



Klamath Network Featured Creature

February 2014

Death Cap, Destroying Angel, Coccora, ect. (*Amanita* spp.)

General Description:

How could one not be intrigued by names like Death Cap, Destroying Angel, or Fly Amanita? These are all common names given to members of the *Amanita* genus: some of the world's best known and most recognizable fungi. Much of this recognition is due to the combination of beauty and danger. Some members are deadly poisonous. Amanitas are gilled mushrooms medium to large in size (5-30cm in diameter), usually with pale gills, and have a variety of cap colors. A distinctive and interesting feature of the *Amanita* genus is the universal veil

A universal veil is a tissue enclosing the entire button mushroom. It serves to protect the immature mushroom, and makes it look rather like an egg. When sliced in cross-section, button mushrooms encased in universal veils reveal the mushroom-to-be inside. The universal veil is ruptured by the growing mushroom, and it may disappear entirely or leave warts or patches on the cap of the mature mushroom--and/or fragments at the base of the stem.



Where to See it and Habitat: Most *Amanita* are ectomycorrhizal, meaning they attach to the outside of tree roots in symbiotic relationship. Thus when looking for *Amanita* mushrooms you need to be near trees. Different species of *Amanita* have different associations with trees species, some prefer hardwoods while some prefer conifers. A keen eye could find an *Amanita* in any treed area of the Klamath Parks. However it would be unlikely to find one in the arid environment of Lava Beds national Monument.



Image of *Amanita muscaria* from wikipedia

Reproduction: *Amanita* are in the fungi Phylum Basidiomycota. Unlike most fungi, basidiomycota reproduce sexually as opposed to asexually. This group of fungi produces basidia (singular basidium). The club shaped Basidia are the reproductive organs of these fungi. Two different mating strains are required for the fusion of genetic material in the basidium which is followed by meiosis producing basidiospores. Mycelia of different mating strains combine to produce a secondary mycelium that contains haploid basidiospores, where the fungi remains until a basidiocarp (mushroom) is generated with the developing basidia on the gills under its cap.

Edibility: Some *Amanita* are edible, others are deadly poisonous. In fact 90% of all mushroom poisonings are from *Amanita*!! Proper identification of an *Amanita* is paramount before ingesting!! Arguably the most famous *Amanita* is *Amanita muscaria*, also known as fly agaric or fly amanita. This mushroom is well known and documented throughout history for its hallucinogenic properties. Interestingly, Danish historian Samuel Odman claimed that the ferocious Viking Berserkers would eat *A. muscaria* before battle. Its recreational use is limited due to unpleasant side effects. However, (and also fascinating, if disgusting) these side effects can be minimized by drinking the urine of those who have consumed the mushroom recently.



Mushroomexpert.com

Additional Information:

<http://www.mushroomexpert.com/amanita.html>

Field guide to mushrooms of Western North America.