

Astraeus hygrometricus



Astraeus hygrometricus © Fran Guard

Fruiting body: subglobose or depressed at first, often encrusted in debris, 25–30 mm diameter; opening to reveal 7 to 13 rays which are strongly hygrometric: closing over the endoperidium in dry conditions, opening and reflexing downward in damp weather; up to 80 mm in diameter when open.

Exoperidium: brown, layered; when older, splits into a reticulate pattern (tessellated) to expose paler flesh in lower layer.

Endoperidium: subglobose, felty, whitish at first becoming pale buff.

Stipe: absent, sessile.

Stoma: naked, ragged.

Flesh: thick and leathery, almost woody when dry.

Spores: globose; 9–11 μm ; echinulate or verrucose, verrucae pointed and 0.5–1 μm high.

Habitat: nutrient-poor soils under exotic trees.

Notes: this earthstar has been introduced with exotic trees; it is readily recognised by its hygrometric character, hence its alternative name of the ‘barometric earthstar’.

Collections examined: PL19509, Mount Tomah Botanic Garden, NSW, Pat Leonard, May 2009; F2015061, suburban garden, Toowoomba, Fran Guard, 23 Jul 2015.