FIRST REPORT OF POWDERY MILDEW CAUSED BY *OIDIUM HELIOTROPII-INDICUM* IN INDIA

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Indian heliotrope (*Heliotropium indicum* L., family Boraginaceae) is an annual, herbaceous plant and a common weed in waste lands areas. During field surveys conducted between September to January 2015 a severe powdery mildew outbreak was observed in different areas of the Odisha State (India). Symptoms initially appeared as small circular to irregular white spots on both leaf sides, which expanded resulting in plant defoliation and drying. Conidia scraped from symptomatic leaves were ellipsoid to ovoid, had distinct fibroin bodies and were 23-35×13-20 μm in size (I/w ratio 1.4-2.1). Conidiophores were erect, slightly curved, cylindrical, foot cell 43 to 63×12 to 18 μm, followed by 1-3 shorter hyaline cells. Germ tubes stemmed from the lateral sides of the conidia. Based on the above, the fungus was identified as *Oidiun beliotropii-indici* (Braun and Cook, 2002) in the *Podosphaera* section, *Sphaerotheca* subsection (Cook and Braun, 2009). *O. beliotropii-indici* and the anamorphic state of *Podosphaera fuliginea* cannot be easily distinguished on the basis of the appressorium morphology (Braun, 1987) and the main difference is the nipple shape in *O. beliotropii-indici* in contrast to the indistinct shape in *P. fuliginea*. Pathogenicity was confirmed by gently pressing an infected leaf on to the young leaves of five healthy potted *H. indicum* plants. Five non-inoculated plants were used as controls. Plants were maintained in a greenhouse at 28 to 30°C. Seven to ten days post inoculation, typical white patches appeared on the upper side of the inoculated leaves; they were morphologically similar to those observed on naturally infected plants whereas control plants remained symptomless. To the best of our knowledge, this is the first confirmed report of *O. beliotropii-indici* causing powdery mildew on *H. indicum* in India.


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