

Research Article

## Coat Protein and Movement Protein-Based Characterization of Mungbean Yellow Mosaic Virus Infecting Urdbean

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### Abstract

Urdbean varieties viz., T9, GU-1, and Pant U-40 cultivated in different villages of Kheda, Vadodara, Panchmahal and Ahmedabad districts were monitored for occurrence of yellow mosaic. Molecular detection was carried out for confirming the presence of the *Mungbean yellow mosaic virus* (MYMV) in T9, GU-1 and Pant U-40 varieties of urdbean. The sequencing result showed 94-99 per cent similarity with previously available MYMV- movement protein (MP) gene. Whereas, MYMIV- MP showed 95-99 per cent and MYMIV- coat protein (CP) showed 97-99 per cent similarity with previously available sequence at NCBI. However, no band was observed in variety PU-40 which indicated absence of specific virus gene that cause virus infection. The partial genome sequence of MYMIV- CP was submitted in NCBI GenBank with accession number OQ999358.1. Thus, it is concluded that urdbean is infected by both MYMIV and MYMV in different locations of Gujarat.

**Key words:** Coat protein, MYMV, movement protein, PCR, urdbean

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