

Cesati, by slide germination technique<sup>1</sup>. Percentage of spore inhibition was noted after 24 hours and the fungistatic activity was measured in terms of this percentage.

TABLE I  
Inhibition of spore germination by seedling extracts

S. No.	Genus and species	% inhibition of spore germination	
		<i>Cephalosporium sacchari</i>	<i>Fusarium nivale</i>
1	<i>Allium cepa</i> L.	1.00	0.00
2	<i>Abelmoschus esculentus</i> L.	30.96	90.7
3	<i>Brassica campestris</i> L. var. <i>dichotoma</i> Watt.	100.00	98.91
4	<i>B. campestris</i> L. var. <i>sarson</i> Prain.	100.00	100.00
5	<i>B. juncea</i> L.	0.00	0.00
6	<i>B. oleracea</i> L. var. <i>capitata</i> L.	100.00	100.00
7	<i>B. pekinensis</i> Lour.	0.00	0.00
8	<i>B. rapa</i> L.	100.00	36.50
9	<i>Cajanus cajan</i> L.	1.00	0.00
10	<i>Cassia auriculata</i> L.	4.40	100.00
11	<i>C. occidentalis</i> L.	3.80	32.70
12	<i>Calotropis procera</i> Ait.	0.00	1.50
13	<i>Carica papaya</i> L.	45.00	52.00
14	<i>Cicer arietinum</i> L.	10.00	0.00
15	<i>Cucumis sativus</i> L.	2.00	1.50
16	<i>Cucurbita moschata</i> Duch.	36.00	16.30
17	<i>Cyamopsis tetragonoloba</i> L.	17.82	15.12
18	<i>Dolichos lablab</i> L.	0.00	99.80
19	<i>Ipomea fistulosa</i> L.	11.50	6.70
20	<i>Lycopersicon esculentum</i> Mill	0.00	100.00
21	<i>Luffa acutangula</i> Roxb.	12.00	0.00
22	<i>Luffa cylindrica</i> Roem.	57.20	16.91
23	<i>L. echinata</i> Roxb.	14.00	11.00
24	<i>Lagenaria siceraria</i> Staudl.	36.80	0.00
25	<i>Momordica charantia</i> L.	7.50	29.55
26	<i>Pisum sativum</i> L.	0.00	14.00
27	<i>Raphanus sativus</i> L.	100.00	100.00
28	<i>Tridax procumbens</i> L.	0.00	100.00
29	<i>Vigna sinensis</i> L.	39.21	30.00
30	Control	99.98	100.00

Out of 29 taxa screened, the extract of four showed strong fungistatic activity against both test fungi (Table I). The extracts of six other species were partially active, inhibiting spore germination of either of the two test fungi. Surprisingly the extracts of *Brassica juncea* L. and *Brassica pekinensis* Lour. (5 and 7 in Table) stimulated the germination of fungal spores.

Table also shows that fungistatic property is neither a family character nor a generic one. It varies from family to family, from genus to genus

from species to species. A plant species which partially inhibited one fungus was found to be completely inhibitory to other one.

Further study is needed to isolate the fungistatic substance(s) from these seedling extracts. The authors are thankful to Prof. K. S. Bhargava, for providing laboratory facilities and encouragement to Dr. R. R. Upadhyay, for various suggestions and to the S.C.S.I.R., (U.P.), for financial assistance.

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#### THE GENUS *PSEUDOBOTRYTIS* KRZEMIENIEWSKA AND BADURA

THE genus *Pseudobotrytis* was created by Krzemieniewska and Badura (1954)<sup>1</sup> with the type species *P. fusca*. Timonin (1940)<sup>2</sup> and Morris (1955)<sup>3</sup> described the same fungus as *Spicularia terrestris* Timonin and *Umbellula terrestris* (Timonin) Morris respectively. Subramanian (1956)<sup>3</sup> found that *P. fusca* K & B. and *U. terrestris* (Timonin) Morris were identical and congeneric and, therefore, he proposed a new combination *Pseudobotrytis terrestris* (Timonin) Subram. In 1961 Timonin<sup>5</sup> isolated from soil in Honduras a new species of this genus, *P. bisbyi* Timonin.

Recently the authors collected dead twigs bearing black fungal growth from Mt. Abu. The present fungus closely resembles *P. bisbyi* Timonin except that the conidiophores are short. *P. bisbyi* has not so far been recorded from other parts of the world and hence this is the first record of this fungus from India.

#### *Pseudobotrytis bisbyi* Timonin

Fungus forming effuse, blackish growth on the dead twigs. Repent vegetative hyphae brown, branched, septate, upto  $5.5\mu$  broad, producing 1-2 rhizoid like hyphae at the point of origin of conidiophores. Conidiophores arising laterally from cells of the repent hyphae, length upto  $120\mu$ , unbranched, simple, erect, straight, septate, distance between septa upto  $27\mu$ , dark-brown with the apical cell  $20-24.5 \times 4.0\mu$  being hyaline, slightly tapering towards the tip, breadth at the base  $5.4-6.7\mu$ , breadth at the middle  $4.7-5.4\mu$ ; tip globose,  $6.7 \times 5.4\mu$ , denticulate and bears a verticil of about 12 simple, hyaline, sterigma-like branches of nearly equal length,  $21.6-27.5 \times 2.5-4.0\mu$ , thick at the base, and gradually tapering towards the apex, finally each of which in turn terminates in

a nearly globose to elliptical tip, diameter of the tip  $6-6.7\mu$ , bearing many conidia produced singly on minute, short pegs. Conidia ovate to oblong, 1-celled, pale-brown to fuliginous, smooth-walled, with a minute basal scar indicating the point of attachment,  $5-6.7 \times 3-4.7\mu$  (Fig. 1).

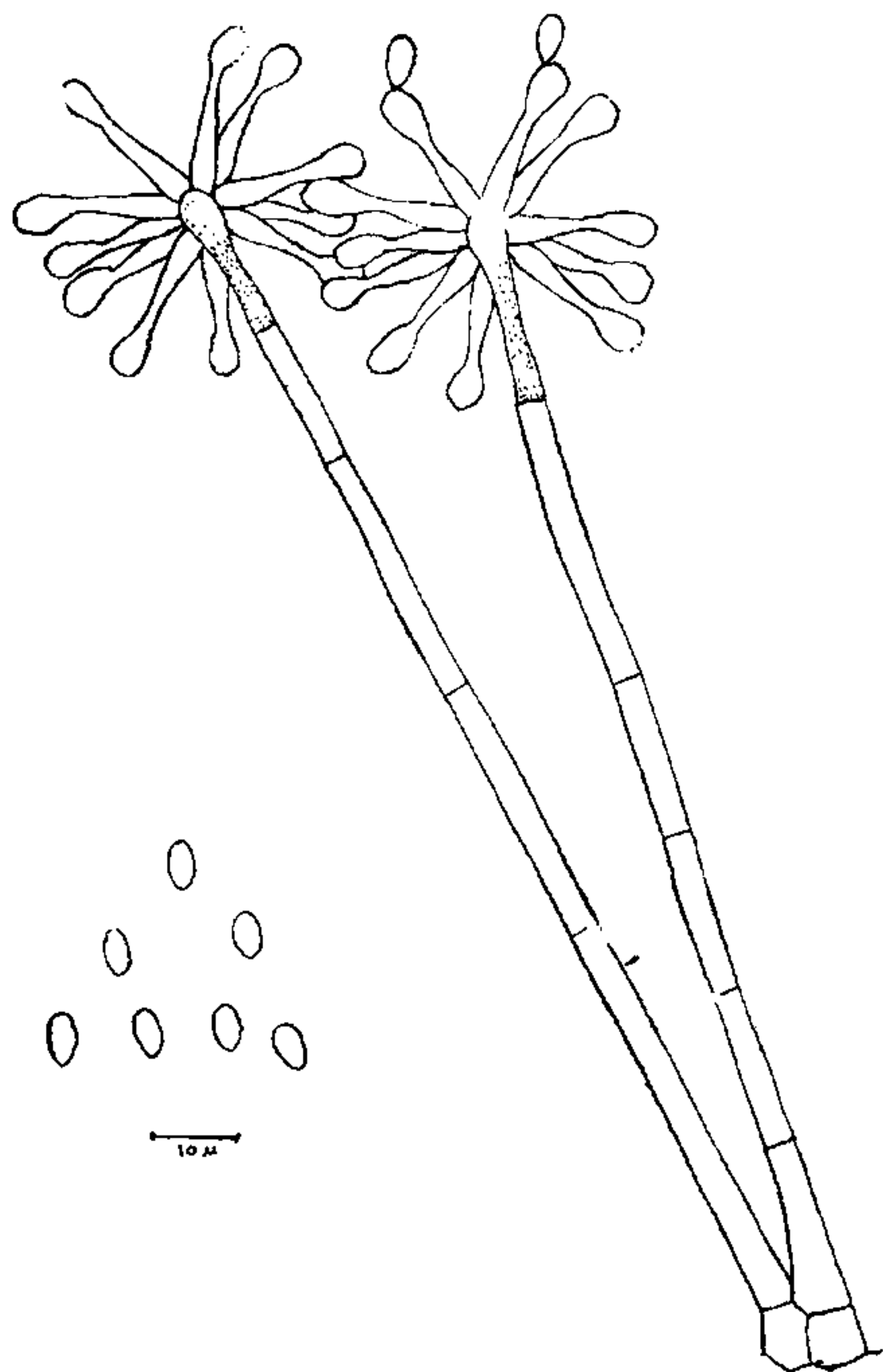


FIG. 1. Showing Conidiophores and Conidia.

Specimen deposited with Botany Department,  
University of Jodhpur, Jodhpur, J.U.M.L., 326.

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# AN INTERESTING ASCOMYCETE FROM COORG (KARNATAKA)

DURING a tour in the Coorg Forests an interesting ascomycetous fungus was collected growing on the twigs of *Lobelia trigona* Roxb. The infected areas were in the nature of stroma forming a thin, black, carbonaceous outer layer on the host. Critical examination of the material further revealed its identity as a species of *Pleuroceras* Riess. (Diaporthaceae)<sup>1</sup>, hitherto an unrecorded genus in India. For its identity, the fungus was studied in detail and found to be distinct, differing significantly from *Pleuroceras cryptoderis* (Lev.) v. Hohn.<sup>3</sup>, the type species, as well as *P. populi* Thompson<sup>2</sup> in respect of gross-morphological characters and dimensions of fruiting structures, besides being collected on a new host. Hence, the same has been described here as a new species, viz.,

*Pleuroceras lobelii* SP. NOV. (Fig. 1)

Stromata nigra, levia, coriaceo-carbonaceis tenui : perithecia rostellata, tenuiter-tunicata, membranaceo, defixus oblique in plantis textus, ostiolata, usque ad 1-2 per stroma, magnit :  $340-510 \times 255-340\mu$  ; collo brevia vel piriformibus,  $136-170 \times 80\mu$ , diagonalia et lateralibus oriunda ; periphyses numerosae, filiformes hyalinae ; paraphyses nullae ; asci octospori, unitunicati, paraphysatae, cylindracei vel clavati, emergentes in fasciculo, magnit :  $95-114 \times 9.5-11.4\mu$  ; ascospores bicellulares, hyalinae, tenuiter-tunicati, forma fusus, constrictae ad septa,  $22.8-30.4 \times 2-3.8\mu$ .

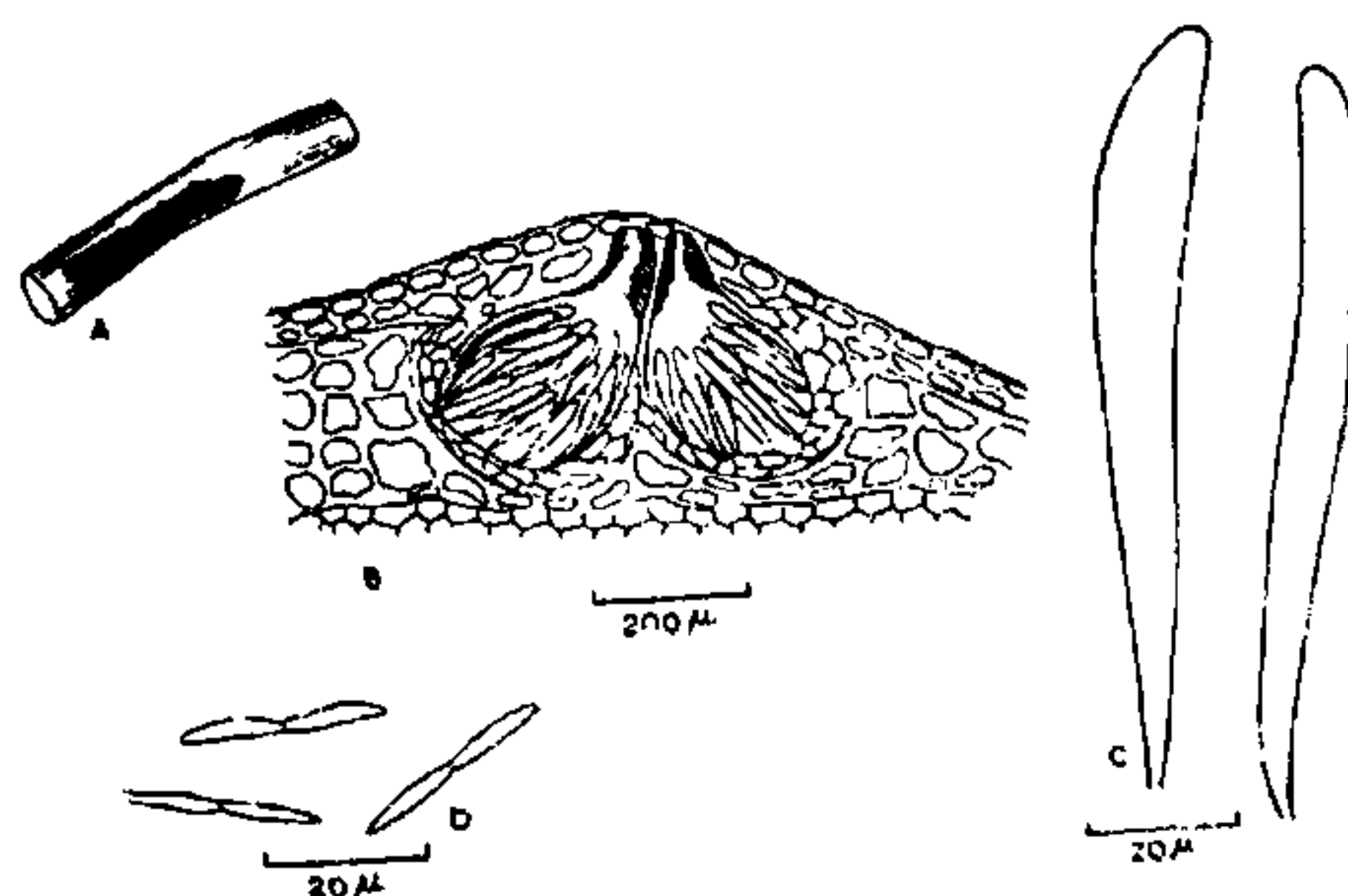


FIG. 1. *Pleuroceras lobelii*. A, Habit ; B, V. S. through a stroma ; C, Asci ; D, Ascospores.

Matrix : In culmis emortuis *Lobelia trigona* Roxb. (F. Lobeliaceae), leg. D. V. Narendra (November 11, 1971), ad Mercara (Coorg, Karnataka), No. AMH 2188 (Holotypus).

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