

## A new Powdery mildew disease of *Malva pusilla*

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*Sphaerotheca fuliginea*, causing powdery mildew disease of *Malva pusilla* has been recorded for the first time from Raipur, Chattisgarh. The fungus has been described and illustrated in this communication

**Key words:** *Sphaerotheca fuliginea*, *Malva pusilla*, powdery mildew new record

### INTRODUCTION

During a recent general survey a new powdery mildew disease was recorded on *Malva pusilla* (Malvaceae) around University campus Raipur Chattisgarh. The samples showing the powdery mildew symptom were collected and examined for the identification under microscope. The standard system of characterization of powdery mildew fungi were made using Blumer (1967) conidiophore-type based on the Brundza (1933) and "A" and "B" units of conidiophore in the sense of Hammet and Manners (1973). The samples were submitted to HClO, New Delhi for deposition. On the basis of morphology the fungus has been identified as *Sphaerotheca fuliginea* (Schlecht. : Fr.) Poll.

Mycelium amphiphylous, hyphae up to 9.12  $\mu$  m in diam., appressoria nipple shaped. Conidiophores euoidium type, mostly slightly curved sometimes straight, A & B units of 2 to 8 cells, 111.24 - 185.4  $\times$  12.77 - 17.71  $\mu$  m, av. 148.04  $\times$  16.23  $\mu$  m., foot cell 41.2-78.28  $\times$  10.71-16.48  $\mu$  m, av. 54.65  $\times$  12.52  $\mu$  m. Conidia broadly ovate 28.84 - 41.2  $\times$  16.48 - 20.6  $\mu$  m, av. 32.61  $\times$  18.78  $\mu$  m. Germ tube lateral 1-2, cylindrical to fusiform. (Fig. 1).

It was also observed that the conidiophore of the fungus was found to be heavily hyperparasitised by the *Ampelomyces quisqualis*. But the infestation of *Ampelomyces* varied from one locality to another in the same period. In case of severe infestation it suppresses the formation of conidiophore and conidia on the leaves of host plant and only

superficial thin coating of powdery mass was recorded instead of the thick powdery mass recorded on other plants free from *Ampelomyces*.

**Habitat** - On leaves of *Malva pusilla* (Malvaceae), 17.ix.2006, IGAU, College campus, Raipur C.G. Leg. V.K. Yadav.

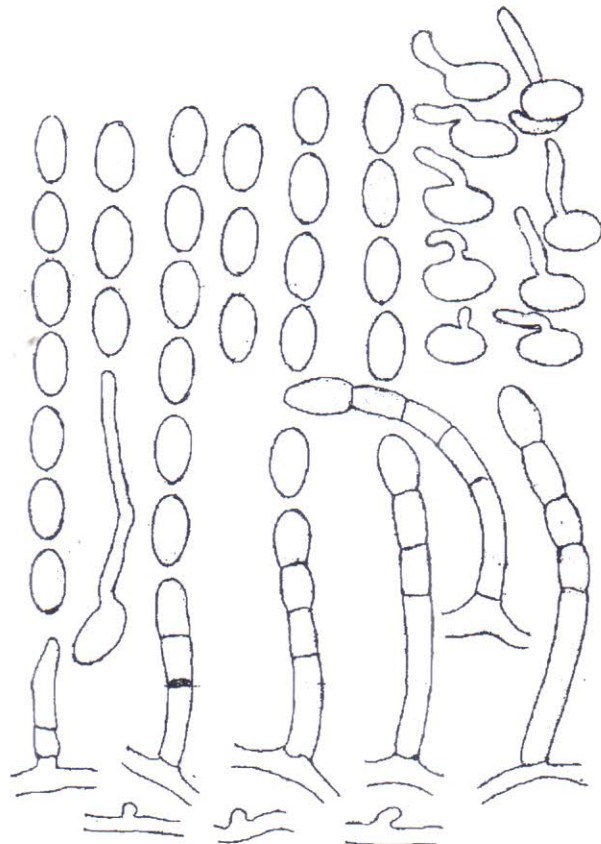


Fig. 1 : Conidiophore, conidia and germ tube of *sphaerotheca fuliginea*.

The specimen has been deposited at HCIO Herb No. 46,911.

A review of literature has revealed that, three species of powdery mildews : viz. *Leveillula taurica*, *Erysiphe cichoracearum* and *E. communis* have been recorded on eleven species of the genus *Malva*. The two species *E. cichoracearum* on *Malva sylvestris* L. and *Leveillula taurica* on *M. neglecta* Wallr. have been reported from India. The present

collection is a new record of the fungus *Sphaerotheca fuliginea*.

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