

= *Entoloma austroprunicolor* =

Entoloma austroprunicolor is a species of agaric fungus in the family Entolomataceae . Described as new to science in 2007 , it is found in Tasmania , where it fruits on the ground of wet sclerophyll forests in late spring to early winter (usually between January and March) . The fruit bodies (mushrooms) have reddish @-@ purple caps measuring up to 5 cm (2 @. @ 0 in) in diameter supported by whitish stipes measuring 3 ? 7 @. @ 5 cm (1 @. @ 2 ? 3 @. @ 0 in) long by 0 @. @ 2 ? 0 @. @ 6 cm (0 @. @ 1 ? 0 @. @ 2 in) thick . On the cap underside , the crowded gills are initially white before turning pink as the spores mature .

= = Taxonomy = =

The species was first formally described in 2007 by Australian mycologist Genevieve Gates and Dutch mycologist Machiel Noordeloos , from collections made in Tasmania , Australia . The specific epithet *austroprunicolor* is derived from the Latin prefix *austro-* , meaning " southern " , and the Latin word *prunicolor* , meaning " plum @-@ coloured " . The type collection was made in January 2002 at Kermadie Falls , near Geeveston in southern Tasmania . The species was discovered as a result of intensive field research , conducted by Gates and David Ratkowsky , which began in 1998 . Realizing that many Tasmanian Entolomataceae species were undescribed , they and their collaborators published a series of papers documenting the new fungi .

Within the genus *Entoloma* , the fungus is classified in the subgenus *Leptonia* , section *Cyanula* because of its overall habit , clampless hyphae , and abundant granules of pigment . Noordeloos and Gates place it in the stirps (a grouping of related species within a genus) *Austroprunicolor* , characterized by mushrooms with a violaceous pink or blue cap that contrasts with a pallid , whitish , polished stipe .

= = Description = =

The cap measures 1 to 5 cm (0 @. @ 4 ? 2 in) in diameter , and is convex or umbonate (having a central rounded elevation resembling a nipple) . It is bluish @-@ purple when young before reddening to a reddish @-@ purple and eventually fading to a more purplish @-@ grey colour . The cap surface texture is initially fibrillose (made of loose fibers) to velutinous (made of short , fine " hairs " that form a velvety surface) , and then breaks up into small radially arranged fibrillose squamules (small scales) as it matures . The cap margin curves downward . Gills are closely crowded together , up to 6 mm broad , and have an adnate attachment to the stipe . They are white initially before becoming tinged with pink from the developing spores . The thin cylindrical stipe measures 3 ? 7 @. @ 5 cm (1 @. @ 2 ? 3 @. @ 0 in) long and 0 @. @ 2 ? 0 @. @ 6 cm (0 @. @ 1 ? 0 @. @ 2 in) wide with a slightly thicker base . It is dry and brittle , hollow , and white or nearly white . The flesh is purple in the cap , and white in the stipe . The smell and taste are indistinct , although the latter has been described as peppery or radish @-@ like . Its edibility is unknown .

The spore print is pink , and the spores measure 10 ? 13 by 6 ? 9 ?m . They are heterodiametric (with different diameters in different directions) , possessing between 6 and 8 pronounced angles . The basidia (spore @-@ bearing cells) are four @-@ spored , lack clamps , and measure 33 ? 40 by 9 ? 14 ?m . Located on the gill edge , the thin @-@ walled , inconspicuous cheilocystidia measure 20 ? 30 by 5 ? 9 ?m and have shapes ranging from irregular cylinders to narrow clubs to flasks . The cap cuticle is arranged in the form of a cutis (with bent @-@ over hyphae that run parallel to the cap surface) to a trichoderm (where the outermost hyphae emerge roughly parallel , perpendicular to the cap surface) , comprising cylindrical to inflated hyphae that are up to 20 ?m wide . The cap tissue is made of narrow cylindrical hyphae that are 4 @. @ 5 ? 9 ?m in diameter . They contain granules that have a purple @-@ brown pigment . The stipe cuticle is made of loosely arranged , cylindrical hyphae measuring 2 ? 7 ?m . Clamp connections are absent from the hyphae .

= = = Similar species = = =

Entoloma austroprunicolor resembles the European species *E. queletii* , but the cap of the latter species fades to an ochre colour , and it has a white fibrillose stipe . Microscopically , its gill edges have well @-@ differentiated cheilocystidia .

= = Habitat and distribution = =

Entoloma austroprunicolor is a commonly occurring mushroom of wet sclerophyll forests in Tasmania . Fruiting occurs from late spring to early winter , with most fruit bodies recorded between the months of January to March . In a study of the distribution of mushroom species in this area , it was found to occur only in mature or uncut forests .