= Inocybe praetervisa =

Inocybe praetervisa is a small , yellow and brown mushroom in the Inocybaceae family , distinguished from other members of the genus by its unusual spores and bulb . The unusual spores led to the species being named the type species of the now @-@ abandoned genus Astrosporina ; recent studies have shown that such a genus could not exist , as the species with the defining traits do not form a monophyletic group . However , it is a part of several clades within the genus Inocybe . I. praetervisa grows on the ground in woodland , favouring beech trees , and can be found in Europe , North America and Asia . It is inedible and probably poisonous due to the presence of muscarine . The ingestion of muscarine can lead to SLUDGE syndrome , and could potentially lead to death due to respiratory failure .

= = Taxonomy and naming = =

Inocybe praetervisa was first described by Lucien Quélet in the first volume of Giacomo Bresadola 's 1883 publication Fungi tridentini . The species was moved to the genus Astrosporina by Joseph Schröter in 1889 , but this was rejected , and the name Astrosporina praetervisa is now considered an obligate synonym . Astrosporina praetervisa was the type species of the no longer recognised genus . The specific epithet praetervisa comes from the Latin word meaning " overlooked " .

Within the genus Inocybe , I. praetervisa has been placed in the subgenus Inocybe . Mycologist Rolf Singer places the species in the section Marginatae ; mycologist Thom Kuyper considers Marginatae a supersection , and includes I. praetervisa along with I. abietis , I. calospora and I. godeyi . Phylogenetics has shown that , in addition to the large clade of subgenus Inocybe , I. praetervisa forms a clade with I. calospora , I. lanuginosa and I. leptophylla . The species are similar in that all four have basidiospores with small nodules ; it was this feature that defined the genus Astrosporina , with then A. praetervisa as its type species . However , when phylogenetic analysis later concluded that nodulose @-@ spored Inocybe species do not form a monophyletic group , the name Astrosporina was deemed inappropriate at a generic level . But it may be considered useful at a lower level to refer to the clade of the four Inocybe species . Of those four , I. praetervisa is most closely related to I. calospora , with which it forms a smaller and closer clade . A different study also found the close relationship between I. praetervisa and I. calospora ; it also named I. teraturgus as a part of the clade containing I. praetervisa , I. calospora , I. lanuginosa and I. leptophylla .

= = Description = =

Inocybe praetervisa has a bell @-@ shaped (later expanding) cap of 3 to 5 centimetres (1 @.@ 2 to 2 @.@ 0 in) in diameter , which is a yellowish @-@ brown colour . It is fibrous , and splits from the margin (which curves inwards) to the centre . The stem is from 5 to 6 centimetres (2 @.@ 0 to 2 @.@ 4 in) in height , and from 3 to 8 millimetres (0 @.@ 12 to 0 @.@ 31 in) thick . It is white , maturing to a pale straw @-@ yellow , and the whole stem is farinaceous , meaning it is covered in particles resembling meal . The stem has a distinct bulb at the base , which is moderately marginate , and lacks a ring . The flesh is white , and discolours to yellowish in the stem . The gills are initially whitish , but later become a clay @-@ brown with toothed , white edges . They are adnexed , meaning they connect to the stem by only part of their depth , and are crowded closely together .

= = = Microscopic features = = =

Inocybe praetervisa leaves a clay @-@ brown spore print , while the spores themselves are rectangular with a large number of " distinct , angular knobs " . In size , the spores measure between 10 and 12 micrometres (0 @.@ 00039 and 0 @.@ 00047 in) in length by between 7 and 9 micrometres (0 @.@ 00028 and 0 @.@ 00035 in) in width . Inocybe praetervisa has both pleuro-and cheilocystidia which are relatively spindle @-@ shaped with apical encrustation . The cystidia have hyaline or pale yellow walls .

= = = Similar species = = =

The species can be differentiated from the similar I. cookei by its " irregular , lumpy spores " . It is also similar to I. rimosa , but differs in the presence of a bulb . Another species that can be differentiated by the lack of a bulb is I. numerosigibba .

= = Habitat and distribution = =

Inocybe praetervisa is an ectomycorrhizal species , and can be found on the ground in mixed , deciduous or even coniferous woodland . It typically favours beech . Mushrooms grow solitarily or in "trooping groups " in late summer and throughout autumn , though it is not commonly encountered species . It can be found in Europe , Asia and North America .

= = Edibility and toxicity = =

The species has a mild , indistinct taste , and a faint smell of flour . Mycologist Roger Phillips describes its edibility as " suspect " , recommending that it be avoided , and notes that it is possible that the species is poisonous ; most species of Inocybe have been shown to contain poisonous chemicals . Mycologist Ian Robert Hall lists the mushroom as containing the poisonous compound muscarine . Consumption of muscarine could lead to a number of physiological effects , including : excess salivation , lacrimation , uncontrollable urination and defecation , gastrointestinal problems and emesis (vomiting) ; this array of symptoms is also known by the acronym SLUDGE . Other potential effects include a drop in blood pressure , sweating and death due to respiratory failure .