

for micropropagating and introducing native anthuriums abundant in the forests of Kerala State.

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## STUDIES IN NEMATOPHAGOUS FUNGI: IX *MYZOCYTIUM PAPILLATUM*—A NEW RECORD FROM INDIA

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IN studies of the nematophagous fungi of Varanasi, a species of *Myzocytiium* was encountered which has not been previously reported from India. *Myzocytiium*, a member of Oomycetes is found parasitic on nematodes. Barron<sup>1</sup> described 6 species of the genus *Myzocytiium* from Canada. An interesting feature of the genus is that almost all the species exhibit different modes of parasitic cycle, which range from primitive to advanced Oomycetous type.

The present note deals with the detailed account of the chief structural characteristics of *Myzocytiium papillatum* Barron. Nematodes were isolated from soil using Cobb's sieving and decanting technique<sup>2</sup>. Using Giurma and Cooke's method<sup>3</sup>, nematode suspension was concentrated at 1000 RPM for 3 min. The supernatant was discarded and resuspended in a few ml of distilled water. On immediate examination of the suspension, few nematodes showed symptoms of fungal attack. After four days or more of incubation in

distilled water, they were again centrifuged. After discarding the supernatant, the nematodes were poured on fresh water agar plates<sup>4</sup>. They were again incubated at  $25 \pm 2^\circ\text{C}$  and then a large number of nematodes were found to be infected.

*Myzocytiium papillatum* Barron.

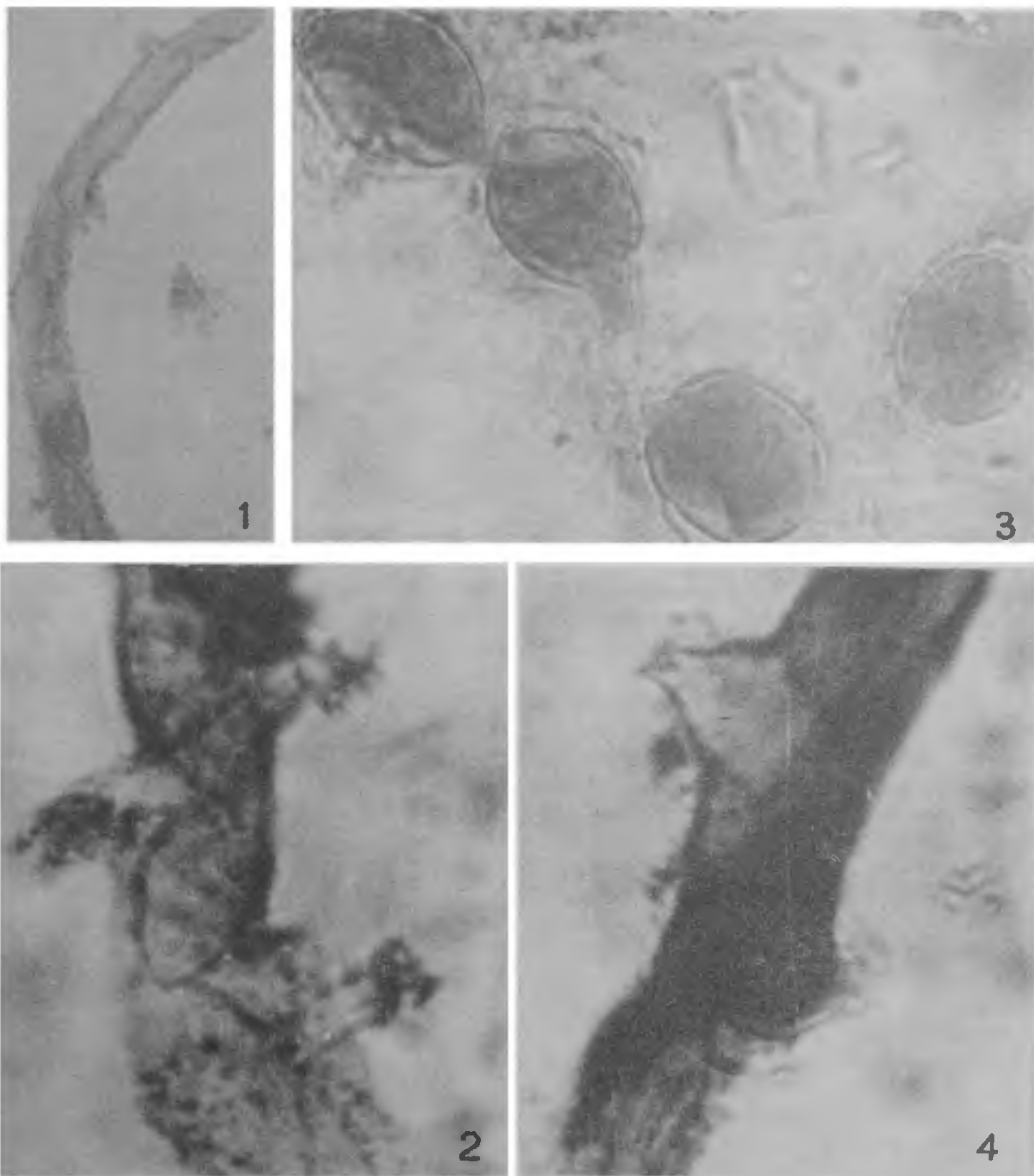
Zoospores lens-shaped, laterally biflagellate,  $4.2 - 6.3 \mu\text{m}$  long. The zoospores encyst on the nematode cuticle before penetration and infection. The infection thallus formed from encysted spore, grew on the entire length of the host. Sporangia measured  $21.0 - 37.8 \times 16.8 - 20.6 \mu\text{m}$  often lemon shaped, distinctly papillate at one or both ends, linearly arranged in the nematode body. Evacuation tubes  $8.4 - 12.6 \times 6.3 - 8.4 \mu\text{m}$  produced singly from zoosporangia.

Two adjacent segments behave as antheridia and oogonia. They are similar in appearance to that of sporangia. Oospores are thick-walled, smooth, and spherical with  $16.8 - 21 \mu\text{m}$  in diameter.

The fungus was isolated from the soil under Papaya vegetation during March and April 1984.

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**Figures 1–4.** *Myzocytyium papillatum*. **1.** Nematode body filled with sporangia. One sporangium showing the evacuation tube  $\times 150$ . **2.** Host filled with lemon-shaped sporangial segments and zoospores accumulated at the orifice of the exit tube  $\times 600$ . **3.** Linear series of sporangia inside the host  $\times 600$ . **4.** Evacuation tube produced to the exterior.  $\times 600$ .