

RESEARCH ARTICLE

# Serological and molecular detection of Groundnut bud necrosis virus (GBNV) causing bud blight disease in tomato

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ABSTRACT

Tomato bud blight disease caused by Groundnut bud necrosis virus (GBNV) is a distinct member in the genus *Tospovirus* of the Bunyaviridae, and is the most economically important disease affecting tomato crop. Diagnosis of virus was done using two different methods, *i.e.*, Direct antigen coated-enzyme linked immunosorbent assay (DAC-ELISA) and reverse transcription-polymerase chain reaction (RT-PCR). Bud blight affected samples collected from Dharwad, Belgaum, Haveri, Bengaluru-rural and Kolar showed positive reaction with polyclonal antibodies of GBNV in DAC-ELISA and amplification of 831 bp GBNV-coat protein by RT-PCR with degenerate primers.

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