## = Typhula quisquiliaris =

Typhula quisquiliaris , commonly known as the bracken club , is a species of club fungus in the family Typhulaceae . It produces small , white fruit bodies up to 9 millimetres ( 0 @ . @ 4 in ) in height , each with a single distinct " head " and " stem " . The head is fertile , while the stem attaches to a sclerotium embedded in the substrate . The fruit bodies grow from dead wood , and strongly favours bracken , where the species feeds saprotrophically . Though T. quisquiliaris was described under a different name by James Sowerby in 1803 , the specific name quisquiliaris was sanctioned in 1821 by Elias Magnus Fries , and the species was moved to the genus Typhula , which resulted in its currently accepted binomial name by Paul Christoph Hennings in 1896 . The species has been recorded in Europe and north Africa .

### = = Taxonomy = =

Typhula quisquiliaris was first described by James Sowerby in 1803 as Clavaria obtusa . However , this name was found to be illegitimate , as it had already been given to a different species by Christiaan Hendrik Persoon in 1797 . The species was given its sanctioned name several years later by Elias Magnus Fries , in his 1821 Systema Mycologicum . Fries named the species Pistillaria quisquiliaris , having previously ( in 1818 ) named it Clavaria quisquiliaris . The specific name quisquiliaris is from the Latin meaning " pertaining to refuse " . In the same year , Samuel Frederick Gray reclassified Sowerby 's Clavaria obtusa , naming it Geoglossum obtusum . Fries 's name was taken up as the valid one , however , and in 1896 , Paul Christoph Hennings transferred the species to Typhula , giving the species the name by which it is known today . However , the name Pistillaria quisquiliaris was sometimes used into the 20th century . For instance , Carleton Rea used it in a 1922 publication . The species is commonly known as the bracken club .

# = = Description = =

Typhula quisquiliaris produces fruit bodies in the form of clubs . Each fruit body consists of a single distinct " stem " and " head " , and measures up to 7 mm ( 0 @.@ 3 in ) in height . The surface of the head is smooth and white , and measures 1 @.@ 5 to 4 mm ( 0 @.@ 06 to 0 @.@ 2 in ) by 1 to 2 @.@ 5 mm ( 0 @.@ 04 to 0 @.@ 1 in ) . The rounded stem is infertile , and of a similar colour to the head . However , it has a very fine downy covering , and is somewhat translucent . The stem measures from 0 @.@ 3 to 0 @.@ 4 mm ( 0 @.@ 01 to 0 @.@ 02 in ) in width . The stem attaches to sclerotium which is buried into the branch from which the fruit body grows .

### = = = Microscopic characteristics = = =

Typhula quisquiliaris spores are narrowly ellipsoid , and measure from 9 to 14 by 4 to 5 @.@ 5 micrometres ( ?m ) . The spores are white , and contain small granules . The spores are borne on basidia which measure 50 to 70 by 7 to 8 ?m , with four spores on each basidium . The downy covering of the stem is made up of thick @-@ walled hairs , each measuring 15 to 60 by 3 to 7 ?m , though they are often swollen towards the base . The sclerotium measures from 1 @.@ 5 to 3 by 0 @.@ 5 ?m , and is a pale yellow colour . Clamp connections are present in the hyphae .

### = = Habitat and distribution = =

Typhula quisquiliaris fruit bodies are typically found in rows , growing from plant detritus . The species favours bracken , especially Pteridium aquilinum , but the colonisation of dead matter from other plants is not unknown . Upon these substrates , it feeds as a saprotroph , breaking down the dead organic matter in order to sustain itself . The species has been recorded in Europe and northern Africa . In Europe , the fruit bodies can be encountered from April to December .