

= *Volvopluteus gloiocephalus* =

Volvopluteus gloiocephalus , commonly known as the big sheath mushroom , rose @-@ gilled grisette , or stubble rosegill , is a species of mushroom in the family Pluteaceae . For most of the 20th century it has been known under the names *Volvariella gloiocephala* or *Volvariella speciosa* , but recent molecular studies have placed it as the type species of the genus *Volvopluteus* , newly created in 2011 . The cap of this mushroom is about 5 ? 15 cm (2 ? 6 in) in diameter , varies from white to grey or grey @-@ brown , and is markedly sticky when fresh . The gills start out as white but they soon turn pink . The stipe is white and has a sack @-@ like volva at the base . Microscopical features and DNA sequence data are of great importance for separating *V. gloiocephalus* from related species . *V. gloiocephalus* is a saprotrophic fungus that grows on grassy fields and accumulations of organic matter like compost or woodchips piles . It has been reported from all continents except Antarctica .

= = Taxonomy = =

This taxon has a long and convoluted nomenclatural history . It was originally described as *Agaricus gloiocephalus* by Swiss botanist Augustin Pyramus de Candolle in 1815 and later sanctioned under this name by Elias Magnus Fries in 1821 . The French mycologist Claude Gillet transferred it in 1878 to the genus *Volvaria* erected by Paul Kummer just a few years earlier in 1871 . The name *Volvaria* was already taken , as it had been coined by De Candolle for a genus of lichens in 1805 . The generic name *Volvariella* , proposed by the Argentinean mycologist Carlos Luis Spegazzini in 1899 , would eventually be adopted for this group in 1953 after a proposal to conserve Kummer ? s *Volvaria* against De Candolle ? s *Volvaria* was rejected by the Nomenclature Committee for Fungi established under the principles of the International Code of Botanical Nomenclature .

Despite the generic name *Volvariella* being adopted in 1953 the name *Volvariella gloiocephala* did not exist until 1986 , when the placement of the species in that genus was formally proposed by mycologists Teun Boekhout and Manfred Enderle . The reason for this long interval is that most 20th @-@ century mycologists working on *Volvariella* (e.g. Rolf Singer , Robert L. Shaffer , Robert Kühner , Henri Romagnesi) considered the epithet " *gloiocephalus* " to represent a variety with dark basidiocarps of another species of *Volvariella* , viz . *Volvariella speciosa* , that has white basidiocarps , and therefore would use the name *Volvariella speciosa* var. *gloiocephala* to refer to this taxon . Boekhout & Enderle showed that white and dark basidiocarps can arise from the same mycelium , and that the epithets " *gloiocephalus* " proposed by De Candolle in 1815 and " *speciosa* " proposed by Fries in 1818 should be considered to represent the same species with the former having nomenclatural priority . In 1996 Boekhout and Enderle designated a neotype to serve as a representative example of the species .

The phylogenetic study of Justo and colleagues showed that *Volvariella gloiocephala* and related taxa are a separate clade from the majority of the species traditionally classified in *Volvariella* and therefore another name change was necessary , now as the type species of the newly proposed genus *Volvopluteus* .