Soil vs microbiology assignment



Microorganisms are an essential factor in many natural phenomena that make life possible on Earth and the diversity of microbial populations that they take advantage of any niches found in their environment. Such niches can be different amounts of sight, oxygen, and nutrients found in soil and water and enable them to grow (Tractor, Funk, and Case. Microbiology Introduction. 10th De.). Billions of microorganisms form a vibrant community in the soil. In this community, recycling of chemical elements take place and is used over and over by other microorganisms.

This is called biochemical cycle. In biochemical cycles, elements are oxidized and reduced by microorganisms to meet their metabolic needs; furthermore, without this cycle life on Earth would cease to exist (Tractor, Fauvism is a fungus that was identified in our soil sample. The Fauvism genus is one of the most ubiquitous fungi in the terrestrial ecosystems and a relevant pathogen tort cultivated plants It seems to survive in arid environment and in general have optimal growth between -5 and -25 bar and do not grow at all at 100 to 120 bar.

Survival of the Fauvism can be possible in moderate saline soils with high soil temperature (near ICC.) and haply growth may be stimulated at lower osmotic pressure C. C. Tell, et al '11). Another fungus we identified was Espadrilles. Threw our research we found that these fungi can also be airborne and have effects on us as humans. Airborne Espadrilles species are significant environmental components involved in the pathogenesis and persistence of allergic respiratory diseases.

The detection and quantification of airborne allergens is important to elucidate the clinical implications of environmental exposure of patients suffering with allergic asthma and/or allergic rhinitis (Menhaden K. Aquaria, et al' 10). Lastly, we identified Penicillin. Species of Penicillin and Espadrilles serve in the production of a number of biotechnological produced enzymes and other macromolecules, such as cloning, citric, and tartaric acids, as well as several actinides, lipase, amylase, celluloses, and proteases.

Some Penicillin species have shown potential for use in premeditation because of their ability to break down a variety of xenophobic compounds (M H Ryder, et al' 07) Next, we identified the bacteria E-coli. E-coli are the predominant fecal chloroform is which constitutes a large proportion of the human intestinal population (Tractor, Funk, and Case. Microbiology Introduction. 10th De.). It was no surprise to me that E- coli were found in the soil sample because of the geese and E-coli comes from fecal matter of animals.

The soil we retrieved was from the area by the lake and therefore very possible to get a positive result for E-coli. All of the fungi and bacteria found from the environment share a symbiosis relationship, two organisms living together in a close association that is beneficial to one or both of them.

(Tractor, Funk, and Case. Microbiology Introduction. 10th De.) The relationship that bacteria and fungi share with each other contributes to the biochemical cycle and without bacteria and fungi we could not continue our existence on our planet "earth.