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New records of *Exserohilum* (Pleosporales, Dothideomycetes) species from rice and associated weeds in Sri Lanka

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The order Pleosporales in the class Dothideomycetes comprised of several genera of graminicolous fungal pathogens including *Curvularia*, *Bipolaris*, *Exserohilum*, *Drechslera*, *Johncornia* and *Porocercospora*. Amongst them, *Exserohilum* is a well-known pathogenic genus of fungi causing important plant diseases such as leaf blights of corn and millet, leaf spots and foot rots of wheat, damping off of sugarcane seedlings. The genus composes around 35 species epithets in *Index Fungorum*. Although *Exserohilum* is an economically important genus, only two species, *E. turcicum* and *E. rostratum* have been recorded so far from Sri Lanka. The objective of this study is to identify the *Exserohilum* species from rice and associated grass species in Sri Lanka. During the current study, samples were collected from Kegalle and Gampaha districts. Fungi were isolated using the single spore isolation technique and colony characters were observed on three different culture media; Potato Dextrose Agar (PDA), Corn Meal Agar (CMA) and Malt Extract Agar (MEA). Fresh isolates were characterized based on morphological and molecular data. Phylogenetic analyses were implemented based on maximum parsimony and maximum likelihood criteria. The multi-gene phylogeny consisted of ribosomal Internal Transcribed Spacer (ITS) region and partial Glyceraldehyde 3-Phosphate Dehydrogenase (GPDH) sequence data from the GenBank and from the freshly collected isolates. Two isolates, identified as *E. rostratum* and *E. fusiforme*, were isolated from *Oryza sativa* and *Echinochloa oryzoides* respectively. Phylogenetic informativeness of ITS, GPDH, TEF and RPB gene regions were evaluated using Phydesign software. Highest phylogenetic informativeness recorded in the ITS locus for the genus *Exserohilum* although GPDH has reported as the highest informative locus for sister genera, *Bipolaris* and *Curvularia*. Both isolates appear to be novel host-fungal association records from Sri Lanka. Further studies are in progress to study the diversity of species of this poorly known genus.

Keywords: phylogeny, dematiaceous hyphomycetes, helminthosporoid fungi

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