

= *Inocybe cookei* =

Inocybe cookei , commonly known as the straw fibre-cap , is a species of mushroom in the *Inocybaceae* family . It was first described in 1892 by Giacomo Bresadola , and is named in honour of Mordecai Cubitt Cooke . The species can be found in Europe , Asia and North America . It produces small mushrooms of an ochre colour , with a prominent umbo , fibres on the cap and a distinctive bulb at the base of the stem . It grows from soil in mixed woodland , and is encountered in summer and autumn , though is not common . Ecologically , it feeds through use of ectomycorrhiza . *Inocybe cookei* has been described as both toxic and non @-@ toxic , but either way , is not advised for consumption .

= = Taxonomy and naming = =

Inocybe cookei was first described by Giacomo Bresadola in 1892 ; the specific epithet *cookei* honours the British mycologist Mordecai Cubitt Cooke . Mycologists J. Stangl and J. Veselský described *Inocybe kuthanii* in 1979 , which was later described as a variety of *Inocybe cookei* (*Inocybe cookei* var. *kuthanii*) by Thom Kuyper in 1986 , but MycoBank now lists both names as synonyms of *I. cookei* . The mushroom is commonly known as the straw fibre-cap .

Within *Inocybe* , it is placed within the subgenus *Inosperma* , and was previously categorised within the section *Rimosae* . However , phylogenetic analysis has shown that section *Rimosae* as formerly defined does not form a monophyletic group (that is , descended from a single exclusive ancestor) , and former *Rimosae* species are better grouped into two clades , *Maculata* and *Rimosae* . Phylogenetic analysis has placed the species in the clade *Maculata* . Other species joining *I. cookei* in the *Maculata* clade include *I. maculata* , *I. quietiodor* , *I. rhodiola* , *I. adaequata* , and *I. erubescens* .

= = Description = =

Inocybe cookei has a conical or bell @-@ shaped cap of between 2 and 5 centimetres (0 @. @ 79 and 1 @. @ 97 in) in diameter . As the mushrooms age , the cap becomes flatter , and an umbo becomes prominent . The margin of the cap frequently cracks towards the centre . The cap is an ochre colour , and the upper surface is covered in long fibres . The silky fibres thickly cover the cap , starting at the centre and extending to the cap 's margin . The species has a whitish or ochre stem of 30 to 60 millimetres (1 @. @ 2 to 2 @. @ 4 in) in height by 4 to 8 millimetres (0 @. @ 16 to 0 @. @ 31 in) in thickness . There is a distinctive marginate bulb at the base of the stem , and no ring . The flesh is white , becoming yellow with age . *Inocybe cookei* mushrooms have closely packed adnexed gills (gills that are attached to the stem only on part of their depth) . Gills on young mushrooms are whitish , then become a grey @-@ tinged pale ochre before becoming cinnamon yellow .

= = Microscopic features = =

Inocybe cookei leaves a snuff @-@ brown spore print . The spores themselves are bean @-@ shaped , measuring from 5 @. @ 5 to 10 micrometres (0 @. @ 00022 to 0 @. @ 00039 in) by 4 to 6 micrometres (0 @. @ 00016 to 0 @. @ 00024 in) . The walls of the spores (which are around 0 @. @ 5 micrometres (2 @. @ 0 × 10 ? 5 in) thick) can be smooth or slightly wrinkled , and there is a distinct depression just above the hilum (the scar where the spore was once attached to the basidium) . The basidia are four @-@ spored , and the thin @-@ walled , gill @-@ edge cheilocystidia are pear @-@ shaped .

= = Similar species = =

The species can be differentiated from the similar *I. praetervisa* by its spores ; the latter " has

irregular , lumpy spores " . *Inocybe rimosa* , the split fibre-cap , is also similar in appearance ; the rarer *I. cookei* can be differentiated by the smell of honey and the marginate bulb . The colouration , as well as the thick stem with a bulb , are features shared by two other species of *Inocybe* ; *I. mixtilis* and *I. cryptocystis* . Another fragrant *Inocybe* is *I. pyriodora* , which has an odor resembling cinnamon , or ripe pears in mature specimens ; unlike *I. cookei* , it lacks a bulb at the base of its stem , and bruises a reddish colour when handled or with age .

= = Distribution and habitat = =

Inocybe cookei is an occasional to frequent mushroom , found growing in mixed woodland on the ground . It is ectomycorrhizal , and grows from summer to late autumn , solitarily or in " trooping groups " . It has been recorded in Europe , Russia , China , Mexico , and the United States .

= = Toxicity and edibility = =

Inocybe cookei has been described as both poisonous (due to the presence of muscarine compounds) and non @-@ toxic . Consumption of mushrooms containing muscarine compounds could lead to a number of physiological effects , including : excess salivation , lacrimation , uncontrolled urination or defecation , gastrointestinal problems and emesis (vomiting) ; this array of symptoms may also be known by the acronym SLUDGE . Other potential effects include a drop in blood pressure , sweating and death due to respiratory failure . The flesh of the mushroom has a mild taste and a slight smell of honey . Regardless of its actual toxicity or edibility , it is considered " best avoided " .