

1. PaDIL Species Factsheet



Scientific Name:

Macalpinomyces arundinellae-setosae R.G. Shivas & Vánky
Basidiomycota, Ustilaginomycetes, Ustilaginales, Ustilaginaceae

Common Name

Arundinella Smut

Live link: <http://www.padil.gov.au:80/aus-smuts/Pest/Main/140018>

Image Library

Smut Fungi of Australia

Live link: <http://www.padil.gov.au:80/aus-smuts/>

Partners for Smut Fungi of Australia image library



Agri-Science Queensland, DEEDI
<http://www.deedi.qld.gov.au>

2. Species Information

2.1. Details

Specimen Contact: Roger Shivas - roger.shivas@deedi.qld.gov.au

Author: Roger Shivas

Citation: Roger Shivas (2010) Arundinella Smut (*Macalpinomyces arundinellae-setosae*) Updated on 12/2/2010 Available online: PaDIL - <http://www.padil.gov.au>

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2.2. URL

Live link: <http://www.padil.gov.au:80/aus-smuts/Pest/Main/140018>

2.3. Facets

Columella: absent

Distribution: NT, QLD

Host Family: Poaceae

Peridium: present

Sorus position: inflorescence

Sorus shape: long cylindrical

Spore balls: absent

Spore mass texture: semi-agglutinated

Spore shape: globose or subglobose, polyhedral or subpolyhedral

Spore surface ornamentation: echinate or echinulate, punctate, verruculose

Status: Native Australian Species

Sterile cells: present

2.4. Diagnostic Notes

****Sori**** in some ovaries of an inflorescence, cylindrical, 5–13 mm long, c. 0.5 mm wide, protruding beyond the glumes, covered by a pale yellowish brown peridium that dehisces from its apex exposing a dark brown semi-agglutinated mass of spores and sterile cells.

****Spores**** subglobose to irregularly subpolyhedral, 6.5–9.0 × 6.5–8.5 µm, brown; wall uniformly c. 0.5 µm thick, punctate to verruculose-echinulate.

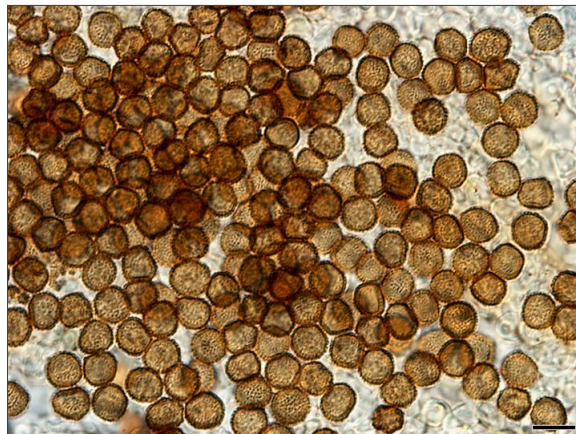
****Sterile cells**** globose, subglobose or ellipsoidal, often in large groups (hundreds of cells), 5–10 µm diam., mostly with a spherical vacuole c. 2.5 µm diam., hyaline; wall uniformly thin, smooth.

3. Diagnostic Images



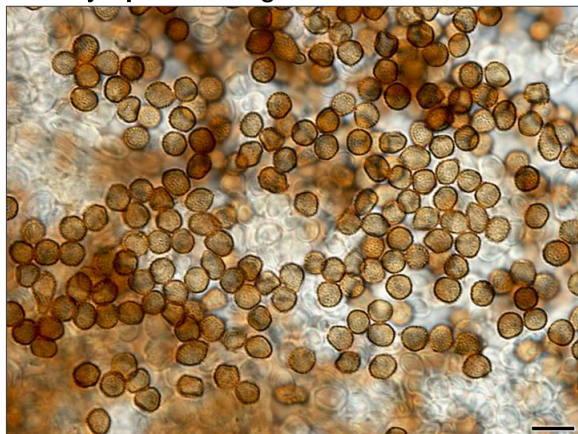
Macalpinomyces arundinellae-setosae on Arundinella setosa - BRIP 46034. Scale bar = 2 mm.

Host symptoms: Roger Shivas DEEDI



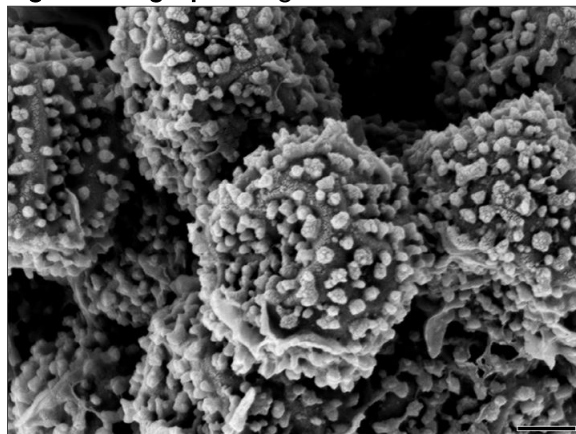
Macalpinomyces arundinellae-setosae on Arundinella setosa - BRIP 46034. Scale bar = 10 μ m.

Light micrograph: Roger Shivas DEEDI



Macalpinomyces arundinellae-setosae on Arundinella setosa - BRIP 47761. Scale bar = 10 μ m.

Light micrograph: Roger Shivas DEEDI



Macalpinomyces arundinellae-setosae on Arundinella setosa - BRIP 47761. Scale bar = 10 μ m.

Scanning Electron Micrograph: Desley Tree DEEDI

Results Generated:

Wednesday, June 26, 2019
