

1. PaDIL Species Factsheet



Scientific Name:

Sporisorium absconditum Vánky

Basidiomycota, Ustilaginomycetes, Ustilaginales, Ustilaginaceae

Common Name

Schizachyium Smut

Live link: <http://www.padil.gov.au:80/aus-smuts/Pest/Main/139937>

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) Schizachyium Smut(*Sporisorium absconditum*) Updated on 11/22/2010

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/139937>

2.3. Facets

Columella: present

Distribution: NT, QLD

Host Family: Poaceae

Peridium: present

Sorus position: inflorescence

Sorus shape: long cylindrical

Spore balls: present

Spore mass texture: granular, powdery

Spore shape: globose or subglobose, irregular, ovoid to ellipsoidal, polyhedral or subpolyhedral

Spore surface ornamentation: smooth, verruculose

Status: Native Australian Species

Sterile cells: absent

2.4. Diagnostic Notes

****Sori**** destroying the racemes, narrowly cylindrical, 15–30 mm long, 0.5–1.0 mm wide, almost completely hidden by the tubuliform spatheole, with only the tip of the sorus protruding, covered by a thin pale brown peridium that ruptures from its distal part to expose the black granular-powdery mass of spore balls and a long filiform columella. Frequently, all shoots of a plant are infected; occasionally an infected plant may have 1 or several flowering shoots.

****Spore balls**** persistent, subglobose, ovoid, ellipsoidal or irregular, 50–100 × 50–80 µm, dark reddish brown, opaque, composed of tens of spores that separate by strong pressure.

****Spores**** dimorphic. Outer spores subglobose, ellipsoidal to subpolyhedrally irregular, 10.5–13.5 × 8–12 µm, dark yellowish brown; wall uneven, alternating thin and thick, 0.5–2.0 µm, causing darker and lighter areas to be visible; free surface of the outer spores coarsely verrucose; spore profile serrulate on the free surface, smooth on the contact sides. Inner spores subpolyhedrally irregular, about the size of the outer spores, subhyaline to pale yellowish brown; wall thin, to c. 0.5 µm, smooth.

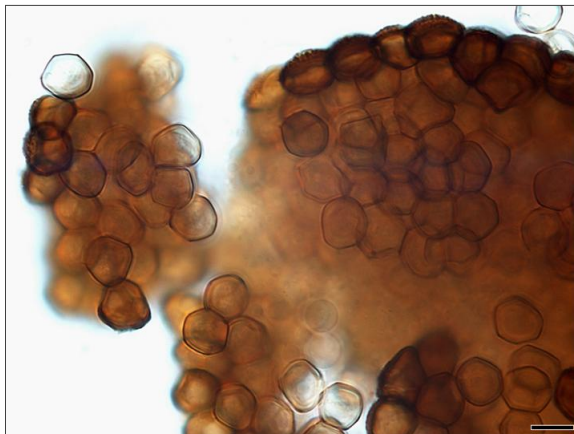
****Sterile cells**** absent.

3. Diagnostic Images

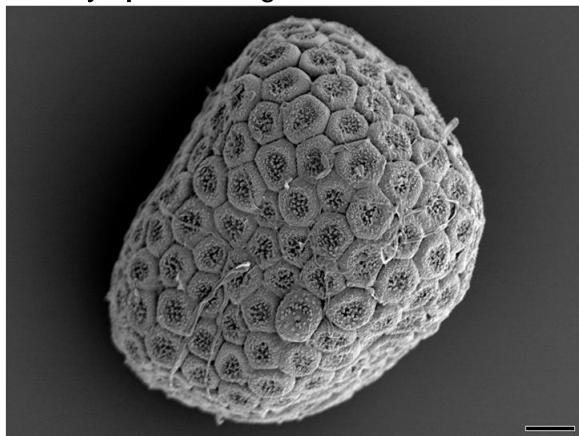


Sporisorium absconditum on Schizachyrium fragile - BRIP 44566 and BRIP 44244. Scale bars = 5 mm.

Host symptoms: Roger Shivas DEEDI

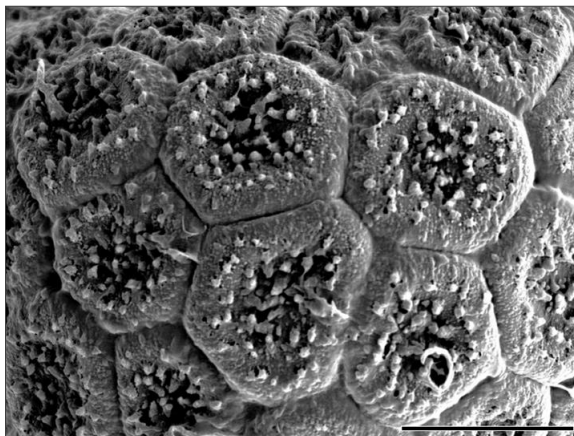


Sporisorium absconditum on Schizachyrium fragile - BRIP 49647 Scale bar = 10 µm
Light micrograph: Roger Shivas DEEDI



Sporisorium absconditum on Schizachyrium fragile - BRIP 44244 Scale bar = 10 µm

Scanning electron micrograph: Desley Tree DEEDI



Sporisorium absconditum on Schizachyrium fragile - BRIP 44433 Scale bar = 10 µm

Scanning electron micrograph: Desley Tree DEEDI

Results Generated:

Tuesday, July 16, 2019