

KEY to NON-GILLED MUSHROOMS FOR BEGINNERS, by Gary Lincoff

Non-gilled mushrooms can be conveniently placed in ten distinct groupings:

1. Gill-like; 2. With pores; 3. With teeth-like projections; 4. Shaped like underwater coral; 5. Vase-shaped; 6. Club-shaped, with or without something on top of club; 7. Cup or saucer shaped; 8. Ball-shaped; 9. Amorphous and jellylike; and 10. Mold on other mushrooms.

A traditional dichotomous key (“either it looks like this or it does not”) is less efficient and useful for these mushrooms than a set of shapes, which these mushrooms most closely resemble, with notes differentiating them.

1. GILL-LIKE

- With cap and stem and gill-like folds or systematically forked
 - Cantharellus: on the ground; cap orange-yellow to red
 - Cantharellula: in beds of hair-cap moss; cap gray, gills white
 - Gomphus: on the ground; vase-shaped, orange and scaly
 - Hygrophoropsis: on wood; cap orange, stem orange-brown
- Shelf-like on wood, with split gills, leathery-woody gills, or maze-like
 - Schizophyllum: gills split in two from edge of cap to stem
 - Lenzites: whole mushroom leathery to woody
 - Daedalea (including Daedaleopsis): underside maze-like

2. WITH PORES

- With cap and stem and pores under cap
 - On the ground
 - Boletus: pores white to yellow to greenish to red
 - B. bicolor: pores yellow, only bluing slightly
 - B. sensibilis: pores yellow, bluing instantly
 - B. frostii: pores red, stem with fishnet marks or ridges
 - B. subvelutipes: pores red, stem with vertical dots
 - B. edulis: pores white to yellow-green, stem with fishnet marks
 - Chalciporus: pores orange; stem base yellow; peppery
 - Gyrodon: stem eccentric, pores run down stem; near ash
 - Gyroporus: cap and stem orange-brown, stem hollow
 - Leccinum: cap gray to orange; stem with scabrous marks
 - Pulveroboletus: dry, powdery veil on dry cap
 - Strobilomyces: cap and stem dark, scaly; gray veil cov. pores
 - Suillus: cap typically sticky, stem typically dotted; under conifers
 - S. luteus complex: veil present, cap slimy
 - S. pictus: veil present, cap dry, scaly
 - S. granulatus and allies: veil absent
 - Tylopilus: pores becoming pinkish
 - Xerocomus: pores irregular, not round
 - Albatrellus: fleshy, on ground, with pores descending stem
 - Coltricia: tough, brown, on ground; stem central, slender
 - On wood
 - Ganoderma tsugae: cap shiny shellac-like, reddish-brown
 - Polyporus: cap typically circular; stem slender, black at base

Shelf-like on wood, with pores under shelves

- Bondarzewia: large, shelving, pale yellowish, tough and bitterish
- Fistulina: caps reddish brown; fleshy, pores yellowish, looking like pasta
- Ganoderma applanatum: large, woody, cap; dry and gray to brown
- Grifola: large, fleshy, with many small grayish brown caps; pores white
- Laetiporus: large, fleshy, orange shelves with yellow pores
- Meripilus: large, fleshy, dirty gray-brown shelves, and pores, blackening
- Polyporus: fleshy-tough, stem with distinctive black base
- Pycnoporus: tough, bright orange-red top and bottom
- Trametes: leathery, small, dark colored; concentrically zoned on surface
- Trichaptum: leathery, purple at cap margin; toothlike on maturing

3. WITH TEETH-LIKE PROJECTIONS

With cap and stem and teeth or teeth-like projections

- Hydnum repandum: orange, fleshy, mild
- Sarcodon: gray to brown, often scaly, often bitter
- Hydnellum: orange to brownish, tough fleshed
- Pseudohydnum: jellylike mushroom with teeth

Polar bear's head-like (fur-like) mass of hanging teeth-like projections

- Hericium: often massive, resembling a frozen waterfall on wood

Shelf-like on wood with teeth or teeth-like projections

- Climacodon: large, white, shelving polypore-like but with teeth

Crust-like on wood

- Hydnochaete: on oaks, a crust-like brown toothed surface
- Irpex: on hardwood trees, a crust-like white toothed surface
- Trichaptum: shelf-like on wood with teeth; shelf with purple margin

4. SHAPED LIKE UNDERWATER CORAL

- Clavulina: small, branched, white or purplish
- Clavulinopsis: slender, unbranched to sparingly branched
- Ramaria: densely branched, often massive
- Sparassis: large, fleshy, cream-colored; like an Elizabethan ruff
- Tremellodendron: white, densely branched, very tough

5. VASE-SHAPED OR SHELF-LIKE WITH MORE OR LESS SMOOTH UNDERSURFACE

- Craterellus: dark gray-black to black, vase-shaped, fragrant
- Cantharellus lateritius: orange, like chanterelle but without gill-like folds
- Gomphus: vase-shaped, orange
- Thelephora: leathery tough; dark, vase-shaped

6. CLUB-SHAPED WITH OR WITHOUT SOMETHING ON TOP OF CLUB

- Clavariadelphus: yellow to orange, club-shaped, narrowing downward
- Stinkhorns: Phallus, Mutinus
 - Dictyophora: phallic structure with short skirt below head
 - Phallus: phallic structure without skirt below head
 - Mutinus: cylinder narrowing, with green slime mass at tip
- Morchella: spongelike head on a hollow stem
- Helvella: saddle-shaped head on a stem
- Gyromitra: brain-shaped head on a stuffed stem
- Trichoglossum: earthtongue, usually black

Spathularia: spatula-shaped, short earthtongue on the ground
 Cordyceps: more or less roundish head on stalk on buried tuber or insect
 Hypomyces hyalinus: white mold covering phallic-like Amanita
 Xylaria: misshapen black fingers in clusters; context white

7. CUP OR SAUCER-SHAPED

Cup or saucer fungi: fragile, cracks on bending
 Aleuria: bright orange cups along path sides
 Bisporella: tiny, yellow discs on wood
 Chlorociboria: blue-green stain on wood with blue-green cups
 Peziza: fragile cups, often brown, mostly on ground
 Scutellinia: tiny, orange red cups with marginal eyelashes
 Cup-shaped or ear-shaped fungi: rubbery, non-breaking
 Auricularia: earlike on wood, rubbery, bendable
 Cup-shaped, small, on wood, with egg-like packets in “nest”
 Crucibulum: tiny, cuplike on wood, with “eggs” in cups
 Rabbit-ear shaped fungi
 Wynnea: moose-ear shaped, dark with reddish interior

8. BALL-SHAPED

Lycoperdon: opening by apical pore; flesh white to greenish, skin thin
 Scleroderma: opening by apical pore; flesh becoming blackish, skin thick
 Calvatia: puffball opening by cracks in outer layer
 Geastrum and Astraeus: looking like lunar landers with central puffball
 Calostoma: puffball with red “mouth”; stalk encased in a thick jelly
 Entoloma abortivum: white, misshapen, typically in clusters near tree trunk
 Daldinia: on wood; small, hard, carbon-like; concentrically zoned context

9. AN AMORPHOUS JELLYLIKE BLOB

Tremella and related fungi: amorphous jellylike blobs on wood
 Syzygospora (=Christiansenia): amorphous jellylike blobs on Collybia

10. A MOLD COVERING ANOTHER MUSHROOM

Hypomyces chrysospermus: white to yellow mold on many boletes
 Hypomyces hyalinus: white phallic-like mold on Amanita rubescens
 Hypomyces lactifluorum: orange mold on white Lactarius and Russula.
