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Curvularia tsudae comb. nov. et nom. nov., formerly *Pseudocochliobolus australiensis*, and a revised synonymy for *Curvularia australiensis*

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ABSTRACT

Cultures originally identified as *Drechslera australiensis*, from seeds of *Chloris gayana* in Japan, were the basis for Tsuda and Ueyama's new combination, *Bipolaris australiensis*, and its associated sexual morph *Pseudocochliobolus australiensis*. By studying ex-type materials of both *Drechslera australiensis*, which was originally isolated from seeds of *Oryza sativa* in Australia, and *Pseudocochliobolus australiensis*, we show by morphological and molecular phylogenetic analysis that these two specimens represent different species. Taxonomic confusion is resolved by the transfer of *Pseudocochliobolus australiensis* to *Curvularia tsudae* comb. nov. et nom. nov., together with a revised synonymy for *Curvularia australiensis*.

1. Introduction

Sivanesan (1987) provided the first comprehensive morphology-based taxonomic treatment for the species of *Bipolaris* Shoemaker (Shoemaker 1959), *Curvularia* Boedijn (Boedijn 1933) and *Cochliobolus* Drechsler (Drechsler 1934) that infect or were associated with grasses (Poaceae). Molecular phylogenetic analyses have since shown that these genera divide into two groups (Berbee et al. 1999; Manamgoda et al. 2012). *Bipolaris* and *Cochliobolus* species clustered in one of these groups along with their respective type species, (*Bipolaris maydis* (Y. Nisik. & C. Miyake) Shoemaker and *Cochliobolus heterostrophus* (Drechsler) Drechsler), whereas *Curvularia* (including species named as *Bipolaris*, *Cochliobolus*, *Pseudocochliobolus* Tsuda, Ueyama & Nishih. and *Curvularia*) clustered in the other group, with its generic type, *Curvularia lunata* (Wakker) Boedijn (Manamgoda et al. 2012). Rossman et al. (2013) proposed the retention of *Bipolaris* over *Cochliobolus* as *Bipolaris* was more widely used and established in the plant pathology literature.

Tsuda and Ueyama (1981) studied a fungus that had been isolated from the seeds of *Chloris gayana* Kunth provided by the Kyushu National Agriculture Research Station, Japan.

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