

Edible vs Poisonous Mushrooms

Agaricus (Edible)



Agaricus augustus *Agaricus fissuratus*

Agaricus arvenses group: Yellowing Almond Agaricus

Large to medium sized white mushrooms that **slowly bruise yellow or tawny**. Related to store-bought button mushrooms. Chocolate brown gills at maturity, free from attachment to stem.

Strong or subtle odor of almonds or anise when young; "mushroomy" odor (like button mushrooms) at maturity.

Saprobic. Growth in grass or at edges of woods. Delicious edible species, but can be difficult to ID

Psilocybe (Medicinal)



Psilocybe cyanescens: Magic Mushrooms

Small, veiled, brown capped, on wood. Introduced to the Bay Area.

Spores PURPLE-BLACK. Cap skin when wet peels cleanly off like cellophane. Many species bruise blue.

Temporarily alters brain chemistry.

Recent promising use in psychological therapy for PTSD and depression.

Note: In the United States, possession of **psilocybin**-containing mushrooms is **illegal**.

Morels (Edible)



Morchella snyderi, *M. americana* and *M. rufobrunnea*: True Morels

Black or blonde coloration (may redden), conical or rounded caps with pits and ridges. Hollow inside.

Saprobic, possibly mycorrhizal. *M. snyderi* found in mountains; *M. americana* found in riparian lowlands, orchards; *M. rufobrunnea* in urban areas (woodchips).

Toxic only when raw (exact toxins unknown); choice edible when well cooked.

Amanita (Edible)



Amanita calyptroderma and *Amanita vernicoccora*: Fall and Spring Coccora

Variable color: warm brown cap edged with yellow (fall); uniformly pale yellow cap or pure white cap (spring).

Cap with striate margin in both youth and age.

Egg wider at top than at bottom.

Universal veil membranous and thick, tears to form a sac at the stem base, **usually leaving a veil patch on the cap.**

No bulb; stem uniform in width. Odor mild or like fish.

Mycorrhizal with conifers and hardwoods.

Agaricus (Poisonous)



Agaricus xanthodermus: Yellow Stainer

Large to medium sized mostly white mushrooms that **quickly bruise "marker yellow" when cap is rubbed**. Related to store-bought button mushrooms. Free chocolate brown gills at maturity.

Strong or subtle odor of phenol or library paste when base of stem is bruised. Not everyone has the ability to smell this odor. Older or waterlogged specimens may lack odor.

Saprobic. Growth in grass or at edges of woods.

Toxins rapidly cause unpleasant GI effects, normally self-limiting.

Galerina (Poisonous)



Galerina marginata: Deadly Little Brown Mushroom

Small, veiled, brown capped, on wood. Native to the Bay Area.

Spores BRIGHT RUSTY BROWN. Cap skin does not peel cleanly off. Never blues.

Contains deadly amatoxins like those found in Death Caps.

Gyromitra (Poisonous)



Gyromitra esculenta: False Morel or Beefsteak Mushroom

Reddish convoluted caps, which resemble little brains on a stalk. Stems hollow or stuffed or chambered.

Saprobic. Found primarily at elevation here in CA. Contains the highly volatile toxin gyromitrin, which converts to monomethylhydrazine (MMH), a chemical found in rocket fuel!

Seriously **toxic** and sometimes even deadly.

Amanita (Poisonous)



Amanita phalloides: Death Cap

Variable color: green to greenish yellow to brown to tan to white cap, sometimes with a metallic sheen in age. Subtle embedded radial fibers in cap. **Non-striate cap margin when young.**

Egg wider at bottom than at top.

Universal veil membranous, thin and tough, tears to form a sac at the stem base, **usually without leaving a veil patch on the cap. Bulb at base of stem.** Odor sickly sweet in youth, like decaying flesh at maturity. Contains deadly amatoxins.

Mycorrhizal with live oak, deciduous oak, cork oak, tan oak and pine.