

Systematic Botany. Lecture 22

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Outline

Questions and answers

Protista

Panmycota

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Protista

Panmycota

Previous final question: the answer

Why fungi could be considered as protists?

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Why fungi could be considered as protists?

- ▶ Polyphyletic
- ▶ No tissues

Primitive Basidiomycota (F-5)—basidial yeasts, smut and rust fungi

Phylum 20. BASIDIOMYCOTA [⁶*Agaricus*]

Subphylum *Ustilagomycotina* [^{5,8}*Ustilago*]

Classis 1(65). *Exobasidiomycetes* [⁵*Exobasidium*]

2(66). *Ustilaginomycetes* [⁵*Ustilago*]

Subphylum *Pucciniomycotina* [^{5,8}*Uredo*]

Classis 3(67). *Pucciniomycetes* [⁵*Uredo*]

4(68). *Atractiellomycetes* [⁵*Atractiella*]

5(69). *Cystobasidiomycetes* [⁵*Cystobasidium*]

6(70). *Agaricostilbomycetes* [⁵*Agaricostilbum*]

Advanced Basidiomycota (F-5)—mushrooms

7(71). *Microbotryomycetes* [⁵*Microbotryum*]⁴⁰

8(72). *Mixiomycetes* [⁵*Mixia*]

Subphylum *Agaricomycotina* [^{5,8}*Agaricus*]

Classis 9(73). *Wallemiomycetes* [⁵*Wallemia*] sed.m.⁴¹

10(74). *Bartheletiomycetes*[†] [⁵*Bartheletia*]

11(75). *Tremellomycetes* [⁵*Tremella*]

12(76). *Dacrymycetes* [⁵*Dacrymyces*]

13(77). *Agaricomycetes* [⁵*Agaricus*]

Primitive Ascomycetes (F-4)—yeasts

Phylum 21. ASCOMYCOTA [⁶*Ascomyces*]⁴²

Subphylum ***Taphrinomycotina*** [^{5,8}*Ascomyces*]*⁴³

Classis 1(78). *Neoelectomyces* [⁵*Neoelecta*]

2(79). *Taphrinomycetes* [⁵*Ascomyces*]⁴⁴

3(80). *Schizosaccharomycetes* [⁵*Schizosaccaromyces*]⁴⁵

4(81). *Saccharomycetes* [⁵*Saccaromyces*]

Advanced Ascomycetes (F-4)—molds and lichens

Subphylum *Pezizomycotina* [^{5.8}*Tuber*]

Classis 5(82). *Pezizomycetes* [⁵*Tuber*]

6(83). *Orbiliomycetes* [⁵*Orbilia*]

7(84). *Geoglossomycetes* [⁵*Geoglossum*]

8(85). *Lichniomycetes* [⁵*Lichnia*]

9(86). *Dothideomycetes* [⁵*Dothidea*]⁴⁶

10(87). *Eurotiomycetes* [⁵*Penicillium*]

11(88). *Lecanoromycetes* [⁵*Lecanora*]⁴⁷

12(89). *Laboulbeniomycetes* [⁵*Laboulbenia*]

13(90). *Leotiomycetes* [⁵*Leotia*]⁴⁸

14(91). *Sordariomycetes* [⁵*Sordaria*]

Final question (2 points)

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What are differences between Basidiomycota and Ascomycota?

For Further Reading



Margulis and Chapman. 2009.

Kingdoms and domains: an illustrated guide to the phyla of life on Earth. 4th edition.