

## MORPHOLOGICAL CHARACTERIZATION OF CASUAL ORGANISM [SPHAEROTHECA FULIGINEA (SCHLECHT) POLLACI] ON LUFFA CYLINDRICA POWDERY MILDEW

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*Luffa cylindrica* is cultivated in some localities of district Jalgaon on Khandesh region. The crop is being grown successfully in the region during the month of June to September. During this period the crop is severely attached by powdery mildew. In this region, both anamorphic as well as teliomorphic stages of the disease occur the present study was under taken as till date, this pathogen infecting *Luffa Cylindrica* has not been characterized. Infected leaves were collected from Jalgaon Dist. brought to the laboratory and examined under the microscope to detect the presence of anamorphs and teliomorphs of the pathogen.

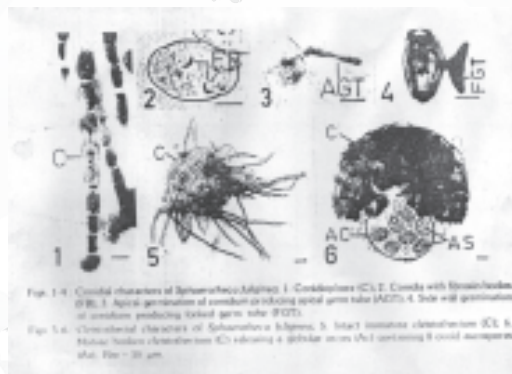
Morphological characters of the powdery mildew fungus were studied according to Khan & Sharma (1995). Telimorphic characters, like appendages number of asci per cleistothecium & number of ascospores per ascus were also studied.

Infected leaves were cleared with chloral hydrate and stained with cotton blue for microscopic examination of the fungus Hilu & Hooker 1964. Mature conidia were treated with 0.1 percent KCL for detection of fibrosin bodies and their dimensions were measured. The details of anamorphs & telimorphs of the fungus *sphaerotheca fuligines* (schlecht.) pollaci are given

below.

**Anamorph-** Mycelium superficial, uninucleate, conidiophore erect, 4-7 septate, 80-146 mm long, foot cell cylindrical followed by 1-4 barrel-shaped cell

(fig.1). Conidia in chain (4-7), oblate or avoid, contained irregular shaped fibrosin bodies (fig. 2), 21 x 37 x 15-23 mm, L/B ratio 1.28-2.27 (range). Conidia germinated from its apical and basal part or from the side wall, germ tube simple or forked (fig. 1-4).



**Teleomorphs-** leistothecia (perithecia) (fig. 5) light brown to

black, globose 105-155 mm with about fifth septate mycelioid appendages. Length of the appendages varied, usually as long as the diameter of the cleistothecium, ascus single globular, double walled 52 x 76 x 56-118 mm. Ascospores 8 ovoid or globular single celled 16-18 x 18-24 mm. (fig. 6). However the occurrence of cleistothecia of *sphaerotheca fuliginea* (schlecht) pollaci. On other members of cucurbitaceae family, viz., *Culurbita maxima*, *Cucumis sativa*, *Lagenaria leucantha* have been reported by Sohi & Nayar (1969), Khan *et al.* (1972) Gupta *et al.* (2001).

### REFERENCES

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