

= *Mycena arcangeliana* =

Mycena arcangeliana (commonly known as the angel 's bonnet or the late @-@ season bonnet) is a species of Mycenaceae fungus . It has been known by a number of scientific names , and its taxonomy is still somewhat disputed . It produces small mushrooms with caps varying in colour from whitish to a darker grey @-@ brown , and stems of an olive @-@ greyish that fade with age . The mushrooms can be mistaken for the similar *Mycena flavesces* . They have a mild taste , but a strong smell of iodoform ; they are not edible . The species grows on dead wood in autumn months , and can be found throughout Europe .

= = Taxonomy , naming , and classification = =

Mycena arcangeliana was first described by Giacomo Bresadola in 1904 ; the species was listed along with 41 others found in Pisa , in an article by Egidio Barsali published in the *Bollettino Della Societa Botanica Italiana* (Bulletin of the Botanical Society of Italy) . Authors Roger Phillips and Paul Sterry both describe the name *Mycena oortiana* as synonymous ; *M. oortiana* was a name given by Frederich Hora in 1960 based on Robert Kühner 's 1938 name for the variety *Mycena arcangeliana* var. *oortiana* , an invalid name . Phillips had earlier considered *M. arcangeliana* var. *oortiana* to be a synonym of *M. oortiana* , and MycoBank lists it as a synonym of Lucien Quélet 's *Mycena olivascens* . However , Index Fungorum lists both *M. olivascens* and Kühner 's *Mycena vitilis* var. *olivascens* as synonyms of *M. arcangeliana* . The specific epithet *arcangeliana* may be in honour of Giovanni Arcangeli , who collected the species in the Orto botanico di Pisa . *M. arcangeliana* is commonly known as the angel 's bonnet , or the late @-@ season bonnet .

Within the genus *Mycena* , it is found in the section *Filipedes* , on account of the cheilocystidia covered with evenly spaced , short cylindrical excrescences , and its size and occurrence on wood . It can be separated from the other members of the section on account of a cap with yellowish to olive shades , gills with pinkish hints and stems with vaguely violet colouration .

= = Description = =

Mycena arcangeliana mushrooms have caps of between 1 and 5 centimetres (0 @.@ 4 and 2 in) in diameter which are conical in shape in younger mushrooms , becoming bell @-@ shaped with a broad umbo in older specimens . The oldest mushrooms have caps which are almost completely flat . The colouration varies from a whitish to a darker grey @-@ brown , sometimes with tints of olive or yellow , and it has furrows on the typically translucent surface . However , it is hygrophanous , and dries to a much paler colour . The cylindrical stem measures between 20 and 40 millimetres (0 @.@ 8 and 2 in) in length , by 1 and 2 mm (0 @.@ 04 and 0 @.@ 08 in) in width . In young mushrooms , it is an olive @-@ greyish colour , tinted with lilac , though it fades as the mushroom ages . The very top of the stem is a whitish colour , while the base is covered in white hairs . It is smooth and silky in texture , and there is no ring . The crowded gills are adnexed , that is , connected to the stem by only part of their depth , and are white in colour , turning pinkish as the mushroom ages . The gill edges are somewhat toothed . The flesh has a mild taste , but a strong smell of iodoform . In the cap , it is white , while in the stem , it is grey . The mushrooms are not edible .

= = = Microscopic characteristics = = =

Mycena arcangeliana mushrooms leave a whitish spore print , while the spores are shaped like apple seeds and amyloid , meaning that they stain a dark colour in Melzer 's reagent or Lugol 's solution . The basidia are four @-@ spored . They measure from between 7 and 8 micrometres (μm) by 4 @.@ 5 and 5 μm . There are a large number of hyaline cheilocystidia (cystidia on the edge of the gills) which are club @-@ shaped or ovate . They have thin cell walls , and are covered in grain @-@ like warts . The pleurocystidia (the cystidia on the face of the gill) are similar in appearance .

The pileipellis is made up of wart @-@ covered hyphae measuring between 2 and 4 @.@ 5 µm wide and up to 30 µm long . The outermost layer of the stem is made up hyphae with short , cylindrical hairs . The hyphae have clamp connections .

= = = Similar species = = =

Mycena arcangeliana is somewhat similar to the less common *Mycena flavescens* , a species found in both hardwood and softwood forests on the floor among leaf or needle litter or grassland . *M. flavescens* typically has a whiter cap and a smell reminiscent of radish . *M. peyerimhoffi* , known from Algeria , has a similar cap colour to *M. arcangeliana* , but has a yellow stem . *M. limonia* , known from the Netherlands , has a lemon @-@ yellow cap and stem and more gills . Another species similar in appearance is *M. metata* , which has a sweet taste .

= = Habitat and distribution = =

Mycena arcangeliana grows on dead deciduous wood , favouring beech and ash , where it grows in " small troops " . It has also been recorded less frequently on conifers , bracken and Japanese knotweed . There have been reports from grassland , but these are probably a misidentification of *M. flavescens* . It is infrequently to commonly found in late summer to autumn months in the British Isles , though it is more commonly encountered in the south . Its distribution is fairly widespread elsewhere in Europe , though it is less common . It has been listed as vulnerable on the Red List of Threatened Fungi in Norway . " *Mycena oortiana* " , which was rarely found in mycological literature , was described as a predominantly west @-@ European species ; however , *M. arcangeliana* has also been recorded in Scandinavia , Greenland , and Italy , from where it was first described .