



SHORT COMMUNICATION

OCCURRENCE OF POWDERY MILDEW ON SOME WILD PLANTS FROM KHANDESH REGION OF MAHARASHTRA STATE

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The fungi belonging to order Erysiphales and family Erysiphaceae are commonly known as powdery mildew fungi. The fungi are highly pathogenic to the variety of Angiospermic plants causing disease powdery mildew. The fungi grown ecto parasitically on the surface of the infected plant parts. The superficial mycelium of the fungi produces enormous number of conidia usually on the leaf surfaces, which appear like a mass of white powder, hence the name powdery mildew. As a group, powdery mildew fungi infect many species of plants, including many trees, shrubs, crops, vegetables, cereals, grasses, numerous ornamental and even weeds. It is clear from the literature that nearly 7187 host species which are all Angiosperms spread all over the globe are attacked by powdery mildew fungi. Powdery mildew is more common on cultivated plants and grows luxuriantly in dry, cool seasons. Depending upon environmental conditions the powdery mildew disease may cause significant destruction and loss in plants and yields. With the onset of summer they began to disappear and the plants become free from the infection during scorching heat and rainy season.

Survey of powdery mildew of wild plants was carried out since 2004 upto 2006 at Khandesh region of Maharashtra state. Powdery mildew fungi were identified by using literature of Hirata (1942), Boesewinkel (1980), Zheng (1985), Braun (1987), Bappamal et al. (1995), Sharma and Khare (1995) and Hosagoudar et al. (1997).

Thirty five wild plants viz *Abrus precatorius* L., *Abutilon indicum* (L.) Sweet, *Acacia nilotica* (L.) Del.,

Acacia pennata (L.) Willd., *Acalypha indica* L., *Ammania baccifera* L. sub. Sp. *Baccifera*, *Argemone mexicana* Linn., *Azadirachta indica* A. Juss., *Bauhinia variegata* L., *Cassia tora* L., *Clitoria ternatea* Linn., *Cocculus hirsutus* (L.) Diels., *Convolvulus arvensis* L., *Dalbergia sissoo* Roxb. Ex. Dc., *Euphorbia hitra* L., *Euphorbia prunifolia* Jacq., *Helimdesmus indicus* (L.) R. Br., *Hibiscus esculentus* L., *Hibiscus micranthus* L. f., *Ipomoea obscura* (L.) Ker Gawl., *Ixora pavetta* Andrews, *Jatropha gossypifolia* Linn., *Lablab purpureus* (L.) Sweet, *Mirabilis jalapa* L., *Ocimum sanctum* L., *Pedilanthus tithymaloides* (L.) Poit, *Physalis minima* L., *Sida cordata* (Burm. f.) Bross., *Sida acuta* Burm. P.f., *Sonchus asper* (L.) Hill., *Tamarindus indica* L., *Tectona grandis* L.f., *Tephrosia hamiltonii* Drum., *Triumfetta rotundifolia* Lamk and *Xanthium strumarium* Linn. were infected by powdery mildew like *Odium abri*, *Odium abutili*, *Odium* sp., *Erysiphe acaciae*, *Erysiphe acalyphae*, *Oidiopsis taurica*, *Odium papaveracearum*, *Odium azadirachtae*, *Odium bauhiniae*, *Odium cassiae hirsutae*, *Odium clitoriae*, *Microsphaera pseudolonicerae*, *Erysiphe convolvuli*, *Phyllactinia dalbergiae*, *Sphaerotheca euphorbiae*, *Odium* sp., *Odium hemidesmi*, *Sphaerotheca fuliginea*, *Odium ahsimoschi*, *Odium ipomoeae*, *Erysiphe cichoracarum*, *Odium jatrophae*, *Oidiopsis taurica*, *Odium nyctaginacearum*, *Odium ocimi*, *Sphaerotheca euphorbiae hirtae*, *Sphaerotheca fusca*, *Odium* sp., *Odium schmiedeknechtii*, *Erysiphe cichoracarum*, *Odium tamarindi*, *Uncinula tectonae*, *Microsphaera trifolii*, *Odium doidgel* and *Odium xanthemi* respectively (Table 1).

Table 1. Occurrence of Powdery mildew on some wild plants

Name of plant	Powdery mildew fungi
<i>Abrus precatorius</i> L.	<i>Odium abri</i>
<i>Abutilon indicum</i> (L.) Sweet	<i>Odium abutili</i>
<i>Acacia nilotica</i> (L.) Del.	<i>Odium</i> sp.
<i>Acacia pennata</i> (L.) Willd.	<i>Erysiphe acaciae</i>
<i>Acalypha indica</i> L.	<i>Erysiphe acalyphae</i>

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<i>Ammania baccifera</i> L. sub. Sp. <i>Baccifera</i>	<i>Oidiopsis taurica</i>
<i>Argemone mexicana</i> Linn.	<i>Odium papaveracearum</i>
<i>Azadirachta indica</i> A. juss.	<i>Odium azadirachtae</i>
<i>Bauhinia variegata</i> L.	<i>Odium bauhiniae</i>
<i>Cassia tora</i> L.	<i>Odium cassiae hirsutae</i>
<i>Clitoria ternatea</i> Linn.	<i>Odium clitoriae</i>
<i>Cocculus hirsutus</i> (L.) Diels.	<i>Microsphaera pseudolonicerae</i>
<i>Convolvulus arvensis</i> L.	<i>Erysiphe convolvuli</i>
<i>Dalbergia sissoo</i> Roxb. Ex. Dc.	<i>Phyllactinia dalbergiae</i>
<i>Euphorbia hitra</i> L.	<i>Sphaerotheca euphorbiae</i>
<i>Euphorbia prunifolia</i> Jacq.	<i>Odium</i> sp.
<i>Helimedesmus indicus</i> (L.) R. Br.	<i>Odium hemidesmi</i>
<i>Hibiscus esculentus</i> L.	<i>Sphaerotheca fuliginosa</i>
<i>Hibiscus micranthus</i> L. f.	<i>Odium ahsimoschi</i>
<i>Ipomoea obscura</i> (L.) Ker Gawl	<i>Odium ipomoeae</i>
<i>Ixora pavetta</i> Andrews	<i>Erysiphe cichoracarum</i>
<i>Jatropha gossypifolia</i> Linn.	<i>Odium jatrophae</i>
<i>Lablab purpureus</i> (L.) Sweet	<i>Oidiopsis taurica</i>
<i>Mirabilis jalapa</i> L.	<i>Odium nyctaginacearum</i>
<i>Ocimum sanctum</i> L.	<i>Odium ocimi</i>
<i>Pedilanthus tithymaloides</i> (L.) Poit	<i>Sphaerotheca euphorbiae hirtae</i>
<i>Physalis minima</i> L.	<i>Sphaerotheca fusca</i>
<i>Sida cordata</i> (Burm. f.) Bross.	<i>Odium</i> sp.
<i>Sida acuta</i> Burm. P.f.	<i>Odium schmiedeknechtii</i>
<i>Sonchus asper</i> (L.) Hill.	<i>Erysiphe cichoracarum</i>
<i>Tamarindus indica</i> L.	<i>Odium tamarindi</i>
<i>Tectona grandis</i> L.f.	<i>Uncinula tectonae</i>
<i>Tephrosia hamiltonii</i> Drum	<i>Microsphaera trifolii</i>
<i>Triumfetta rotundifolia</i> Lamk.	<i>Odium doidgel</i>
<i>Xanthium strumarium</i> Linn.	<i>Odium xanthemi</i>

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