

# Isolation and characterization of a virus infecting chilli in eastern Uttar Pardeshh

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## ABSTRACT

Chilli plants showing severe mosaic mottling on foliage and bud necrosis symptoms, were collected from different locations around Faizabad and the causal virus was purified. The purified virus samples reacted only with polyclonal antiserum raised against coat protein (cp) of Tobacco streak virus (TSV) isolate from India (TSV- SF) in direct antigen coated enzyme linked immunosorbent assay. The identity of the causal virus associated with chilli bud necrosis was further confirmed by reverse transcription polymerase chain reaction and sequence analysis. The CP gene was amplified and sequenced. The CP gene was 717 nucleotides long and could encode a protein of 238 amino acids. Comparative amino acid sequence analysis revealed that the virus infected chilli shared maximum identity both at nucleotide (98-99%) and amino acids (98%) levels with the corresponding region of TSV isolates.

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