

**B-21: The occurrence of the scurf fungus (*Monilochaetes infuscans* Ell. & Halst. ex Harter) in sweet potato (*Ipomoea batatas* L.)**

Premala Jeyanandarajah<sup>1,2</sup>, Tamara Liyanage<sup>2</sup>

(<sup>1</sup>Horticultural Crop Research and Development Institute, Gannoruwa, Peradeniya) <sup>2</sup>Present address: National Plant Quarantine Service, Katunayake)

Sweet potato (*Ipomoea batatas* L.) is a relatively underutilised plant able to grow under a wide range of soil and environmental conditions. Its storage roots are consumed as food while shoot tips are food item. It is a crop which is gaining more attention now and crop improvement programmes are being carried out to secure better cultivars.

In crops raised in farmers' fields, storage roots were observed to have dark brown to black lesions, symptoms suggestive of a disease. The study undertaken was to ascertain whether a pathogenic agent was involved.

Storage roots with dark brown or black lesions were used for the study.

Small pieces of tissue from the periphery of the lesions were excised, surface sterilised in a 0.5% solution of sodium hypochlorite for 1 min, rinsed thoroughly in sterile distilled water and placed in Petri dishes containing 3 layers of moistened blotters. Tissue pieces were also cultured on potato dextrose agar (PDA). Plates were incubated at 25°C under alternating cycles of near ultraviolet (NUV) light and darkness. The PDA plates were examined after 5 days. The plates with moistened blotters were examined after 7 days and thereafter at 2 day intervals up to 21 days.

Stem inoculation incited symptoms characteristic of the observed conditions.

The scurf fungus *Monilochaetes infuscans* was detected in the isolations from storage roots of the cultivar 456/15 collected from a field at Heenganga. It was restricted to the surface layers. Yet, the unsightly lesions reduce the market value of the produce. The disease was prevalent in soils with a high content of organic matter.

The lesions observed on storage roots of sweet potato were caused by the scurf fungus *Monilochaetes infuscans*. Ell. & Halst. ex Harter.

The use of clean planting material is an important means of preventing its spread. An added precaution is the treatment of cuttings with a solution of thiabendazole before distribution. As the fungus is also a soil dweller, the portion of the stem immediately above the soil should be excluded when cuttings are taken. This pathogen is restricted to *Ipomoea* spp. However, it can survive in the soil for up to 2 years. Therefore, crop rotation should be practised in sites where sweet potato is cultivated.