
TAXONOMICS STUDIES OF -

A) UNCINULA STERCULIAE YADAV.

ON STERCULIA ALATA ROXB.

During botanical excursion at Castle Rock (Goa, India) I came across a powdery mildew, on the living leaves of host Sterculia alata Roxb. (Sterculiaceae). I studied it in field and later in laboratory. Details are as follows. [Photo No 1]

DESCRIPTION :

Spreaded, covering the part or a whole of the lower surface of the leaf. Mycelium superficial, ectophytic, creeping, persistent, white, later appearing scanty, colourless. Hyphae 1-3 μm in diameter, an average diameter 2 μm . Septate, cells 2-3 μm wide an average being 2 μm , haustoria globular, stalked, penetrated into epidermal cells. Conidiophores many, spring from superficial mycelium, straight, slender, septate, conidia are produced in chains.

Reproductive structures cleistothecia, show 87-120 μm diam. average 105 μm . Perithecia scattered, dark brown, globular having 13-22 appendages, average of 14, hyaline, elongated, 72-126 μm long and 6-9 μm broad, average 7 μm , with curved tips. Cells of perithecial wall polygonal, thick walled, hard, dark brown. [Photo No. 2].

Asci 5-7, broadly ovate to subovate, 39-60 μm X 21-39 μm (average 49 X 24 μm) with a small, narrow stalk towards the base. Ascospores 4, one celled, globase to subglobase, 18-24 μm X 12-15 μm (average 21 X 12 μm). [Photo No. 3, 4].

Collected on the living leaves of host Sterculia alata Roxb. (Sterculiaceae) by Dhage R.B. at Castle Rock, Goa (India), on January 28, 1988. The material is deposited in the Herbarium of Botany Department of Y.C. Institute of Science, Satara, Maharashtra, India.

DISCUSSION :

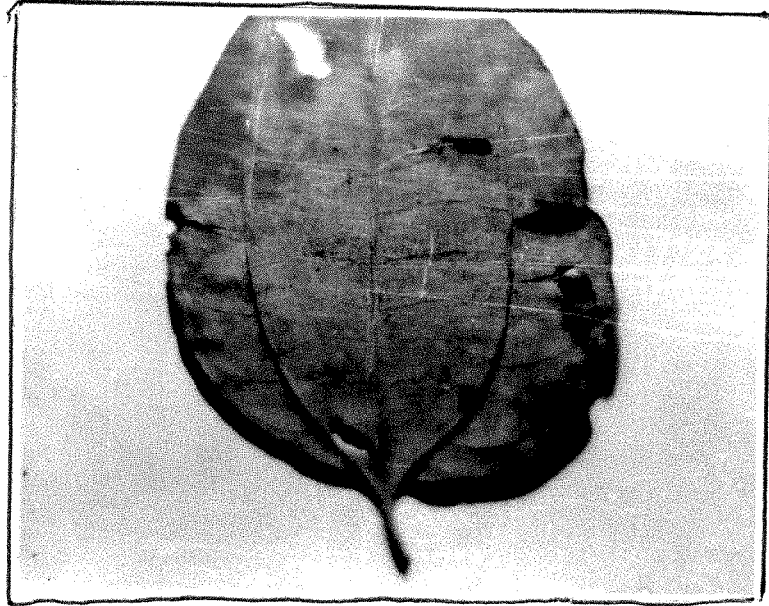
The description of fungus tallies with the Uncinula sterculiae. Yadav already reported on Sterculia species by Yadav, A.S. (1963) from Bihar.

Hence, this host Sterculia alata Roxb. is a new host record for this fungus and Uncinula sterculiae Yadav is reported for the first time from Goa.

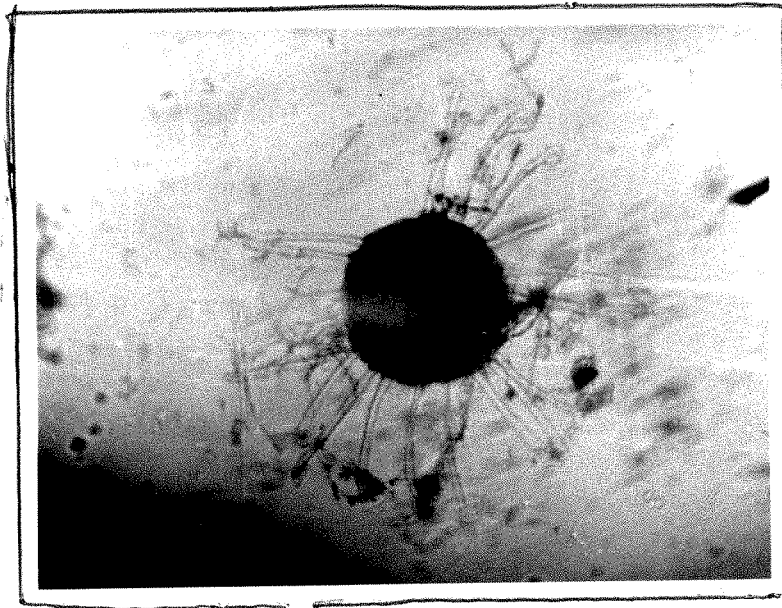
- Photograph No. 1 - Lower surface of infected leaf of Sterculia
alata Roxb.
- Photograph No. 2 - Surface view of entire perithecium showing
appendages with curved tips .

Photograph No. 3 - T.S. of Perithegium showing asci and uniculate
& 4 ascospores

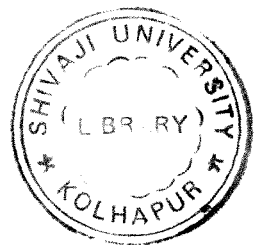
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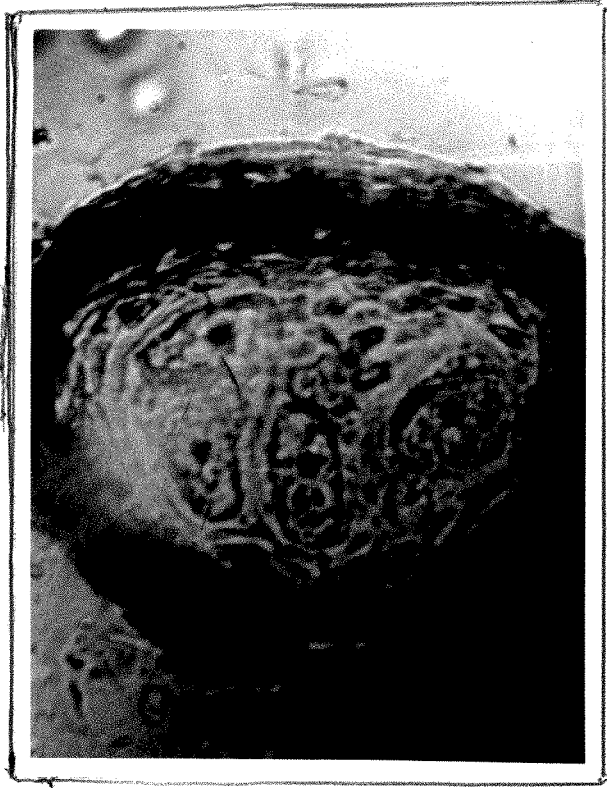
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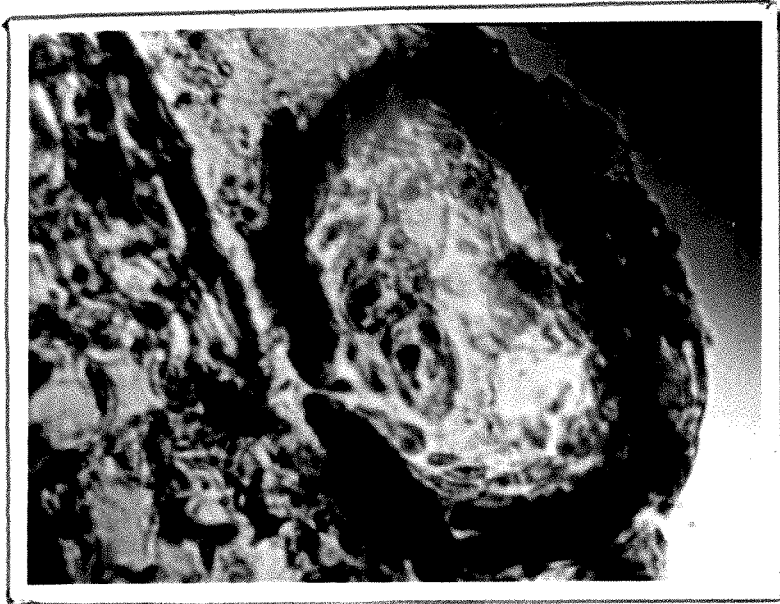
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TAXONOMIC STUDIES OF -

- B) PRINGSHEIMIA PANDANI (CHAVAN ET
HOSAGOUDAR) MANE AND DHAGE. COMB
NOVA. ON PANDANUS FASCICULARIS
LAMB.
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During the mycological collections of fungi, I came across an ascomycetous fungus on a garden plant Pandanus fascicularis Lamb. (Pandanaceae) at Y.C.Institute of Science, Satara. [Photo.No.1]

DESCRIPTION :

Infection spots foliicolous, amphiphylous, mostly epiphylous, ovate to elongate, coalescing to form large patches, mostly along the midrib, gray with deep red margin, perithecia - subepidermal, dark, globose, ostiolate, cottony subicle at the base, 174 - 285 μm X 126 - 225 μm ; Asci - hyaline, cylindrical, bitunicate, 8 spored, stalked, 90 - 108 μm X 9 - 18 μm , Ascospores - brown, ellipsoidal, uniseriate, thin walled, multi celled, 18 - 24 μm X 9 - 12 μm . [Photo.No.1 to 6]

Collected on living leaves of Pandanus fascicularis Lamb. (Pandanaceae) by R.B.Dhage on October 10, 1988; deposited at Herbarium of Botany Department in Y.C.Institute of Science, Satara, Maharashtra, India.

DISCUSSION :

The fungus under study having (1) brown ascospores and (2) showing dictyosporous nature will have to be accommodated under the genus Pringsheimia. Verona and Benedek (1959-1970), Luttrell (1973).

From the same locality and the same host, Hosagaudar (1984) has already reported a fungus with hyaline, one celled,

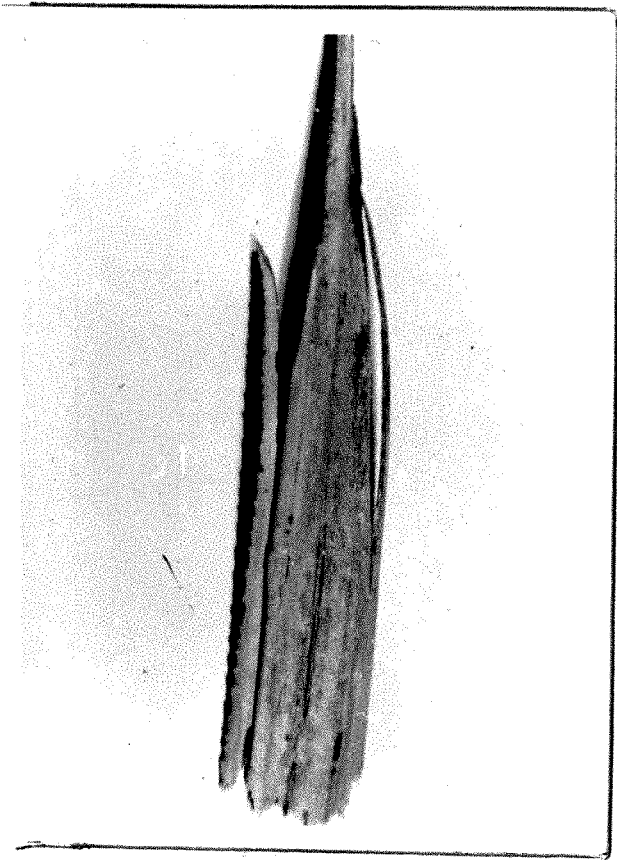
small sized ascospores as Vestergrenia and accomodated into a new species Vestergrenia pandani, Chavan et Hosagoudar.

When the type material of the species deposited at Science College (now Y.C.Institute of Science) Satara, was examined a few dictyosporous ascospores could be recorded but they were very few in number, probably because the collection done by Hosagoudar was in early rainy season (July, 1984).

Hence, it is hereby proposed to accomodate this fungus collected on Pandanus fascicularis Lamb. under a new combination as Pringsheimia pandani (Chavan et Hosagaudar). Mane and Dhage as combination nova (Baslonym being Vestergrenia pandani Chavan et Hosagoudar J.Econ. Tax.Bot.Vol.5(2); 1984).

- Photograph No. 1 - Dorsal surface of infected apical part of leaf
of Pandanus fascicularis
- Photograph No. 2 - Opened perithecium showing several exposed asci.
- Photograph No. 3 - Ascus containing one celled, two celled
ascospores.

- Photograph No. 4 - Asci containing 1 celled, 2 celled, 3 celled and 4 celled ascospores .
- Photograph No. 5 - Asci with 2 celled, 3 celled, 4 celled and multicelled dictyosporous ascospores .
- Photograph No. 6 - Asci containing a row of obliquely placed ascospores .



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