

# Systematic Botany. Lecture 24

Alexey Shipunov

Minot State University

October 26, 2011

# Outline

Questions and answers

Protista

Panalgae

# Outline

Questions and answers

Protista

    Panalgae

## Previous final question: the answer

What are Excavata?

## Previous final question: the answer

### What are Excavata?

- ▶ Subregnum of Protista
- ▶ Gliders
- ▶ Organisms with deviated mitosis and meiosis, susceptible to some antibiotics and close to prokaryotes by structure of some proteins

# Protista

# Panalgae

# “Big” Cercozoa—Pr-3, Pr-4, Pr-20, Pr-29, Pr-30

## Subphylum *Endomyxa* [<sup>5,8</sup>*Gromia*]

Classis 8(119). *Gromiidea* [<sup>5</sup>*Gromia*]

9(120). *Ascetosporea* [<sup>5</sup>*Haplosporidium*]<sup>76</sup>

10(121). *Proteomyxidea* [<sup>5</sup>*Filoreta*]\*<sup>77</sup>

11(122). *Plasmodiophorea* [<sup>5</sup>*Plasmodiophora*]<sup>78</sup>

12(123). *Foraminifera* [<sup>5</sup>*Rotalia*]<sup>79</sup>

# Radiolaria—Pr-31

## Phylum 27. RADIOLARIA [<sup>6</sup>*Acanthometra*]

Classis 1(124). *Taxopodida* [<sup>5</sup>*Sticholonche*] stat.m. <sup>80</sup>

2(125). *Polycystinea* [<sup>5</sup>*Collosphaera*]\*

3(126). *Acantharia* [<sup>5</sup>*Acanthometra*]

## Labyrinthomorpha and Opalozoa—Pr-19, Pr-21

Superphylum *Heteroconta* [ <sup>6.2</sup>*Fucus* ]

Phylum 28. LABYRINTHOMORPHA [ <sup>6</sup>*Labyrinthula* ]

Classis 1(127). *Labyrinthulea* [ <sup>5</sup>*Labyrinthula* ]<sup>81</sup>

Phylum 29. OPALOZOA<sup>†</sup> [ <sup>6</sup>*Opalina* ]

Classis 1(128). *Bicoecea* [ <sup>5</sup>*Bicosoeca* ]<sup>82</sup>

2(129). *Placididea* [ <sup>5</sup>*Placidia* ]<sup>83</sup>

3(130). *Opalineae* [ <sup>5</sup>*Opalina* ]<sup>84</sup>

4(131). *Blastocystea* [ <sup>5</sup>*Blastocystis* ]

5(132). *Actinophryida* [ <sup>5</sup>*Actinophrys* ] sed.m.<sup>85</sup>

# Oomycota, Pr-14

Phylum 30. OOMYCOTA [<sup>6</sup>*Saprolegnia*]

Classis 1(133). *Oomycetes* [<sup>5</sup>*Saprolegnia*]<sup>86</sup>

## Chromophyta—Pr-15–18, Pr-27

### Phylum 31. CHROMOPHYTA [ <sup>6</sup>*Fucus* ] <sup>87</sup>

Classis 1(134). *Bacillariophyceae* [ <sup>5</sup>*Diatoma* ] s.a.<sup>88</sup>

2(135). *Dictyochophyceae* [ <sup>5</sup>*Dictyocha* ] <sup>89</sup>

3(136). *Pelagophyceae* [ <sup>5</sup>*Pelagomonas* ] <sup>90</sup>

4(137). *Eustigmatophyceae* [ <sup>5</sup>*Eustigmatos* ]

5(138). *Chrysophyceae* [ <sup>5</sup>*Chrysococcus* ] s.a.<sup>91</sup>

6(139). *Pinguiophyceae* [ <sup>5</sup>*Pinguiochrysis* ]

7(140). *Raphidophyceae* [ <sup>5</sup>*Rhaphidomonas* ]

8(141). *Phaeophyceae* [ <sup>5</sup>*Fucus* ] s.a.<sup>92</sup>

## Final question (2 points)

## Final question (2 points)

Write the short characteristic of any phylum from today's lecture

# Appendix

## For Further Reading

## For Further Reading



Margulis and Chapman. 2009.

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