Study of soilborn fungal diseases of ornamental Plants in Iran. M.Mirabolfathy

Plant Pests and Diseases Research Institute

In recent decades the cultivation and production of ornamental plants have been developed for their exportation values in Iran. Based on research conducted during last years, the most important diseases of these plants are soilborn phytopathogenic fungi, the causal agents of wilting, decline and death of herbaceous plants, shrubs and trees in landscapes, parks, afforestations and greenhouses with root, crown and stem rot symptoms.

During conducting this research project surveys were made to study soil born Phytopathogenic fungi causing wilt, root and stem rot of ornamental plants, the losses of the diseases were studied and infected plants were collected. The tissues of stems and roots were plated on selective and semi selective media such as PARPH and Nash & Snyder. The causal agents were isolated and identified based on morphological and some physiological characteristics and found to be pathogenic on their seedlings in greenhouse. The following diseases and their causal agents recorded from several hosts in landscapes, afforestations, and greenhouses which were novel to Iran. Root and stem rot of B lack locust trees in Tehran and Semnan provinces expressing dieback, wilt and death of the infected trees caused by p.drechsleri, P. nicotianae and P. citrophthora. Incidence of wilt and root rot of Chamaecyparis lawsoniana and Cedrus deodora in ornamental conifer nurseries caused by P.cinnamomi. Occurrence of root and stem rot of Pinus eldarica in Tehran afforestation caused by P.mgasperma Incidence of dieback and death of cedrus trees caused by P. drechsleri and P. cryptogea. Decline and death of Norway and Colorado spruce trees in Tehran caused by P.nicotianae, P. drechsleri and P. palmivora. Prevalence of wilting of Dianthus caryophyllus in