J. Mycopathol. Res. **39**(2) : 107–108 (2001)
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Pleospora sp. nov. causing canker in *Dalbergia sissoo*

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A canker disease in *Dalbergia sissoo* caused by *Pleospora agavicola* sp. nov. was recorded and described for the first time from India.

Key words : Canker disease, *Dalbergia sissoo*, *Pleospora agavicola* sp. nov.

INTRODUCTION

The disease occurred widely in the young sissoo plantation at New Forest, Dehradun. Development of cankers started in early June and continued till October. The disease incidence accounted for 62%. However, 27% of the plants were severely attacked whereas the remaining plants showed poor to moderate infection. Multiple infection led to development of cankers at different heights on the stem and brances. Early symptoms of the disease manifested by slight depression and cracking of the bark followed by opening of wound exposing the wook beneath. Plants with multiple cankers on stem presented a crooked appearance but they survived.

Application of Chubatia paste on the stem and branches of the infected plants arrested further damage to these parts and had curative effect as evident from healing of wounds to a great extent in the first year of application. Second application of Chaubatia paste in the following year further helped in controlling the disease effectively.

CAUSAL ORGANISM

The causal organism has been identified as an ascomycetous fungus *Pleopora* Rabenh. ex. Ces. and de Not., and species as *agavicola* nom. nov.

Pleospora sensu Wehm. (1961) is a heterogenous genus. Wehmeyer (1961) divided this genus into subgenera and sections based mainly on spore characters but several intermediates are encountered. Donk (1962) and Deighton (1965) have discussed the nomenclature of this in great detail.

Description of the *Pleospora agavicola* Rabenh. ex. Ces. and de Not. (Fig. 1)

Pseudothecia scattered, brown to black, unilocular, amphigenous, gregarious, erumpent, smooth upto 217 µm wide, with a protruding short papillate ostiole. Pseudothecial wall is composed of dark yellow brown cells forming a textura angularis, outer layer consists of thick walled, dark brown cells and an inner thick layer of thin walled, hyaline cells which become smaller and more compressed towards the innermost layer. Asci numerous, cylindric-clavate, short stalked, usually 8 spored upto 93.0 µm (55.8 – 93.0) µm long and 15.5 µm (6.2 – 15.5) µm thick. Ascospores uniseriated in ascus, oblong, 3 septate with one vertical septum, upto 15.2 µm (11.4 - 15.2) µm long and 7.6 µm (5.7 – 7.6) µm thick, yellow to dark brown. Pseudoparaphyses numerous, filiform branched.

Slide and photographs deposited as H. C. I. O.

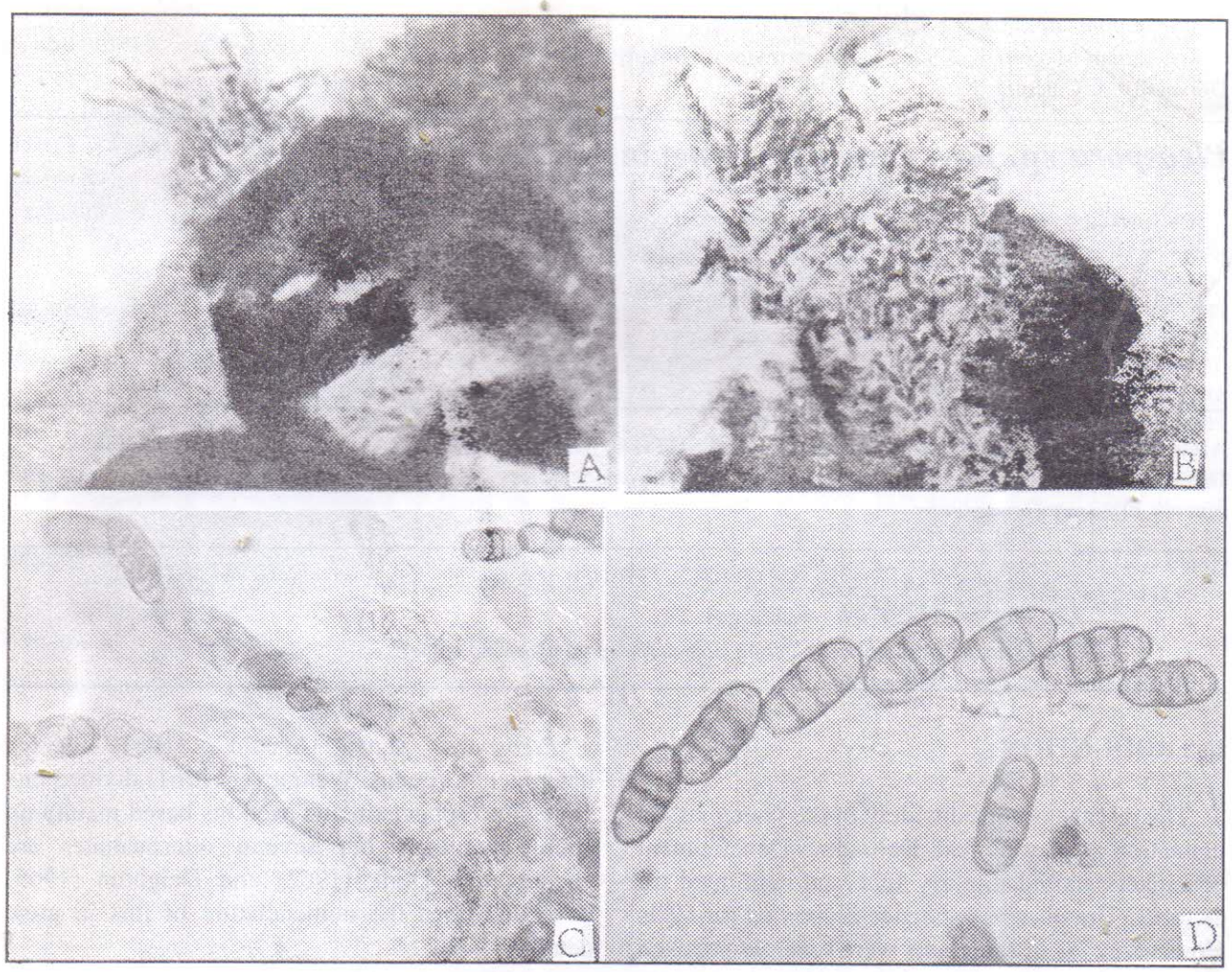

Fig. 1 : *Pleospora agavicola* Rabenh. ex. Ces. and de Not. A. Pseudothecium with asci × 100, B. Ruptured pseudothecium with bitunicate asci × 100, C. Uniseriate asci with ascospores × 500, D. Uniseriate ascus with ascospores × 800.

No. 43,746 New Forest, Dehradun, Uttaranchal in the Herbarium Cryptogamae Indiae Orientalis, I.A.R.I., New Delhi - 110012.

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(Accepted for publication July 2, 2001)