

B-09 Leaf twister disease in shallot onion

MAK Wijesinghe, P Rajapakse

Regional Agricultural Research and Development Centre (RARDC), Makandura, Gonawila (NWP)

Leaf twister disease is a major problem in onion growing areas, especially in Kalpitiya peninsula. Isolation and inoculation tests were carried out in order to identify the causal agents of the disease.

Leaves and bulbs of the diseased plants were collected from the fields at Kalpitiya and cultured on PDA medium at RARC, Makandura, to isolate the causal agents. These isolated cultures were used to inoculate the onion variety "Vethalan" grown in clay pots filled with sterilized soil and kept in a shed. Pots were divided into 3 sets; first set of plants were inoculated with *Fusarium oxysporum* f.sp. *cepae*, the second with *Colletotrichum gloeosporoides* and the third without inoculation as control. *Fusarium oxysporum* f.sp. *cepae* was isolated from diseased onion bulbs and *Colletotrichum gloeosporoides* from the leaves of diseased onion plants.

Plants inoculated with *Fusarium oxysporum* f.sp. *cepae* and *Colletotrichum gloeosporoides* showed diseased symptoms while control plants were in good condition. *Fusarium oxysporum* f. sp. *cepae* and *Colletotrichum gloeosporoides* were re-isolated from the inoculated plants.

This study showed that Leaf twister disease could be caused either by *Fusarium oxysporum* f.sp. *cepae* or *Colletotrichum gloeosporoides*.