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PHOMA LUCKNOWENSIS SP. NOV. FROM INDIAN ALKALINE SOILS

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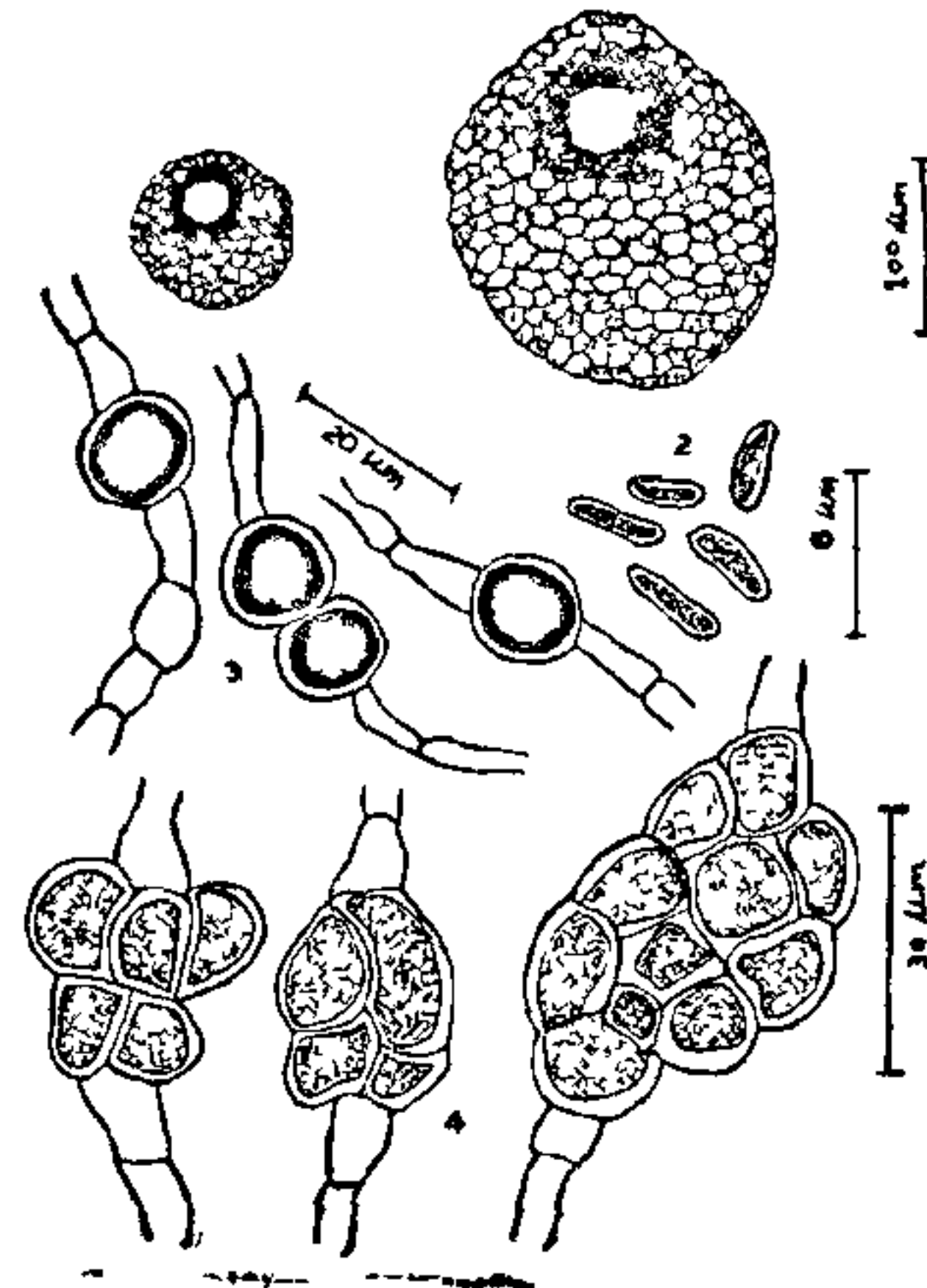
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Phoma lucknowensis sp. nov.

HYPHAE hyalines vel leviter fuscescens, septatae bis $6.4 \mu\text{m}$ in diam. **Pycnides** brunneis vel nigris, globosa vel irregularia, non numerosa, $72.0\text{--}216.0 \mu\text{m} \times 72.0\text{--}158.0 \mu\text{m}$. **Pycnidiosporae** minutae, unicellulae, hyalinae, ellipsoideae, $3.1\text{--}4.6 \mu\text{m} \times 1.5\text{--}2.0 \mu\text{m}$. **Dictyochlamydosporae** fusco-nigrescens, muriformibus, intercalariibus, $24.0\text{--}64.0 \mu\text{m} \times 16.0\text{--}48.0 \mu\text{m}$. **Chlamydosporae** fusco-nigrescens, singularis, vulgo, $8.0\text{--}12.0 \mu\text{m}$ in diam.

Lectus mense julio ex solo usar (pH 8.0) and Hindnagar, Lucknow.

Colonies on potato-dextrose agar growing rather very slowly, forming a tough mycelial felt over the substratum, gradually deepening and in age becoming almost black, reverse and reverse agar dark greyish, exudates abundant in the form of colourless droplets. Hyphae hyaline to light brownish, septate upto $6.4 \mu\text{m}$



FIGS. 1-4. *Phoma lucknowensis* sp. nov. Fig. 1. Pycnidia. Fig. 2. Pycnidiospores. Fig. 3. Chlamydospores. Fig. 4. Dictyochlamydospores.

in width. Pycnidia produced in limited numbers after a few weeks, dark brown to black, globose to irregular, $72.0\text{--}216.0 \mu\text{m} \times 72.0\text{--}158.0 \mu\text{m}$. Pycnidiospores extruded in a mucilage droplet, small, unicellular, hyaline, ellipsoidal $3.1\text{--}4.6 \mu\text{m} \times 1.5\text{--}2.0 \mu\text{m}$. Dictyochlamydospores dark brown, muriform, produced in chains, measuring $24.0\text{--}64.0 \mu\text{m} \times 16.0\text{--}48.0 \mu\text{m}$. Chlamydospores dark brown, single, frequently produced in long chains and measuring $8.0\text{--}12.0 \mu\text{m}$ in diameter.

Isolated in July from Usar soils (pH 8.0) collected from Hindnagar, Lucknow. Type, in the form of dried culture, deposited in the Department of Botany, Lucknow University, Lucknow, India. A subculture has also been deposited in the Commonwealth Mycological Institute, Kew, England, as IMI 132164.

Of all the described species of the genus *Phoma*^{1,2} *P. lucknowensis* sp. nov. comes closer to *P. eupyrena* but clearly differs in the size of pycnidia and pycnidiospores and the presence of dictyochlamydospores which is characteristic of this form.

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