**Galerina cerina** Smith & Singer

**ROD name** *Galerina cerina*

**Family** Cortinariaceae  
**Morphological Habit** mushroom

**Description:**  
**CAP** 5-15 mm in diam., broadly conic to convex, glabrous, rich tawny with paler margin, fading to tan, margin striate with slightly fibrillose edge when young.  
**GILLS** adnate, pale tan, becoming tawny in age, edges even.  
**STEM** 20-30 mm x 2-3 mm, equal, fragile, tubular, undulating, apex concolorous with gills, tawny over lower portion, apex pruinose, lower part with off-white veil fragments scattered, but disappear in age.  
**ODOR AND TASTE** not distinct.  
**BASIDIA** 27-35 x 8-10 µm, 4 spored.  
**PLEUROCYSTIDIA AND PILEOCYSTIDIA** absent.  
**CHEILOCYSTIDIA** both fusoid-ventricose and ventricose-subcapitate, 30-40 (-50) x 7 µm overall, 12 x 3-5 µm at neck.  
**CLAMP CONNECTIONS** present.  
**SPORES** broadly ovoid, 8.7-12 x 5.5-7 µm, smooth, calyptrate, forming a ragged border, many spores show large blisters or bumpy areas where the perispore separates near the apiculus, making them appear to have a sacklike outer area, pale brown.

**Distinguishing Features:** The presence of a veil and the calyptrate spores is distinct for the species.


**Substrate and Habitat:** Gregarious on mosses in sphagnum bogs. Also sometimes found on the mucky humus in sphagnum bogs or on colonizing mosses in burned areas.

**Season:** Spring and early summer.

**Galerina heterocystis** (Atk.) Smith & Singer

**ROD name** Galerina heterocystis

**Family** Cortinariaceae  
**Morphological Habit** mushroom

**Description:** Cap 2-15 (-25) mm in diam., obtusely conic with a straight margin, expanding to somewhat campanulate, sometimes with a small umbo; glabrous, pale yellow to red-brown, hygrophanous and then fading to pale tan, translucent-striate, with striae more brown. Gills ascending adnate to adnexed in aged or expanded caps, pale yellow when young, aging to fulvous, with smooth edges. Stem 12-80 mm long, 0.5-3 mm thick, equal, tubular, fragile, pale to pale yellow, with slight darkening in age, apex pruinose and faint off-white fibrils from evanescent veil near base, or these may be lacking in some, veil fragments usually visible only when young, and some specimens may not show signs of having a veil. Odor not distinct. Taste mild. Basidia (18-) 24-35 (-43) x (7-) 8-10 (-12) µm, 1-4 spored. Cheilocystidia bottle shaped, variable in size, 30-44 x 6-9 µm, 18-26 x 6-9 µm, or 30-60 x 7-12 µm, with the head 5-7 µm in diam., hyaline to pale yellow. Pleurocystidia absent or only at margin. Caulocystidia 30-70 x 7-25 µm, ventricose-capitate, numerous at apex of stem, and numerous the full length at first but soon readily collapsed, which leaves the lower portion smooth and naked. Pleurocystidia absent or only near the gill edge and similar to the cheilocystidia. Clamp connections absent. Spores oblong, 11-17 x 6.5-8.5 µm, nearly smooth to distinctly roughened, pale cinnamon.

**Distinguishing Features:** *Galerina heterocystis* can be highly variable macro- and microscopically. The number of spores per basidia ranges from 1 to 4, which influences spore size. The veil is quite reduced and can be easily overlooked or may not even be present in some collections. *Galerina dimorphocystis* is somewhat similar in general appearance, but the cap is pubescent. The overall height of this species, as well as the lighter colors plus the presence in disturbed habitat, helps set it apart from other species in the group without clamp connections.

**Distribution:** Widely distributed in the Northern Hemisphere. CALIFORNIA, Humboldt Co., Redwood National Park, near park boundary; Marin Co., Picher Canyon; Sierra Co., Tahoe National Forest, north of Deadman Peak; Yuba Co., near New Ballard’s Bar Reservoir; OREGON, Clackamas Co., Mount Hood National Forest, Bull Run watershed; Estacada; Jackson Co., Rogue National Forest area; Tillamook Co., Siuslaw National Forest, Cascade Head Experimental Forest, Bible Creek; WASHINGTON, Lewis Co., Mount Rainier National Park (MRNP), Reflection Lake; MRNP Castle Peak; MRNP, Cliff Lake; MRNP, Snow Lake; Pierce Co., Gifford Pinchot National Forest, Eatonville; MRNP, Green Lake; MRNP, St. Andrews Creek; MRNP, Sunshine Point campground; MRNP, Mowich Lake Rd.

**Substrate and Habitat:** Single to gregarious, attached to the base of the mosses and lower dead stems and roots; also in the soils close by Ranunculus spp. Various grasses mixed with mosses seem to be its preferred neighbors.

**Season:** Summer and autumn.

**Galerina sphagnicola** (Atk.) Smith & Singer

**ROD name** Galerina sphagnicola

**Family** Cortinariaceae  
**Morphological Habit** mushroom

**Description**: Cap 10-25 mm in diam., at first obtusely conic then spreading widely, nearly plain but with a broad umbo, faintly to noticeably striate, glabrous, sometimes with a few white fibrils near the margin from the veil, especially when young and fresh, tan to pink-tan drying pale red-brown. **Odor and Taste** indistinct. **Gills** broadly adnate to toothed, nearly decurrent, cinnamon to red-brown, with edges smooth but encrusted with cystidia. **Stem** 50-120 mm long x 1-3 mm wide, equal, fragile, hollow, mostly glabrous except for pruinose apex and a few scattered veil fragments over lower half, pale brown. **Basidia** 25-30 x 6-11 µm, cylindric to clavate, 4 spored. **Pleurocystidia and Pileocystidia** absent. **Cheilocystidia** variably shaped, but ventricose with subacute to subcapitate apex, some with a flexuous neck, 30-50 x 6-11 µm, hyaline. **Caulocystidia** frequent at apex but absent at base, variable in shape, 30-70 x 4-12 µm. **Clamp connections** present. **Spores** broadly ovate, 9-11 x 6-8 µm, calyptrate, deep red-brown.

**Distinguishing Features**: The calyptrate spores of this species are fairly distinctive. *Galerina sphagnorum* also inhabits sphagnum bogs and has an elongated stem to reach above the mosses but has nearly smooth spores, a sharply pointed small umbo on the cap, and longer necked cheilocystidia. Mixed field collections of *G. sphagnicola* and *G. sphagnorum* are possible, so careful observation and inspection are necessary. *Galerina farinacea* is another similar bog inhabitant, but its spores are slightly smaller, and the cheilocystidia are much smaller.

**Distribution**: Widely distributed in the Northern Hemisphere but not known from Washington, Oregon, or California.

**Substrate and Habitat**: Scattered to gregarious, apparently exclusively found in sphagnum bogs, at low to moderately high elevations.

**Season**: Early autumn.