

gelatinous sheath. Each seta possesses a delicate, cytoplasmic, filamentous and hair-like prolongation. Each cell contains a single parietal chloroplast with one or two pyrenoids (figure 1). Occasionally cells of certain cluster are enlarged and contain granular contents (figure 2) and may be perennating. The cells measure 19–22  $\mu\text{m}$  in diameter. Sheath of the setae are 3–6  $\mu\text{m}$  in diameter and 15–30  $\mu\text{m}$  in length and setae are usually more than 100  $\mu\text{m}$  in length. The perennating cells are 22–27  $\mu\text{m}$  in diameter.

The present alga resembles *Conochaete comosa* in most of the morphological features and dimensions as given for the type species<sup>1</sup>. The alga collected has narrower dimensions but the enlarged perennating cells, come upto the range of type description.

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21 February 1983; Revised 2 April 1983

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### **DACTYLOSPORA KÖRBER PATELLARIACEAE: A NEW GENERIC RECORD FOR INDIA**

M. P. SHARMA AND AMAR SINGH\*  
Botany Department, Panjab University,  
Chandigarh 160 014, India.

\* Botany Department, Government College,  
Chandigarh 160 011, India.

*DACTYLOSPORA stygia* (Berk. & Curt.) Hafellner was collected from Mussoorie hills in North-Western Himalayas at an altitude of 1800 m., m.s.l. There is no previous record of a fungus belonging to *Dactylospora* Körber<sup>1</sup> = *Leciographia* Massalongo, Helt. fide Nannfeldt<sup>2</sup>, as verified earlier<sup>3-5</sup>. This is, therefore, the first record of the occurrence of this species in Mussoorie hills.

**Observations** Ascocarps up to 1 mm across, highly gregarious, sessile to subsessile, discoid, dark-brown, black after drying; hymenium concave, smooth; margin entire. Asci 8 spored, 3+, clavate-cylindrical. Ascospores 11–21  $\times$  3–4.5  $\mu\text{m}$ , fusoid, brown, smooth, 2-celled, guttulate. Paraphyses filiform. Excipulum two-layered of angular brown cells.

Collection examined: 11825 (PAN, K), on dead wood (Angiospermous) under mixed forest, Spring Road, Mussoorie, U.P., September 30, 1981, leg. M. P. Sharma.

Single Indian specimen examined is quite typical of the species. *Karschia stygia* (B. & C.) Masee var. *tenuispora* Dennis, differs in its smaller ascospores: 10–13  $\times$  2.5–3  $\mu\text{m}$ , fide Dennis<sup>6</sup>.

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### **PYTHIUM VEXANS VAR. MINUTA VAR. NOV. FROM KUMAUN, THE HIMALAYAS, INDIA.**

G. S. MER AND R. D. KHULBE  
Department of Botany, Kumaun University,  
Nainital 263 002, India.

The fungus *Pythium Vexans* Var. *Minuta* Var. *Nov.* was isolated during a study on soil inhabiting water-molds (zoosporic fungi) carried out over two years. After detailed and careful examination, this isolate is being described as a new variety of *Pythium vexans* de Bary.

*Pythium vexans* var. *minuta* var. *nov.*

Hyphe delicatae, ramosae, 2–9  $\mu\text{m}$  in diameter; zoosporangia pleura, terminalis vel intercalaria, globosis, subglobosis vel pyriformis 12.5–25  $\mu\text{m}$  diametro, plerumque 16–18  $\mu\text{m}$ , zoosporangia 1–2 tubis germinantia; chlamydosporae terminalis, globosis, subglobosis vel pyriformis, 14–28.5  $\mu\text{m}$  diametro, tubis germinantia; oogonia pleura, terminalia raro intercalaria, globosis, tunica levibus, 13–2–31  $\mu\text{m}$  diametro, plerumque 15–18  $\mu\text{m}$ ; antheridia ple-

rumque hypogynae raro androgynae vel diclinae; oosporae singulae tunica levelibus, globosis, eccentrica, plerumque aplerotica raro plerotica, 9.9-16  $\mu\text{m}$  diametro, plerumque 10.7  $\mu\text{m}$ .

*Pythium vexans* var. *minuta* var. nov.

Hyphae slender, branched, 2-9  $\mu\text{m}$  in diameter; zoosporangia formed abundantly, terminal or intercalary, spherical, sub-spherical or pyriform, 12.5-25  $\mu\text{m}$  in diameter, predominantly 16-18  $\mu\text{m}$ , germinating by 1-2 germ tubes; chlamydospores few, spherical, sub-spherical or pyriform, 14-28.5  $\mu\text{m}$  in diameter, germinating by germ tubes; oogonia abundant, terminal on short lateral branches, occasionally intercalary, spherical, smooth walled, 13.2-31  $\mu\text{m}$  in diameter, predominantly 15-18  $\mu\text{m}$ ; antheridia mostly hypogynous but androgynous and diclinous antheridial branches are not uncommon, bell-shaped; oospore single, smooth-walled, spherical, eccentric, mostly aplerotic, rarely plerotic, 9.9-16  $\mu\text{m}$  in diameter, mostly 10.7  $\mu\text{m}$ .

**Etymology:** The variety is named *minuta* on the basis of its smaller oospores.

**Habitat:** Soil, Ram Tal (one of the Sat Tal lakes) and Naina peak, March 5, 1979, G. S. Mer and R. D. Khulbe. The type culture has been deposited in the herbarium, CMI (IMI-255017), Kew, England.

The present isolate differs significantly from the one described by other workers<sup>1,2</sup> in the germination of zoosporangia by germ tubes, smaller oospores and preponderance of hypogynous antheridia. This isolate also differs from the isolate described by Middleton<sup>3</sup> in having smaller oospores and hypogynous antheridia. It is identified as *P. vexans* on the basis of the presence of bell shaped antheridia which is a characteristic feature of this species.

Keeping in view the above characters, the isolate is described as a new variety of *P. vexans* viz *P. vexans* var. *minuta*.

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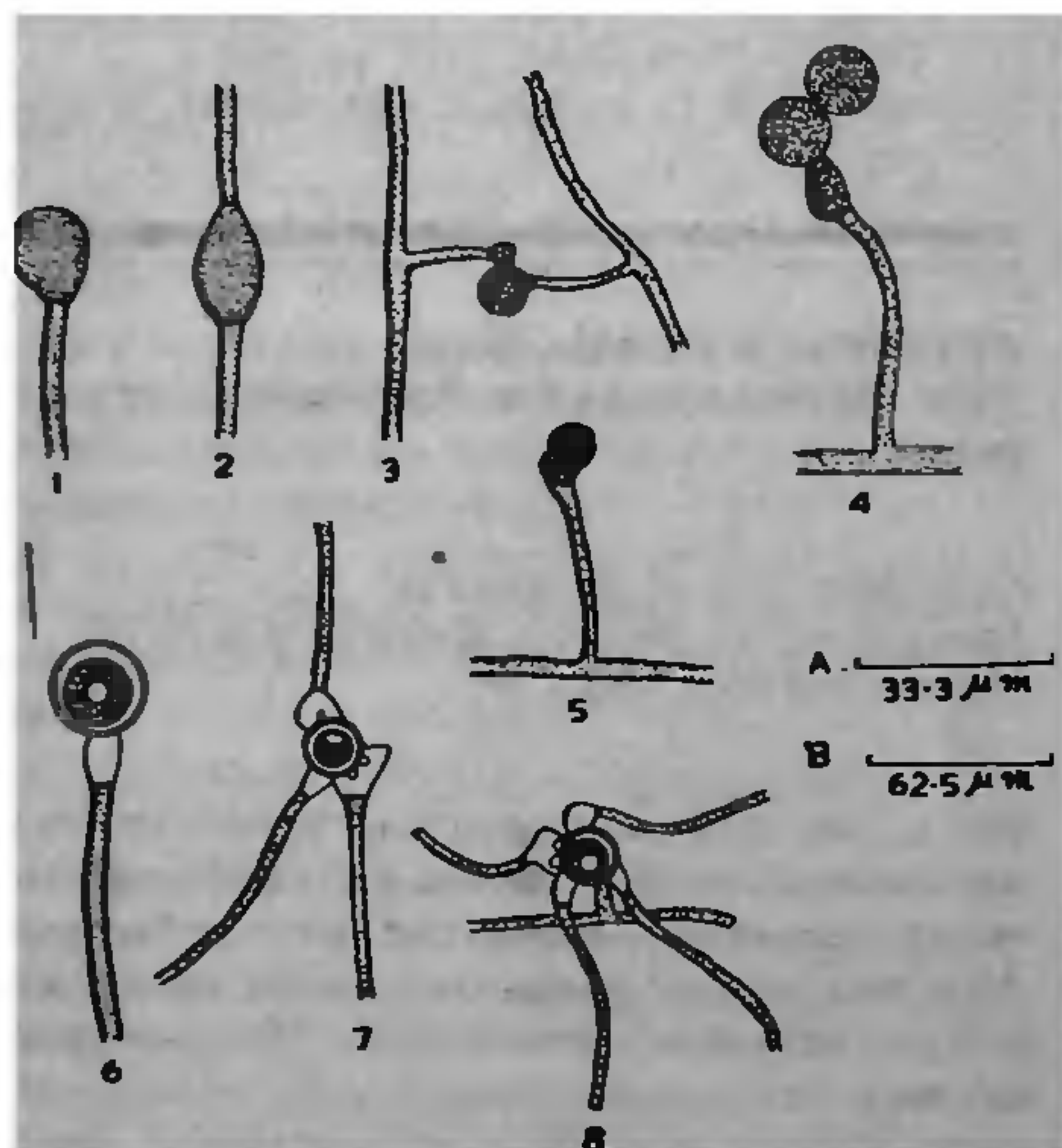
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## ROOT ROT OF GROUNDNUT INCITED BY *FUSARIUM NIVALE*

RAVI KUMAR, S. K. MATHUR AND ANILA MATHUR  
Botany Department, Agra College, Agra 282 002, India.

DURING the kharif season of 1980 and 1981, root-rot was observed in T28 variety of groundnut grown in the Dayalbagh region of Agra district. The disease was observed in July, 15 days after sowing. The infected root portion was isolated and the fungus was identified as *Fusarium nivale* (Fr.) Ces.

The root portion near the hypocotyl region turned brown followed by rotting. Simultaneously the leaves showed yellowing, drying and curling at the margins proceeding inward and downward. The infected plants drooped and later died. The infected plants on pulling, in some cases, left behind the root system in the soil. The disease caused 8-10% plant mortality.



**Figures 1-8.** 1. Terminal zoosporangium; 2. Intercalary zoosporangium; 3. Young oogonium with diclinous antheridium; 4. Young oogonia in chain; 5. Young oogonium with androgynous antheridium; 6. Mature oogonium with aplerotic, eccentric oospore and hypogynous antheridium; 7. Mature oogonium with hypogynous and diclinous antheridia; 8. Mature oogonium with diclinous antheridia. (1,2,4, & 6, scale A and 3,5,7,8 scale B.)