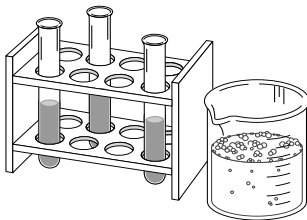


Algae for All!

What do pond scum, red tide, and the green stuff growing in your aquarium have in common? They all are types of algae! As a matter of fact, algae are valuable members of the biosphere. Unfortunately, algae don't always receive the recognition they deserve. Did you know that half the world's organic material produced by photosynthesis comes from algae? And humans use algae more than you might think. We use algae to make medicines as well as to treat sewage. Many cultures eat seaweed and other algae regularly. And though they thrive in watery places like lakes and ponds, these hardy creatures can live almost anywhere—from the Antarctic to the Sahara Desert!



Algae Blooms

1. How do algae and detergent mix? Design an experiment to determine the effects of detergent in waste water on algae and other pond plants, such as *Elodea*. Repeat your experiment to test for the effects of fertilizers or acid rain. Present your findings in a scientific article.

USEFUL TERMS

dermatologist
a doctor who specializes in the skin and its diseases

pathologist
a doctor who specializes in the effects of diseases on the body

More Long-Term Projects

2. Athlete's foot is an itchy infection caused by a fungus. Interview a dermatologist or pathologist about other human diseases that are caused by fungi or by protozoa. Create a brochure for patients with a fungal- or protozoan-related disease that explains the disease and its treatment.
3. You may not realize it, but you probably eat algae on a regular basis. No kidding! Carrageenan, mannitol, and agar are a few algae extracts commonly used in food products. Look for these extracts and other algae-related products on the labels of food and cosmetic containers. Identify and list products in your home that contain algae. Create a poster that highlights at least five of the products in your home that use or contain algae.

Research Idea

4. Sometimes an organ-transplant patient suffers from organ rejection, even though a new organ can save the patient's life! Why does the body do this? How can the drug cyclosporine, derived from a fungus, help the transplant operation to be more successful? Find out about cyclosporine, and research other medical uses of fungi. Write a newspaper article about your findings.

