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First report of a begomovirus infecting Crassocephalum crepidioides (Benth.) S Moore in India

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Vein yellowing disease was observed on weed Crassocephalum crepidioides in northern India. Ageratum enation virus (AEV) along with an alphasatellite was found to be associated with the weed. Leaf samples of the symptomatic plants were collected and total DNA was extracted. Samples were subjected to rolling circle amplification followed by restriction digestion with a number of restriction enzymes to identify an enzyme having a single site in the genomic components. Complete genome of the begomovirus and alphasatellite were cloned and sequenced using primer walking. The isolate had 99% identity with an isolate of AEV reported from Zinnia elegans from this region. AEV and alphasatellite sequences from C. crepidioides were submitted to Genbank database under accession numbers FN794201 and FN794202 respectively. To the best of our knowledge, this report is the first of any begomovirus infection in C. crepidioides in India and the first on AEV infecting C. crepidioides worldwide.

Biography

Renuka Sharma is pursuing Ph.D from Amity university. She did her graduation in Biotechnology from Guru Nanak Dev University, Amritsar. She did her masters in biotechnology from LPU, Jalandhar. She did her thesis work at Directorate of Wheat Research, Karnal with Dr. Pradeep Sharma.

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