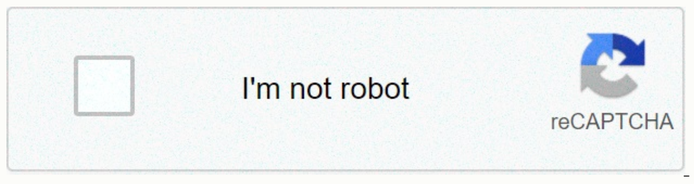

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Is moss a fungus or protist

Protista protistas form one of the four kingdoms of eukaryotic organisms and include algae, protozoa, slimemolds and ovikots. Among the various organisms called protestans (Protist's kingdom) are algae, protozoa, mucus form, and oomycota. Algae have long been considered simple plants and have been classified as Plantae, but do not have more highly differentiated tissues and organs characteristic of higher plants such as mosses, ferns and seed plants. Protozoa, all of which are single-celled, have been appointed to the kingdom of Animalia; considered more animal than plants like, they are not considered here in detail. The two remaining groups of protists, slime forms and oomycota, were traditionally considered fungi, as indicated in their names (mykoto means fungus), and accordingly were assigned to the kingdom of Mushrooms, mainly because of their heterotrophs (non-phototosinetic). However, as information about the true nature of these life forms accumulated, they were grouped together with the protists. However, Protista is a heterogeneous kingdom consisting of both heterotrophic forms of mucus, and oviesets and autotrophic (photosynthetic) algae. Thus, the kingdom of Protista is to catch all groups containing different organisms that do not seem to fit into any of the other kingdoms. Biology Protista Most protestants are single-celled, but some, in particular, large species of seaweed, called algae and algae, are multicellular. They are all eukaryotic (with cells that have nuclei, making them members of the Eukarya domain, along with fungi, plants and animals), as opposed to prokariotic bacteria (which are divided between Archaea domains and bacteria). In addition to being surrounded by a nuclear embran (envelope), the eukaryotic cell cytoplasm contains different types of organelles, each specializing in a specific task (or related). Examples include mitochondria (cellular respiration), chloroplasts (photosynthesis), Golga's body (molecule packaging) and endoplasmic cyticulum (for stiffness). As a result of this specialization, eukaryotic cells are able to function more efficiently than prokaryotic cells, which should perform the same functions but in the cell as a whole. Thus, the protesters are similar to plants, animals and mushrooms. In addition, the evolution of eukaryotic cells from prokaryotic was a key event in the evolution of life, which led not only to protistan, but also from them to more highly developed kingdoms. As mentioned earlier, protists exist in a great variety. Included are some, which, due to the lack of a rigid cell wall, are able to quickly change shape. Other proteans have cell walls surrounding their cell membranes, resulting in a more permanent shape. Some fringe like lashes or whip-like flagella which which Use for swimming; Others move by other means; many of them are non-motyl. Some protists live solitary lives, while others unite to form colonies. Some are parasitic, while most are free residence (non-parasitic). There are also large differences in size: Many are single-celled and microscopic, while some algae, such as algae and algae, grow up to many meters in length. In addition, many protists have complex life cycles, with different stages, having different combinations of these characteristics. Biologists generally agree that fungi, plants and animals are derived from ancient protists. Thus, the study of protists, who continue to inhabit the Earth, sheds light on the origin of these groups of more advanced organisms. In addition, each of these modern proteists plays an ecological role along with other organisms that occupy its ecosystem. Some protists affect people more directly as agents of the disease; some of them are the source (or potential source) of medicines that can be used to fight a variety of diseases. Algae: Classification of algae - euglenophitis (euglenoids) term algae (single algae), when unqualified, refers, as a rule, to the organism, usually inhabiting water or moist habitat, i.e. several plant (photosynthetic), but that lacks more specialized tissues characteristic of plants. In addition, almost all algae produce reproductive cells, spores or gamers who do not have surrounding specialized enclosures, such as typical plants. Blue-green algae, historically considered algae, are now recognized as a separate group of organisms. Since they are prokaryotic, they are now considered a special type of bacteria, cyanobacteria. They differ from other bacteria primarily because they possess chlorophyll and therefore have the ability to photosynthesis. In the kingdom of Protista, algae are currently separated by phycologists (scientists who study algae) among anywhere from 4 to 13 fila. It uses a system in which nine of Protista's phila kingdoms include algae. Nine phila include the following: Euglenophyta (euglenoids). This small group of protists (about nine hundred species) is a good starting point for the study of algae, as euglenoids combine traits characteristic of plants, fungi and animals. They are all single-celled, and almost all of them are mobile using two flagella that come out of the groove at the end of the cell. With the help of an eye patch at the base of the flagella, euholenoids can detect light and swim to it. Most members of the filum do not chlorophyll and therefore must absorb food from external sources. Others, however, such as Euglena, have chloroplast with chlorophylls A and b, along with carotenoids and accessories pigments. They multiply by dividing (cell division). Most are freshwater organisms, but some of them occur in brackish or marine environments. Cryptofita (cryptomonadas). (cryptomonadas). algae are single-celled flagellates that are usually brownish, blue-green or red. Their name (Greek crypto means hidden) refers to their small size (3-50 micrometers), which makes minconspicuous. Like euglenoids, they include both colorless (unpigmentated) and pigmented photosynthetic members. Pigments include chlorophyll a and c and carotenoids. There is evidence that cryptomonadas originated from the merger of two different types of eukaryotic cells. Of the two hundred known species, some are marine; others live in fresh water. Rhodophyte (red algae). Red algae are mostly multicellular organisms and are commonly referred to as algae. However, about a hundred of the five hundred species are single-celled and live in fresh water. Red algae chloroplasts contain chlorophyll as well, but the presence of ficobilins (red pigments) usually masks chlorophyll, giving the theme a red or reddish look. Red pigment contributes to the absorption of light in deep water, where there is a lot of red algae. Since red algae chloroplasts resemble cyanobacteria, there is reason to believe that they probably originated from these prokaryotic organisms. One group of red algae, coral algae, deposit calcium carbonate into their cell walls, causing stone formations in the ocean. They are often associated with coral reefs, which they help stabilize. Many red algae have a complicated life story. The simplest type is that in which the haploid gametophyte alternates with diploid sporophyte. This pattern, also known throughout the plant kingdom, is known as generational alternation. In most red algae, there are three generations: haploid gametophyte, carposporophy, and tetrasporophy (both diploid). It has now been recognized that some red algae, previously thought to be different species, are actually different stages of the same species. Dinofita (dinoflagellata). Most dinoflagellates are single-celled algae, each with two flagells. One of them is in the equatorial groove around the cage; Another passes down the longitudinal groove before expanding outwards. In addition to chlorophyll, they have accessory pigments that give them a golden brown color. Many dinoflagellates are associated symbioticly with various invertebrates; for example, many corals benefit from the food they receive from these algae. Other dinoflagellates are non-photo-synthetic and live as parasites in other marine organisms. Many dinoflagellates are bioluminescent; they emit a faint light that can be seen in the dark from a passing ship. Others are responsible for fish kills when they become superabundant in warm stagnant water. The death of fish in these red tides is often toxins produced by dinoflagellates. Haptophitis (gaptophytes). This group, consisting of only three hundred known species, includes mainly marine species, but some freshwater and even terrestic species are known. Included are both single-celled and colonial flagellates, along with others that are non-motyl. A distinctive feature of gattophytes is the gaptonema, a filamentous structure that bends and rolls because it appears to help the cell catch food particles. It differs from the flagellum lack of 9 and 2 microtubules location, which is typical of flagella eukaryotic cells. Most gattophytes are photosynthesis and have chlorophylls A and C along with pigment accessories such as fucoxanthin. Although this phenomenon is not as well documented as for dinoflagellates, haptophytes also cause marine fish kills by releasing toxins. Chrysophitis (chrysophitis). There are about a thousand species of chrysophitis, including single-celled and colonial organisms, which often abound in both fresh and marine habitats. Some lack chlorophyll a and c. However, the golden color of fucoxanthin, which they possess, usually masks green pigments, giving them a characteristic golden hue and considering their name (chrysos means gold). Some chrysophitiss feed on bacteria. Some are responsible for brown tides that damage shellfish and salmon fishing. Bacilliriophyta (diatoms). The name diatom comes from two overlapping shells that fit together like two pieces of candy box. Comprised of silica (silicon dioxide), the shell is preserved long after the living cell inside has died. Most species are photosynthetic, possessing chlorophyll and c, as well as fucoxanthin. In life cycles of diatoms includes both asexual (cell division) and sexual phases. It is difficult to overestimate the importance of diatoms. There are more than 100,000 known species and they are abundant in almost all aquatic and marine habitats. Because of the conservation of their shells, it is known that there are many extinct species as well. Diatoms account for up to 25 percent of the world's total food production (photosynthesis). Especially in polar waters, they are the main food source for aquatic animals. Large clusters of diatoms, known as diatoms, are mined, cleaned and used in filters, gas masks, toothpaste and various other purposes. Faeophitis (brown algae). Found only in salt water, this group includes large, noticeable, multicellular forms commonly referred to as algae or algae. Often found on rocky shores, various of the 1,500 species live in the ocean, especially in temperate and cool waters. Laminaria is called algae and often form algae forests along gently sloping shores off the coast of California. Although lacking true roots, stems and leaves, algae have the most highly differentiated bodies of any of Some of their cells resemble chloe-thloe vascular plants. The brown pigment fucoxantin is present in addition to chlorophyll A and C. chlorophyte (green algae). Seventeen thousand or more species of green algae are perhaps the most diverse group of algae. Most of them live in fresh water, but some live in the ocean, while others live in soil or on tree trunks. Many form symbiotic associations with sponges, protozoa and other invertebrates; others are associated with lichen mushrooms. As green algae resemble plants more than any other group of algae, plants are thought to have evolved from green algae. They, like plants, have chlorophyll A and b; food is stored in specialized cytoplasmic organelles called plastics. The fistum is divided into three classes. The class of chloro-officials includes a variety of forms, almost all of which are freshwater species. Chlamydomonas is a motley single-celled species that nevertheless demonstrates a complex life cycle. Volvox and a number of other large spherical colonial forms consist of cells, each strongly reminiscent of Chlamydomonas. Other members of this class are nitain. The Ulvophyceae class includes mostly marine species. A common example is the type of Ulva (sea salad), consisting of flat sheets of cells; it is found in shallow seas all over the world. The Charophyceae class includes a familiar Spirogira, a freshwater filamentous view with spiral chloroplasts. Human use of algae links has already been made in such a way that algae are involved in the overall economy of nature. Because algae are autotrophes (producers) and photosynthesize, they generate food that is available for heterotrophic animals (consumers). At the same time, oxygen, which is a product, is available for the same animals. Because algae function in marine and freshwater environments similar to those performed by grasses (and other plants) on land, algae are called grasses of many waters. Algae are often also involved in human affairs in more direct ways. In Asian countries, especially algae and other multicellular algae have been used for food production for centuries. Nori, the red algae of the genus Porphyra has been harvested and eaten as a vegetable in Japan and China. It is now cultivated on a large scale, thereby increasing its accessibility and popularity. Unfortunately, most seaweeds do not have high nutritional value, although they provide some necessary minerals and vitamins. Another problem is their taste, which is unacceptable to many Westerners. A number of products derived from algae and various algae are more commercially valuable in Europe and North America: alginates, carrageenans and agar. Alginates are hydrophobic compounds derived from various brown algae, such as Laminaria. Once they are harvested mechanically from the ocean, the algae are processed. Processed. resulting in sodium salt and potassium alginate products. These alginates are used in the paper industry as a means for size and polishing, as well as in the production of paints, cosmetics and a wide range of foods. In each case, the role of the alginate is to improve the consistency of the product and prevent the separation of its ingredients. Carragins are derived mainly from Irish moss (Chondrus crispus), a red algae found off the coast of New England. After processing, the resulting carrageenans are used for some of the same purposes as alginates. However, due to their higher melting point, they have been found higher for use in many types of food, especially desserts. PioneerIng German bacteriologist Robert Koch popularized the use of agar for bacterial culture. Agar is derived from some red algae. After processing and cleaning, agar is added in small amounts (1-2 percent) to the water along with the nutrients needed by the bacteria. The result is a solid environment in which bacteria can be isolated from mixed culture. Although Asians have long used certain algae for traditional medicinal purposes, their use in Western medicine until recently was limited to a large extent as a binder in medicinal tablets or as a laxative. Their potential as a source of therapeutic drugs is being pursued by an increasing number of researchers. Included are those from which antibiotics and anti-cancer drugs can be extracted. Slime Moles Slime forms As the name suggests, these organisms resemble forms (kingdom of mushrooms) and are thus historically thought to be mushrooms. Like fungi, they are heterotrophic and grow on decaying organic matter. However, the accumulation of more data, including molecular information, indicates that they are a group other than fungi. Slime shapes are usually divided between two phila. Plasmodium forms of mucus (violet Myxomycota) often exist as noticeable fan mass of protoplasm, which creeps across the surface somewhat like amoeba. From this stage, known as plasmodium, spores form inside. A single-celled amoeba-like stage is formed from the dispute; they converge to form plasmodium. Cellular mucus forms (phylum Dictyosteliomycota) are amoeba-like organisms that combine at one stage to form slugs, or pseudoplasmodium. Like that in the plasmodium mucus form, reproduction in cellular mucus forms both sexual and asexual, but, unlike the plasmodium mucus form, non-flagellated cells are known. In both types of mucus form, food particulate matter such as bacteria can be swallowed (mushrooms absorb only overcooked food). Oomycetes was also previously thought to be mushrooms, oomycetes (phylum Oomycota), probably almost associated with certain algae than mushrooms. Like algae, their cell cellulose walls. Some species are single-celled, while others are Some of the strands are kenocytic (no cell walls separate neighboring cells). The name of the group reflects a large female gamer or egg; This type of sexual reproduction is called oogamy. Some terrestile oomycetes are plant pathogens of significant importance. Downey mold grapes, caused by Plasmopara viticola, often threatens France's wine industry. Species of the genus Phytophthora cause diseases of many fruit crops and other plants of economic importance. Among them are P. infestans, which leads to the late decline of potatoes. One particular outbreak of this parasite caused the infamous Irish potato famine of the mid-1840s, in which more than a million people were affected (some estimates, four million). Saprolegnia is a prominent member of a group of aquatic oomycetes called water form. Most are saprophyte on dead plants and animals, but some are parasitic. Parasitic.