The kingdom of fungi essay sample

Food & Diet



The kingdom of Fungi contains single-celled and multicellular organisms that absorb nutrients for food. Fungi, together with bacteria decay and decompose organic matter. Some fungi can be parasitic and cause serious diseases in plants and animals. Though considered an individual kingdom today, traditionally fungi were classified as plants with no stems, leaves, or chlorophyll. About 100, 000 species of fungi are known.

Most fungi are made of protoplasm-containing tubes called hyphae, sometimes divided by walls called septa. Hyphae grow by branching and elongating. When there is an abundance of hyphae, the fungus forms into a larger structure such as mushrooms or puffballs. Some fungi form spherical masses called sclerotia, which range in size from a grain of sand to a cantaloupe.

Spores are the most common way of fungi to reproduce. Spores are tiny particles of protoplasm within walls. A single fungus may produce from several million to several trillion spores. Spores are formed in two ways, the first, the union of two or more nuclei within a specialized cell or cells.

Oospores, zygospores, ascospores, and basidiospores are made in this way. The other method involves the transformation of hyphae into numerous segments or short parts. Oidia, conidia, and sporangiospores are formed in this asexual process.

Fungus can be classified many different ways with complicated systems.

Mycologists, mycology scientists, usually use a simple system with four main groups. Oomycota, Zygomycota, Ascomycota, and Basidiomycota are the main phyla which fungi are classified into. There is a fifth major phylum,

Deuteromycota, also called Fungi Imperfecti, in which a few organisms are loosely grouped into because they are difficult to classify, many of them are related to bacteria in some ways.

Spores from fungi are carried for long distances in the atmosphere. Water areas are often filled with chytrids and other water molds. Many fungi have been discovered in polluted rivers and streams. These fungi help the natural decay of sewage. Soil is a natural habitat for many types of fungus, which live on dead, organic remains. Some fungi will infect living plants and animals if given the chance, while others need a living host to survive. Some fungi which live in the soil capture microscopic organisms such as amoebas and nematodes. Certain fungi live with algae, forming structures called lichens.

Fungus is helpful to the population in many ways. Yeast, used for bread making, and enzymes from fungi are used for grain, liquid glue, and ethyl alcohol. Acids from fungi are used in inks, dyes and synthetic resins. Fungus is also used for food products including the ripening of some types of cheese. Fungi have also been used medically since ancient times. A few antibiotics are produced from fungus such as penicillin.

The kingdom of Fungi is an interesting topic, having many features and uses. Fungi range from microscopic organisms to giant growths. They absorb nutrients from decaying, organic material, or living plants and animals. Fungus has helped humanity, but has also hurt as well, it can save a life or cause death.