= Lactarius blennius =

Lactarius blennius (commonly known as the Slimy Milkcap or Beech Milkcap) is a medium @-@ sized mushroom of the genus Lactarius found commonly in beech forests in Europe , where it is mycorrhizal , favouring the European Beech (though associations with other trees are known) . It was first described by Elias Magnus Fries . Though its colour and size vary , it is distinctive because it is slimy when wet and exudes copious amounts of milk . It has been the subject of some chemical research , and it can be used to produce pigments and blennins . Blennins , some of which have shown potential medical application , are derived from lactarane , a chemical so named because of their association with Lactarius . The edibility of L. blennius is uncertain , with different mycologists suggesting that it is edible (though not recommended) , inedible or even poisonous .

= = Taxonomy and naming = =

Lactarius blennius was first described by Swedish mycologist Elias Magnus Fries as Agaricus blennius in 1815 , before being given its current binomial name by the same author in 1838 . Within the genus Lactarius , it is closely related to Lactarius cinereus , another Lactarius species that also favours beech . It has been suggested that the two species (forming a group) could have a coevolutionary pathway with beech . The specific epithet is derived from a Latin adjective blennius , meaning " slimy " . Lactarius mushrooms are commonly known as milkcaps , and L. blennius is known as the Slimy Milkcap or the Beech Milkcap .

Lactarius blennius is synonymous with Agaricus blennius (the name under which Fries first described the species in 1815) and Agaricus viridis , a name given earlier by Heinrich Schrader , in 1794 . Galorrheus blennius (a name proposed in 1871 by Paul Kummer) , Lactarius viridis (proposed in 1888 by Lucien Quélet) and Lactifluus blennius (proposed by Otto Kuntze in 1891) are also now recognised as synonyms . Lactarius albidopallens was originally described as a form of L. blennius as Lactarius blennius f. albidopallens by Jakob Emanuel Lange in 1928 , before being classified as a separate species by J. Blum . Lange also described Lactarius blennius f. virescens , which is now recognised as nomen invalidum (an invalid name) . Lactarius fluens is another species that has been included in L. blennius ; originally described in 1899 by Jean Louis Émile Boudier , in 1999 , German Joseph Krieglsteiner suggested that it is actually a variety of L. blennius , naming it Lactarius blennius var. fluens . The situation with Lactarius viridis is similar ; first described as a separate species by Quélet in 1888 , A. Marchand proposed that it is in fact a variety of L. blennius , naming it Lactarius blennius var. viridis .

= = Description = =

Lactarius blennius has a flattened convex cap that is 4 ? 10 cm (1 @.@ 6 ? 4 in) across that later becomes depressed in the centre . In colour , it is pale olive to a greenish grey , sometimes a dull green or pale grey @-@ sepia , and has blotches of darker colouration in concentric bands , though the colour can vary greatly . Heavily spotted specimens are also known , and a very brown specimen similar to Lactarius circellatus was recorded in Scotland . The cap is very slimy when moist and has a margin that is curved inwards . The stem is a paler colour than the cap , but also very slimy , and measures from 4 ? 5 cm (1 @.@ 6 ? 2 in) tall by 1 ? 1 @.@ 7 cm (0 @.@ 4 ? 0 @.@ 7 in) thick , tapering a little towards the bottom . The flesh is whitish , similar in colour to the gills , which later become a creamy or pale buff colour . The gills turn a brownish @-@ grey colour when wounded , and are crowded . In shape , they are slightly decurrent or adnate , meaning that they run a small way down the stem in attachment , or that they are attached to the stem by the whole depth of the gills . The milk is white and dries grey , and is very plentiful . L. blennius spores leave a creamy print , and are elliptic with low warts joined by ridges with a small number of cross @-@ connections , measuring from 6 ? 9 by 5 @.@ 5 ? 7 µm .

= = Distribution , habitat and ecology = =

Lactarius blennius is very common and is found in broad @-@ leaved woodland , favouring beech ; it is most associated with Fagus sylvatica , the European Beech , though it has also been observed growing in association with species of oak . It forms an ectomycorrhizal association with trees , and can grow on a wide variety of subsoil types , but is more typical of acidic soil . It is found between late summer and late autumn , and is native to Europe . The distribution of the mushroom coincides with the distribution of beech . In the British Isles , the species is one of the one hundred most common mushrooms . Other areas in which it has been recorded include Sweden , France , Italy , and Poland .

= = Uses = =

Mycologist Roger Phillips claims that L. blennius is edible when cooked , but not recommended , while others describe it as inedible or even poisonous . The milk tastes very hot and acrid .

L. blennius has been the subject of some research in chemistry . Lactarane derivatives (known as " blennins ") have been acquired from the mushroom , including the lactone blennin D , and blennin A , which was first isolated from this species . Lactaranes are chemicals so named because of their occurrence in Lactarius species . Blennins have been shown to be potentially useful- blennin A , for instance (a lactarane @-@ type sesquiterpene) has been shown to be an anti @-@ inflammatory , having a strong inhibitative affect against leukotriene C4 biosynthesis . L. blennius can also be refined to create a green pigment , known as blennione .