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MALAYAEASPORA COSTATA GEN. ET SP. NOV FROM THE TERTIARY COAL OF MALAYA

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THE tertiary coal in Malaya rests unconformably on the post Triassic and Triassic basic and ultrabasic intrusive rocks. One of us (B.S.T.) collected the co-sample from 3 km west of Kuala Lumpur, Malaya, in 1953. Trivedi and Chaturvedi¹, Trivedi and Verma² and Trivedi, Chaturvedi and Verma³ described various microfossils from this coal. The present authors recovered a rich palynological assemblage from this sample comprising 18 spore and pollen genera out of which one new genus, viz., *Malayaeaspora* is described here.

Systematic Palynology

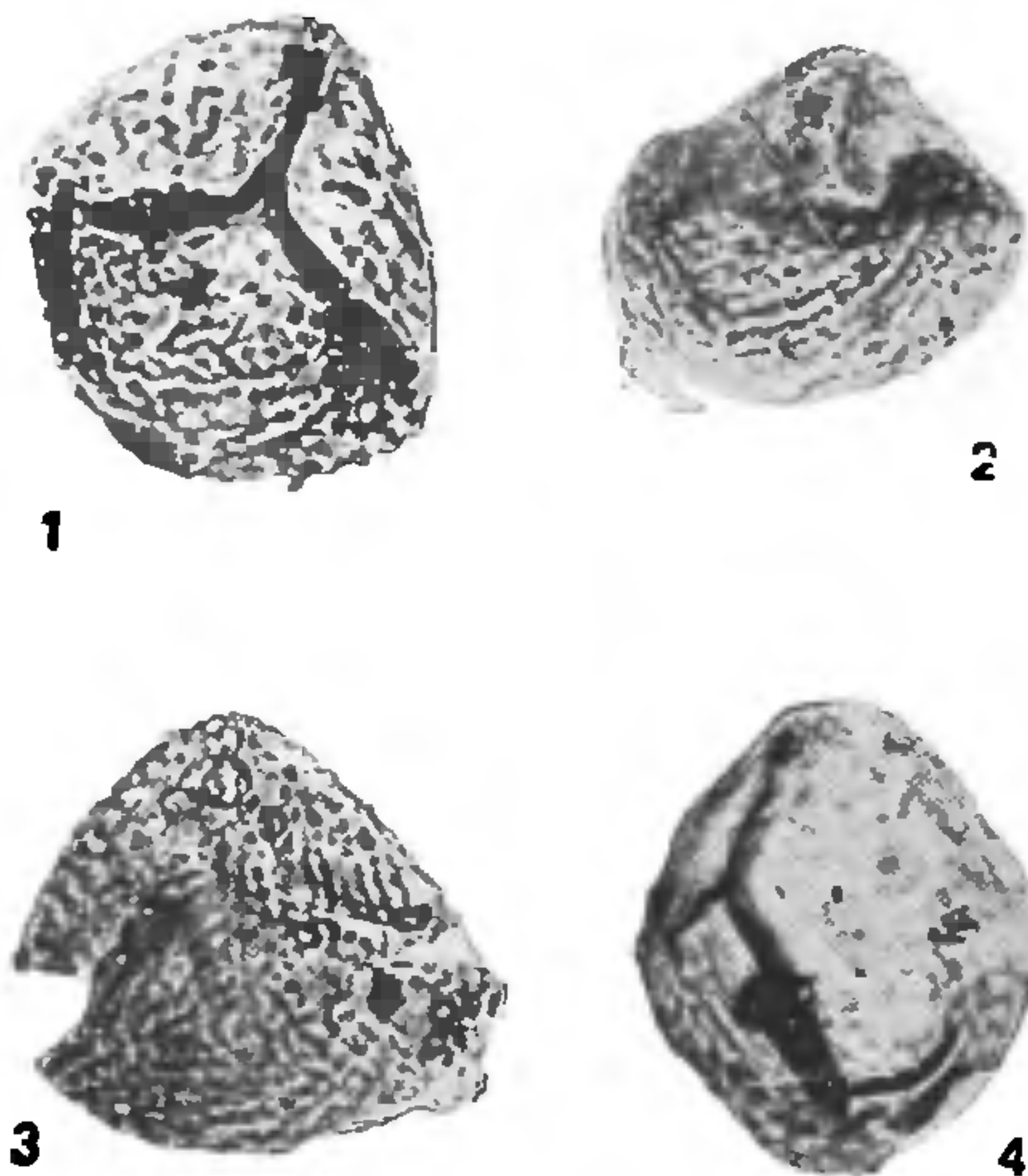
Anteturma	<i>Sporites</i> H. Potonie, 1893
Turma	<i>Triletes</i> (Reinsch) Potonie and Kremp, 1954
Subturma	<i>Azonotriletes</i> Lubert, 1935
Infraturma	<i>Murornati</i> Potonie and Kremp, 1955
Genus	<i>Malayaeaspora</i> gen. nov.
Type species	<i>Malayaeaspora costata</i> sp. nov.

Diagnosis

Spores triangular-subtriangular. Trilete rays well developed. Exine laevigate on proximal side distally exine verrucose-costate, verrucae closely placed adhere together and aligned in rows to provide the appearance of costae.

Description

Proximo-distally fully flattened specimens rare spores preserved mostly laterally. Proximal side thinner, seems to be concave, distal side thicker, seems



FIGS. 1-4. *Malayaeaspora costata* gen. et sp. nov. Fig. 1. Holotype, $ca \times 500$. Figs. 2 and 4. Note the laevigate exine on the proximal side, $ca \times 500$. Fig. 3. Note verrucae on the distal side aligned in rows to provide costate appearance, $ca \times 500$.

to be convex. Distal side heavier than proximal due to presence of sculptural elements. Sometimes proximal side caves in, size range $45-77 \mu m$. Psilate nature of proximal side clearly visible on laterally preserved specimens. Trilete rays distinct, rays flappy, broad, extending upto three-fourths radius. Some specimens with monolet and oval shape also observed, proximal side in them like other specimens laevigate and distally verrucose-costate. Ornamentation on distal side well developed. Costae in some specimens raised, distinct run without any break, parallel to each other, rarely branched. In others, low set verrucae juxtaposed, coalesce together, align in rows to form costae. The costae in these specimens slightly discontinuous, few verrucae could be deciphered.

Comparison—Cicatricosisporites

Potonie and Gelletich⁴ comes close to the present genus in shape and presence of costae. It may, however, be mentioned that *Malayaeaspora* proposed here has no costae on the proximal side and they are restricted only to the distal side. *Striatriletes* van der Hammen emend. Kar⁵ is triangular to subcircular in shape, its size varies from $40-140 \mu m$, costate, generally originate at interray area or at ray ends and traverse on respective distal side to form three concentric rings.

May 30, 1981.

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A NEW SPECIES OF *CERCOSPORA* FROM INDIA

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Cercospora lantanae-camerae sp. nov.

STROMATA dark brown, 20–32 μm wide, composed of few cells; conidiophores fasciculate, in fascicles of 6–12, multiseptate, dark brown, lighter at apex, geniculate, unbranched, simple, straight or flexuous, with prominent scar of attachment to conidia, 110–250 \times 4–6 μm ; conidia hyaline, broader below and tapering above, filiform, straight or curved, 5–20 septate, base truncate, apical ends subacute, distinct scar at the base, acropleuro-genous, 100–250 \times 4–6 μm . (Fig. 1).

On the living leaves of *Lantana camera* Linn. (verbenaceae), causing leaf spots, collected from Pariat Tank, Jabalpur, December, 1977, leg. R. C. Rajak. The type specimen has been deposited in the Commonwealth Mycological Institute, Kew, England, as I.M.I. No. 224099.

The present collection is distinctive from all the known species of *Cercospora* reported on *Lantana*^{1–4}, in shape, septation and size of conidia and conidiophores. It comes closer to *C. apii* but differs from it in many respects. The conidia of the present species are filiform, 6–20 septate and 100–250 μm long while in the case of *C. apii* the conidia are obclavate, 3–10 septate and 50–80 μm long. Moreover, the conidiophores of the present fungus are much longer (110–250 μm) and 6–12 septate in contrast to the short (40–60 μm) and 1–2 septate conidiophores of *C. apii*.

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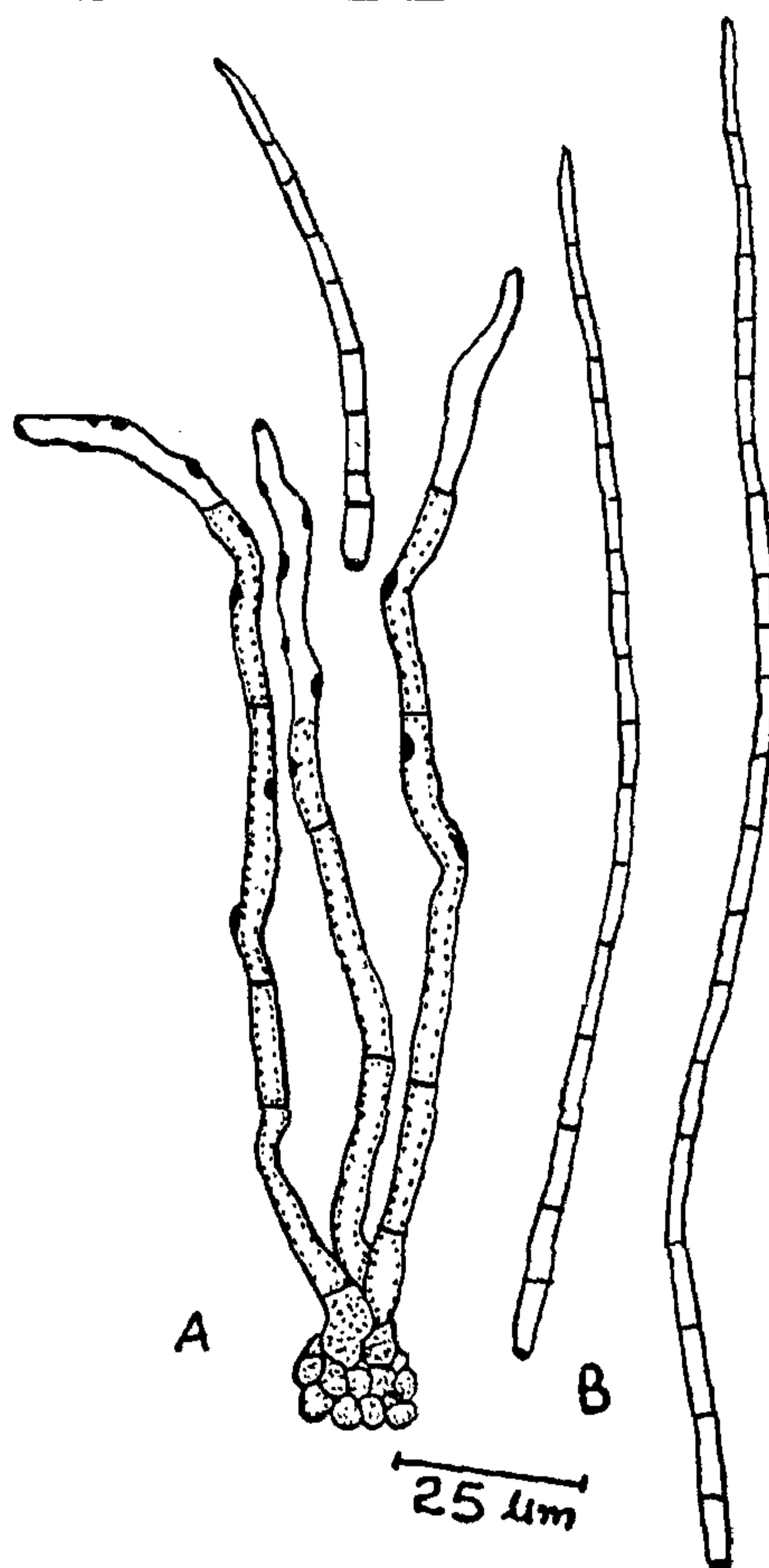


FIG. 1. A. Conidiophores. B. Conidia.

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