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## NOTE

### FIRST REPORT OF *GOLOVINOMYCES* SP. CAUSING POWDERY MILDEW INFECTION ON *DYSCHORISTE NAGCHANA* IN WESTERN GHATS OF INDIA

Sachin Vasantryao Thite

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## First report of *Golovinomyces* sp. causing powdery mildew infection on *Dyschoriste nagchana* in Western Ghats of India

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*Dyschoriste nagchana* is a perennial plant growing naturally in wet grassland, but quite often now found in secondary bushland and grassland, including lawns. In January 2019, severe powdery mildew infection was observed for the first time in the hills of Western Ghats of district Satara, viz., Yavateshwar and Varoshi, predominantly on the leaves and stem of *D. nagchana* (Image 1a). Due to severe infection, premature leaf fall was observed. The pathogen was observed in the anamorphic form only.

After collection and detailed study diseased specimen was deposited in the Ajrekar Mycological Herbarium (AMH 9659) housed at Agharkar Research Institute, Pune, Maharashtra, India. The teleomorph (chasmothecia) of this powdery mildew was not found. The anamorph is characterized as follows: mycelium caulicolous and foliicolous, amphigenous, thin-walled, effuse or thicker white patches, persistent; hyphae colourless, hyphal appressoria solitary, always nipple-shaped (Image 1f); conidiophores arising laterally and usually towards one end of the hyphal mother cell, foot-cell curved, 48–55 × 7–10 µm (Image 1d). Conidia broadly ellipsoid doliiform without fibrosin bodies, 35 × 18 µm (Image 1b, c). Germ tubes terminal, short. Tips often

with a swollen appressorium (Image 1e). Based on these morphological characters the pathogen is identified as *Golovinomyces* sp. (*Euoidium* sp.).

A literature survey (Paul & Thakur 2006; Hosagoudar & Agarwal 2009; Braun & Cook 2012; Farr & Rossman 2016) reveal that no powdery mildew infection has been reported on *D. nagchana* from India and abroad. To our knowledge, this is the first report of *Golovinomyces* sp. (*Euoidium* sp.) on *D. nagchana* from India.

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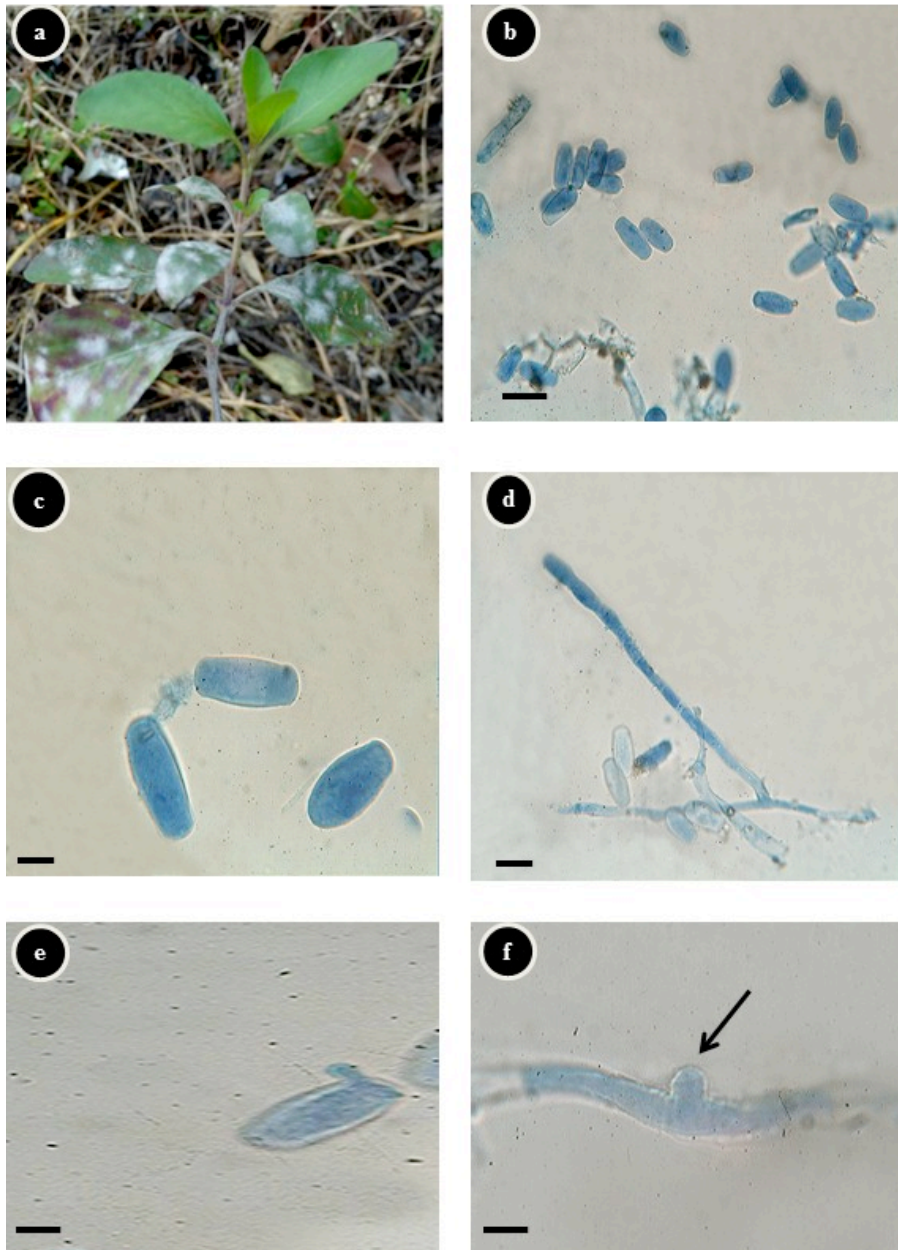


Image 1. a—infected host | b—conidia at 45x | c—conidia 100x | d—conidiophore | e—germinated conidium | f—arrow indicates nipple shaped hyphal appressorium. Scale= 20µm.





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