First report of natural occurrence of groundnut bud necrosis virus in *Solanum torvum* Sw. in India

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Solanum torvum Sw., commonly known as turkey berry, belongs to the family Solanaceae. It is extensively used for medicinal purposes (Ndebia et al. 2007). Foliar necrotic and chlorotic ring spots were observed on 10–15% of *S. torvum* plants at the IIVR research farm, Varanasi (Uttar Pradesh, India) in December 2015. Enveloped spherical shaped virions 80–120 nm in size were observed by transmission electron microscopy in tissue from symptomatic plants. Five symptomatic plants tested were positive for groundnut bud necrosis virus (GBNV) from the genus *Orthospovirus*, family *Tospoviridae* in Direct Antigen Coating-Enzyme Linked Immunosorbent Assay (DAC-ELISA) with the antibodies obtained from the International Crops Research Institute for the Semi-Arid Tropics, Hyderabad, India. To confirm the presence of GBNV, total RNA was extracted from five symptomatic plants along with asymptomatic samples using TRIzol reagent (Ambion™) and subjected to reverse transcription polymerase chain reaction (RT-PCR) using a degenerate primer pair to amplify a portion of the L RNA segment of orthospoviruses (Chu et al. 2001). Amplicons of 800 bp (GenBank accession No. KY940037) from symptomatic plants were cloned and sequenced. The

nucleotide sequence had 98% identity with the L RNA of GBNV from Indonesia (FJ177300). Additionally, a 830 bp fragment was amplified by RT-PCR with specific primers to the coat protein (CP) gene of GBNV (Nagendran et al. 2018). The CP gene nucleotide sequence (MG913145) had 98% identity with the CP gene of GBNV from eggplant in India (GQ844886). This is the first report of GBNV in *S. torvum* in India.

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