

B-76: Viruses isolated from tomato affected by a severe disease condition

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Tomato (*Lycopersicon esculentum*) is grown under diverse climatic conditions in the different agro-ecological regions of Sri Lanka, and is often cultivated adjacent to other solanaceous crop species such as chillies and potato. In surveys for virus infection in cultivated crops, a particularly severe disease of tomato was observed. The symptoms included leaf mottling, upward curling and stunting. The older leaves developed discolouration with mauve tinge. Investigations were initiated to determine whether this disease was virus induced, the methods adopted including sap and graft transmissions, indicator-inoculation tests and serology. The results indicated that the disease symptom was induced by a complex of two viruses, identified as potato virus Y, strain N (PVY^N) and cucumber virus, strain C (CMV^C). Both viruses had extensive host ranges and were readily transmissible in a non-persistent manner by many aphid species.