

= Lactarius subflammeus =

*Lactarius subflammeus* , commonly known as the orange milk cap , is a species of fungus in the Russulaceae family . It is found in western North America in the late summer and fall and is especially common in the Pacific Northwest , where it grows on the ground near conifers like pine and spruce . The brightly colored fruit bodies , which are slimy or sticky , have scarlet caps when young that soon fade to brilliant orange . The stem ? typically longer than the width of the cap ? is also bright orange but the gills are whitish . The mushroom secretes a whitish latex when it is cut or injured .

= = Taxonomy = =

The species was first described by Lexemuel Ray Hesler and Alexander H. Smith in their 1979 monograph of North American species of the genus *Lactarius* , based on specimens collected from Pacific City , Oregon . Prior to this description , the species had frequently been confused in the literature with *L. aurantiacus* . The specific epithet *subflammeus* means " almost flame color " . It is classified in the section *Russularia* of the subgenus *Russularia* of *Lactarius* . Species in this subgenus have small to medium @-@ sized and fragile fruit bodies .

*Lactarius subflammeus* is commonly known as the " orange milk cap " .

= = Description = =

The cap is 3 ? 7 cm ( 1 @.@ 2 ? 2 @.@ 8 in ) wide , convex , eventually becoming shallowly depressed in the center . The margin of the cap is curved inward then arched , with short translucent striations ( grooves ) at maturity . The cap surface is slimy to sticky , smooth , not zonate . It is scarlet when young , but becomes orange to yellowish @-@ orange and duller when older . The attachment of the gills to the stem is adnate ( squarely attached ) to decurrent ( running down the length of the stem ) ; the gills are moderately broad , with spacing close to subdistant ( with visible spaces between the gills ) . They are whitish or colored similar to the cap but paler . The stem is 4 ? 9 cm ( 1 @.@ 6 ? 3 @.@ 5 in ) long , 5 ? 15 mm ( 0 @.@ 2 ? 0 @.@ 6 in ) thick , and thicker near the base . The smooth stem surface can be either moist or dry depending on the moisture in the environment . It is hollow , fragile , and colored like the cap . The flesh is thin , fragile , pale pinkish @-@ buff to dull orangish @-@ buff . The mushroom 's odor is not distinctive , and the taste slowly becomes acrid . The latex is white , and does not change color with continued exposure to air . It does not stain the tissues , and tastes acrid . The spore print is white . The edibility of the fruit bodies is unknown , and consumption is not recommended .

= = = Microscopic characteristics = = =

The spores are 7 @.@ 5 ? 9 by 6 @.@ 5 ? 7 @.@ 5  $\mu\text{m}$  , with an ellipsoid shape . Their surfaces are ornamented with warts and short ridges that do not form a reticulum ( a network of raised net @-@ like ridges on the surface ) , with ridges up to 1 @.@ 0  $\mu\text{m}$  high . The spores are hyaline ( translucent ) , and amyloid ? they absorb iodine when stained with Melzer 's reagent . The basidia ( spore @-@ bearing cells ) are four @-@ spored , and measure 42 by 9  $\mu\text{m}$  . The cap cuticle is a modified ixotrichoderm , meaning that the hyphae are embedded in a slimy or gelatinous layer .

= = = Similar species = = =

*Lactarius luculentus* var. *luculentus* is similar in appearance , but it has an ochraceous @-@ tawny to ochraceous @-@ buff cap and stem , flesh that tastes slightly bitter before slowly turning acrid , white latex that tastes mild to somewhat astringent , and a buff @-@ colored spore print . *Lactarius luculentus* var. *laetus* is another lookalike , but may be distinguished by a brownish @-@ orange to grayish @-@ orange stem , and mild @-@ tasting latex . *Lactarius substriatus* has white latex that

slowly changes color to yellow , and *Lactarius subviscidus* has similar overall coloring but white latex that changes to yellow . The Californian species *L. cocosiolens* has a sticky orange @-@ brown to caramel @-@ colored cap . It has a mild taste , abundant latex , and as its specific epithet suggests , smells like coconut when it is dry .

= = Ecology , habitat and distribution = =

Like all species in the genus *Lactarius* , *L. subflammeus* is mycorrhizal , forming mutualistic associations with trees . The fungus and the plant forms structures called ectomycorrhizae , a specialized sheath of hyphae on the surface of the root from which hyphae extend into the soil and into the outer cortical cells of the root . The fruit bodies of *L. subflammeus* grow scattered to grouped under conifers or in mixed conifer @-@ hardwood forests near pine and spruce , from August to December . The fungus is widely distributed in the Pacific Northwest , where it is very common in conifer forests . The habitat of the type location was coastal sand dunes under pine . States from which the fungus has been collected include Washington , Idaho , Oregon , California , and Colorado . The mushroom 's range extends north into Canada , where it has been found near Victoria , British Columbia in coastal forests dominated by Douglas @-@ fir ( *Pseudotsuga menziesii* ) .