

PITHYA CUPRESSINA (ASCOMYCOTA: PEZIZOMYCETES, SARCOSCYPHACEAE): A NEW ADDITION TO THE MALTESE MYCOBIOTACarmel SAMMUT¹

ABSTRACT: The cup fungus *Pithya cupressina* is recorded for the first time from the Maltese Islands where it has been found associated with cypress leaf-litter.

KEYWORDS: *Pithya cupressina*, Sarcoscyphaceae, Mycobiota, Malta.

During a survey of macrofungi in Malta, the author came across a small disc-shaped ascomycete growing on cypress leaf litter but its identity remained undetermined. Recently a similar specimen was collected from the exact same area (figure 1). The specimen was examined microscopically (figure 2) and was eventually identified as *Pithya cupressina* by comparison with Phillips (1893), Seaver (1942) and Benkert (2008).

Pithya cupressina appears restricted to this area, as searches in other stations have been negative. However although the apothecia are brightly coloured their miniscule size renders them inconspicuous to the casual observer. Furthermore this species prefers shaded areas in contrast with open areas favoured by other cup fungi.

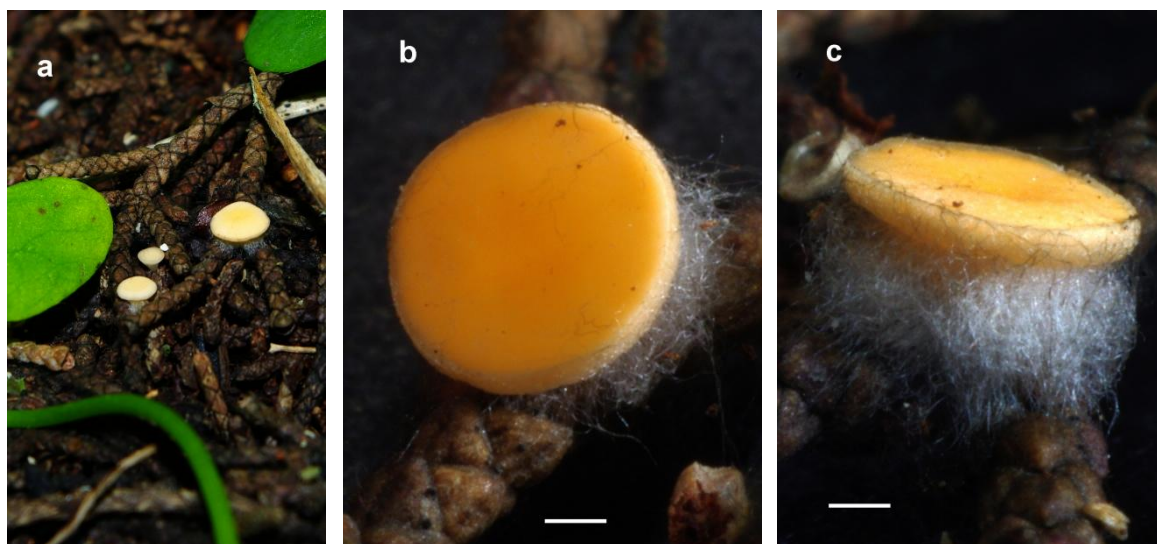


Figure 1. (a) *Pithya cupressina* on leaf litter; (b) frontal view; (c) lateral view. Scale 0.5mm.

Order: Pezizales

Family: Sarcoscyphaceae

Pithya cupressina (Batsch) Fuckel

Malta: il-Buskett (Verdala) gregarious on *Cupressus* leaf litter, 7/1/11 (CS189); il-Buskett (Verdala) gregarious on *Cupressus sempervirens* litter, 16/12/11 (CS302).

Ascocarp initially 'cup' shaped flattening to a disc on maturation, yellow-orange to orange on the upper surface but a pale yellow on the underside, size range 0.5 – 3mm in diameter, shortly stipitate to sessile, glabrous around the margin but villous on the underside, particularly in mature specimens where the stipe is obscured by the white hairs.

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Microscopically the asci are cylindrical, operculate, 8-spored, 140-215µm x 10-13µm bulging at each spore location, thinning gently towards the base. The paraphyses are filiform, 100-220µm x 2-5µm, slightly inflated at the tips occasionally splitting into two (central to basal split). Spores in fresh material are globular, aseptate, smooth and hyaline, 10-11µm in diameter. In dried material there is a tendency for the spores to become distorted to a slightly ellipsoid shape. Melzer's reagent: negative all tissues.

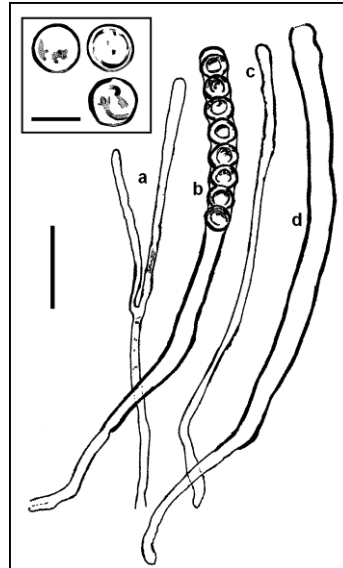


Figure 2. (a) Paraphysis splitting into two;(b) ascus with spores;(c) paraphysis; (d) empty ascus. Inset: spores. Scale 10µm.

Pithya cupressina is associated with conifer leaf litter, most commonly on *Cupressus* & *Juniperus* (Seaver, 1942) and is distinguished from the related *Pithya vulgaris* by the latter's larger size (Benkert, 2008), association with *Abies* leaf litter (Benkert, 2008) or *Pinus* leaf litter (Breitenbach & Kränzlin, 1984) and the larger ascospores (Saccardo, 1889) of the latter. *Scutellinia* species are easily distinguished from this species by the presence of marginal hairs, whilst *Aleuria aurantia* is larger, darker in colour (orange-red) and terrestrial.

It is relevant to note that Edwin Lanfranco states that he had first encountered and identified this species on the 7th February 1982, also from il-Buskett and growing on *Cupressus sempervirens* litter (Lanfranco, pers. comm. 25th April 2012).

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