* [^{3,8}*Amborella*]

- Familia 1(64). *Amborellaceae* Pichon [³*Amborella*]

Subordo *Schizandrineae* [^{3,8}*Schisandra*]

- Familia 2(65). *Austrobaileyaceae* (Croizat) Croizat [³*Austrobaileya*]
3(66). *Schisandraceae* Blume [³*Schisandra*]³⁷
4(67). *Trimeniaceae* Gibbs [³*Trimenia*]

Ordo 8. CHLORANTHALES [⁴*Chloranthus*] s.a.

Familia 1(68). *Chloranthaceae* R. Br. ex Sims [³*Chloranthus*]

Ordo 9. MAGNOLIALES [⁴*Magnolia*]

Subordo *Winterineae* [^{3,8}*Drimys*']

Familia 1(69). *Canellaceae* Mart. [³*Canella*]

2(70). *Winteraceae* R. Br. ex Lindl. [³*Drimys*']

Subordo *Magnoliineae* [^{3,8}*Magnolia*]

Familia 3(71). *Myristicaceae* R. Br. [³*Myristica*]

4(72). *Himantandraceae* Diels [³*Galbulimima*']

5(73). *Magnoliaceae* Juss. [³*Magnolia*] s.a.³⁸

6(74). *Eupomatiaceae* Orb. [³*Eupomatia*]

7(75). *Annonaceae* Juss. [³*Annona*]

Subordo *Laurineae* [^{3,8}*Laurus*]

Familia 8(76). *Calycanthaceae* Lindl. [³*Calycanthus*]³⁹

9(77). *Atherospermataceae* R. Br. [³*Atherosperma*]⁴⁰

10(78). *Monimiaceae* Juss. [³*Monimia*] stat.m.⁴¹

11(79). *Lauraceae* Juss. [³*Laurus*]⁴²

12(80). *Hernandiaceae* Blume [³*Hernandia*]⁴³

Ordo 10. PIPERALES [⁴*Piper*]Subordo *Aristolochiineae* [^{3,8}*Aristolochia*]Familia 1(81). *Aristolochiaceae* Juss. [³*Aristolochia*] s.a.⁴⁴2(82). *Hydnoraceae* C. Agardh. [³*Hydnora*]Subordo *Piperineae* [^{3,8}*Piper*]Familia 3(83). *Piperaceae* Giseke [³*Piper*]⁴⁵4(84). *Saururaceae* Rich. ex T. Lestib. [³*Saururus*]

Ordo 11. CERATOPHYLLALES [⁴*Ceratophyllum*]

Familia 1(85). *Ceratophyllaceae* [³*Ceratophyllum*] Gray sed.m.⁴⁶

Final question (2 points)

Final question (2 points)

What are “paleoherbs”?

