

1. PaDIL Species Factsheet



Scientific Name:

Sporisorium blakeanum Vánky

Basidiomycota, Ustilaginomycetes, Ustilaginales, Ustilaginaceae

Common Name

Schizachyrium smut

Live link: <http://www.padil.gov.au:80/aus-smuts/Pest/Main/139946>

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) Schizachyrium smut(*Sporisorium blakeanum*) Updated on 11/23/2010 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/139946>

2.3. Facets

Columella: present

Distribution: 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, polyhedral or subpolyhedral

Spore surface ornamentation: punctate, smooth, verruculose

Status: Native Australian Species

Sterile cells: absent

2.4. Diagnostic Notes

****Sori**** destroying destroying the racemes, fusiform, 15–25 mm long, 0.5–1.5 mm wide, completely hidden by the tubuliform spatheole and also covered by a rather thick yellowish brown peridium on which numerous short or long fissures appear. Inside the spatheole and within the irregularly opened peridium, there is a black granular-powdery mass of spore balls and a long filiform columella.

****Spore balls**** rather regular, globose, subglobose, ovoid, ellipsoidal, rarely slightly irregular, 50–90 × (40–) 50–70 (–90) µm, reddish brown, composed of a few tens of spores that separate by hard pressure.

****Spores**** dimorphic. Outer spores rounded to subpolyhedrally irregular, 15–20 (–21.5) × 11.0–18.5 µm, medium reddish brown, with several large distinct irregular yellowish brown spots due to the irregularly thickened wall [0.5–2.0 (–2.5) µm thick], thickest at the angles; free surface of the outer spores c. 1.5 µm thick, including the blunt 0.5–0.8 µm high spines that, in surface view, appear as sparsely to moderately dense irregular warts; spore profile finely serrulate. Inner spores rounded, subpolyhedrally irregular, c. the size of the outer spores, subhyaline or yellowish brown-tinted; wall even to slightly uneven, 1.5–4.0 µm thick; contents finely granular.

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

3. Diagnostic Images



Sporisorium blakeanum on Schizachyrium fragile - BRIP 7804. Scale bar = 1 mm
Host symptoms: Roger Shivas DEEDI



Sporisorium blakeanum on Schizachyrium fragile - BRIP 7804. Scale bar = 10 μ m
Light micrograph: Roger Shivas DEEDI

Results Generated:

Tuesday, July 16, 2019
