

Licea xanthospora



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Licea xanthospora E.M. Davison, P.J.N. Davison, M.D. Barrett & R.L. Barrett, *sp. nov.*

Etymology. Derived from the Greek *xanthos* and *spora*, in reference to the yellow spores.

Sporangia single, gregarious, or plasmodiocarpous, sessile, without hypothallus, hemispheric to pulvinate, plasmodiocarps often reticulate; variable in size 0.1–2 × 0.1–1.8 mm, total height less than 0.25 mm; dark brick, rusty tawny occasionally purplish chestnut. *Peridium* thick, double, the two walls usually closely adhering, separating at maturity; outer wall thick with included debris, yellow brown in transmitted light, inner wall thin, iridescent, yellow in transmitted light, smooth; dehiscence along preformed lines into large plates, inner wall thickened at plate margin. *Columella* absent. *Spores* in mass sienna, yellow in transmitted light, globose, densely ornamented with capitate warts, 12–15.5 µm diam, no germ-pore seen. *Plasmodium* not seen.

Typus. AUSTRALIA, Western Australia, Bachsten Camp, Regent River Reserve, S15°59'24" E125°18'50", 26 Jan. 2010, M.D. & R. Barrett, MB 27, developed in moist chamber on leaf litter of *Melaleuca* sp. and *Planchonia careya* (holotype PERTH 08481636, MycoBank MB804927); Western Australia, Charnley River Homestead, S16°42'36" E125°27'36", 28 Jan. 2010, M.D. & R. Barrett, RB 34, developed in moist chamber on leaf litter of *Melaleuca viridiflora*, paratype PERTH 08481628; Western Australia, Charnley River Homestead, S16°42'36" E125°27'36", 28 Jan. 2010, M.D. & R. Barrett, RB 36, developed in moist chamber on leaf litter of *Antidesma ghaesambilla*, paratype PERTH 08481601.

Notes — *Licea* is a genus of small, usually inconspicuous myxomycetes. They are most frequently observed on bark that has been incubated for several weeks in moist chambers. *Licea xanthospora* is unusual because of its relatively large size and yellow, verruculose spores (as seen under the light microscope) that are capitate under the scanning electron microscope. It differs from other sessile species that dehisce along preformed lines, as described in Poulain et al. (2011), because the peridium is opaque, whereas the peridium of *L. sambucina* is translucent, and in the colour of the spore mass which is sienna, whereas it is fuscous red-brown in *L. minima*, and dark brown or black in *L. chelonoides*, *L. pusilla*, *L. pygmaea* and *L. testudinacea*. Also there are no tubercles at the plate margins as in *L. chelonoides*, *L. minima*, *L. pusilla* and *L. pygmaea*. On this basis it is described as a species new to science.

Licea xanthospora occurs in the Kimberley area of Western Australia, where it has been found in *Eucalyptus miniata* woodland over sand flats and *Melaleuca* / *Antidesma* thickets over swampy alluvial soils.

Colour illustrations. Charnley River, Kimberley area, Western Australia, paratype locality; mature sporangia on litter (from moist chamber) showing their range of form; plasmodiocarp on litter (from moist chamber); margin of peridium; spores; SEM spores. Scale bar = 10 µm (margin of peridium and spores); 2 µm (SEM).

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