Dothiorella thripsica
**Fungal Planet 32 – 30 June 2009**

**Dothiorella thripsita** R.G. Shivas & D.J. Tree, *sp. nov.*

Conidia *cylindraceae* ad clavata, recta, ambo extrema late rotundata, 20–25 × 8.5–11.5 µm, aspetata et pallide brunnea ubi sunt luvienia, orientia septata et brunnea ubi sunt natura, saepe cum guttula in quaque cellula, paries dense et minute verruculosus, facies levis in LM, verruculosa in SEM.

**Etymology.** Named after the insect that feeds on this fungus.

Conidiomata pycnidial, solitary, immersed, partially erumpent when mature, dark-brown, glosbese ad elliptoidial, usque ad 300 × 200 µm diam, uniloculate, wall composed of an outer layer of dark brown, thick-walled textura angularis, and an inner layer of thin-walled hyaline cells. Ostiole central, circular, papillate. Conidiophores absent. Conidiogenous cells 10–15 × 3–6 µm, holoblastic, discrete, cylindrical, hyaline, smooth, indeterminate. Conidia cylintricale ad clavate, straight, both ends broadly rounded, 20–25 × 8.5–11.5 µm, aspetate and pale brown when young, becoming septate and brown when mature, often with a guttule in each cell, wall densely and minutely verruculose, profile smooth under light microscope, verruculose in scanning electron microscope, in vitro on Sachs’ agar supporting sterilised pieces of maize leaf and in vivo.

Culture characteristics — Colonies on 10 % potato-dextrose agar of thin-walled hyaline cells. Ostiole central, circular, papillate. Conidiophores absent. Conidiogenous cells 10–15 × 3–6 µm, holoblastic, discrete, cylindrical, hyaline, smooth, indeterminate. Conidia cylindrical to clavate, straight, both ends broadly rounded, 20–25 × 8.5–11.5 µm, aspetate and pale brown when young, becoming septate and brown when mature, often with a guttule in each cell, wall densely and minutely verruculose, profile smooth under light microscope, verruculose in scanning electron microscope, in vitro on Sachs’ agar supporting sterilised pieces of maize leaf.

**Typus.** Australia, Queensland, Tallegalla, 27° 35' 40" S, 152° 33' 01" E, alt. 160 m, on dead stems and phylloides of *Acacia harpophylla* F. Muell. ex Benth. 24 Mar. 2008, D.J. Tree & C.E.C. Tree, isol. D.J. Tree, BRIP 51876, holotype; cultures ex-type BRIP 51876, GenBank FJ824738, MycoBank MB513166.

Notes — Thrips (Thysanoptera) are an order of insects that feed almost exclusively on leaves of brigalow (*Acacia harpophylla*). A distinctive feature of this thrips species is the presence of diplodia-like conidia. All of these specimens consist of several phylloides of *Acacia complanata* exhibiting irregular pale grey leaf lesions, 5–10 mm diam, containing small dark spots less than 1 mm diam. On close examination these were found to be acervuli of *Pestalotiopsis* and no diplodia-like conidia were seen. It appears that no material of *D. lichenopsis* is extant.

The most parsimonious tree (TL = 112; CI = 0.725; RI = 0.855) was obtained from a max-mini branch-and-bound search of an ITS sequence alignment using MEGA4. The scale bar shows distances among the nodes. The species described here is printed in **bold** face. The tree was rooted to *Mycosphaerella* (GenBank AY260085).

**References**


**Colour Illustrations.** *Acacia harpophylla* with dead leaves harbouring *Mycenothrips hardyi* and *Do. thripsita* from the type locality; adult male *M. hardyi*; conidia; pycnidia; SEM of conidia. Scale bar = 1 mm for adult male *M. hardyi*; other scale bars = 10 µm.