TABLE I

Lignin content (%) of wheat straw at different stages of decomposition

Treatments	Initial	Period in weeks					
		4		8		12	
		Liquid medium	Soil	Liquid medium	Soil	Liquid medium	Soil
Control	19·3	17 8	17·8	17·5	17·7	17·4	17·6
Inoculated with *Aspergillus clavatus*	19·3	10·9	11·8	10·5	11·5	10·0	10·7
Inoculated with *Penicillium martensii*	19·3	12·5	13·0	12·1	12·7	11·8	12·0
Inoculated with *Pythium proliferum* deBary	19·3	14·3	15·2	14·0	14·9	13·6	14·2

higher content of cellulose (40·9%) than lignin (19·3%). The cellulosic material might have served as initial source of energy for rapid proliferation of lignin decomposing fungi which later accelerated the decomposition of lignin. *Aspergillus clavatus* was most efficient in lignin decomposition followed by *Penicillium martensii* and *Pythium proliferum* deBary. Several soil fungi imperfectii commonly occurring in soil decompose lignin[3] but there appears to be no report on *Pythium* sp. The relatively lower efficiency of this organism may be attributed to the lack of proper enzyme system needed for the decomposition of lignin.

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A NEW LEAF BLIGHT DISEASE OF CITRONELLA GRASS

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CITRONELLA (*Cymbopogan winterianus* Jowitt.) is an aromatic, perennial grass largely grown for its essential oil, "*Citronella* oil". It is cultivated over large areas in South India. A new leaf blight disease was observed during June, 1978 at the Forest Research Station, Gottipura near Bangalore. The disease manifests in the form of irregular, minute, brownish spots, scattered all over the leaf lamina which later turn reddish brown. When the disease incidence is severe, the leaf spots coalesce causing extensive blighting of the leaf. Death of the tissue is striking at the centre of the leaf which eventually spreads to the entire leaf surface.

When the affected tissues were kept in the humid chamber, numerous conidia emerged from the dead portion of the leaf A large number of tissue isolations from leaves invariably yielded a culture of the fungus akin to *Drechslera* sp.

One week old sporulating culture of the fungus was used successfully to produce infection on a 10 week-old, healthy potted citronella plant. Characteristic symptoms were observed on the leaves on the 7th day after inoculation. Profuse sporulation was observed in a week's time on PDA at 25° C.

Conidiophores straight or flexuous, dark golden brown to dark brown emerging mostly singly and sometimes in groups measuring 85·14–200·92 μm × 2–4 μm. Conidia pale brown to golden brown, straight or slightly curved, cylindrical to oblong or elliptical measuring 28·38–82·56 × 10·32–15·48 μm (mean 55·12 × 14·03 μm) with 4 to 11 pseudo septa. In culture, the conidia measured 19·06–28·38 × 7·74–10·32 μm (mean 21·88 × 9·50 μm) with 3 to 5 pseudo septa.

These morphological characters agreed with the description of *Drechslera australiensis* (Bugn.) Subram. and Jain Ex. Ellis. (Subramanium and Jain[2]; Ellis[1]) and the identification was confirmed by Baarn, The Netherlands. The type specimen is deposited in MYSP Herbarium, Department of Plant Pathology, University of Agricultural Sciences, Hebbal, Bangalore 560 024, with accession No. MYSP 2001.

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LOPHODERMIUM PICEAE (FUCK.) HÖHN. (PHACIDIACEAE)—A NEW RECORD FROM INDIA

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Lophodermium piceae (Fuck.) von Höhn. (Ascomycetes—Phacidiales) is recorded from Kashmir Himalayas (India) for the first time. The fungus causes needle blight in silver fir *Abies pindrow* Spach. at high altitudes. The incidence increases with the increase in temperature and humidity.

The genus *Lophodermium* Chev. with about 100 species is widely distributed throughout the world. Only 10 species are represented in India (Bilgrami *et al.*[1]; Sharma and Sharma[2]), mainly confined to the Himalayan region. Fungal foray through the valley of Kashmir enabled the senior author to collect this interesting fungus. After critical scrutiny, it was identified as *L. piceae*, a taxon well represented in Europe (Saccardo[3]; Terrier[4,5]; Nannfeldt[6]) but not recorded hitherto from India. Our findings were confirmed at Laurentian Forest Research Centre, Ste. Foy, Quebéc, Canada.

The material has been deposited at PAN (Herbarium, Botany Department, Panjab University, Chandigarh, India). Duplicate material has also been deposited at CMI (Commonwealth Mycological Institute, Kew, Surrey, England).

Observations from Indian Sample

Ascocarps 1·5–2 × 0·4–0·8 mm, subepidermal, shining black, elliptical, labial structures neat. Asci 90–130 × 9–12 (–13) μm, clavate, $J\pm\cdot$ Paraphyses up to 1·5 μm; filiform. Ascospores 54–98 (–100) × 1·5–2·5 μm, 2–3·2 μm with sheath (Fig. 1, A–E). Collection examined: PAN 11602, on needles of *Abies pindrow*, near Golf View Hotel, Gulmarg

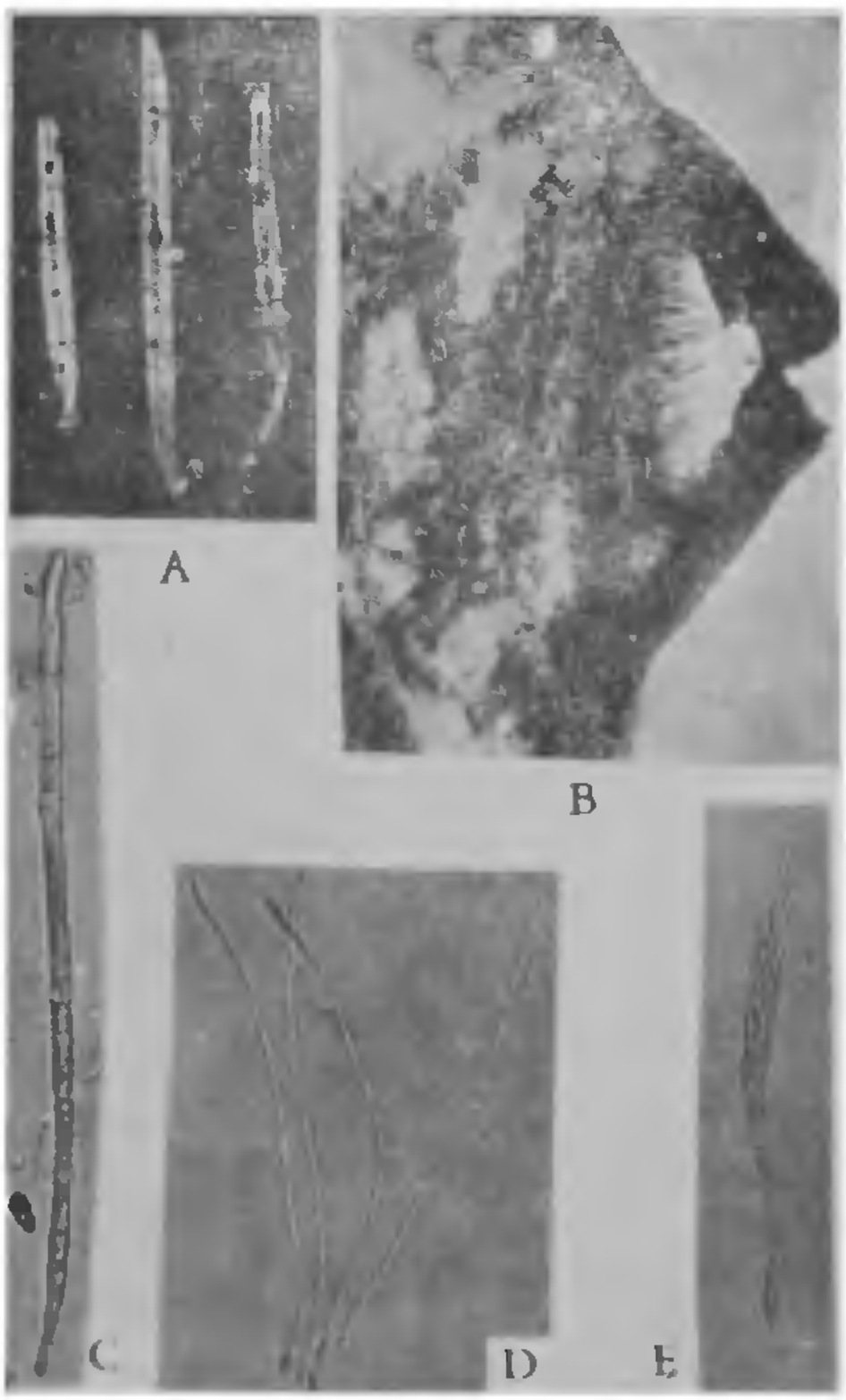

Fig. 1, A–E. *Lophodermium piceae*. A. *Abies pindrow* needles with hysterothecia, × 1·5. B. T.S. subepidermal ascocarp, KOH Phloxine mount showing hymenium and labial structure. × 280. C. Ascospore showing gelatinous sheath, KOH Phloxine mount, × 1,120. D. Filiform paraphyses, × 560. E. Ascus with mature ascospores. × 560.