Agaricus aff pilatianus



Agaricus aff pilatianus © Pat Leonard

Cap: convex but irregular; 65 - 85 mm diameter; glabrous, but breaking into broad scales in centre when old; chalky white but seems to bruise brown; margin entire on emergence but splitting with age.

Stipe: cylindrical or distinctly tapering towards base; $60 - 80 \times 15$ mm; glabrous; white; ring distinctly thickened, triangular, and persistent, white; ring circa 0.6 of height of stipe; base of stipe yellows on bruising.

Gills: free; greyish pink at first, becoming chocolate brown; crowded; lamellulae rare. **Flesh:** white in cap and upper stipe, bright yellow towards base of stipe, but yellow fading quite rapidly after exposure to air.

Smell: strong, carbolic soap.

Spores: dark brown; ellipsoid; $4.8 - 5.6 \times 3.2 - 4 \mu m$, average $5.2 \pm 0.3 \times 3.5 \pm 0.2 \mu m$, Q = 1.5.

Basidia: clavate, four-spored.

Cheilocystidia: clavate to ovoid; septate, catenate (in chains).

Pleurocystidia: absent.

Pileipellis:

Notes: one of a group of *Agaricus* species in the Section *xanthodermi* that appear in Queensland forests. This is close to the European *Agaricus pilatianus* described by Nauta on page 55 of Flora Agaricina Neerlandica but differs by having smaller spores. It is thought that this is a synonym of *Agaricus iodosmus* Heinem. The cylindrical or tapering stipe separates it from *Agaricus xanthodermus* in the field, but this needs to be confirmed microscopically by checking that the cheilocystidia are catenate (in chains).

Collections examined: PL51310, South West Brisbane Park, Pat Leonard, 13 March 2010; PL760321, Maroochy Bushland Botanic Garden, Pat Leonard, 27 Mar 2021.