Contents

A rare example of a young *Bridgeoporus nobilissimus*, the largest polypore of all.

A Polypore known only from a few old growth forest sites in Cascadia

10” Mushroom Quiche
Best with Morels. Great with King Boletes or Chanterelles
Modified from
Mushrooms Love Herbs by Ruth Bass

Ingredients:
2 Tbsp butter
1.5 ounce dried mushrooms (reconstituted with about 1 cup boiling water)
or 0.75 pound fresh mushrooms or about 0.25 pound duxelles
Unbaked 10-inch pie shell
2.5 cups shredded cheese (Swiss and/or asiago and/or provolone)
4 eggs
1 cup light cream (or quark) blended with 0.75 cup milk
1 Tbsp minced fresh sage
2 Tbsp chives (or 1 Tbsp minced parsley)
Salt and freshly ground black pepper plus 0.25 tsp dry mustard

Preparation:

In medium skillet melt butter and sauté the mushrooms (chopped medium) over medium heat until golden but not browned.

Preheat oven to 350° (or 375°F).

Cover the bottom of the pie shell with shredded cheese and the mushrooms.

Beat the eggs, cream, milk, sage, chives or parsley, salt, pepper and dry mustard. Pour into the pie shell.

Bake for 40 to 50 minutes until firm and browned. Serve warm. Six to eight servings.

Key to the Fungi of Cascadia

1a. Fleshy, with thin blade-like ‘gills’ on the underside of the cap (with or without a stipe) - the gilled fungi 175a page 139




1b. Non-Gilled Fungi 2a

2a. Fruitbody an unbranched fleshy to woody club 168a page 135




↓2b. Fruitbody gelatinous (the jelly fungi) 154a page 129




↓2c. Fruitbody with spines under a cap or with hanging icicle-like structures, soft or woody 140a page 119




↓2d. Fruitbody coral-like with up-ward pointing tips or in one case lobes (the coral fungi) 118a page 105




↓2e. Fruitbody like a tiny bird's nest; or ± round, inside a solid to powdery mass (puffballs, earthballs); or a stinking fruitbody erupting from a volval egg (stinkhorns) 106a page 97




↓2f. Fruitbody ± buried, ± globular (truffles); or with a stipe but developing in a volva underground (desert stalked puffballs, etc.) 97a page 91




↓2g. Fruitbody woody or leathery, or soft with inseparable pores (polypores & crusts + other) 66a page 67




2h. None of the above, fruitbody fleshy 3a

Illustrated species for key entries 1a through 3d (listed left to right)

1a. *Amanita muscaria, Cortinarius albofragrans, Crepidotus mollis* & *Laccaria montana;* 2a. *Clavaria rosea, Clavaria fragilis, Clavariadelphus truncatus, & Xylaria hypoxylon;* 2b. *Ascocoryne sarcoides, Auricularia americana, Dacrymyces chrysospermus, & Dacryopinax spathularia;* 2c. *Echinodontium tinctorium, Hericium erinaceus, Hydnellum caeruleum, & Hydnum neorepandum;* 2d. *Clavulina coralloides, Ramaria araiospora, Sparassis radicata, & Ramaria purpurissima; 2e. Nidula niveotomentosa, Calbovista subsculpta, Mutinus caninus, & Scleroderma cepa;* 2f. *Geopora cooperi, Leucophleps magnata, Rhizopogon vinicolor, & Montagnea arenaria;* 2g. *Bondarzewia occidentalis, Fistulina hepatica, Trametes ochracea, & Hyphodontia sambuci;* 3a. *Cordyceps militaris, Gymnosporangium sp., Hypomyces lactiflorum,* & *Hypomyces rosellus;* 3b. *Caloscypha fulgens* (albino), *Cheilymenia fimicola, Ciboria rufofusca & Mitrula elegans;* 3c. *Morchella tridentina, Gyromitra montana, Helvella crispa, & Helvella 01mwb032815; 3d. Caloboletus calopus, Boletus mottiae Leccinum discolor, Suillus pungens; 3e.Turbinellus kauffmanii, Cantharellus formosus, Craterellus calicornucopioides, & Gomphus clavatus*

3a. Parasitizing another mushroom, an insect, or causing deformed plant growth (various ascomycetes) 64a page 63




↓3b. Fruitbody a fleshy cup-like to club shaped ascomycete 40a page 48




↓3c. Brain-like, saddle-like, wrinkled, or ridged ascomycete 26a page 39




↓3d. With soft removable sponge under the cap (boletes) 5a page 23




3e. With a stipe, underside of cap smooth, veined or with blunt ridges 4a page 20




Note: see previous page for names of species illustrated in 3a through 3e

4a. (3e) Thin-fleshed, hollow, underside smooth to wrinkled

Craterellus 'tubaeformis' *Craterellus calicornucopioides*

Comments: *C. tubaeformis* is known from Europe and our regional species is distinct . Our species may be named *C. neotubaeformis.* It is a 2-3" wide distinctive edible found under conifers late in the season at all elevations. *Craterellus calicornucopioides* (1-4" wide, see also 3e for an unusual form) is distinctive and common on the coast winter to spring from southern Oregon to central California, found in clusters near oaks and sometimes pines. It is one of the choicest of all mushrooms. The odor is fruity when fresh and cheesy pungent when dried.

↓4b. Deeply depressed center, vase-shaped, underside bluntly ridged

Turbinellus floccosus Very young *Turbinellus floccosus*

Comments: *T. floccosus* is distinctive, large (2-6" wide), and abundant (late summer and fall) in many habitats. It is fleshy like a *Chanterelle* and can be rosy to orange. *T. kauffmanii* (illustrated in lead 3e) is tan. *Turbinellus* species can cause significant stomach problems if eaten.

↓4c. Grows singly; not hollow; flesh stringy like a chicken breast when pulled apart; cap dull egg-yellow, bright egg-yellow, rosy-tan or white in color, bruising orange; ± faint apricot odor

1 = Cantharellus formosus group

2 = *Cantharellus cascadensis*

3 = *Cantharellus roseocanus*

4 = *Cantharellus subalbidus*

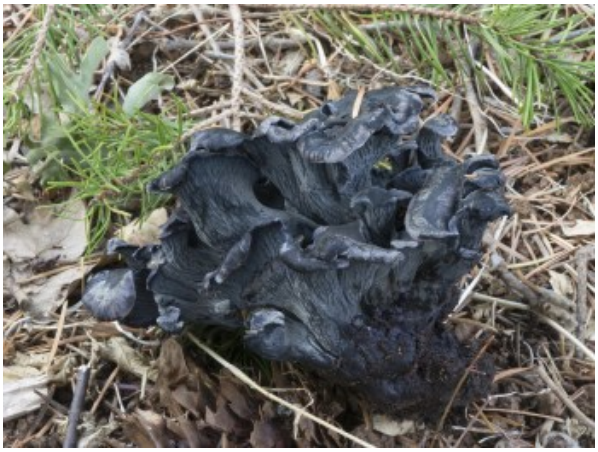
Comments: These four distinctive edible species appear from July through November and are distinguished by cap versus underside color. The members of the *C. formosus* group (1-5" wide) are found at all elevations, usually under conifers. They have a dull egg-yellow cap and underside (a photo showing a top view is in key entry 3e). *C. roseocanus* (1-5" wide) is associated with spruce. The cap has a rosy blush when young and the underside is very bright egg-yellow in color. *C. cascadensis* (2-6+" wide) has a bright egg-yellow cap and the underside is white. Found <2,000' under both firs and oaks in southern Washington and in the Oregon Cascade Mountains. *C. subalbidus* (2-6+" wide) with a white cap and white underside is found at all elevations under conifers. All are most flavorful before the heavy rains. Best eaten fresh or made into duxelles and frozen to preserve. They dry hard and do not reconstitute well.

↓4d. Growing in fused clusters, not hollow; underside tan to violet

Gomphus clavatus

Comments*: G. clavatus* (up to 6" wide)*,* "pigs ears," is unique with its lavender underside and tan cap. It is considered a very good edible by some people but is often riddled by the larvae of fungus gnats. It fruits under conifers in the late summer and early fall. Related to coral fungi (*Ramaria*).

4e. In fused clusters, fleshy, blue to black underside *Polyozellus* species



Polyozellus atroazulinus *Polyozellus marymargaretae*

Comments: Three *Polyozellus* species are commonly called "blue chanterelles". One species *Polyozellus purpureoniger* (not illustrated), is so far known from coastal Washington and Alaska. The three are challenging to tell apart, requiring microscopy and even DNA evidence to be sure. They are found late summer through fall under spruce and other conifers at elevations above 3,000 feet in clusters up to 12" wide. All three are edible but bland. However, they are valued by fabric artists for preparing dyes for silk and wool and they contain compounds of interest to researchers seeking cancer cures, notably stomach cancer. Until 2018, all three were known as *Polyozellus multiplex*, a species now known to be restricted to Northeastern North America. They are in the Thelephorales and are more closely related to polypores than to chanterelles.

5a. (3d) Bolete with a viscid cap and/or with a partial veil when young that may leave a ring on the stipe when mature 14a

5b. Non-viscid (or only slightly slimy) bolete lacking both a partial veil and a ring on the stipe 6a

6a. Stipe lacking scabers 7a

6b. Stipe with scabers (soft rasp-like scales) *Leccinum* species

1 = *Leccinum insigne*; 2 = *Leccinum ponderosum;* 3 = *Leccinum holopus; 4 = Leccinum scabrum*

Comments: North American *Leccinum* species need critical study. All *Leccinum* species are considered edible, but many people suffer flu-like symptoms after consuming them. If you do choose to eat *Leccinum* species, make certain to very thoroughly cook them. *L. insigne* (flesh darkening without first turning pinkish) and *L. discolor* (key entry 3d, flesh staining pinkish then smoky) are found under aspens spring-fall and are very similar. *L. ponderosum* is found late summer to early fall above 3,000' under conifers. Caps can reach over a foot in diameter. The cap flesh does not stain when cut. *L. manzanitae* (2-12"wide) is very similar and is found associated with manzanita. It bruises pinkish-red then smoky when cut. *L. holopus* and *L. scabrum* are associated with birch, summer and fall. Both have weak staining reactions. Descriptions of 16 *Leccinum* species are in MycoMatch.

7a. (6a) Boletes with coppery, brown, orange or red pores when young 11a

↓7b.Stipe ± netted; ± blue bruising; flesh colors various 9a

↓7c. Rapidly bruises intensely blue when bruised; flesh yellow or white 8a

7d. Stipe rudimentary to absent; sponge contorted former *Gastroboletus* species

Boletus subalpinus

Comments: *B. subalpinus* (2-5" wide) is a mild tasting truffle-like species closely related to *B. edulis.* It develops underground and sometimes is found under mountain conifers from about 3,000' to the tree line. Formerly in *Gastroboletus.* Edible.

Gastroboletus turbinatus

Comments: *G turbinatus* 1-2.5" wide is a common and widespread truffle-like species that typically develops partly underground under mountain conifers but can be found at times under low elevation conifers. Indistinct odor and taste. The edibility of this small fungus is unknown. *Gastroboletus ruber* (= *Truncocolumella ruber*) is similarly colored but lacks a distinct cap. It is nearly spherical to top-shaped. *G. ruber* is found in the Cascades above 4,000' and is typically associated with mountain hemlock. Both *G. turbinatus* and *G. ruber* are going to be moved to *Neoboletus*.

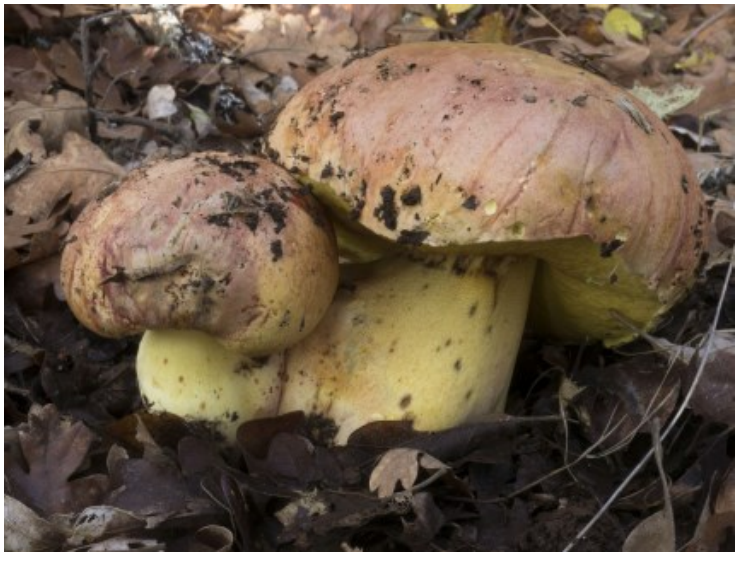
↓8a. (7c) Mild; stipe netted; yellow flesh; intense bluing; under conifers

Butyriboletus abieticola

Comments: Found late summer under conifers above 3,000', cap 3-5" wide. *Butyriboletus primiregius* (rare) with a redder, smoother cap, fruits in the spring in the mountains. Both have good flavor. The bitter *Caloboletus conifericola* and *Caloboletus rubripes,* are often found nearby. All bruise intensely blue.

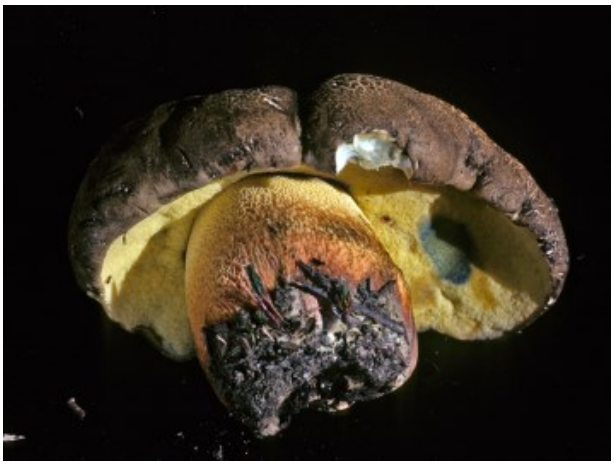
↓8b. Mild; stipe finely netted; yellow flesh, intense bluing, under oaks

Butyriboletus querciregius (2 images).



Comments: Fruits in the fall and sometimes in the spring below 2,000', caps 2-10" wide). Firm texture and good flavor. The edible brown-capped butter bolete, *Butyriboletus persolidus*, may also be present in the same low elevation oak habitats. A similar redder capped bolete, *Butyriboletus primiregius,* fruits in the mountains in the spring. *B. primiregius* is choice. *Caloboletus marshii,* an intensely bitter bolete, lacks netting and fruits under oaks during the hot, dry weather of mid-summer. All four species rapidly blue when bruised.

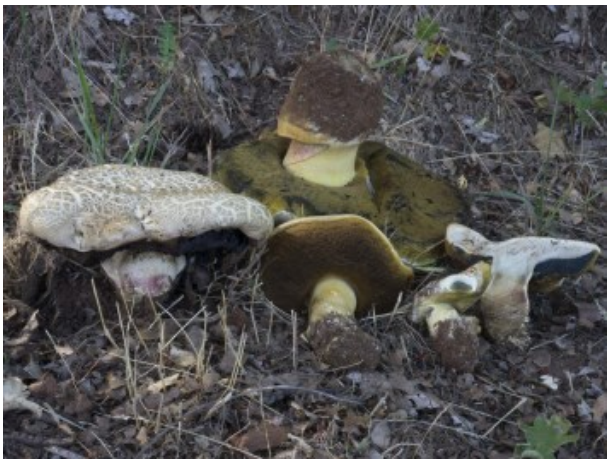
↓8c. Bitter; stipe ± finely netted; intense bluing; under conifers



1 = Caloboletus conifericola; 2 = Caloboletus cf 'calopus'; 3 = Caloboletus rubripes

Comments: *C. conifericola* is distinguished by the absence of red on the stipe and by presence of very fine netting on the upper stipe (but it might take a hand lens to see the netting). Both *C. 'calopus'* and *C. rubripes* have red on the stipe. *C. 'calopus'* has very distinctive netting while *C. rubripes* is not netted. Note: the mushroom I am calling *C. 'calopus'* is not a good match for either what others have called *Boletus calopus v. calopus* or for *B. calopus v. frustosus* and might well be an unnamed species. All three taste bitter when raw, intensely bitter when cooked. These large, stocky, intensely blue-staining boletes can be common under conifers, August until snow.

8d. Bitter; upper stipe plain; bluing; **under oaks**; cap 2-6" wide

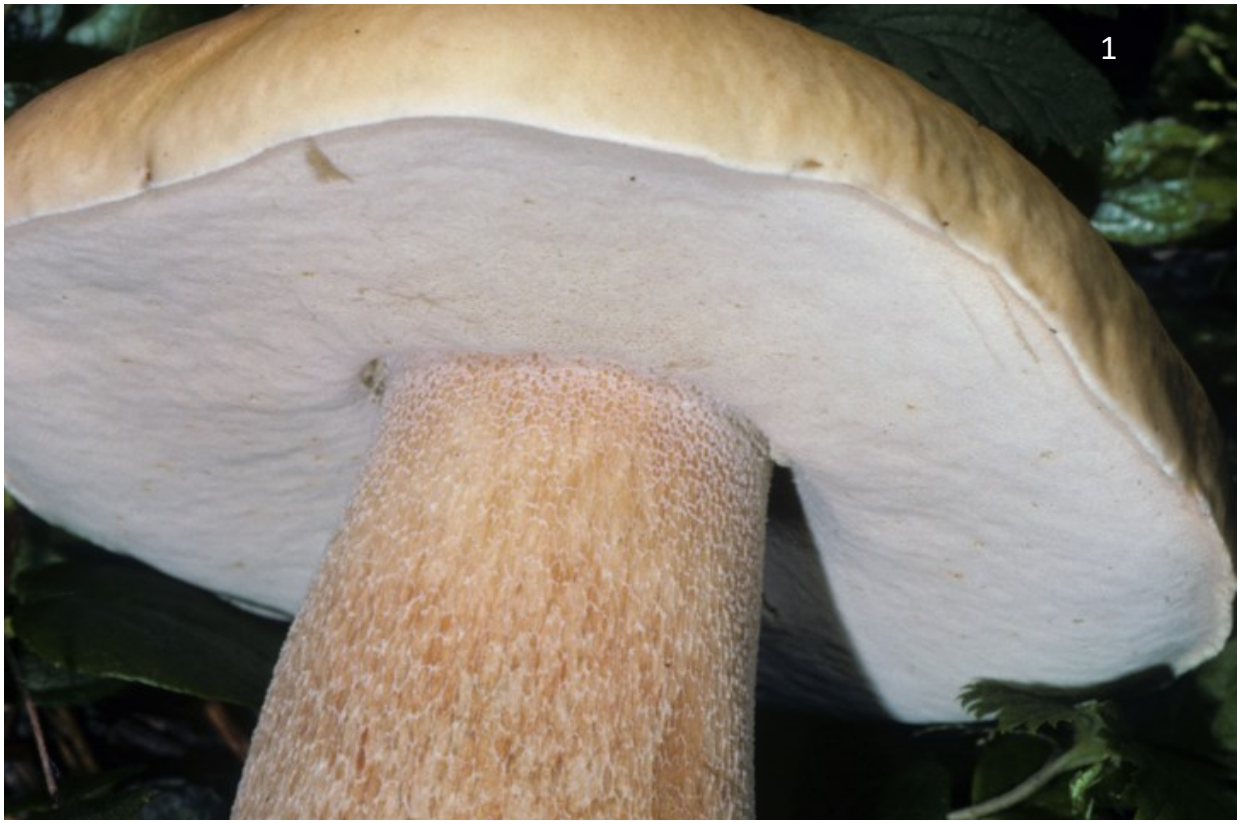


Caloboletus marshii

Comments: Fruits in August in hot, dry weather. Can be mild when tasted raw, but always intensely bitter no matter how it is cooked. Distinguished from the "butter boletes" by the absence of fine netting on the stipe. Has a short, stocky stipe, blues intensely. Inedible.

9a. (7b) Mushroom bruises blue, but bruising not intense and rapid 10a

↓9b. Rarely slightly blue staining, stipe with a fine to coarse netted pattern; flesh white; tubes white when young *Boletus edulis* complex



Boletus edulis var. edulis (1 and 2) *Boletus barrowsii* (3)

Comments: *B. edulis* var. *edulis* is found under spruce above 3,000' August-October and on the coast starting in August in Alaska into winter in California. *B. edulis var. grandedulis* is a coastal species with a beige to reddish-brown cap found under shore pines and hardwoods. *B. barrowsii* is a white to grayish capped look-alike found inland under conifers and hardwoods. All three are choice and distinctive. All have sponge that turns olive in age. All can grow in stupendous abundance.

↓9b. The *Boletus edulis* complex (continued)

Boletus fibrillosus

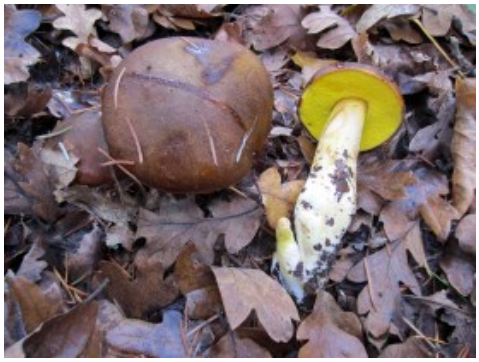
Boletus rex-veris

Boletus mottiae

Boletus regineus

Comments: *B. fibrillosus, B. rex-veris*, *B. mottiae* and *B. regineus* are all distinctive species closely related to *B. edulis*. All are good to choice edibles. *B. fibrillosus* is uncommon, found under mixed conifers in the fall at elevations from 2,500' to 3,500' and is the least tasty of the group. The tubes of *B. fibrillosus* are yellowish when young. *B. rex-veris,* the "spring king" is found under mixed conifers in open woods, often near pines, from early April (elevations around 1,000') through early July (elevations 3,000' to 3,500'). *B. mottiae* is a very uncommon fall species with a distinctive ridged cap surface and supposedly very fine reticulation, though the few I have seen were strongly reticulated. *B. mottiae* might simply be a variation of *B. regineus. B. regineus*, the "queen bolete" is found in October below 2,000' under mixed conifers where oaks and often pines are present. The caps of *B. regineus* are dark brown but covered with a distinctive powdery white to gray bloom when young.

↓9c. Associated with hardwoods; ± viscid; bright yellow pores



Aureoboletus flaviporus

Comments: This uncommon species is very distinctive and easy to distinguish from other boletes. The cap is cinnamon to reddish-brown, 2-6" wide. Though technically edible, the viscid cap, soft flesh and acid taste would make for an unpleasant meal. Rarely found in any quantity. Previously known as *Boletus flaviporus.*

↓9d. In the fall on rotting conifer (hemlock) logs; velvety cap (2-8" wide)

'Boletus' mirabilis

Comments: In a good year fruits at all elevations starting in August in the mountains, lasting through October or November at lower elevations. The cap has a lovely velvety feel. Unique and distinctive, this lemony flavored bolete is a good beginner's mushroom. A very good edible. Long known as *Boletus mirabilis*, this will need a new genus. It had been placed in *Aureoboletus,* but is unrelated.

9e. Yellowish stipe with tiny scales, reddish near base; with hardwoods

Hemileccinum subglabripes

Comments: Cap up to 4" wide, chestnut to reddish-brown. Pale yellow flesh rarely turns slightly blue when cut. Indistinct odor. Taste mild to slightly acidic. Edible. Uncommon, usually with birch, sometimes with conifers.

10a. (9a) Cap (2-6") olive buff to olive yellow, red in age

'Boletus' smithii

Comments: The cap is velvety to fibrillose. The stipe always has red present. The flesh may or may not bruise blue. It is edible with a mild flavor unlike the somewhat similar bitter bolete, *C. rubripes. B. smithii* is found at all elevations. This species will be transferred to a small new genus, *Pulchroboletus.*

↓10b. Cap (1-3”) dark vinaceous black, a ± faint bloom

Xerocomellus zelleri

Xerocomellus atropurpureus

Comments: Both *X. zelleri* and *X. atropurpureus* are considered good edibles. The main visual difference in the two species is that the cap of *X. zelleri* is finely velvety when young and always has a lighter whitish beige to yellowish tan band on the cap margin while *X. atropurpureus* lacks both features. Both have long been known as *Boletus zelleri*. Both found late summer-fall under conifers and hardwoods.

↓10c. On ground; cap (2-3”) brown and cracked; ± pink in the cracks

Xerocomellus diffractus group

Comments: Common and widespread. *X. ‘diffractus’* (= *Boletus chrysenteron*) is a mediocre edible. We may have up to 4 similar species in the group. They can easily be confused with the better tasting vinaceous black *X. zelleri.* Widespread in fall under conifers and hardwoods.

↓10d. Velvety cap; pores pale brown when young; pores & flesh ± bluing

Porphyrellus porphyrosporus

Comments: Cap 2-6” wide; stipe 1.5– 5” long. White flesh stains blue then reddish-brown. Odor somewhat of antiseptic, taste mild to a bit bitter. Edibility? In mixed and coniferous woods, sometimes on wood, summer and early fall.

10e. Slightly viscid, tomentose yellow cap; on wood chips or near stumps

Buchwaldoboletus sphaerocephalus

Comments: Cap 2-4" broad, nearly flat in age, often cracked like mud. Pores stain blue then brownish. Stipe 2-4" long, yellow, lacking reticulations. Indistinct odor and taste. Edibility not reported. Uncommon in our area. Photographed in the fall on a sawdust pile.

11a. (7a) Fruits under oaks and sometimes other hardwoods 13a

11b. Fruits most often in coniferous forests 12a

12a. Slender; pores coppery to pinkish; stipe base yellow; cap 1-3" wide

Chalciporus piperatus

Comments: This common small, peppery bolete is believed to be toxic. It does not stain blue and the flesh is yellow. *C. piperatus* is suspected of being a mycoparasite on *Amanita muscaria* mycelium. It can be found at all elevations in the late summer and fall.

↓12b. Cap (3-8" wide) dark reddish-brown; blue-staining; red pores

Rubroboletus pulcherrimus

Comments: Causes severe gastric distress and one recorded death. I will taste and then spit out any mushroom, even known deadly species, except for *R. pulcherrimus* and *R. eastwoodiae.* Fortunately, it is rare, appearing in late summer and fall. *Neoboletinus* species are under conifers and sometimes hardwoods, but are rare.

12c. Non-bulbous stipe with a granular covering; cap blackish-brown to reddish


Neoboletus 'luridiformis' (both)

Comments: Two undescribed species are found in this region. The cap surface turns red in KOH, quickly darkening; the flesh turns yellow to pale orange in KOH. Cap 2-5" wide, stipe 2-4" long. Indistinct to unpleasant odor and taste. Edible for many, but not all.

13a. (11a) Medium stature (caps 2-5" wide); non-reticulate stipe with reddish granules; red to orange tube mouths; blue bruising of all parts

Suillellus amygdalinus

Comments: *S. amygdalinus* is common in warmer and drier microclimates of Washington and Oregon, fruiting from late September through November under oaks and other hardwoods. Found in warmer parts of coastal California where fruiting can continue into spring. Indistinct odor, mild taste. Edible for many but not recommended.

13b. Stipe reticulate, bulbous; red tube mouths; blue staining

Rubroboletus eastwoodiae

Comments: This infrequent, distinctive, extremely poisonous species was long known as *Boletus satanas*. Found below 2,000' October through December under oaks. Large (3-12" wide). Odor mild, becoming like dung in age. Taste indistinct. Do not even taste it.

14a. (5a) Stipe lacking a persistent ring or ring zone 21a

14b. Stipe with a persistent ring or ring-zone 15a

15a. Flesh of stipe base not staining bluish-green 17a

15b. Stipe base staining bluish-green within 15-30 minutes 16a

16a. Cap (2-6" wide) fibrillose-scaly when young, cinnamon to brick red

Suillus lakei var. *lakei* *Suillus lakei* var. *pseudopictus*

Comments: Blue staining is weak and only at the base of the stipe. Pores bruise brown. Cap slightly slimy, slightly to strongly fibrillose. Abundant under Douglas fir at all elevations. Appearing in the mountains in late summer. *S. lakei* v. *pseudopictus* is distinguished by larger scales and a redder cap. Okay edible (for a *Suillus*).

16b. Cap (2-6" wide), yellowish-brown to orange-brown, scattered fibrils

Suillus caerulescens (left)

Suillus ponderosus (right)

Comments: These two species are very hard to distinguish, especially in age. When young, the *S. ponderosus* veil has a yellow viscid lower layer that is absent in *S. caerulescens.* Both exhibit weak blue-staining at the stipe base and elsewhere bruise brown. Cap slightly slimy, not fibrillose. Abundant under Douglas fir and other conifers at all elevations starting in late summer and until snowfall. Both are okay edibles when young, though slimy in age. Among the better tasting *Suillus* species.

17a. (15a) Cap viscid (slimy), not woolly-fibrillose-scaly, under various trees 19a

17b. Cap dry, woolly-fibrillose, associated with western larch 18a

18a. Cap (1-4” wide) brown scales on yellow; stipe base hollow

Suillus ampliporus

Comments: Resembles *S. lakei* but easily distinguished by the hollow stipe (and angular pores). Always near larch in the mountains starting in late summer until snowfall. A good edible (for a *Suillus*). Very distinctive. Long known as *Suillus cavipes.*

18b. Cap (3-8” wide) fibrillose-scaly, rosy-red; stipe base not hollow

Suillus ochraceoroseus

Comments: This unique and distinctive species was long known as *Fuscoboletinus ochraceoroseus.* It fruits in late summer through fall in the mountains, always in association with western larch. It is bitter and thus not suitable as an edible.

19a. (17a) Associated with western larch; cap (1.5-6” wide) viscid; veil viscid

Suillus clintonianus

Comments: Glutinous cap and outer veil. The margin of the cap, the partial veil and ring it leaves are yellow. It is common wherever larch is present and was long known here as *Suilllus grevillei.* It fruits late summer into fall. Distinctive. Edible but not desirable.

19b. Associated with other conifers, especially pines 20

20. Cap (<5”) viscid; veil viscid

1 = *Suillus acidus* (= *S. subolivaceous*) 2 = *Suillus flavidus* (= *S. umbonatus*)

3 = *Suillus americanus* (= S. *sibiricus*) 4 = *Suillus luteus*

Comments: *S. acidus* is typically associated with western white pine but also can be under other conifers. It has conspicuous glandular dots on the stipe. It is 2-4” wide, fruits late summer-fall and has a mild odor and slightly acid taste. *S. flavidus* is slimmer and smaller, up to 2” wide with indistinct glandular dots on stipe. It fruits under lodgepole and shore pines. Odor indistinct, taste sour. *S. americanus* is associated with western white pine. All parts bruise dull cinnamon to vinaceous brown. Dark brown glandular dots on stipe. Odor indistinct, taste indistinct to acidic or bitter. Some reports of contact dermatitis. *S. luteus* is associated with several conifers species. It is 2-5” wide and mainly fruits in the fall. It does not stain. The stipe is glandular dotted, at least above the ring. The odor and taste is mild. None of these four species are desirable as edibles. If you choose to eat them, remove the slime layer to minimize episodes of diarrhea.

21a. (14a) Cap (<6”) margin with a cottony roll when young

1 = *Suillus glandulosipes; 2 = Suillus brunnescens*; 3 = *Suillus pseudobrevipes*

Comments: *S. glandulosipes* has a buff cap when young, aging orangish cinnamon with a white partial veil that does not leave a ring. *S. brunnescens* (= *S.* borealis) has a cap that can be whitish to orange cinnamon and aging vinaceous-brown with a white to red-brown partial veil. *S. pseudobrevipes* is pale to dark honey-yellow with a whitish partial veil. All are mainly found under pines late summer and fall and all have glandular dots on the stipe. Gastrointestinal problems possible if eaten. All three are bland edibles.

21b. Cap margin naked 22a

22a. Stipe with brownish glandular dots (dark brownish spots) 23a

22b. Stipe lacking glandular dots; cap (<4”) dark red-brown to cinnamon

Suillus brevipes

Comments: This non-bruising species is very common under pines. The cap can be much darker reddish-brown. *Suillus pallidiceps,* also under pines, looks like a pale variant, with a white to yellow to cinnamon-buff cap. Both are bland edibles, with no similar toxic species.

23a. Flesh bluing when cut; cap (<5”) more or less wooly

Suillus tomentosus var. *tomentosus* *Suillus discolor*

Comments: Both *S. tomentosus* and *S. discolor* are common in the fall under pines. *S. discolor* was long considered a variety of *S. tomentosus* but proved to be sufficiently distinct to be raised to species rank. The surface fibrils of *S*. *discolor* easily wash off in the rain and then it resembles *S. tomentosus*. Sometimes these species literally carpet the ground under pines. Edible but sour.

23b. Not bluing when bruised 24a

24a. Cap ± bald 25a

24b. Cap (<6”) very fibrillose-scaly

Suillus cf fuscotomentosus

Comments: When older, the fibrils are thinner and *S. fuscotomentosus* resembles a non-bluing *S. tomentosus.* Common in the fall under pines. Edible but poor flavor.

25a. (24a) Pores small, 1 mm maximum; cap (<5”) pale yellow to brown

Suillus ‘granulatus’

Comments: The photo is of eastern *S. ‘granulatus’* which is distinct from the European species. The new name is unresolved but *S. weaverae* is likely. We have one or two similar species of “milk mushrooms” since there often are milky droplets on the pores. *S. subalpinus* is one proposed name for a species that looks much like this one. They fruit in the fall under pines and are mild tasting edibles.

25b. Pores large, over 1 mm; cap (<6”) orange-cinnamon to purplish-brown

Suillus punctatipes

Comments: Pores are radially arranged and elongated. Fruits late summer through fall under mixed conifers, often white pine. Edible (but bland). On all viscid *Suillus* species, the slime layer should be removed (or a brief spell under the broiler can dry up the slime layer).