Annals of the Sri Lanka Department of Agriculture, 2002. 4: 437

RESEARCH NEWS

IDENTIFICATION OF THE CAUSAL AGENT AND MANAGEMENT OF LEAF BURNING DISEASE IN RED ONION IN KALPITIYA PENINSULA

P. RAJAPAKSE, M.A.K. WIJESINGHE, L.C. WIJETHILAKA,
D.S.P. KURUPPUARACHCHI
Regional Agricultural Research and Development Centre, Makandura, Gonawila (NWP)

About 40% of the total production of red onion is from the Kalpitiya peninsula. Bulb rot caused by *Colletotrichum* sp and bacterium, tip burn caused by various reasons and leaf twister disease (disco) caused by *Fusarium oxysporum* or *Colletotrichum gloeosporioides* are the major destructive diseases. It has been recently reported that a new disease (leaf burning of red onion) known as "acid disease" is found to be very high in the area.

It is believed that the continuous cultivation of red onion (3- 4 cultivations per year without rotation), improper cultural practices and negligence of practicing important cultural methods are the main reasons for the spread of the diseases. Therefore, a study was undertaken to identify the causal agent of this new disease and to find a suitable integrated management approach for this disease. The causal agent of the disease found to be a fungus, *Colletotrichum gloeosporioides* in the laboratory studies. Koch's postulation was followed to confirm the causal agent and Commonwealth Mycological Institute description were used to confirm the identification.

Seed treatment with thiophante–methyl 50% + thiram 30% and solarization of the soil for two weeks prior to planting significantly reduced the incidence of the disease and enhanced yield of onion