

Galerina vittaeformis (Fr.) SingerROD name *Galerina vittaeformis*

Family Cortinariaceae

Morphological Habit mushroom

Description: CAP 5-12 mm diam., broadly conic, campanulate to nearly plane, broad umbo, distinctly striate, sulcate, crenulate margin, moist but strongly hygrophanous, not fibrillose but appearing almost cellular; tan with red-brown tones. Occasional veil fragments adhering to edge of cap in younger specimens. **GILLS** adnate to toothed-decurrent, moderately broad, tan to yellow-brown, with serrate edges. **STEM** 20-30 mm long x 1 mm in diam., equal, flexuous, pruinose from caulocystidia along its full length when young, but only along upper half as it ages. **ODOR AND TASTE** not distinct to mildly farinaceous. **BASIDIA** 22-36 x 8-9.5 μ m, 4 spored. **CHEILOCYSTIDIA** fusoid-ventricose with rounded, subcapitate apex, some branched near apex, 36-80 x 6-17 μ m, 2.5-5 μ m in diam at apex, hyaline, with some darkening in age. **PLEUROCYSTIDIA** scattered, same or longer length, more slender necks and undulating. **CAULOCYSTIDIA** similar to cheilocystidia. **PILEOCYSTIDIA** absent. **CLAMP CONNECTIONS** present. **SPORES** amygdaliform, 8-10.5 x 5.5-7.5 μ m, ornamentation finely punctate, pale brown.

Distinguishing Features: *Galerina vittaeformis* can be distinguished from all other species by the abundant cystidia on the stem and gills and the small spores.

Distribution: Widely distributed in the Northern Hemisphere. Known from many dozens of locations throughout the range of the Northwest Forest Plan.

Substrate and Habitat: Single to gregarious, can be found with a variety of mosses, mostly on soil, but also on moss-covered logs.

Season: Summer and autumn.

Reference: Smith, A.H.; Singer, R. 1964. A monograph of the genus *Galerina* Earle. New York: Hafner Publishing Co. 384p.

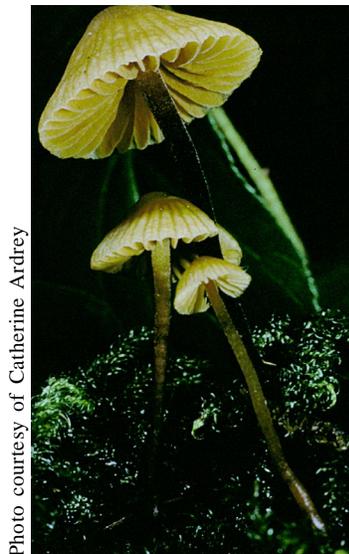
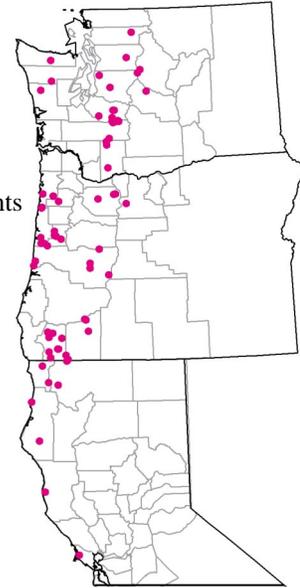


Photo courtesy of Catherine Ardrey



Photo courtesy of mycology team

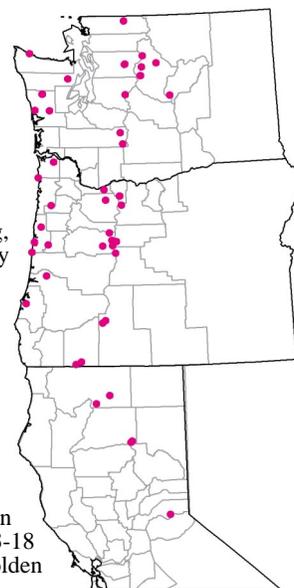
Gastroboletus turbinatus (Snell) A.H. Smith & Singer

ROD name *Gastroboletus turbinatus*

Family Boletaceae

Morphological Habit truffle

Description: **SPOROCARP** 20-55 (-80) x 20-50 (-7) mm, cap margins strongly upturned at maturity, yellow to various shades of brown, often with red areas or red blushed overall. **CONTEXT** pale yellow, staining blue where exposed, later becoming red to brown. **TUBES** adnate-seceding, at maturity angled from below horizontal to nearly vertically upward, often contorted, 10-40 mm long, in youth yellow, later olive, staining blue, initially yellow but soon becoming olive and often slightly to strongly red at maturity. **STEM** centrally or sometimes laterally attached, nearly always percurrent, 10-20 (-70) x 8-20 mm, equal to downward tapered, often not projecting much below the tubes, solid, yellow at apex, often more orange-yellow to red or red-brown below, quickly bluing where bruised. **CONTEXT** yellow, often developing pink areas near the apex to becoming deep red throughout, bluing slightly to strongly when exposed. **ODOR AND TASTE** not distinct. **PILEIPELLIS** of hyaline to yellow, thin-walled hyphae 3-5.5 (-9) μm in diam., the cells mostly slightly inflated, releasing a golden yellow pigment in KOH mounts, in youth forming a palisade of cystidiumlike hyphal ends that these soon collapsing. **STIPITPELLIS** with a basal, subhymeniumlike layer giving rise to a patchy palisade of fertile basidia and brachybasidioles 15-27 x 9-14 μm and ventricose to mucronate, yellow caulocystidia 30-42 x 8-11 μm . **BASIDIA** clavate, hyaline to yellow, 30-40 x 9-14 μm ; 4-spored. **CYSTIDIA** 35-60 x 9.5-17 μm , ventricose-mucronate to pedicellate-ampullaceous, often with a long, thin neck, the apex mostly obtuse. **CLAMP CONNECTIONS** absent. **SPORES** fusoid, (9.5-) 13-18 (-20) x (5.5-) 6.5-9.5 μm , symmetrical, smooth, the walls 0.5 μm thick, the apex obtuse to acute, golden yellow singly and bright brown-yellow in mass, inamyloid.



Distinguishing Features: *Gastroboletus turbinatus* is closely related to *G. ruber*, but the latter has a dendroid columella and lacks a well-defined stem or cap. *Gastroboletus vividus* may occur in the same habitats as *G. turbinatus*, but the former has much brighter colors than the latter and does not turn blue where bruised.

Distribution: Washington, Oregon, northern California, Idaho, Missouri, and Mexico. **CALIFORNIA**, Shasta Co., Lassen National Park (LNP), Summit Lake; LNP, Shadow Lake trail; Shasta-Trinity National Forest (STNF), Bear Springs; STNF, Mount Shasta; **Siskiyou** Co., head of the south fork of Salmon River; **OREGON**, Benton Co., Bureau of Land Management, Mary's Peak Resource Area, Grass Mountain; Siuslaw National Forest, Mary's Peak summit; **Clatsop** Co., Fort Clatsop National Monument; **Coos** Co., near South Slough Estuaries Sanctuary headquarters south of Coos Bay; **Douglas** Co., Tahkenitch Lake campground; **Hood River** Co., Mount Hood National Forest (MHNF), Tilly Jane campground; **Jackson** Co., 1.6 km east of Dutchman Peak; Dutchman Peak; west slope of McDonald Peak; Rogue River National Forest, MacDonald Basin; **Jefferson** Co., Willamette National Forest (WNF), Canyon Creek basin; **Klamath** Co., Crater Lake National Park (CLNP), Cleatwood Picnic area; CLNP, Mazama Creek; CLNP, Annie Springs; **Lane** Co., WNF, West Lava campground; **Lincoln** Co., SNF, Cape Perpetua, Gwynn Creek; Depoe Bay; Rocky Creek State Park; Whale Cove State Park; **Linn** Co., WNF, Iron Mountain; WNF, Lost Prairie; WNF, Mount Jefferson Wilderness Area, Pamela Creek; **Multnomah** Co., MHNF, Larch Mountain; **Tillamook** Co., Cape Lookout; Oswald West State Park; **Wasco** Co., Devil's Half Acre; **WASHINGTON**, **Chelan** Co., Lyman Lake; north fork of Entiat River; Phelps Creek at wilderness boundary; Wenatchee National Forest (WENF), Nason Ridge; WENF, southwest of Rock Mountain; WENF, White River Rd.; WENF, Valhalla Mountain; **Clallam** Co., Clallam Bay Demonstration Forest; **Grays Harbor** Co., 1.6 km north of Copalis beach on Hwy. 109; Copalis; Olympic National Forest (ONF), 1.6 km south of Lake Quinault; ONF, north of Falls Creek on trail; **Jefferson** Co., Olympic National Park, Hoh park entrance; **King** Co., Denny Creek trail to Malakwa Lake above the second bridge; **Pierce** Co., Mount Rainier National Park, (MRNP) Lower Tahoma; MRNP, Ohanepecos; **Snohomish** Co., Mount Baker-Snoqualmie National Forest, Barlow Pass; **Whatcom** Co., U.S. Cabin, Chilliwack River.

Substrate and Habitat: Hypogeous to emergent, scattered to grouped in lowland forests of *Picea sitchensis*-*Tsuga heterophylla* and *Pseudotsuga menziesii* to montane and subalpine *Abies*, *Picea*, and *Pinus* spp.

Season: July through November.

References: Smith, A.H.; Singer, R. 1959.

Studies on secotiaceae fungi – IV.

Gastroboletus, *Truncocolumella* and *Chamonixia*.

Brittonia. 11: 205-223. Thiers, H.D.; J.M. Trappe. 1969.

Studies in the genus *Gastroboletus*. Brittonia. 21: 244-254.

Photo courtesy of Michael Castellano



Gomphus bonarii (Morse) Singer

ROD name *Gomphus bonarii*

Family Gomphaceae

Morphological Habit chanterelle

Description: **SPOROCARP** 3-7 cm broad, fleshy, margin spreading and undulating or lobed, depressed at the center, surface broken into thick floccose more or less erect scales that fill the central depression, scales orange at the tips blending to yellow at the base and giving the entire cap an orange-yellow color, fading to near pink-tan in drying; flesh white, firm, tapering to margin, relatively thin. **SPORE-BEARING TISSUE** obtuse, narrow, in the form of radially disposed decurrent folds or interconnected veins, primary folds sometimes decurrent half the length of the stem, color white when fresh, pale tan to brown when dried. **STEM** 20-40 mm long, 10-15 mm thick, solid, glabrous, white, enlarged upward into the cap, mostly fused with other stems (up to 13 from a common base), the entire cluster 5-7 cm tall, many undeveloped fruiting bodies sometimes present in the large clusters. **ODOR** indistinctive. **TASTE** not recorded. **BASIDIA** 44-70 x 7-8 μ m, narrowly clavate, hyaline, 2-6 spored. **CYSTIDIA** absent. **SPORES** subellipsoid, 10-12 (-14) x 5-6 μ m, smooth to slightly roughened, apiculate, hyaline to pale yellow, inamyloid.

Distinguishing Features: *Gomphus bonarii* is similar to *G. floccosus* but has less warty spores, and it forms closely caespitose clusters.

Distribution: **CALIFORNIA**, Mendocino Co., Jackson State Forest, Aleuria Glen; Mendocino National Forest (MNF), O'Neil Place Rd.; MNF, Well's Cabin campground; **Plumas Co.**, Lassen Volcanic National Park (LVNP), Devil's Kitchen trail; LVNP, Upper Warner Valley campground; **Siskiyou Co.**, Klamath National Forest (KNF), Duck Lake area; KNF, Marble Mountain Wilderness, Haypress trail; Shasta-Trinity National Forest (STNF), Military Pass Rd; STNF, Red Fir Flat; STNF, Sand Flats; KNF, Sugar Lake trail; STNF, Timber Hills Mountain; **Tehama Co.**, LVNP, Broke-Off Mountain trail; MNF, Doll Basin; near Mineral; **OREGON**, **Douglas Co.**, Bureau of Land Management (BLM), Swiftwater Resource Area, 2.4 km south of Wards Butte; BLM, near Jim Creek; Umpqua National Forest (UNF), about 0.8 km due east of Umpqua Hot Springs; UNF, edge of Drews Lake; **Klamath Co.**, Winema National Forest (WINF), south entrance to Crater Lake; WINF, 4.8 km north of Blue Springs; WINF, 4.8 km northeast of Sevenmile Marsh; WINF, Scott Creek campground; WINF, Upper Scott Creek; **WASHINGTON**, **Chelan Co.**, Wenatchee National Forest (WENF), Pole Ridge; WENF, Riverbend campground; WENF, Snow Creek trail #1531; **Kittitas Co.**, Diamond Lake, Union Creek; **San Juan Co.**, Matia Island; **Snohomish Co.**, Mount Baker-Snoqualmie National Forest, Sloan Creek campground.

Substrate and Habitat: Closely gregarious to caespitose, partly hidden in deep humus under *Pinus* and *Abies* spp.

Season: Spring and autumn.

Reference: Singer, R. 1945. New genera of fungi. Lloydia. 8: 139-144.

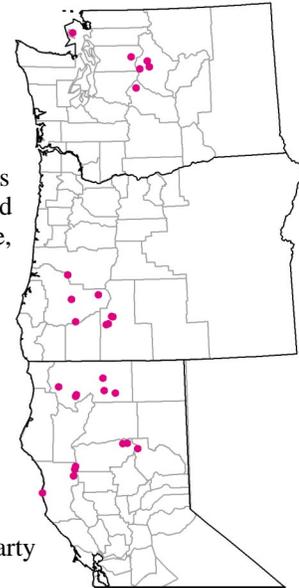


Photo courtesy of mycology team



Photo courtesy of David Arora

Gomphus clavatus (Persoon:Fries) S.F. Gray**ROD name** *Gomphus clavatus***Family** Gomphaceae**Morphological Habit** chanterelle

Description: **SPOROCARP** up to 15 cm tall. **CAP** surface flat, somewhat wavy, depressed to concave, crenate at margin, macroscopically smooth, covered with minute anastomosing patches of brownish hyphae separate and distinct toward the margin, but becoming a solid felty tomentum over the top, brown to yellow-olive. **SPORE-BEARING TISSUE** undulate-rugose to rugose, with or without discrete folds or pits, bright violaceous at the margin and junction with stem, and all over when immature, becoming covered with spores and duller in color. **STEM** solid, white at base and where protected, smooth above and there blending to pale dull violaceous, often bruising pale brown where handled. **ODOR** faintly earthy or none. **TASTE** musty. **CAP** surface a turf of pileocystidia 3.0-4.5 μm in diam., thin walled, densely scattered to fasciculate, protruding 50-120 μm from the surface, simple to commonly axially branched. **BASIDIA** 60-90 x 8.5-11.5 μm , elongate-clavate, hyaline, (2) 4 spored. **STERIGMATA** up to 8 μm long. **CYSTIDIA** absent. **CLAMP CONNECTIONS** present. **SPORES** ellipsoid to narrowly ovoid, (9.8-) 10.3-15.5 (-16.8) x 4.3-7.0 (-7.5) μm , near dark olive-tan, somewhat thick walled, inamyloid, ornamentation of scattered warts.

Distinguishing Features: Characterized by a combination of olive and violet tones, flat cap surface, not concave to infundibuliform, and its solid flesh.

Distribution: Widely distributed across northern temperate forests in North America and Europe.

CALIFORNIA. **Del Norte** Co., Crescent City; Jediah Smith Redwoods State Park, Crescent City; **Mendocino** Co., Jackson State Forest, Aleuria Glen; **Siskiyou** Co., Klamath National Forest (KNF), Cub Creek, near Marble Mountain Wilderness; KNF, Marble Mountain Wilderness, Haypress trail; **OREGON,** **Benton** Co., Siuslaw National Forest (SNF), Mary's Peak Scenic Botanical Area, Mary's Peak, Chintimini Creek; BLM, Marys Peak Resource Area, end of Hairy Mountain Rd.; **Clackamas** Co., Mount Hood National Forest (MHNF), Clackamas River Ranger District, south fork of Eagle Creek; MHNF, Buck Creek; MHNF, east fork of Salmon River; MHNF, Still Creek; Wemme; **Columbia** Co., Bureau of Land Management (BLM), Tillamook Resource Area, west of Scappose Creek; **Coos** Co., South Slough Estuarine Research Reserve; **Curry** Co., 1.6 km west of Quail Prairie Mountain; **Douglas** Co., Umpqua National Forest (UNF), 4.8 km west of Clayton Point; UNF, near Umpqua Hot Springs; UNF, east of Willow Flats; UNF, north of Emile Shelter; UNF, northwest of Snowbird Shelter; BLM, South River Resource Area, Wolf Creek; BLM, Swiftwater Resource Area, Gallagher Canyon; **Jackson** Co., BLM, Butte Falls Resource Area, 1.6 km northwest of Blue Goose Spring; BLM, Butte Falls Resource Area, Blue Goose Spring; **Klamath** Co., BLM, Klamath Falls Resource Area, 2 km southwest of Aspen Butte; Winema National Forest, near Yellow Jacket Spring; **Lane** Co., Willamette National Forest (WNF), 3.2 km southeast of Indigo Springs; WNF, Belknap Springs; WNF, Horse Creek Camp; WNF, Mill Creek; WNF, Lookout Point Reservoir; SNF, Woahink Lake trail; UNF, Wyatt Creek; UNF, 4 km southwest of Mount June; UNF, Dinner Ridge, 3.2 km east of Rose Hill; **Lincoln** Co., Newport; **Linn** Co., WNF, 2.4 km southeast of Potato Hill; BLM, Cascades Resource Area, 4.8 km northwest of Snow Peak; WNF, Lost Prairie campground; WNF, near Lava Lake Sno-Park; **Yamhill** Co., BLM, Tillamook Resource Area, 0.8 km north of Stoney Mountain; BLM, Tillamook Resource Area, 1.2 km south of Bald Mountain; **WASHINGTON,** **Clallam** Co., Olympic National Park (ONP), Lake Crescent; ONP, Mount Angeles; Morse Creek Camp; **Jefferson** Co., ONP, Hoh River trail, Hoh rain forest on mossy ground; **King** Co., Enumclaw, Greenwater River area near state park, about 32.2 km east of Enumclaw; Green River area; **Lewis** Co., Mount Rainier National Park (MRNP), 4 km south of Stevens Canyon entrance; **Mason** Co., Olympic National Forest, Olympic Mountains, Lake Cushman; **Pierce** Co., MRNP, Longmire; MRNP, Lower Tahoma Creek; MRNP, Nisqually River; **Skamania** Co., Gifford Pinchot National Forest (GPNF), Pacific Crest Trail west of Trout Creek; GPNF, Trapper Creek Wilderness trailhead, Rock Creek; GPNF, T.T. Munger Research Natural Area, Trout Creek Hill; **Snohomish** Co., Mount Baker-Snoqualmie National Forest, Sloan Creek trail; **Yakima** Co., MRNP, Bumping Lake.

Substrate and Habitat: Closely gregarious to caespitose, partially hidden in deep humus in coniferous forests.

Season: Autumn.

References: Petersen, R.H. 1971. The genera *Gomphus* and *Gloeocantharellus* in North America. Vaduz, Germany: J. Cramer Verlag. 114 p. Arora, D. 1986. Mushrooms demystified. Berkeley, CA: Ten Speed Press. 959 p.

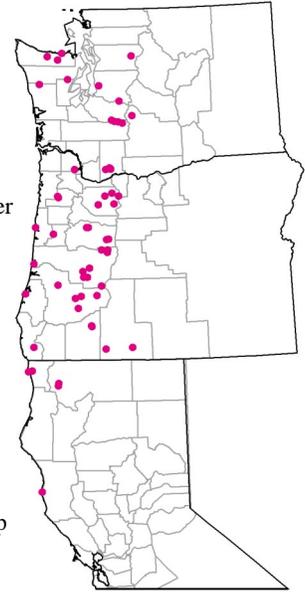


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Gomphus kauffmanii (Smith) Petersen

ROD name *Gomphus kauffmanii*

Family Gomphaceae

Morphological Habit chanterelle

Description: **SPOROCARP** cylindrical-truncate, infundibuliform, cavernous, and finally excavate; up to 30 cm tall, up to 25 cm wide, margin smooth to somewhat undulate, often reflexed to varying degrees. **CAP** up to 25 cm wide; surface differentiated into large, subpyramidal scales becoming incurved so that in immature sporocarps often block the cap cavity, creamy to dull tan, scales paler toward margin, darker below. **SPORE-BEARING TISSUE** of longitudinal, anastomosing ridges or somewhat subporoid, dull tan to pale cinnamon, sometimes bruising dull red-brown. **STEM** up to 3.5 cm thick at base of the hymenium, tapered, rounded at base, sometimes somewhat rooting, white mycelium, smooth but not glabrous, hollow, sometimes obscurely longitudinally streaked with brown tones, dull brown when bruised. **ODOR** mild, often faintly to obviously aromatic. **TASTE** mild, sometimes slightly acrid, but usually insignificantly so. **Basidia** 90-115 x 10-13 μ m, elongate-clavate to cylindrical with somewhat bulbous apex, hyaline, thin walled. **Sterigmata** 2-4, (-8.5) μ m long, apically slender, coronate, straight, not divergent. **CYSTIDIA** absent. **CLAMP CONNECTIONS** absent. **Spores** ovoid, 11.9-17.5 x 5.7-7.8 μ m, pale yellow in mass, thin walled, ornamentation strongly cyanophilic, composed of small, scattered, separate to somewhat anastomosed, low warts, or ridges.

Distinguishing Features: *Gomphus kauffmanii* is characterized by its tan to cinnamon-tan sporocarps lacking bright red or orange tints, the gross scales on the cap surface, and the absence of clamp connections.

Distribution: Endemic to western North America. **CALIFORNIA**, **Del Norte Co.**, Crescent City; Jedediah Smith Redwoods State Park (JSRSP), Crescent City; JSRSP, John Stout Grove; **Humboldt Co.**, Big Lagoon County Park; **Mendocino Co.**, Jackson State Forest, Aleuria Glen; **Siskiyou Co.**, Klamath National Forest (KNF), Carter Meadow; KNF, Marble Mountain Wilderness Area, jct. of Haypress and Stanishaw trails; **OREGON**, **Benton Co.**, Siuslaw National Forest, Mary's Peak Scenic Botanical Area, Mary's Peak; Paul Dunn Forest, off Berry Creek; Bureau of Land Management (BLM), Starr Creek District; **Clackamas Co.**, Mount Hood National Forest (MHNF), 1.6 km west of Last Chance Mountain; MHNF, east fork of Salmon River; MHNF, Salmon River; MHNF, Still Creek; **Coos Co.**, South Slough Estuarine Research Reserve; **Douglas Co.**, BLM, Swiftwater Resource Area, Gallagher Canyon; **Jackson Co.**, BLM, Butte Falls Resource Area, Round Mountain; **Lane Co.**, Willamette National Forest (WNF), English Mountain; WNF, Lamb Butte; WNF, Lamb Butte, Pothole Creek; WNF, Olallie Ridge Research Natural Area, Pasture Creek; WNF, Potholes; **Linn Co.**, WNF, Lost Prairie campground; WNF, Three Pyramids; **Wasco Co.**, MHNF, Frog Lake; MHNF, Skyline Rd.; MHNF, Warm Springs Rd.; **WASHINGTON**, **Chelan Co.**, Wenatchee National Forest, Stevens Pass; **Clallam Co.**, Olympic National Park, Lake Angeles; **Grays Harbor Co.**, Olympic National Forest, 1.6 km south of Lake Quinault; Quinault, Lake Quinault; Montesano, Sylvia State Park, Hwy. 410; **King Co.**, Mount Baker-Snoqualmie National Forest (MBSNF), Arnette Lake trail; **Kittitas Co.**, MBSNF, Hyak Ski area; **Pierce Co.**, Mount Rainier National Park (MRNP), Carbon River; MRNP, Gobler's Knob; MRNP, Green Lake trail from Carbon River; MRNP, Longmire; MRNP, Lower Tahoma Creek area; MRNP, Mowich Lake, trail to Talmie; **Skagit Co.**, MBSNF, Swamp Creek, on roadside; **Skamania Co.**, Gifford Pinchot National Forest (GPNF), Pacific Crest Trail, north of Trout Creek and Rd. 43; GPNF, T.T. Munger Research Natural Area at canopy crane site; GPNF, Wind River Experimental Forest, Trout Creek Division; Mount St. Helens National Volcanic Monument, Table Creek; **Whatcom Co.**, MBSNF, Ermine Stream; MBSNF, Shuksan Inn.

Substrate and Habitat: Closely gregarious to caespitose, partially hidden in deep humus under *Pinus* and *Abies* spp.

Season: Autumn.

Reference: Smith, A.H.; Morse, E.E. 1947. The genus *Cantharellus* in the Western United States. *Mycologia*. 39: 497-534.

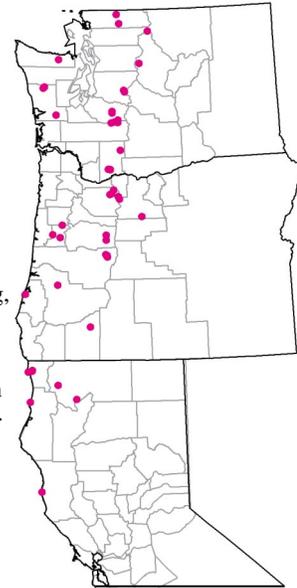


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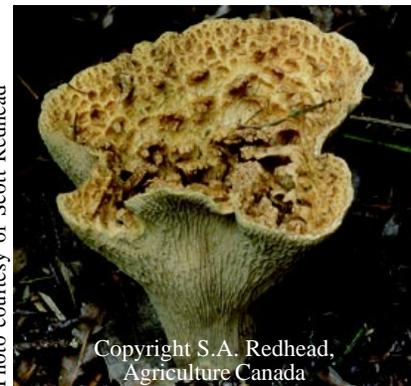


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Gyromitra californica (W. Phillips) Raitviir

ROD name *Gyromitra californica*

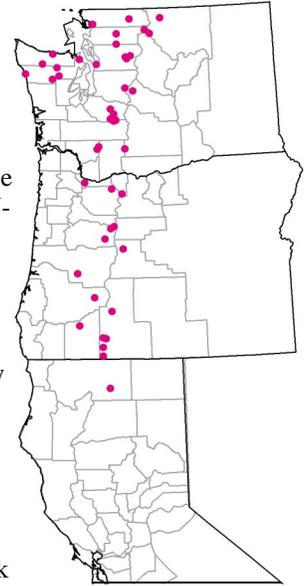
Family Discinaceae

Morphological Habit cup

Description: **SPORE-BEARING TISSUE** convex with numerous undulations and irregularities, brown-gray to gray-brown. **STEM** deeply fluted not forming lacunae, stem base may be flushed with tints of pink to pink-tan while the upper part is cream-colored to white. **Asci** J-negative, operculate. **SPORES** ellipsoid, (14-) 16.1-20.3 x (7.5-) 8.4-10.7 μm , smooth.

Distinguishing Features: Both *G. californica* and *G. sphaerospora* occur in western North America. Spore shape is the primary character used to distinguish between species: globose in *G. sphaerospora*, ellipsoid in *G. californica*. In *G. melaleucoides*, the spore-bearing tissue is similar in color to *G. californica*, but the apothecium is discoid to broadly bowl shaped or minimally recurved, and the stipe, when present, is not composed of sharp-edged ribs; in addition, the spores are ornamented instead of smooth.

Distribution: Endemic to western North America from British Columbia, Canada, to northern California, east to Colorado, Montana, and Nevada. **CALIFORNIA**, Shasta Co., Squaw Valley Creek; **OREGON**, Clackamas Co., Mount Hood National Forest, Cast Creek; **Deschutes Co.**, Black Pine campground; **Douglas Co.**, Umpqua National Forest, Fish Creek Flats; **Hood River Co.**, Robin Hood forest camp; **Jackson Co.**, Lake Creek, Grayback Mountain area; **Klamath Co.**, Bureau of Land Management (BLM), Klamath Falls Resource Area, 0.8 km east of Surveyor Peak; BLM, Klamath Falls Resource Area, Hayden Creek; Winema National Forest (WINF), 2 km southwest of Odessa; WINF, 4 km northeast of Lake of the Woods; WINF, Pothole Butte; WINF, Bear Bluff; **Linn Co.**, Willamette National Forest (WNF), Marion Creek; WNF, Hackelman Creek; WNF, Heart Lake; Mount Jefferson Wilderness Area, Pamela Lake; **WASHINGTON**, **Chelan Co.**, Wenatchee National Forest (WENF), Rainy Pass trail to Lake Ann; **Clallam Co.**, Olympic National Park (ONP), Jackson Guard Station; ONP, Elwha River; **Cowlitz Co.**, Mount St. Helens National Volcanic Monument, Goat Marsh; **Jefferson Co.**, ONP, Hoh River, ONP, north fork of the Quinault River; Olympic National Forest, Graves Creek; **Kittitas Co.**, WENF, Lake Kachess campground; Denny Creek; **Lewis Co.**, Mount Rainier National Park (MRNP), Narada Falls; Longmire; **Okanogan Co.**, Okanogan National Forest, Pasayten Wilderness, trail to Hidden Lakes; Pierce Co., MRNP, Round Pass; MRNP, Carbon River; MRNP, Eagle Peak; **Skagit Co.**, Mount Baker-Snoqualmie National Forest (MBSNF), Easy Pass trail; MBSNF, Big Fir, near Nooksack River; **Snohomish Co.**, Meadowdale; MBSNF, Barlow Pass study area; MBSNF, Sloan Creek campground along trail; MBSNF, Whitehorse Mountain; **Whatcom Co.**, Boulder Creek trail; North Cascades National Park, upper Baker trail; **Yakima Co.**, Yakama Indian Reservation, Mount Adams area.



Substrate and Habitat: Found fruiting on or adjacent to well-rotted stumps or logs of coniferous trees or on soil rich in brown rotted wood.

Season: June.

Reference: Tylutki, E.E. 1993. Mushrooms of Idaho and the Pacific Northwest, Discomycetes. Moscow, ID: University Press of Idaho. 133 p.



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***Gyromitra esculenta* (Persoon:Fries) Fries**ROD name *Gyromitra esculenta*

Family Discinaceae Morphological Habit cup

Description: SPORE-BEARING TISSUE convoluted, brainlike, red-brown to dark brown. **Stem** somewhat tan, up to 5 cm tall, 2.5 cm wide, hollow. **Asci** J-negative, operculate. **Spores** ellipsoid to broadly subfusoid, 20-26 x 10-13 µm, smooth.

Distinguishing Features: *Gyromitra esculenta* is at the center of a species complex that includes species with a spore-bearing tissue that is prominently lobed rather than irregularly recurved at maturity and that is relatively even to only slightly wrinkled, rarely strongly wrinkled. *Gyromitra esculenta* is most often confused with *G. infula*. The spores of *G. esculenta* tend to be relatively wider.

Distribution: Known from northern temperate forests in North America and Europe. Known from many dozens of locations throughout the range of the Northwest Forest Plan.

Substrate and Habitat: Fruits on the ground in disturbed or undisturbed mixed conifer and hardwood forests and occasionally in urban lawns.

Season: Spring.

References: Phillips, R. 1991. *Mushrooms of North America*. Boston, MA: Little, Brown and Co. 319 p.
Tylutki, E.E. 1993. *Mushrooms of Idaho and the Pacific Northwest, Discomycetes*. Moscow, ID: University Press of Idaho. 133 p.

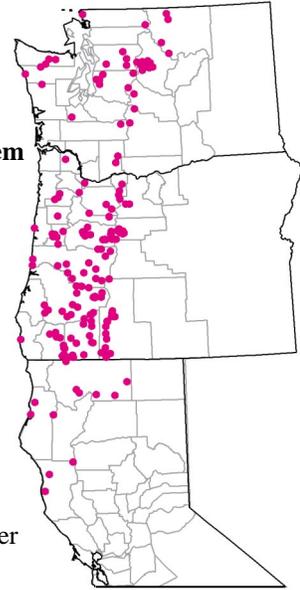


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Gyromitra infula (Schaeffer : Fries) Quélet

ROD name *Gyromitra infula*

Family Discinaceae

Morphological Habit cup

Description: **SPORE-BEARING TISSUE** convex (saddle-shaped) with undulations and irregularities, dull rusty red to red-brown or red-orange. **STEM** dull tan to pink-tan or dusky purple, roughly circular to compressed in cross section. **ASCI** are J-negative, operculate. **SPORES** ellipsoid, (17-) 20-23 (-26) x 7-10 µm, smooth.

Distinguishing Features: *Gyromitra infula* is at the center of a species complex that includes species with a spore-bearing tissue that is prominently lobed rather than irregularly recurved at maturity and that is relatively even to only slightly wrinkled, rarely strongly wrinkled. *Gyromitra infula* is most often confused with *G. esculenta*. The spores of *G. infula* tend to be relatively narrower.

Distribution: Found in western North America, including Alaska, also in Michigan and northern Europe. Known from many dozens of locations throughout the range of the Northwest Forest Plan.

Substrate and Habitat: Fruits in mixed conifer and hardwood forests in disturbed or undisturbed areas, particularly those with charred or uncharred woody debris.

Season: Spring and autumn.

References: Phillips, R. 1991. *Mushrooms of North America*. Boston, MA: Little, Brown and Co. 319 p. Tylutki, E.E. 1993. *Mushrooms of Idaho and the Pacific Northwest, Discomycetes*. Moscow, ID: University Press of Idaho. 133 p.

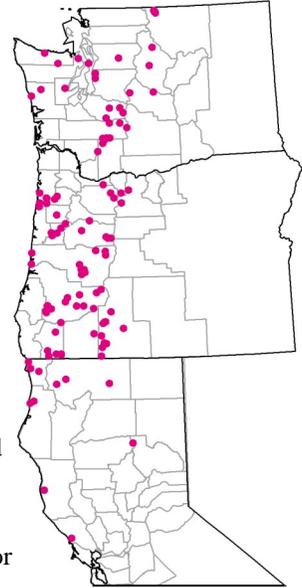


Photo courtesy of George L. Barron



Photo courtesy of Eugene Butler



***Gyromitra melaleucoides* (Seaver) Pfister**ROD name *Gyromitra melaleucoides*

Family Discinaceae

Morphological Habit cup

Description: SPORE-BEARING TISSUE broadly and shallowly bowl shaped to repand or slightly undulate but not truly strongly lobed, brown-gray to gray-brown varying to nearly black when old or partially dried and is even in young specimens but often becomes undulate to irregular in age. STEM sometimes absent to reduced (in age), varying to short-stipitate or indistinctly stipitate. ASCI J-negative, operculate. SPORES ellipsoid, 12-14 x 7-10 μm , finely warted. Sections of fresh spore-bearing tissue mounted in KOH release a yellow pigment.

Distinguishing Features: *Gyromitra melaleucoides* may be separated from most species of *Discina ss. stricto* by the combination of a gray-tan to brown-gray or dark brown spore-bearing tissue and a glabrous, more or less ivory to off-white underside surface that lacks prominent ribs (but may have broad folds). In *Discina ss. stricto*, the colors of the spore-bearing tissue are in the dingy yellow to red-brown range, while the underside surface is concolorous with, or paler than, the spore-bearing tissue.

Distribution: Endemic to western North America from British Columbia, Canada to northern California, east to Colorado. Known from many dozens of locations throughout the range of the Northwest Forest Plan.

Substrate and Habitat: On or adjacent to well-decayed (brown cubical-rotted) wood in moist coniferous forests.

Season: Spring.

Reference: Tylutki, E.E. 1993. Mushrooms of Idaho and the Pacific Northwest, Discomycetes. Moscow, ID: University Press of Idaho. 133 p.

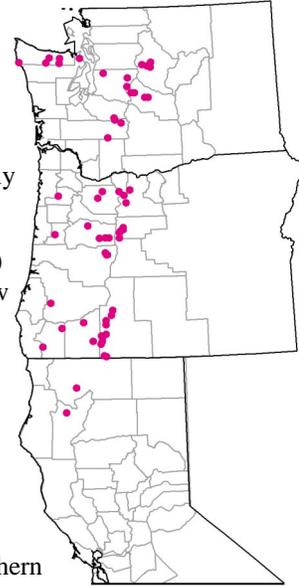


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