Some new host records of *Helminthosporium* from India

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The taxonomic position of the genus *Helminthosporium* and its allied genera is limited to few species as most of the graminicolous species have been redispensed based on its 'couidiurn ontogeny to *Drechslera, Bipolaris* and *Exserohilum* (1-4). Their physiology and pathogenicity are not carried out in conjunction with mycological and pathological parameters. Even in some cases the teleomorphic characters have not been given much importance.

Herbarium Cryptogammae Indiae Orientalis (HCIO) has a large collection of *Helminthosporium* species and its allied genera comprising of one hundred and eleven specimens. It was thought desirable to re-examine the above materials and place them into their proper taxonomic position based on latest nomenclatural changes with particular reference to germination and hilum morphology of the conidium.

During the course of present revisionary studies, five species of *Drechslera* were recorded on new hosts from India (Table 1) (Fig. 1-5).

*Exserohilum halodes* (Bubak) Bubak in *Hedwigia* 57: 337.


**Table 1. Comparative morphological characters of different species of *Drechslera***

<table>
<thead>
<tr>
<th>Character</th>
<th><em>Drechslera dematioidea</em></th>
<th><em>D. ravenellii</em></th>
<th><em>D. spicifera</em></th>
<th><em>D. halodes</em> (Exserohilum halodes)</th>
<th><em>D. australiensis</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conidiophore</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>62 - 303.8 μm × 3.1-6.2 μm</td>
<td>52-279 μm × 3.1-7.75μm</td>
<td>124-331.7μm × 3.1-4.65μm</td>
<td>93-310μm × 3.1-6.2μm</td>
<td>93-310μm × 3.1-6.2μm</td>
</tr>
<tr>
<td>Colour</td>
<td>Amber brown</td>
<td>Golden yellow</td>
<td>Amber brown</td>
<td>Brown</td>
<td>Reddish brown</td>
</tr>
<tr>
<td>Shape</td>
<td>Straight to flexuous, rarely geniculate</td>
<td>Geniculate</td>
<td>Repeatedly geniculate</td>
<td>Straight to flexuous, geniculate</td>
<td></td>
</tr>
<tr>
<td><strong>Conidia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>18.6-31.0 μm × 9.3-13.95μm</td>
<td>12.4-37.2μm × 6.2-12.4μm</td>
<td>12.4-28.7μm × 4.4-12.4μm</td>
<td>27.9-77.5μm × 15.5-31.8μm</td>
<td>12.4-15.5μm × 7.75-15.7μm</td>
</tr>
<tr>
<td>Colour</td>
<td>Golden brown to dark brown</td>
<td>Golden brown</td>
<td>Golden brown</td>
<td>Golden brown</td>
<td>Reddish brown</td>
</tr>
<tr>
<td>Shape</td>
<td>Straight, cylindrical to clavate, rounded at the ends</td>
<td>Straight to oblong, rounded at the ends tapering slightly towards base</td>
<td>Straight, oblong to cylindrical, rounded at the end</td>
<td>Straight to curved, cylindrical to ellipsoidal, to oblong, rounded at the base</td>
<td>Straight, ellipsoidal</td>
</tr>
<tr>
<td>Septa</td>
<td>3-4 pseudoseptate</td>
<td>3-4 pseudoseptate</td>
<td>3 pseudoseptate</td>
<td>5-8 pseudoseptate</td>
<td>3 pseudoseptate</td>
</tr>
<tr>
<td>Hilum</td>
<td>Non-protruding, rounded</td>
<td>Slightly protruding and rounded</td>
<td>Strongly protruding or flattened</td>
<td>Slightly protruding</td>
<td></td>
</tr>
<tr>
<td>Perfect stage</td>
<td>Not observed</td>
<td>Not observed</td>
<td>Not observed</td>
<td>Not observed</td>
<td>Not observed</td>
</tr>
</tbody>
</table>
On living leaves of *Pennisetum typhoides* (Burm.f) Stapf and Hubb., IARI Campus, New Delhi; 11.7.97, K.P.S. Kushwaha and M. Kulshreshtha, HCIO 42,659.


On living leaves of *Setaria glauca* (L.) Beauv., IARI Campus, New Delhi; 2.7.97, K.P.S. Kushwaha and M. Kulshreshtha, HCIO 42,661.


On living leaves of *Kochia scoparia* (L.) Schrad. var. *culta* Farwell, IARI Campus, New Delhi; 28.7.97, K.P.S. Kushwaha and M. Kulshreshtha, HCIO 42,662; On living leaves of *Pennisetum typhoides* (Burm.f) Stapf and Hubb., IARI Campus, New Delhi; 1.7.97, K.P.S. Kushwaha and M. Kulshreshtha, HCIO 42,658.


On living leaves of *Setaria glutinosa* (L.) P.Beauv., IARI Campus, New Delhi; 1.7.97, K.P.S. Kushwaha and M. Kulshreshtha, HCIO 42,658.

On living leaves of *Pennisetum typhoides* (Burm.f) Stapf and Hubb., IARI Campus, New Delhi; 11.7.97, K.P.S. Kushwaha and M. Kulshreshtha, HCIO 42,659.

References


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