

vate, hyaline, thin-walled, smooth. *Hymenophoral trama* subregular or regular, hyaline, inamyloid, consisting of thin-walled, hyphae, 2–4 μm diam. *Subhymenial layer* less developed, up to 9 μm wide, cellular. *Pileal-surface* a cutis of repent, hyaline, thin-walled, radially-arranged hyphae, 2–8 μm diam. *Hair of pileus* cylindrical with broadly acuminate, thick-walled apex and thin-walled basal cells with granular contents, 32–90 \times 6–9 μm . All hyphae devoid of clamp-connections.

Collection examined: PAN 100405 (Holotypus), among the pine needles, Kasauli (ca 6,000 ft), Himachal Pradesh, India, August 2, 1979. Legit B. M. Sarwal, isotype in K No. 5/79.

Etymology of the specific epithet:

Named after the country from where the collection has been made.

The presence of non-diverticulate long hairs, short and broad basidia, pruinose stipe and striate pileus suggest that the cited collection can be placed in the section *Radiatae* Sing. It is similar to *M. dennisii* Sing. and *M. radiata* (Dennis) Sing. *Mycena dennisii* differs from cited collection in having interveined lamellae, pileus white, membranous, conspicuously radially sulcate, lacking cystidia and spores globose, 6–7 μm diam. *Mycena radiata* differs from it in having brownish pileus, basidia 2-spored and ellipsoid spores, 6–9 \times 3–3.5 μm . Hence, a new species is being proposed. It is characterised by pruinose, umbonate, 'Umber' pileus, striate margin, subdecurrent or decurrent lamellae, elliptic, amyloid spores, 4-spored basidia, presence of cystidia and cuticular pileal-surface with long thick-walled, 1-septate hair.

The authors thank Dr. D. N. Pegler, Royal Botanic Gardens, Kew, England for confirming the identification of the taxon. Sincere thanks are extended to Rev. Fr. J. J. Serrano, S. J., Simla for latin translation.

18 January 1982; Revised 10 September 1982

- Holmgren, P. K. and Keuken, W., *Index herbarium Part I. The herbaria of the world*, 1974, 6 ed., Regnum veg. 92.
- Rayner, R. W., *A mycological colour chart*, CMI, Kew, Surrey, England, p. 70 1970.

A NEW LEAF SPOT DISEASE OF GARDEN NASTURTIUM FROM INDIA

D. K. AGARWAL AND A. K. SARBOHY
Division of Mycology and Plant Pathology, Indian Agricultural Research Institute, New Delhi 110 012, India.

A SEVERE leaf spot disease of Garden Nasturtium (*Nasturtium officinale* R. Br.) was observed at the Raja Hotel Lawns in Pithoragarh during November, 1982. The microscopic examination and repeated isolations from the affected parts showed the presence of a species of *Acroconidiella*.

The disease initially appeared as small light brown, minute and round spots scattered all over the leaf surfaces. Gradually the spots increased in size upto 12 mm in diam., and became tan coloured with brown margins and coalesced with each other occupying most of the leaf area. Older spots become papery with light brown concentric rings visible on both sides of the leaf lamina. The central necrotic tissues form a broad yellow margin all around. More often the necrotic tissues of the spots drop off leaving shot hole symptoms (figure 1). Ultimately yellowing and dropping of leaves is common followed by drying of twigs.

The causative fungus has been identified as *Acroconidiella tropaeoli* (Bond) Lindquist and Alippi, and pathogenicity was also established under glasshouse conditions.

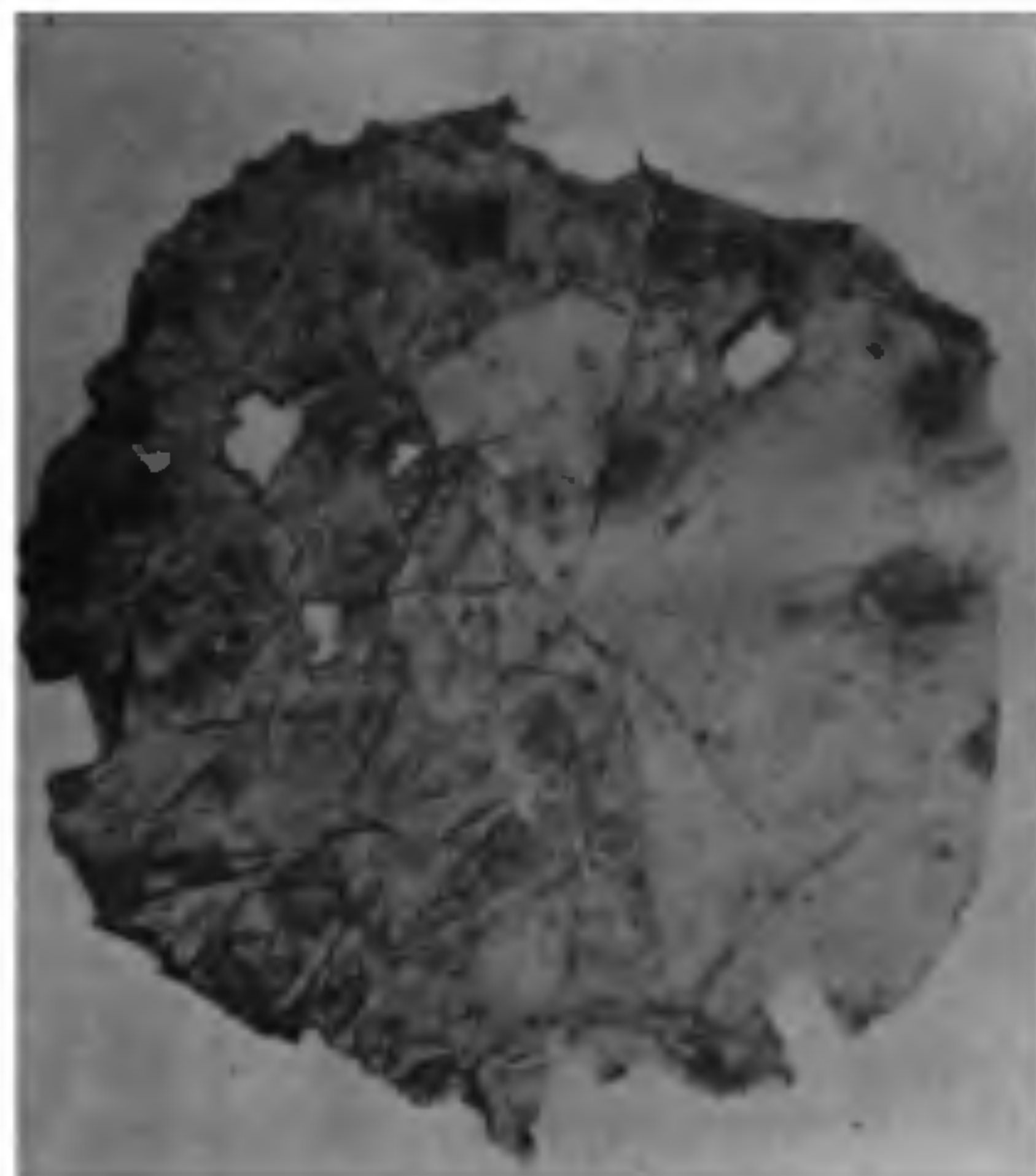


Figure 1. Leaf spots of *Nasturtium* due to *A. tropaeoli*

Description of the fungus:

Conidiophores arising singly or in groups on the hyphae emerging through stomata. Conidiophores erect, simple, occasionally branched, geniculate, swollen at the apex, olivaceous brown, smooth, septate, 5.25-10.5 μm thick. Conidia solitary, ellipsoidal, 2-septate arising through small pores in the conidiophore walls, constricted at the septa, thin walled, olivaceous brown, echinulate, 25-60 μm long and 10-35 μm thick. (figure. 2).

The diseased specimen has been deposited at IARI, New Delhi under the accession number HCIO-33,830.

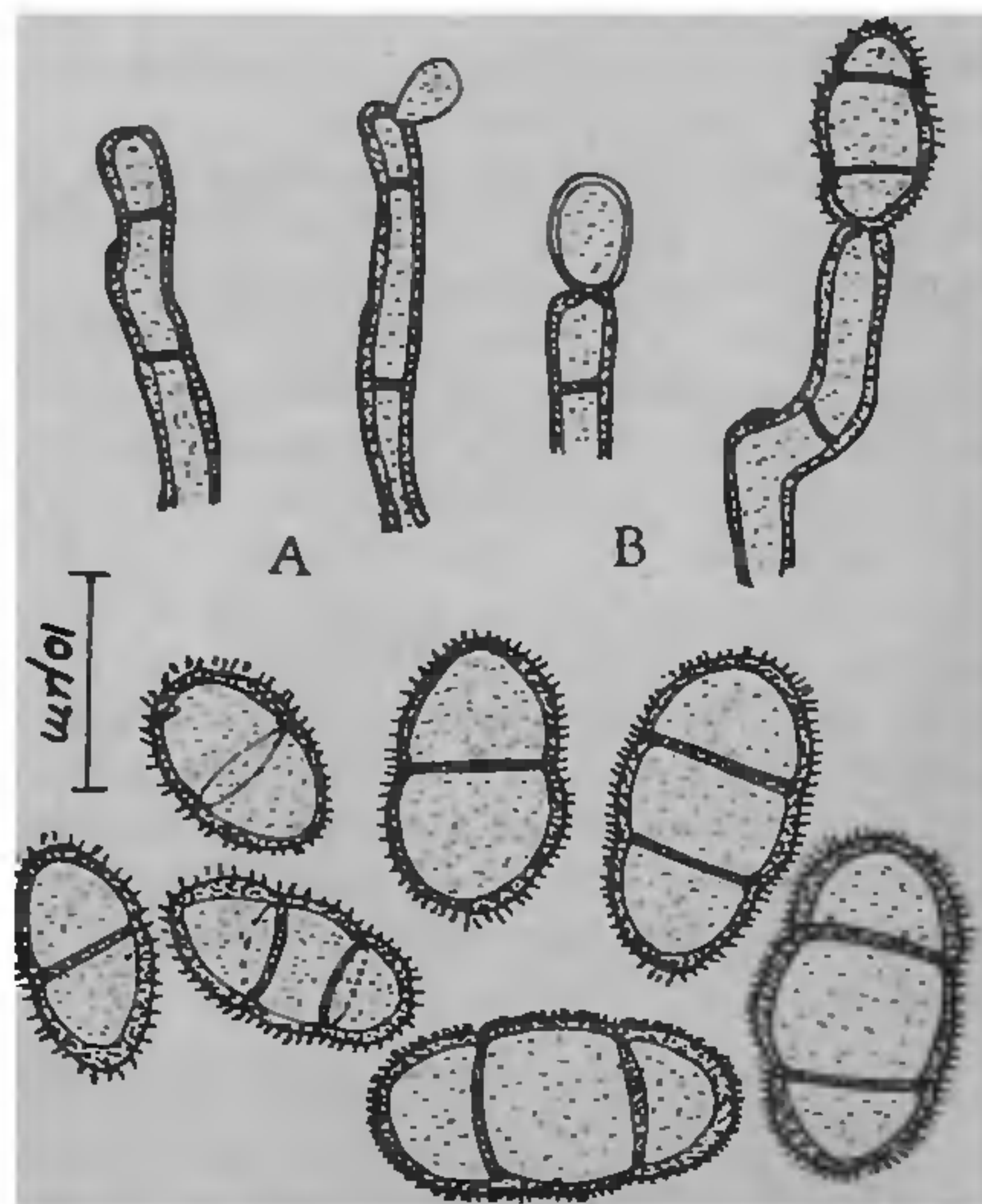


Figure 2. A. conidiogenous cell, B. Conidiophore bearing conidia, C. Conidia.

Review of literature shows that so far only *Cercospora nasturtii*⁵ has been recorded on *Nasturtium officinale*, *Epicoccum nigrum*⁶ and *Albugo candida*¹ on *N. Palustre* and *Leveillula taurica*⁴ on *Nasturtium* sp. from India. The present report therefore, constitutes a new host record from India and the fungus is also reported for the first time from India^{2,3,7}.

Grateful thanks are due to Head, Division of Mycology and Plant Pathology, IARI, New Delhi for providing laboratory facilities.

2 February 1983

1. Anonymous. List of common names of Indian plant diseases. *Indian J. Agric. Sci.*, 1950, 20:, 107.
2. Bilgrami, K. S., Jamaluddin and Rizwi, M. A. *Fungi of India*, Part-I, Today and Tomorrow's Printers and Publishers New Delhi, 1976, p. 467.
3. Bilgrami, K. S., Jamaluddin and Rizwi, M. A. *Fungi of India*, Part-II, Today and Tomorrow's Printers and Publishers, New Delhi, 1981, p. 268.
4. Patel, M. K., Kamat, M. N. and Bhide, V. P. Fungi of Bombay, Supplement-I. *Indian Phytopathol.*, 1949, 2:, 142.
5. Rai, J. N., V.C. Saxena and Tewari, J. P., New leaf and stem-spot diseases of Indian wild crucifers. *Indian Phytopathol.*, 1972, 25:, 253.
6. Roy, A. K. Additions to fungus flora of Assam-II. *Indian Phytopath.*, 1968, 21:, 182.
7. Sarbhoy, A. K., Varshney, J. L. and Agarwal, D. K., *Fungi of India*, (1971-76). Vth Supplement Printers and Publishers, Navayug Traders, New Delhi, 1982, p. 277.