the large bivalents being similar in size to the 10 bivalents of the short variety. Both taxa showed perfectly normal meiosis characterized by regular bivalent formation, anaphase separation and formation of normal tetrads. The pollen grains of the tall variety were slightly larger in size. The cytological evidence thus indicates that the tetraploid tall robust taxon is a natural allopolyploid, in which the diploid short variety could be one of the putative parents. In South India this species exists as a "compilospieces" in which the diploid form is very restricted and the tetraploid widespread in distribution.

Thanks are due to Dr C. A. Ninan for facilities and encouragement and to Prof. P. M. Mathew for helpful suggestions.

3 July 1984


**A NEW SPECIES OF HYPODERMELLA FROM MAHARASHTRA**

**B. P. WANGIKAR and V. N. BALLAL**

Department of Botany, Government College of Arts and Science, Aurangabad 431001, India.

In the survey of ascomycetes fungi from the State of Maharashtra dead leaves of *Thuja occidentalis* L were collected from Kamalpur, Chandrapur district forest showing many carbonaceous elongated fruiting bodies with a central longitudinal slit characteristic of Phacidiales. Section through these bodies revealed the presence of stromatic cup-shaped hysterothecia with parallel asci intermingled with swollen tipped paraphyses. On the basis of structure and ascospore characters, with the available literature, the fungus was concluded to be a species of *Hypodermella* Tubaki.

Two species of this genus were recorded from all over the world. Only one record of this genus is known from India.

This interesting but rare fungus has been designated as *H. occidentalis* sp nov. A comparison of the present material and *H. rhamni* is given in table 1.

From the above data the present collection differs in respect of morphological characters having bigger asci and ascospores and collected on a hitherto unrecorded host, it is, therefore, offered as a new species.

**Table 1 Comparative table of Indian species of Hypodermella Tubaki.**

<table>
<thead>
<tr>
<th>Species</th>
<th>Hysterothecia</th>
<th>Asci</th>
<th>Ascospores</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <em>H. occidentalis</em> sp nov.</td>
<td>200–300 × 162–260</td>
<td>140–170 × 22–26</td>
<td>30–52 × 8.6–11.5 µ</td>
</tr>
</tbody>
</table>

**H. occidentalis* sp nov. (figure 1)**


The ascospores were allowed to germinate in sterile water. They germinated within 24 hr in water with swelling in size, giving out a stout germtube, thus providing their non resisting nature.

Authors are thankful to Dr P. G. Sathe for his guidance and encouragement.

14 March 1983; Revised 12 August 1984
SCREENING OF CITRUS GERMLASM FOR RESISTANCE TO POWDERY MILDEW

M. R. S. REDDY, P. H. NAIDU
and D. GOPALA RAJU

Citrus Improvement Project, S.V. Agricultural College,
Tirupati 517502. India.

DURING January 1984, powdery mildew (Oidium	
tingitanum Carter) appeared in a serious form at
Citrus Project, Tirupati and it was felt necessary to
screen different varieties of germplasm for their resis-
tance to the disease. One hundred and thirty seven
varieties maintained in germplasm block were ex-
amined under natural conditions and graded into
the following 4 categories\(^1\) (figure 1).

1. HS (Highly susceptible) showing numerous lesions
   on leaves and twigs, almost covered with whitish
   powdery growth.
2. S (Susceptible) with lesions scattered on the entire
   leaf area and twigs.
3. MS (Moderately susceptible) with only a few
   lesions on the leaves and twigs, Scanty mildew
   growth.
4. R (Resistant) leaves and twigs free of lesions.

Out of 137 varieties assessed the following 16 were
found resistant: 1. Gajanimma [Citrus moi (Lush.)
Sweet lime (C. limettioides Tanaka) 4. Satsuma
nku (C. reticulata Blanco) 5. Pummelo pink (C.
grandis Osb.) 6. Acidlime (C. aurantiifolia (Christm.)

Figures 1–4. 1. Highly susceptible, 2. Susceptible,

3. Ramakrishna, N. K., Proc. Indian Acad. Sci., 1957,
B42, 249.