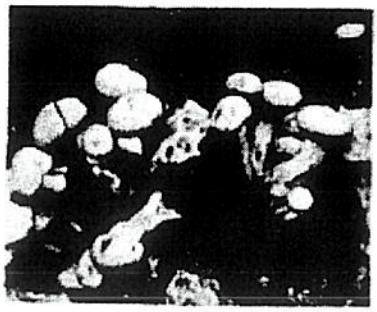
Name _____
Date _____
Block _____

DISEASE-CAUSING FUNGI

We will use the following readings, from 2 different textbooks, to learn a little bit about living things in the Kingdom Fungi. We will use this basic understanding to help us as we learn about how fungi can cause diseases in plants. *(From: Scott Foresman: Science, Level Purple, pg. A18 & Glencoe: Science, Level Red, pg. 106)*



These fungi send rootlike structures into the tree and absorb nutrients from it.

Have you ever eaten a mushroom? If so, you've been in close contact with a fungus. A fungus is a member of the fungus kingdom. Fungi are mostly many-celled organisms that can't move around. The fungi in the picture get nutrients from the tree they are growing on. You've probably seen or heard of several other kinds of fungi, such as molds, mildew, and yeast. Fungi all get nutrients by absorbing them from living organisms or from organisms that are dead or decaying.

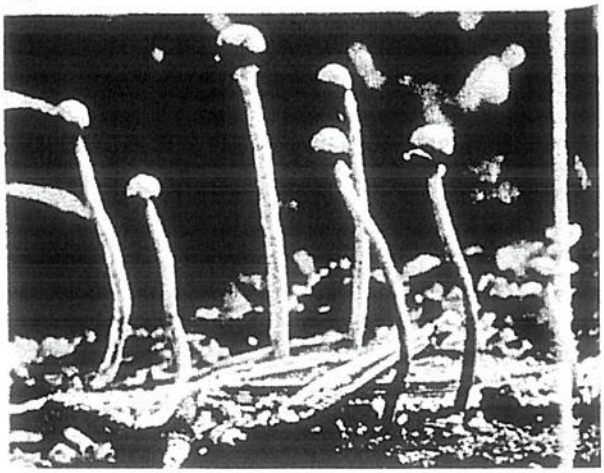
Importance of Fungi

As mentioned in the beginning of this chapter, some fungi are eaten for food. Cultivated mushrooms are an important food crop. However, wild mushrooms never should be eaten because many are poisonous. Some cheeses are produced using fungi. Yeasts are used in the baking industry. Yeasts use sugar for energy and produce alcohol and carbon dioxide as waste products. The carbon dioxide causes doughs to rise.

Agriculture Many fungi are important because they cause diseases in plants and animals. Many sac fungi are well known by farmers because they damage or destroy plant crops. Diseases caused by sac fungi are Dutch elm disease, apple scab, and ergot disease of rye. Smuts and the rust, shown in **Figure 23A,** are club fungi. They cause billions of dollars worth of damage to food crops each year.

Figure 23

Rusts can infect the grains used to make many cereals including wheat, barley, rye, and oats. Not all fungi are bad for agriculture. Some are natural pesticides. This grasshopper is infected with a fungal parasite.



ASEXUAL REPRODUCTION & ITS IMPACT ON FUNGAL DISEASES IN PLANTS

Based on what we have read and heard from your classmates about bananas and cacao trees, what conclusions can we draw about how asexual reproduction in plants impacts the spread of fungal diseases?