ASPECTE ACTUALE PRIVIND FILOGENIA ŞI EVOLUŢIA FUNGILOR

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ACTUAL ASPECTS OF FUNGI PHYLOGENY AND EVOLUTION. The fungi, animals and plants are thought to have diverged from each other probably a billion years ago. They are the only three kingdoms of life that developed multicellular organisms in terrestrial environments. Like plants and animals, the fungi had to adapt to terrestrial environments from ancestors that were aquatic and similar with the extant phylum Chytridiomycota. Actual classification assumes that chytrids form a basal branch in phylogenetic tree of fungi and have involved only one loss of flagellated spores, related with adaptations to the terrestrial environment. These losses of flagellated spores coincided with the evolution of new mechanisms of spore dispersal, such as aerial dispersal in mycelial groups and polar tube formation in the microsporidia (unicellular forms that lack mitochondria). In this paper is analyzed the hypothesis regarding the fungi phylogeny and evolution based on molecular genetic research results. The most of fungi are microscopic species with a relatively simple morphology and for these reasons the evolutionary patterns within the fungi were poorly understood before the advent of nucleotide sequence data.

Key words: fungi, phylogeny, evolutionary patterns.