

TABLE I

Meteorological data in disease incidence during 1978-79 (December to March) at Indian Institute of Sugarcane Research, Lucknow

Month	Average minimum temperature (°C)	Average maximum temperature (°C)	Average mean per cent relative humidity	Total Rain fall (mm)	Per cent larvae infected
December I	9.2	23.2	69.0	nil	—
II	7.4	25.2	66.0	nil	10.3
January I	7.4	24.5	64.0	nil	12.0
II	10.0	21.8	76.0	21.1	15.0
February I	9.4	21.0	73.0	14.2	50.6
II	11.6	24.9	68.0	38.4	68.0
March I	10.0	26.5	61.0	nil	72.0
II	15.3	32.7	60.8	nil	94.0

appeared that the frequent irrigations to sugarbeet crop also favoured the development of the disease epizootic.

Epizootics of *Entomophthora grylli* Fres.¹ and *Entomophthora* sp.² were earlier reported in October–November on *D. obliqua* under Bangalore conditions.

The epizootic completely eliminated the pest in the following two seasons 1979–80 and 1980–81, to such an extent that even for the routine work it was difficult to collect *Diacrisia* larvae.

Thus *Entomophthora* sp. near *virulenta* could be very well exploited in the biological control of *D. obliqua*. The role of *Entomophthora* sp. in the natural control of different crop pests has been acknowledged by several workers³⁻⁹.

The record of *Entomophthora* sp. near *virulenta* and its severe outbreak on *D. obliqua* appears to be the first from India.

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OIDIUM ANTIGONONII SP. NOV., FROM INDIA

B. SREENIVASA REDDY, NISHAT KHALIS AND C. MANOHARACHARY
Department of Botony, Science College, Saifabad, Hyderabad 500 004, India.

ANTIGONON leptopus Hook & Arn. (Polygonaceae), commonly known as coral creeper is grown in Indian gardens. During the winter months of 1980 and 1981, plants at Hyderabad were attacked by a dense white powdery mildew (figure 1). Mildew first appeared as small whitish spots both on dorsal and ventral surfaces of leaves which enlarge, coalesced and covered the entire leaf surface. Both the young and old leaves were attacked.

The pathogen produced hyaline, creeping septate mycelium, mycelium upto 12.5 μ m in diameter; conidiophores erect, 1–2 septate, unbranched, 35–210 \times 7–14 μ m; foot cell straight; conidia cylindrical to ovoid, 28–45 \times 12–17 μ m, smooth walled hyaline, single celled, on germination produced short and twisted appresoria (figure 2).

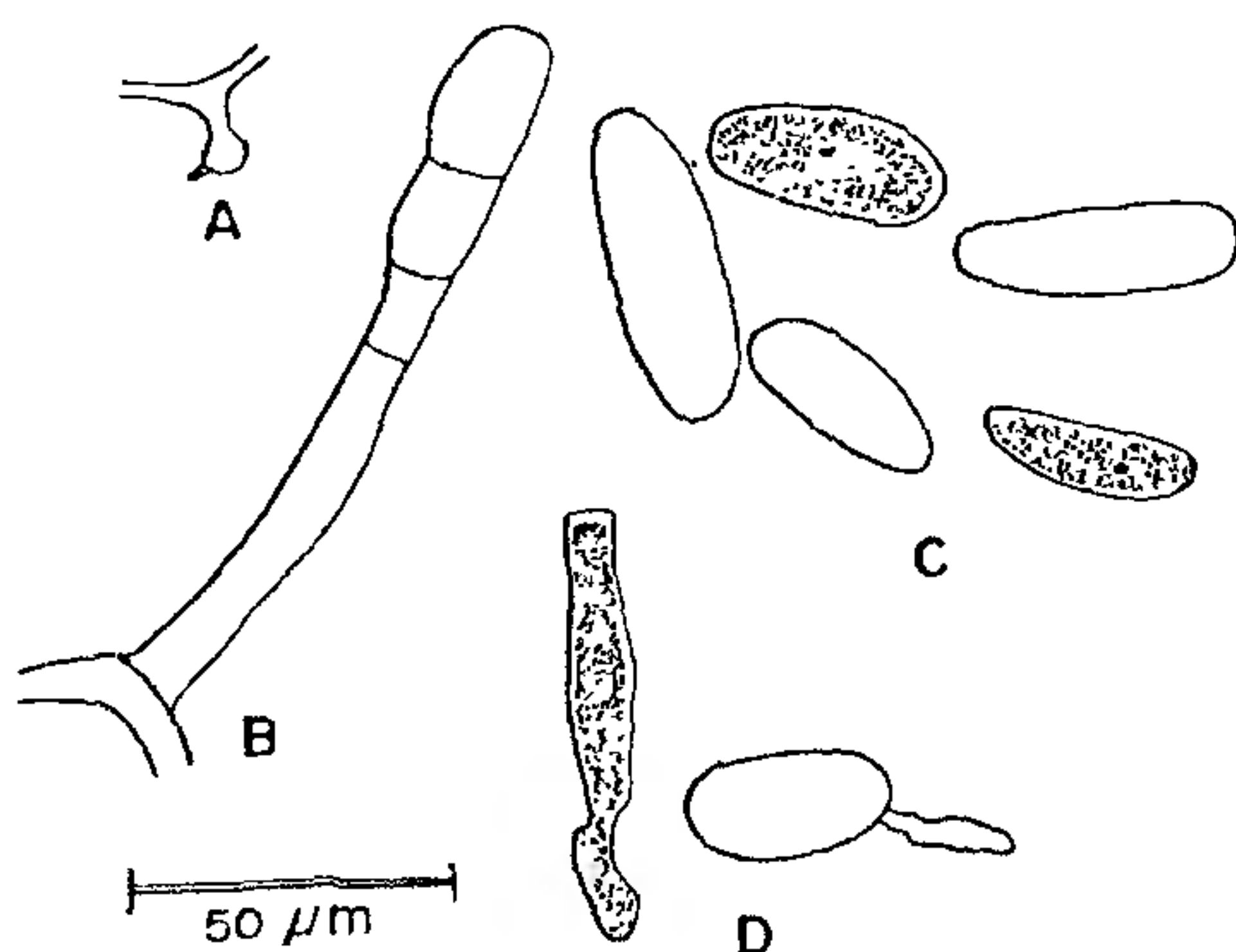
The fungus has been identified as *Oidium* sp. The imperfect states of powdery mildews are not uniform



Figure 1. Infected leaf.

They show a remarkable variety. The conidial states and conidiophore nature provide outstanding characters for the differentiation of species as well as genera. Critical literature review¹⁻⁸ and comparison of the imperfect states of powdery mildews show that this fungus differs from all the known species in the conidial structure and size, besides differing in conidiophore morphology. As such it has been described here as a new taxon. The specimen has been deposited at Herbarium Cryptogamic Indiae Orientalis, I.A.R.I., New Delhi.

Oidium antigononii, Sreenivasa Reddy, Nishat Khalis and Manoharachary, sp. nov.



Figures 2A-D. A. Hanstorium, B. Conidiophore with conidial chain, C. Conidia, D. Germinating conidia.

Mycelium superficiale ex hyphis repentibus, ramosis, septatis $12.5 \mu\text{m}$ diam. conidiophora erecta, simplicia, 1-2 septata, cylindrica, hyalina, $35-210 \times 7-14 \mu\text{m}$; conidia unicellularis, ovalia vel cylindrica, hyalina, laeviagata, $28-45 \times 12-17 \mu\text{m}$ (figure 2).

Typus lectus in foliis viventibus *Antigonon leptopus*, Hooke & Arn, in loco Hyderabad, mensis Octobus & Novembus anni 1980 & 1981. a Manoharachary, at positus in herbaria OUFHS subnumeris 1 p. HC10 33797.

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EPIZOOTIC OCCURRENCE OF NUCLEAR POLYHEDROSIS VIRUSES ON *SPODOPTERA LITURA* F.

N. DHANDAPANI, R. JANARATHAN AND T. KUMARASWAMI

Department of Agricultural Entomology, Agricultural College and Research Institute, Madurai 625 001, India.

AMONG the various microorganisms responsible for diseases in insects, nuclear polyhedrosis viruses (NPV) occupy an important position and such viruses are being used for insect control in recent years. Nearly 200 such NPV have been recorded on insects and many of them on Lepidoptera¹. One such nuclear polyhedral disease has already been reported from India² *Spodoptera litura* F., a polyphagous pest having a host of range of about 21 food plants including Daincha (*Sesbania bispinosa*)³.

In October 1981, NPV in an epizootic form was observed on *Spodoptera* larvae in two daincha fields within the campus of the Agricultural College, Madurai. This natural virus epizootic assumes significance since no such epizootic of *S. litura*, a potential pest, difficult to control has so far been reported from India, although, an epizootic of a fungus, *Beauveria* sp. has been reported on this pest on sunn hemp⁴.