SEED INFECTION OF GREEN GRAM (VIGNA RADIATA) WITH VIRUS

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Viral infections were detected in seeds of green gram (Vigna radiata) cv. T 77, infections ranging from 0 - 4 %. Seeds of other cultivars - T 51, MI 2, MI 4 and MI 5, grown at the same location, Pelwehera, during the same season were free of infection.

The virus isolated infected several plant hosts. Chenopodium amaranticolor was readily infected and reacted with the development of local lesions. The solanaceous hosts, Nicotiana benthamiana and Nicotiana clevelandii were also susceptible. Of the leguminous species tested, five cultivars of cowpea (Vigna unguiculata) - Black Eye, Hawari Mae, MI 35, Nigeria and Polon Mae, two cultivars of soybean (Glycine max) - Pb 1 and Bossier, three cultivars of bean (Phaseolus vulgaris) - Canadian Wonder, Cherokee Wax and Top Crop, and the common weed Clitoria ternatea, were infected symptomlessly, while eight cultivars of bean - Redlands Pioneer, Provider, The Prince (from two sources), Stringless Green Refugee, Pinto, Plentiful and Bush Romano, one cultivar of black gram (Vigna mungo) - MI 1, the village medicinal mung bean - Veda Mung, lima bean (Phaseolus lunatus) and the weed Cassia occidentalis reacted with systemic symptoms. The wide host range of this virus is a cause for concern.

Host reactions and characteristics of its stability in sap indicate its similarity to mungbean mosaic virus.

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