

Tomato Bushy Stunt Virus (TBSV) Infecting

Lycopersicon esculentum



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Tomato bushy stunt virus (TBSV) was detected in tomato crop (*Lycopersicon esculentum*) in Egypt with characteristic mosaic leaf deformation, stunting, and bushy growth symptoms. TBSV infection was confirmed serologically by ELISA and calculated incidence was 25.5%. Basic physicochemical properties of a purified TBSV Egh isolate were identical to known properties of tombusviruses of isometric 30-nm diameter particles, 41-kDa coat protein and the genome of ~ 4,800 nt. This is the first TBSV isolate reported in Egypt. Cloning and partial sequencing of the isolate showed that it is more closely related to TBSV-P and TBSV-Ch than TBSV-Nf and TBSV-S strains of the virus. However, it is distinct from the above strains and could be a new strain of the virus which further confirms the genetic diversity of tombusviruses.

Key words: Tombusvirus, Cloning, Phylogeny