

OCCURRENCE OF COLLAR ROT DISEASE IN *GERBERA JAMESONII* INCITED BY *SCLEROTIUM ROLFSII* IN INDIA

¹P. SUNEETA, ²K. ERAIVAN ARUTKANI AIYANATHAN, ³S. NAKKEERAN

^{1,2,3}Department of Plant Pathology, Centre for Plant Protection Studies,
Tamil Nadu Agricultural University, Coimbatore-641003.
E-mail: suneeag16@gmail.com

Abstract— An extensive survey was undertaken on soil borne diseases of *Gerbera jamesonii* in Tamil Nadu, India during 2013-2014. Among which collar rot disease incited by *Sclerotium rolfsii* was found to be intensively occurring for the first time in India. The mean collar rot incidence in commercially cultivated *Gerbera* varieties namely, Bellwater (White), Donovan (Yellow), Avimaria (White), Valetta (Yellow), Snowflake (Cream) and Blessing (White) at Ooty and Yercaud was 4.67% and 4.52% respectively. The collar rot symptom was noticed both in seedling and maturity stage. Initially, the infected plants exhibited brown necrotic lesions on the petioles near collar region. Subsequently, the leaves turned water soaked to brown coloured. The affected leaves droop and resulted in death of the infected plants. Pathogen associated with collar rot was isolated from *Gerbera* variety Donovan (yellow). The mycelium of the fungal culture on PDA medium was white and fluffy. Small white tufts were formed on mycelium which later turned to dark brown round sclerotia and measured 1-2 mm in diameter. Based on phenotypic characters, the pathogen was confirmed as *Sclerotium rolfsii*. Inoculation of *S.rolfsii* in to the collar region of 30 days old healthy *Gerbera* variety Bellwater (White) expressed the typical symptoms within 7 days after inoculation. Infected plants showed typical rot in the collar portion with numerous brown, mustard seed like sclerotia, followed by blightening and girdling of the affected plants. The pathogen was re-isolated from the artificially inoculated plants and showed all the characteristic features of the original culture.
