

## Abstract

A virus isolate from an eggplant (*Solanum melongena*) showing a mild leaf mosaic had slightly curved filamentous particles with a normal length of 653 nm, a capsid protein size of about 32 kDa and a narrow host range restricted largely to the Solanaceae. It was transmitted by the whitefly *Bemisia tabaci* in a nonpersistent manner but not by the aphid *Myzus persicae*. Its particle morphology, vector transmission and strong reactions in immunoelectron microscopic (IEM) decoration tests with antisera to cowpea mild mottle virus (CPMMV) indicated that it is a CPMMV isolate. Particles of the isolate were weakly decorated when antisera to two carlaviruses, carnation latent virus and a distinct but incompletely described carlavirus from *Helleborus*, were used in IEM but not with 19 antisera to other carlaviruses. When the isolate was compared in host range and serological properties with another CPMMV isolate from tomato in Israel and two legume isolates of CPMMV, the two isolates originating from the solanaceous hosts in Jordan and Israel appeared to be very similar but clearly distinct from the two legume isolates from India and West Africa. In IEM decoration experiments, a legume isolate of CPMMV from Brazil was serologically distantly related to the two other legume isolates but strikingly dissimilar to the Jordanian isolate. Moreover, the isolates from Jordan and Israel differed from the legume isolates by inducing only banded or nonbanded virion aggregates but no brush-like virion aggregates reported to be characteristic of legume isolates of CPMMV from Africa, Thailand and Brazil. Under the conditions of the present study brush-like inclusions were also found with the Indian and West African isolates. The incidence of the virus was higher in the autumn than spring growing season. *Solanum incanum* was identified as a possible perennial reservoir of CPMMV during the summer when the Jordan valley is virtually free from cultivated eggplants.