

= *Cyptotrama asprata* =

Cyptotrama asprata (alternatively spelled *aspratium*) , commonly known as the golden @-@ scruffy collybia , is a saprobic species of mushroom in the family Physalacriaceae . Widely distributed in tropical regions of the world , it is characterized by the bright orange to yellow cap that in young specimens is covered with tufts of fibrils resembling small spikes . This fungus has had a varied taxonomical history , having been placed in fourteen genera before finally settling in *Cyptotrama* . This species is differentiated from several other similar members of genus *Cyptotrama* by variations in cap color , and spore size and shape .

= = History = =

This species was first described from Ceylon by English naturalist Miles Joseph Berkeley in 1847 ; soon after (1852) , specimens were collected from South Carolina USA . Later , the fungus was described under a variety of names : *Lentinus chrysopheplus* from Cuba ; *Agaricus sabriusculus* and *Agaricus lacunosa* from New York ; *Collybia lacunosa* from Michigan ; and *Omphalia scabriuscula* in Connecticut . As Canadian mycologists Redhead and Ginns explain in a 1980 article on the species , since its original 1847 description , *C. asprata* has been given 28 names , and placed in 14 different genera .

= = Description = =

The cap is 0 @.@ 6 to 2 @.@ 7 cm (0 @.@ 24 to 1 @.@ 06 in) in diameter , convex to cushion @-@ shaped . The cap surface is dry , and younger specimens are covered with characteristic spikes ; as the spikes break up with age , they tend to look more hairy or woolly . Older specimens typically have the surface features worn off . The cap margin tends to be rolled inwards when young , gradually becoming straight with maturity . The color of the cap is bright or pale yellow , increasing in intensity towards the center of the cap . *C. asprata* has a web @-@ like ring that soon disappears .

The gills , pale yellow to white in color , are distantly spaced and have an adnate (squarely attached) or short decurrent (running down the length) attachment to the stem ; they feel greasy when dried and crushed . The stem is 1 to 6 @.@ 7 centimetres (0 @.@ 4 to 2 @.@ 6 in) long by 0 @.@ 2 to 0 @.@ 4 centimetres (0 @.@ 08 to 0 @.@ 16 in) thick at the stem apex ; the stem is slightly thicker towards the base , and may be covered with hyphae that appear woolly (flocculose) or hairy (fibrillose) . The surface of the stem may also be scaly ? especially towards the base ? or it may be covered with very small particles (granular) . The flesh of this mushroom is white or pale yellow , with no distinctive taste or odor . The spore print is white . Edibility is unknown for this fungus .

= = Microscopic features = =

Spores are thin @-@ walled , smooth , and ellipsoidal or oval in shape . Viewed with a microscope , they appear translucent (hyaline) , and stain red or blue with Melzer 's reagent (in amyloid) . Their dimensions are typically 7 ? 10 by 5 ? 7 µm ; the spores contain a single large oil droplet . The spore @-@ bearing cells , the basidia , are club @-@ shaped , two- to four @-@ spored , and 25 ? 30 by 5 ? 7 µm . The presence of sterile cells called pleurocystidia (large cells found on the gill face in some mushrooms) is uncommon ; specimens may contain few or abundant cheilocystidia (large sterile cells found on the gill edge) that are club @-@ shaped , thin @-@ walled and 39 ? 87 @.@ 5 by 8 @.@ 5 ? 16 µm in size .

= = Habitat and distribution = =

Cyptotrama asprata is a saprobic fungus , and grows on the decaying wood of deciduous and

coniferous trees . Host species include white fir (*Abies concolor*) , sugar maple (*Acer saccharum*) and other maple (*Acer*) species , grey alder (*Alnus oblongifolia*) , beech (*Fagus*) species , spruce (*Picea*) species , ponderosa pine (*Pinus ponderosa*) and other pine (*Pinus*) species , poplar (*Populus*) and oak (*Quercus*) species . In temperate North America , specimens are typically collected between July through September .

The species has a pantropical distribution , and is widely distributed in tropical regions of the world . It has been collected from Australia , southeastern Canada , China , Costa Rica , India , Hawaii , New Zealand , Japan , and the Russian Far East . It is absent from Europe and Northwestern North America .

= = Similar species = =

Many other members of genus *Cyptotrama* are similar in appearance and differ from *C. asprata* by only one or two readily observable features . For example , *C. granulosa* is bright yellowish @-@ brown (rather than bright or pale yellow in *C. asprata*) ; *C. lachnocephala* is ochre @-@ colored ; *C. deseynesiana* is cream @-@ colored with brown scales ; *C. verruculosa* has a " copper @-@ rust @-@ brown " cap ; *C. costesii* has olive @-@ colored pigments . Species may also be distinguished by differences in spore size and shape , although a considerable size range has been noted for *C. asprata* spores .