

Fungi of Delhi.
XII. *Chaetomium lawransamesii* sp. n.

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Mukerji K.G. and Khanna M.: *Fungi of Delhi. XII. Chaetomium lawransamesii* sp. n. Acta Mycol. XVI(2): 255-257, 1980.

Chaetomium lawransamesii has been described as a new species. This is characterised in possessing bigger fusiform ascospores and myceloid terminal hair on its perithecia.

During our studies on the ecology and taxonomy of plant surface fungi, we have isolated several forms. This paper describes a new species of *Chaetomium* which differs from all the known species possessing fusiform ascospores (Lodha 1964; Rai, Mukerji 1962). It has characteristic long myceloid hairs on its body. This form has been named as *C. lawransamesii* in honour of late Dr Lawrence M. Ames.

CHAETOMIUM LAWTRANSAMESII MUKERJI AND KHANNA SP. N.

Peritheciis superficialibus griseo-niger, ostiolatis, 200-300×390-450 μm, ovalis vel subglobosis, cum rhizoideis delicatis ad substratum affixis. Pilis terminalibus mycelioides, undulatis vel fere rectis, asperis, septatis, 300-900×3.5-5.00 μm. Pilis lateralibus pauci, brevis rectis, 100-300×2.5-4.0 μm. Ascis clavatis, octosporis, evanescentibus, 35-50×10-14 μm, stipitatis. Ascosporis biseriatis vel irregularis, pallidobrunneis 12.5-17.5×6.5-7.5 μm, fusiformis, biapiculatis, compressis, foramine germinali ad apicem ascosporae.

Typus: cultura a cl. Amesio (Ames) missa data in herb. C.M.I. et IARI conservatur.

Cultures on potato dextrose, Czapek's and leaf extract agar, slow growing, reaching 1.0-1.5 cm in 20 days at $27 \pm 1^\circ\text{C}$, very few perithecia develop after a long period. On green maize leaves kept in humid chambers perithecia appear scattered as well as in groups, growth extending to the blotting paper. Perithecia superficial, greyish black, oval to subglobose, 200-300×390-450 μm; attached to the substratum by delicate rhizoids, ostiolate, producing at maturity an irregular cirrhus

of spore mass entangled in terminal hairs (Fig. 1, 3). Terminal hairs myceloid, undulate to nearly straight, finely rough, septate, $300-900 \times 3.5-5.00 \mu\text{m}$, tips blunt to round. Lateral hairs few similar to terminal hairs, smaller in size, $100-300 \times 2.5-4.00 \mu\text{m}$ tip blunt to round, septate, finely rough. Asci clavate, 8-spored, evanescent, $35-50 \times 10-14 \mu\text{m}$; stipe narrow and distinct, $8-10 \times 1.5-2.0 \mu\text{m}$ (Fig. 2, 4). Ascospores biseriate to irregular, light brown, $12.5-17.5 \times 6.5-7.5 \mu\text{m}$, fusiform (Fig. 2, arrow; 5) apiculate at both ends, germ pore at one end only, compressed in side view.

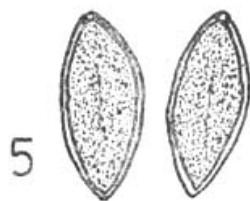
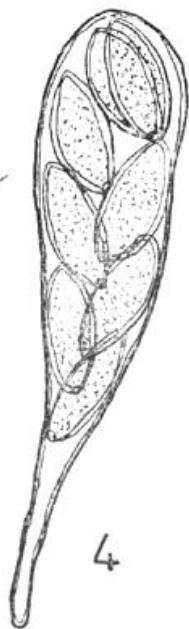
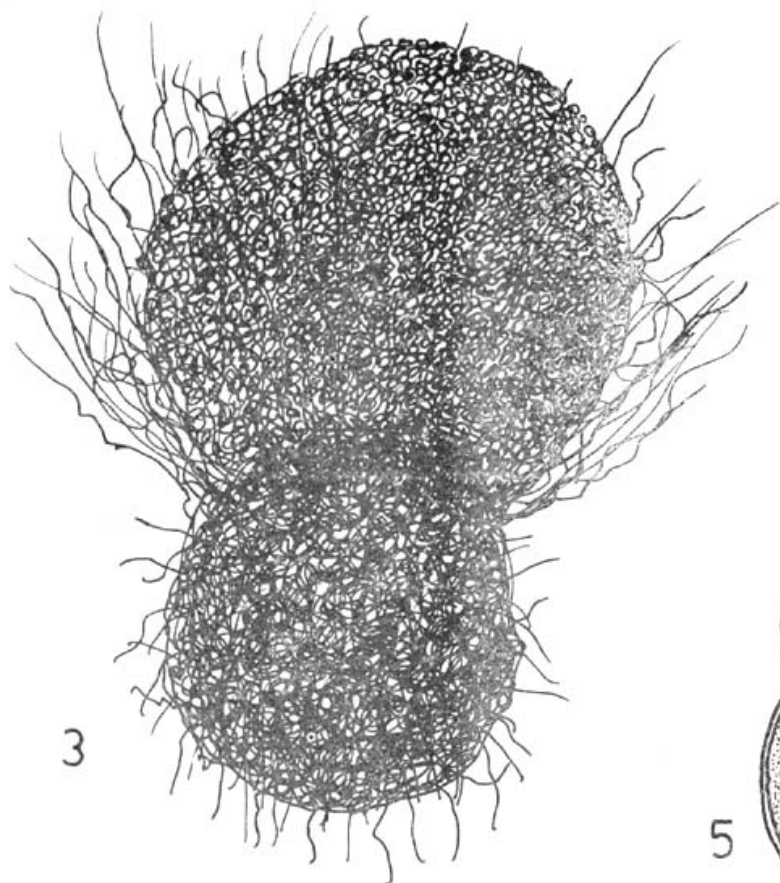
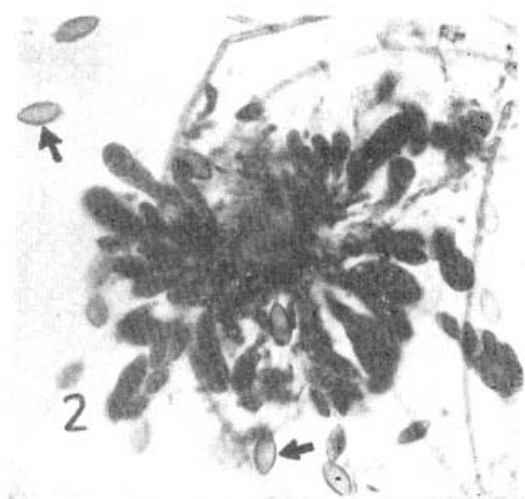
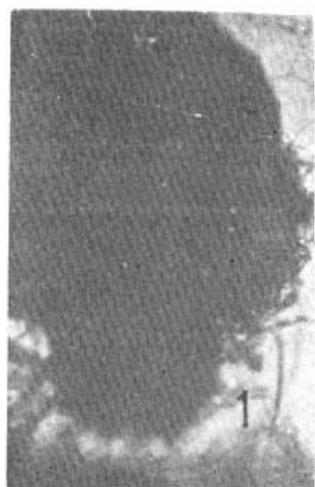
Developed in moist chamber in laboratory on green maize leaves collected from departmental farm on 11th July, 1972 and isolated pure cultures on green maize leaves. Isotypes deposited in the Commonwealth Mycological Institute, Kew, England under reference number IMI 168932 and also at the Indian Type Culture Collection, IARI, New Delhi 12. Dry cultures of the holotype (DU/KR 191) has been deposited in the mycological herbarium of the University of Delhi. This fungus was again isolated from green leaves of *Crotalaria juncea* collected on 13th August, 1978.

It differs from the other five species of *Chaetomium* possessing fusiform spores, i.e. *C. fusiforme* Chiv., *C. fusisporum* Smith, *C. subspirilliferum* Sergeeva, *C. fusisporale* Rai et Mukerji and *C. cymbiforme* Lodha in having long undulate to straight myceloid terminal hairs. Ascospores in *C. lawransamesii* are comparatively bigger than in the other five species.

Thanks are due to the Council of Scientific and Industrial Research for providing financial assistance to one of us (MK).

REFERENCES

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Rai J.N., Mukerji K.G., 1962, A new species of *Chaetomium* from Indian soils. Can. J. Bot. 40: 857-861.



Figs. 1-5. *Chaetomium amesii*

1 — perithecium with cirrus $\times 50$; 2 — group of asci and ascospores $\times 400$; 3 — perithecium with cirrus $\times 80$; 4 — ascus $\times 1000$; 5 — ascospores $\times 1200$