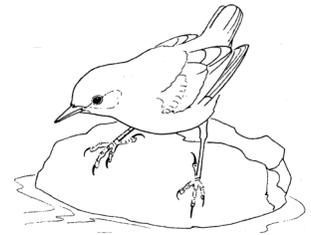


Research Paper

Plan your work carefully because you must take regular field samples. See skylinecollege.edu/case for more information. (100 points)

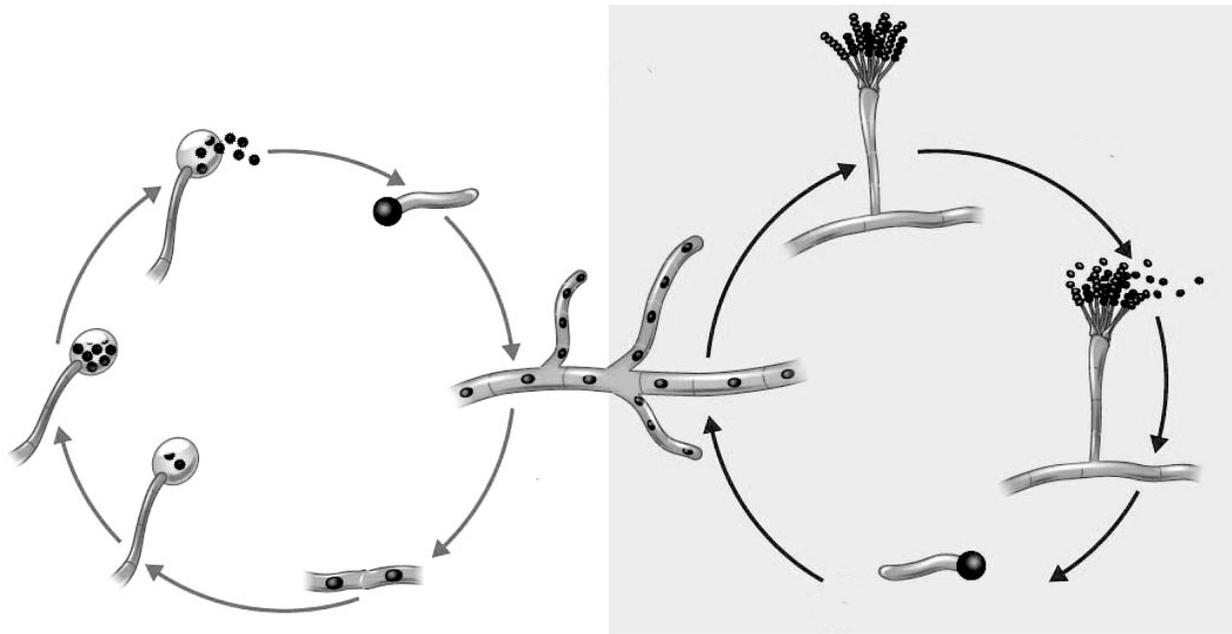


1. Title page (1)
2. **Six** (no more and no less) content pages. The text should consist of a student-worded analysis of your research during long hours in a library, in the lab, and in the field.
 - a. Bimonthly data. (15)
 - b. Graph your counts of living organisms against time or location. (5)
 - c. Explain the relationship between the factors that you graphed. (10)
 - d. Compare your data to Skyline historical data and acceptable standards. (10)
 - e. Discuss the (beneficial, neutral, negative) significance of your data. (5)
3. Read about the organisms you identified and answer the following questions:
 - a. Why did you use SDA *and* NA; what is the purpose of each medium? (5)
 - b. How are fungi classified to kingdom, phyla, and classes? (5)
 - c. Identify two fungi. Provide the information to complete the following table. How do they differ from the fungus shown in the attached figure? What do they metabolize for their carbon and energy source(s)? What is their normal habitat? (10)

Species	Phylum	Sexual spores	Asexual spores	Compared to figure	Carbon source	Energy source

- d. What are the gram-reactions of the bacteria you cultured? Does one cell-wall type predominate? Discuss the significance of this. (10)
4. Literature cited page*. Include 5 references in correct format. (10) You must use at least 3 journal articles; all references may not be books and websites. References must be cited somewhere in the content. Do not include references prior to 1980.
5. Three figures on separate pages.
 - a. Each figure must have a legend.
 - b. Refer to each figure in the body of the text.
 - c. Figures can include (one) photograph or picture of the animal; chemical formulae; metabolic pathways; phylogenetic tree; food chains; calculations; graphs. (9)
6. Typed, double spaced.
7. General form: (5)

Attach this page to your report.
 Followed all directions explicitly with no exceptions.
 Presentation is neat and orderly throughout.
 Spelling and grammar are flawless.



Life cycle of *Talaromyces*, an ascomycete.