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## Cucurbit chlorotic yellows virus (CCYV) infection of pumpkin (Cucurbita maxima) in Sri Lanka

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Viral diseases are serious constraints to the productivity and profitability of cucurbit crops. Although many popular cucurbitaceous fruits and vegetables are grown in various regions in Sri Lanka, only a few published information is available on viral diseases of these crops. Rapid spreading of a virus-like disease with severe leaf yellowing symptoms in many cultivated cucurbits in Sri Lanka has been observed recently. However, the exact causative agent/agents is/are still not known. The diseased samples of Momordica charantia (bitter gourd), Trichosanthes cucumerina (snake gourd) and Cucurbita maxima (pumpkin) were collected from seven different geographically separated locations. The double stranded RNA (dsRNA) form of the viruses was extracted from those samples for preliminary detection of RNA viruses by CF 11 cellulose micro-spin column method. Of twenty six samples collected, four pumpkin samples showed two distinct dsRNA bands of different molecular weights indicating the bipartite nature of their genomes. The corresponding viral genomes (ssRNAs) obtained from the dsRNA samples were subjected to reverse transcriptase (RT)-PCR using primers specific for the two bipartite ssRNA viruses known to infect cucurbits: Cucurbit yellow stunting disorder virus (CYSDV) Cp-1F/1R and Cucurbit chlorotic yellows virus (CCYV) 410L-1F/1R. The expected amplicon of approximately 800 bp for CCYV was observed from pumpkins that were growing in widely separated geographical regions; Balangoda and Mullaitivu. The reproducible results indicated the association of CCYV with pumpkin which has not been reported from Sri Lanka previously.

Keywords: Cucurbit chlorotic yellows virus, dsRNA, pumpkin, RT-PCR