



Figure 1. *Pseudocercospora waltherae* showing conidia and conidiophores.

globosum vel globosum, $13.5 \times 100 \mu\text{m}$ diametro; setae et hyphopodia absentia; conidiophori hypophyllosi, macronematosi, mononematosi, fusce brunnei, septati, breves, geniculati, non-ramosi, ellipsiformes, caespitosi, laeves, erecti, plerique circiter $22 \times 5 \mu\text{m}$; Conidia acrogenosa, pallide olivacea vel fusce brunnea, subhyalina, cylindrata, recta vel aliquantulum flexuosa, raro curva, cum basi conicotruncata et apice aliquantulum acuto, transverse multiseriata (2–7), $26 - 66.5 \times 3.5 - 4 \mu\text{m}$.

Typus positus in herbario I M I Kew No. 266372.

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MYROTHECIUM MORI SP NOV: A NEW LEAF SPOT PATHOGEN OF MULBERRY

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A SPECIES of *Myrothecium* Tode ex Fries was isolated from leaf spots of mulberry (*Morus alba* L) during September 1982. The present species was found to be different from the species of *Myrothecium* reported earlier¹⁻⁴ and the closest to the present species were *M. roridum* Tode ex Fries, *M. verrucaria* (Alb. & Schw) Ditm. ex Fr. and *M. advena* Sacc. However, it differed from these species in respect of characteristics shown in table 1.

Because of the differences shown in table 1, especially with reference to conidial size, shape and number of droplets, and considering its pathogenicity to mulberry, the present isolate has been described as a new species of *Myrothecium* namely, *Myrothecium mori* sp. nov.

Myrothecium mori Sullia & Padma sp. nov.

Colonies on PDA superficial, at first white, later green and finally black with the development of sporodochia; sporodochia sessile; setae absent; conidiophores branched, bearing conidia terminally; conidia hyaline, deep green in mass, aseptate, ellipsoidal, with a single droplet, $10.5 - 14.0 \times 3.5 - 7 \mu\text{m}$.

Myrothecium mori Sullia et Padma sp. nov.

Coloniae in PDA superficiales, primo albae, postea pervirides et postremo nigrae; sporodochia sessilia; setae absentes; mycelium hyalinum, septatum, glabrum; conidiophora hyalina, ramosa, conidia terminalia ferentia; conidia hyalina, in massis pervi-

Table 1 Comparison of the characteristics of the three species of *Myrothecium* with those of the new isolate

Characteristics	<i>M. roridum</i>	<i>M. verrucaria</i>	<i>M. advena</i>	New isolate
<i>Hyphae:</i>	Smooth	Rough	Smooth	Smooth
<i>Sporodochia:</i>	Sessile; at first green; later back with white margin; setae absent	Similar to <i>M. roridum</i>	Similar to <i>M. roridum</i>	Sessile; at first white, later turning greenish black; no white margin; setae absent
<i>Conidia:</i>				
Shape:	Cylindrical; ends rounded	Navicular, limoniform, protuberant & truncate at base	Cylindrical with rounded ends	Ellipsoidal
Colour:	Pale olive green; black in mass	green; black in mass	Hyaline; Olive green to black in mass	Hyaline Deep green in mass
Size: (μm)	6-8 x 1.5-2.5	6-10 x 2.4-5	5-7 x 1.5-2	10.5-14 x 3.5-7
No. of droplets:	Nil	Two	Nil	One

ridia, ellipsoidea, aseptata, guttulis singularibus, 10.5-14 x 3.5-7 μm .

Deposited in I.T.C.C. No. 3353.

The fungus was pathogenic to the following varieties of mulberry viz, M₅, S₅₄ and Goshocerami, a Japanese variety. Pathogenicity to some other members of Moraceae viz, *Ficus religiosa* L. and *Artocarpus indicum* Roxb. has been established.

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EFFECT OF ADENINE ON REGENERATION OF *VICIA FABA* IN TISSUE CULTURE

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VICIA FABA is a classical material for many fundamental studies both under *in vivo* and *in vitro* conditions. The regeneration of whole plant from the callus culture is a prerequisite for any study under *in vitro*. The successful callus culture of *V. faba* from different types of explants as well as from the protoplasts has already been reported¹⁻⁷.

There is, however, no report of reproducible regeneration of whole plant from callus tissues of *V. faba*. The present paper reports the regeneration of plant from the callus culture of *V. faba* using a nucleic acid derivative like adenine.

The seeds of *V. faba* cv 1502, obtained from the Sutton Co., Calcutta, were soaked in tap water overnight, rinsed in 70% ethanol for 20 min and thoroughly washed 4 times in autoclaved distilled water. The embryos were removed aseptically, inoculated in liquid MS media⁵ supplemented with NAA (2 mg/l) and BAP (1 mg/l) and placed on a vertical shaker. After 3 days the intact embryos as well as the longitudinally dissected halves from the liquid media were placed on the same agar medium. Cultures were inoculated under continuous dark and 16/8 hr light/dark condition at 22°C. After the second subcul-