

Botryotrichum indicum A. Subrahm. sp. nov.

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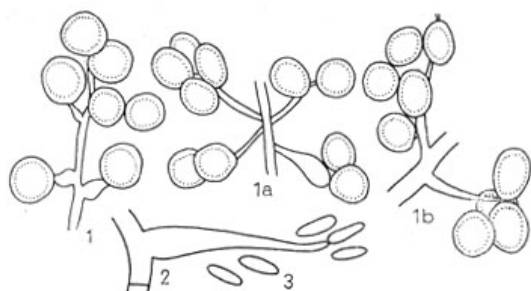
Morphological characters of *Botryotrichum indicum* are presented.

INTRODUCTION

The genus *Botryotrichum* Sacc. et March. was reviewed by Mary H. Downing (1953) and she concluded that *Botryotrichum* is monotypic with *B. piluliferum* Sacc. et March the type species. During the course of study on the fungal flora of Peoma and its environs one of the isolates obtained as a laboratory contaminant showed white mycelium, grape like clusters of aleuriospores and hyaline phialospores described for *B. piluliferum* (Downing 1953). However, the present isolate differed from the in certain characters and is described as new.

Botryotrichum indicum A. Subrahm. sp. nov. — Figs. 1-3

On YpSs agar at 24C growth moderate: colonies white lanose, reach 50 mm in diameter in five days: aerial mycelium snow white; diffusible pigment none; reverse brown; sporulation abundant; Mycelium thin, hyaline, septate funiculose, branched. Aleuriophores borne on short undifferentiated side branches of septate hyphae 25-40 μm long single or in whorls bear clusters of spores in grape-like bunches. They are semi macronematous, straight or flexuous, branched or unbranched, colourless. Aleuriospores globose, hyaline, thick walled, one celled, smooth 9.72-17.0 \times 9.7-11.0 μm . Phialophores lateral, smooth, broader towards the base, narrower towards the distal end, aseptate hyaline 11.0-16.5 μm long (rarely up to 27.5 μm), terminally bear phialospores. Phialospores catenulate, one celled, hyaline,



Figs 1-3. *Botrichum indicum* A. Subrahm. sp. nov.

1-1a, 1b - Hyphae bearing aleuriospores ($\times 320$); 2 - hyphae bearing phialospores ($\times 1000$); 3 - phialospores ($\times 1000$)

Table 1

Comparative characters of *B. piluliferum* and *B. indicum*

Species	Habitat	Aleurio- phore	Aleurio- spore	Philiads	Phialospore
<i>B. piluliferum</i>	dung	12-30 μm	globose hyaline 10-21 μm	hyaline, smooth septate 20-22 \times \times 2.8-3.3 μm	elliptic, hyaline thick walled, smooth, 2.8-4.2 \times \times 1.4-2.8 μm
<i>B. indicum</i>	laboratory contaminant	25-40 μm	globose hyaline 9.7-17.9 \times \times 9.7-11.0 μm	aseptate hyaline smooth 11.0-16.5 μm	oblong-elliptical 4.4-9.9 \times 2.0 μm

smooth, oblong to elliptical, frequently slime down as slimy head, 4.4-9.9 \times 2.0 μm .

Habitat: Pimpri Laboratory contaminant.

Isolation number: 35; Culture deposited at ATCC.

Date of isolation: 22.2.1976.

Feature of distinction with the type are presented in Table 1.

Diagnosis. *Coloniae in agar* YpSs post 5 dies albae lanosae, crescentibus 50 mm diametro, reverso brunneo; mycelio hyalino, funiculosi, septato ramosi; aleuriosporae producta ad laterales non differentis ramis, brevibus, aleuriosporae globosae, hyalinae, continuae, leves, producta ad

non differentis lateralibus, brevibus, ramulis, ramuli septati 25-40 μm longae vel producta in verticillaster racemosum conglomeratum botryodeorum magnit 9.72-17.0×9.7-11.0 μm. Phialophoro lateralialia 11.0-16.5 (27.5 μm longa, levis aseptato, hyalina. Phialosporae catenulatae continuae hyalinae, leves, ovatae vel oblongae magnit 4.4-9.9×2.0 μm.

DISCUSSION

Blochwitz (1914) in a study of *Botryotrichum piluliferum* put a particular emphasis on sterile hairs. They were shown to originate from the same hyphal base from which the spore structure arose. However, in 1953 Downing reviewed the genera *Botryotrichum* and *Coccospora* and gave an amended description of *B. piluliferum*. For the first time the species was shown to produce two types of spores "the predominating aleuriospores and the less predominant phialosporae". She also observed the absence of sterile hairs in culture although they were present in its natural habitat. Similarly, in the present isolate under the conditions of cultivation no sterile hairs were observed. Nevertheless on the basis of presence of two types of spores it is assigned to the genus *Botryotrichum* and the absence of sterile hairs as observed by Downing (1953) may be attributed to the conditions of cultivation on artificial media.

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