

COMMON FUNGAL DISEASES OF SELECTED ORNAMENTAL FOLIAGE PLANTS

J.W. Damunupola, B.S. Nanayakkara* and H.E. Herath

Department of Botany, Faculty of Science, University of Peradeniya, Sri Lanka
**buddhienanayakkara@gmail.com*

Presently the ornamental plant industry is rapidly growing in Sri Lanka, supplying flowers and foliage for both local and export markets. To remain competitive, quality of products is a crucial parameter. Almost all ornamental plants are prone to fungal attacks and fungal leaf spots are common among them. Proper identification of pathogens and related disease symptoms is an important part of the disease control process. In order to study the disease problems related to cut foliage, export-oriented nurseries and home gardens in Kandy, Matale, Kegalle and Gampaha districts were surveyed during the period from July, 2011 to 2013. *Dracaena* spp., *Cordyline* sp., *Calathea* spp. *Ophiopogon* sp., *Polyscias* sp., *Pleomele reflexa* and some palm species including *Caryota urens*, *Ptychosperma* sp., *Cyrtostachys renda* and *Chrysalidocarpus lutescens* were identified as some of the commonly grown foliage varieties. Diseases prevalent in these varieties were studied in the survey and leaf spots/ lesions were found to be the most common among them. For the isolation of pathogenic fungi, the standard isolation procedure was carried out followed by Koch's postulates. Pure cultures were obtained and the causative pathogens were identified using spore and colony characters.

Out of the twelve study sites, 34% were large scale export-oriented industries, whereas 33% and 25% were home gardens and small scale industries, respectively. Eight percent was represented by Research and Development oriented sources. Most plants investigated in this study exhibited leaf spots or lesions on foliage, except in *Polyscias* sp. where stem dying was observed. *Colletotrichum*, *Curvularia*, *Fusarium*, *Phomopsis* and *Botryodiplodia* were some of the common fungal genera identified from the diseased ornamental plants mentioned above. Being an export-oriented industry, it is crucial that these disease problems are investigated and control measures are developed to overcome them.

Financial assistance given by University of Peradeniya (RG/2011/33/S and RG/2012/CG-1/48/S) is acknowledged.