

Systematic Botany. Lecture 39

Alexey Shipunov

Minot State University

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Outline

Questions and answers

Angiosperms

Asteridae, part 1

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Angiosperms

Asteridae, part 1

Previous final question: the answer

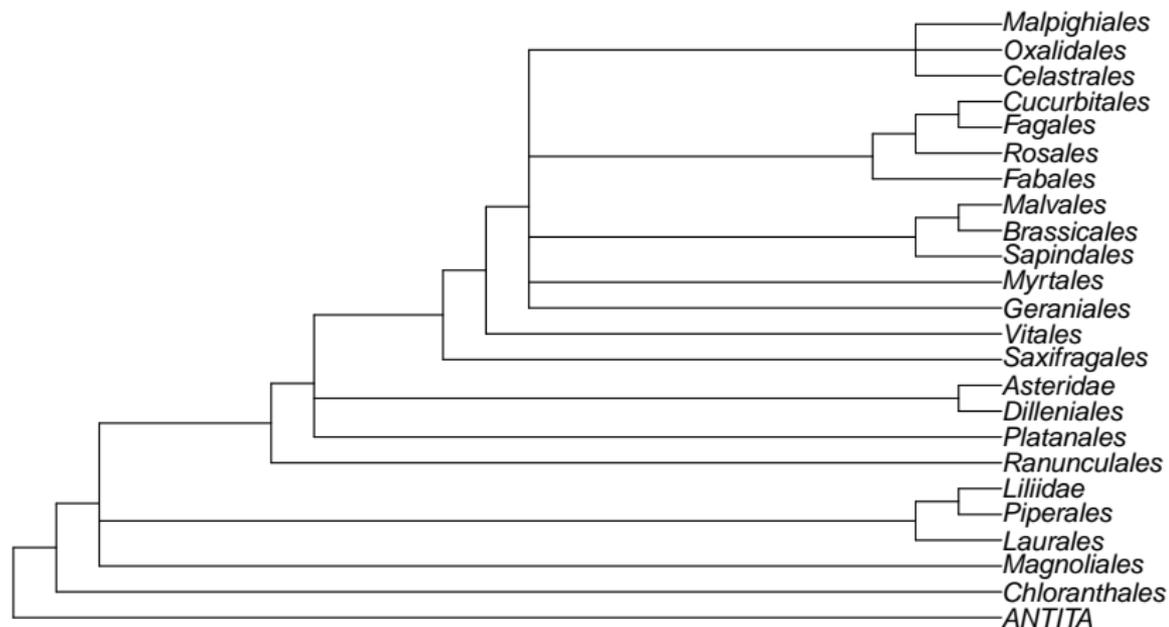
Give the short characteristic of any of orders studied.

Previous final question: the answer

Give the short characteristic of any of orders studied.

- ▶ I will repeat this question once more.

General phylogeny of angiosperms groups studied so far



Angiosperms

Asteridae, part 1

Subclassis *Asteridae* [^{4,8}*Aster*]

Superordo *Caryophyllanae* [^{4,2}*Dianthus*']* sed.m.

Ordo 31. SANTALALES [⁴*Santalum*]

Familia 1(228). *Erythralaceae* Planch. ex Miq. [³*Erythralum*]
s.a.¹¹⁷

2(229). *Coulaceae* Tiegh. [³*Coula*]

3(230). *Olacaceae* Juss. ex R. Br. [³*Ola*]* s.a.¹¹⁸

4(231). *Octoknemaceae* Soler

5(232). *Loranthaceae* Juss. [³*Loranthus*] s.a.¹¹⁹

6(233). *Opiliaceae* Valetton [³*Opilia*]¹²⁰

7(234). *Santalaceae* R. Br. [³*Santalum*] s.a.¹²¹

8(235). *Balanophoraceae* Rich. [³*Balanophora*]¹²²

Ordo 32. BERBERIDOPSISIDALES [⁴*Berberidopsis*]

Familia 1(236). *Aextoxicaceae* Engl. et Gilg [³*Aextoxicon*]

2(237). *Berberidopsidaceae* (Veldkamp) Takht. [³*Berberidopsis*]

Ordo 33. CARYOPHYLLALES [⁴*Dianthus*'] s.a.Subordo **Rhabdodendrineae** [^{3,8}*Rhabdodendron*]Familia 1(238). *Rhabdodendraceae* Prance [³*Rhabdodendron*]Subordo **Plumbaginineae** [^{3,8}*Plumbago*]*Familia 2(239). *Tamaricaceae* Link [³*Tamarix*]¹²³3(240). *Droseraceae* Salisb. [³*Drosera*]4(241). *Nepenthaceae* Dumort. [³*Nepenthes*]5(242). *Ancistrocladaceae* Planch. ex Walp. [³*Ancistrocladus*]
s.a.¹²⁴6(243). *Polygonaceae* Juss. [³*Polygonum*]7(244). *Plumbaginaceae* Juss. [³*Plumbago*]¹²⁵8(245). *Simmondsiaceae* Tiegh. [³*Simmondsia*]9(246). *Physenaceae* Takht. [³*Physena*] s.a.¹²⁶Subordo **Caryophyllineae** [^{3,8}*Dianthus*']Familia 10(247). *Microteaceae* Schaeferhoff et Borsch [³*Microtea*]11(248). *Amaranthaceae* Juss. [³*Amaranthus*] s.a. ¹²⁷12(249). *Achatocarpaceae* Heimerl [³*Achatocarpus*]13(250). *Caryophyllaceae* Juss. [³*Dianthus*']¹²⁸14(251). *Stegnospermataceae* Nakai [³*Stegnosperma*]15(252). *Limeaceae* (Fenzl) Shipunov [³*Limeum*]¹²⁹16(253). *Molluginaceae* [³*Mollugo*]¹³⁰17(254). *Basellaceae* Raf. [³*Basella*]*18(255). *Montiaceae* Raf. [³*Montia*]¹³¹19(256). *Halophytaceae* A. Soriano.

- 20(257). *Didiereaceae* Radlk. [³*Didierea*]¹³²
21(258). *Cactaceae* Juss. [³*Mammillaria*'] s.a.¹³³
22(259). *Lophiocarpaceae* Doweld et Reveal ¹³⁴
23(260). *Aizoaceae* Martynov [³*Aizoon*]¹³⁵
24(261). *Phytolaccaceae* R. Br. [³*Phytolacca*]* s.a.¹³⁶
25(262). *Nyctaginaceae* Juss. [³*Mirabilis*]

Superordo *Asteranae* [^{4,2}*Aster*]

Ordo 34. ERICALES [⁴*Erica*]

Subordo *Balsaminineae* [^{3,8}*Balsamine*]

- Familia 1(263). *Balsaminaceae* A. Rich. [³*Balsamine*]
 2(264). *Marcgraviaceae* Berchtold et Presl [³*Marcgravia*]
 3(265). *Tetrameristaceae* Hutch. [³*Tetramerista*] s.a.¹³⁷

Subordo *Polemoniineae* [^{3,8}*Polemonium*]

- Familia 4(266). *Fouquieriaceae* DC. [³*Fouquieria*]
 5(267). *Polemoniaceae* Juss. [³*Polemonium*]¹³⁸

Subordo *Primulineae* [^{3,8}*Primula*]

- Familia 6(268). *Ebenaceae* Guercke [³*Diospyros*]¹³⁹
 7(269). *Primulaceae* Batsch ex Borkh. [³*Primula*] s.a.¹⁴⁰

Subordo *Lecythidineae* [^{3,8}*Lecythis*]

- Familia 8(270). *Lecythidaceae* A. Rich. [³*Lecythis*] s.a.¹⁴¹
 9(271). *Sapotaceae* Juss. [³*Sapota*]

Subordo *Diapensiineae* [^{3,8}*Diapensia*]

- Familia 10(272). *Pentaphragaceae* Engl. [³*Pentaphragax*] s.m.¹⁴²
 11(273). *Styracaceae* DC. et Spreng. [³*Styrax*]
 12(274). *Diapensiaceae* Lindl. [³*Diapensia*]
 13(275). *Symplocaceae* Desf. [³*Symplocos*]
 14(276). *Theaceae* Mirb. ex Ker Gawl. [³*Thea*] s.s.

Subordo *Ericineae* [^{3,8}*Erica*]

- Familia 15(277). *Actinidiaceae* Gilg et Werderm. [³*Actinidia*]¹⁴³
16(278). *Sarraceniaceae* Dumort. [³*Sarracenia*]
17(279). *Roridulaceae* Martynov [³*Roridula*]
18(280). *Mitrastemonaceae* Makino [³*Mitrastemon*] s.m.
19(281). *Ericaceae* Juss. [³*Erica*] s.a.¹⁴⁴

Ordo 35. CORNALES [⁴*Cornus*] s.s.Familia 1(282). *Cornaceae* Bercht. et J. Presl [³*Cornus*]* s.a.¹⁴⁵2(283). *Hydrostachyaceae* (Tul.) Engl. [³*Hydrostachys*]
sed.m.3(284). *Loasaceae* Juss. [³*Loasa*]¹⁴⁶4(285). *Hydrangeaceae* Dumort. [³*Hydrangea*]¹⁴⁷

Ordo 36. ARALIALES [⁴*Aralia*]* s.a.**Subordo *Aquifoliineae*** [^{3,8}*Ilex*']

- Familia 1(286). *Stemonuraceae* (M. Roem.) Kaarehed [³*Stemonurus*]¹⁴⁸
 2(287). *Cardiopteridaceae* Blume [³*Cardiopteris*]¹⁴⁹
 3(288). *Aquifoliaceae* Bercht. et J. Presl [³*Ilex*'] s.a.¹⁵⁰

Subordo *Escalloniineae* [^{3,8}*Escallonia*]

- Familia 4(289). *Escalloniaceae* R. Br. ex Dumort. [³*Escallonia*]
 s.a.¹⁵¹

Subordo *Bruniineae* [^{3,8}*Brunia*]

- Familia 5(290). *Columelliaceae* D. Don [³*Columellia*] s.a.¹⁵²
 6(291). *Bruniaceae* R. Br. ex DC. [³*Brunia*]

Subordo *Araliineae* [^{3,8}*Aralia*]

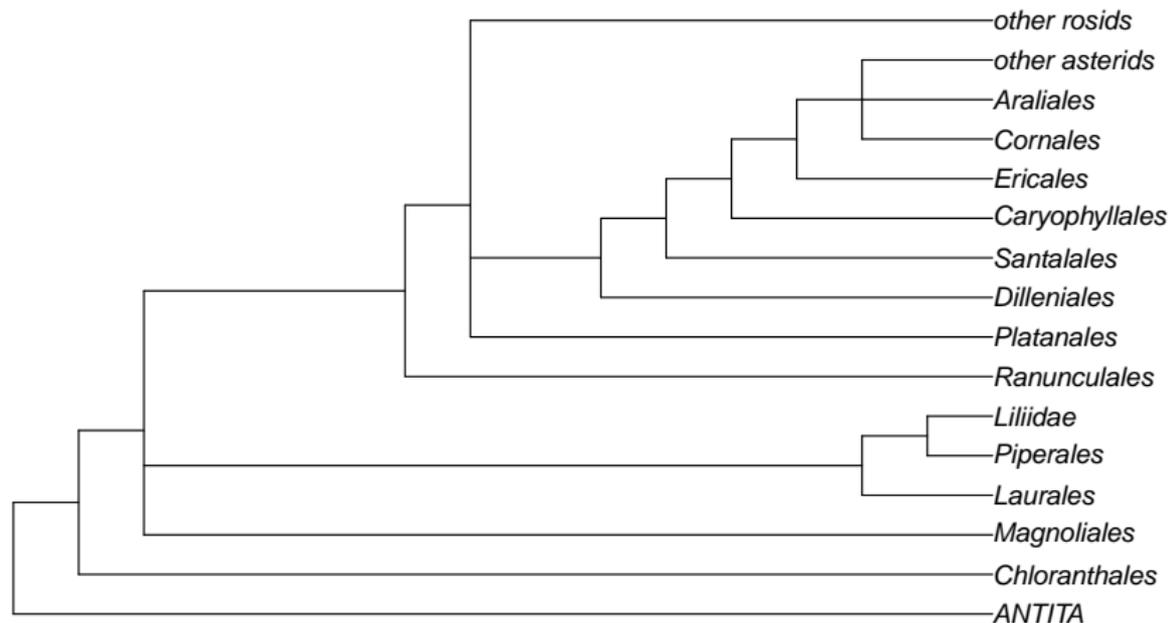
- Familia 7(292). *Pennantiaceae* J. Agardh. [³*Pennantia*]
 8(293). *Torricelliaceae* Hu [³*Torricellia*] s.a.¹⁵³
 9(294). *Griselinaceae* J. R. Forst. et G. Forst. ex A. Cunn.
 [³*Griselinia*]

- 10(295). *Araliaceae* Juss. [³*Aralia*]¹⁵⁴
11(296). *Pittosporaceae* R. Br. [³*Pittosporum*]
12(297). *Myodocarpaceae* Doweld [³*Myodocarpus*]
13(298). *Umbelliferae* Juss. [³*Apium*]¹⁵⁵

Subordo *Dipsacineae* [^{3,8}*Dipsacus*]

- Familia 14(299). *Paracryphiaceae* Airy Shaw [³*Paracryphia*] s.a.¹⁵⁶
15(300). *Adoxaceae* E. Mey. [³*Adoxa*] s.a.¹⁵⁷
16(301). *Caprifoliaceae* Juss. [³*Lonicera*'] s.a.¹⁵⁸

General phylogeny + asterids, part 1



Final question (3 points)

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Give the short characteristic of any of orders studied.

For Further Reading



Shipunov, A. 2011–onwards.

Systematic Botany [Electronic resource]. Mode of access:

http://ashipunov.info/shipunov/school/biol_448/index.htm