rot of Chinese yam (Dioscorea batata) was caused by Pythium ultimum. The soft rot of the Chinese yam was reported to be associated with Pythium or Phytophthora from Jamaica. Recently Harada reported that Pythium was the cause of the rot of Chinese yam in Japan. So far there is no record of Pythium spinosum causing tuber rot in Dioscorea composita. However, Thakur et al reported the rhizome rot of Costus speciosus (Smith) caused by Pythium spinosum from India. Thus, it is the first report of Pythium spinosum causing tuber rot of Dioscorea composita.

As a part of the control measure against this disease, ten fungicides namely Thiram, Captan, Brassicol, Blitox, Ceresan, Dithane Z-78, Benlate, Deconil, Dexon and Dithane M-45 were tried with their three different concentrations viz 0.1, 0.2 and 0.3%. Among these Dexon, Ceresan, Blitox, Thiram and Benlate were more effective.

The efficacy of each fungitoxicant was determined by measuring the radial growth of the test fungus in comparison to the growth in the control. The inhibition percentage was calculated by the formula of Vincent: \[ I = 100 \times (C - T)/C \] where \( I \) is inhibition, \( C \) is the growth of the fungus in control (without fungicide) \( T \)-growth in treatment.

Results showed that Blitox, Ceresan and Dexon were highly effective against the pathogen even at 0.1% concentration whereas Benlate and Thiram inhibited the radial growth of the pathogen only 80% at this concentration. Captain showed its effectiveness only at its 0.2% concentration. The rest of the fungitoxicants were not effective against this pathogen. With still lower dilution (0.05%) Ceresan and Blitox indicated 80% inhibition and Dexon 100% at 0.025.

Sincere thanks are due to Mrs S. Gupta for providing diseased and healthy tuber of Dioscorea composita for these experiments. Authors are grateful to Dr. Anthony Johnston, Director, C.M.I., London for identifying the pathogen.

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A NEW SPECIES OF MYCOVELLOSSIELLA RANGEL FROM INDIA

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During frequent surveys of forests of Terai, U.P., the authors collected a foliicolous hypomycetous fungus which has been described as a new species of Mycovellopsilla as under:

Mycovellopsilla myrtacearum A. N. Rai, B. Rai and Kamal sp. nov.

Mycelium of the new species is composed of thin, septate, rarely branched, 1.7-2.3 μm diam., olive-brown, smooth, with 2-5 septa. Conidiophores are solitary, 13.8-39 μm long and 4-4.6 μm wide, usually terminal, becoming prothallial on conidial formation. Conidia are ellipsoidal, thin-walled, 2-4 μm long and 1.7-2.8 μm wide.
Table 1. Comparative account of *M. cajani* and *M. myrtacearum*

<table>
<thead>
<tr>
<th>Species</th>
<th>Conidiophores</th>
<th>Structure</th>
<th>Conidia size (in μm)</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>M. cajani</em> (Type species)</td>
<td>Very variable in length 1–3 near the base, broadening above to 4–7.</td>
<td>Much branched, climbing leaf hairs, pale or mid pale olivaceous brown.</td>
<td>20–30 × 4–6</td>
<td>Mostly cylindrical, hyaline to mid pale olivaceous brown, 1–3 septate, scars conspicuous.</td>
</tr>
<tr>
<td><em>M. myrtacearum</em> sp nov (proposed species)</td>
<td>13.8–39 × 4–4.6</td>
<td>branched, pale brown.</td>
<td>27.6–92 × 1.7–2.8</td>
<td>Obovate, pale olivaceous brown, 3–7 transversely septate, scars less distinct.</td>
</tr>
</tbody>
</table>

Figure 1. *Mycovellosiella myrtacearum* A. N. Rai, B. Rai and Kamal sp. nov. a. Mycelium, b. conidiophores, c. conidia.

subacute to rarely obtuse apices, obconicotruncate bases, smooth, 3–7 transversely septate, hila less distinct, 27.6–92 × 1.7–2.8 μm (figure 1).

On living leaves of *Psidium guajava* Linn. (Myrtaceae); March, 1979; Tilkonia (South Gorakhpur Forest Division); leg. B. Rai, KR 173, type, IMI 235984.

A reference to literature revealed that the present collection does not resemble any of the species of *Mycovellosiella* described so far [4–11]. Hence the type species is compared in table 1.

The authors are grateful to the Director, CMI, Kew, England for identifying of the associated fungus.

21 August 1985


TWO NEW TAXA OF THE DESMID
*XANTHIDIUM* EHR (CHLOROPHYCEAE)
FROM KARNATAKA STATE (INDIA).

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DURING 1978 a total of 51 collections were made in freshwater ponds and lakes situated in Shimoga district (13°17' and 14°39' N latitude and 74°38' and 76°04'E longitude) and Uttara Kannada district (13°53' and 15°32' N latitude and 74°04' and 75°05'E longitude) of Karnataka State. The collections are deposited in this Department (accession Nos KRU1-