

YELLOW STAINER

**THIS IS A POISONOUS MUSHROOM!
IT MAY CAUSE SEVERE GASTRIC DISTURBANCES!**



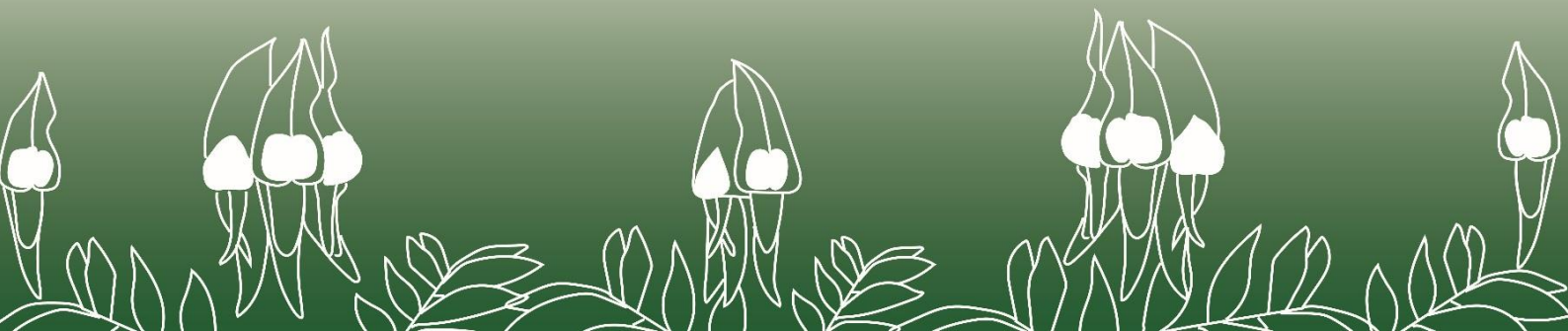
Photo: © Pam Catcheside

Scientific name: *Agaricus xanthodermus* Genev.

General description: *Agaricus xanthodermus* is a large white mushroom with a cap resembling the horse or field mushrooms. However, the young caps are often square in shape and older caps usually have a flattened top and straighter, almost vertical sides. The gills are white initially, then pink, and later turn dark purple-brown; the pink shades are deeper than those of field mushrooms. The most distinguishing feature is that the cap and stem base turn bright chrome yellow when scratched. The smell is often unpleasant, especially when cooking.

Division: Basidiomycota. **Order:** Agaricales. **Family:** Agaricaceae.

Common name: Yellow Stainer.



Cap: The cap size ranges from 50–200 mm diameter; the shape is convex to domed with a flattened top which may be slightly depressed in the centre. Young specimens may be cylindrical or almost square. The colour is white but it may become greyish brown when mature. The surface varies from smooth to having fine fibre-like scales; some specimens have brown scales which are denser in the centre. When the surface near the margin is scratched it turns bright yellow, this colour fades to brown. The margin often has hanging fragments of the veil and older specimens tend to crack around the cap edge. The cuticle or skin peels easily.

Flesh is thick, white and stains yellow.

Stalk ranges from 50–120 mm high, 10–30 mm thick. It is white but stains yellow, especially at the somewhat bulbous base. It is cylindrical, smooth but sometimes finely scaly.

Ring on stalk: There is usually a double ring, the lower one is narrow and hugs the stem, the upper part of the top ring hangs downwards and is marked with the lines of the gills. Rings are white, but stain yellow.

Gills: These plate-like structures radiate from the stem and bear the spores. They are free from the stem, close together, white, then they become pink and finally brown (there is a gap between the gills and the stem). The gill margin is finely serrated.

Spore print: When a cap is placed gills downwards on to white paper and left for a few hours, a purple brown spore print is left.

Habitat: The mushroom grows in groups in lawns and pastures, sometimes forming large rings.

Distribution: NSW, Qld, SA, Vic., Tas., WA.

Smell is unpleasant, phenolic, carbolic, of ink or iodine. The smell becomes stronger on cooking.

Taste: Reports vary from mild and mushroomy to disgusting.

Toxicity: This fungus is one of the most common mushrooms involved in poisonings in Australia (Southcott 1997). It may cause severe gastro-intestinal pains, diarrhoea, vomiting and sometimes coma. Symptoms may start forty minutes to four hours after eating. Complete recovery within a few days is expected. Ingestion does not result in poisoning in all cases: some people seem immune, others have no ill effects after the first few times of eating but suffer on a later ingestion. Others have severe symptoms on their first ingestion.

Look-alikes: The Horse Mushroom, *Agaricus arvensis*, and the Field Mushroom, *Agaricus campestris*, do not stain yellow. Other members of the genus *Agaricus* that may stain yellow do not have the same combination of features: squarish cap, double ring, light coloured gills when young and phenolic smell.

Etymology: *Agaricus* [Greek], *agaricum* [Latin]: mushroom; xanthos [Greek]: yellow; derma [Greek]: skin.



Other descriptions, illustrations and references

D = Description; I = Illustration; P = Photo; CP = Colour Photo.

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State Herbarium Factsheet — Yellow Stainer

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