



## VIROLOGIA

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### **Evaluation of tomato germplasm reaction to *Tomato chlorosis virus***

(Avaliação da reação de germoplasma de tomate para o *Tomato chlorosis virus*)

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Outbreaks of *Crinivirus* species (family *Closteroviridae*) have been reported causing yield and quality losses in field and greenhouse-grown tomatoes in distinct regions around the world (Hanssen et al., 2010). *Tomato chlorosis virus* (ToCV) was found infecting tomatoes in Brazil after the introduction of the whitefly *Bemisia tabaci* biotype B (Barbosa et al., 2008). A collection of commercial hybrids and breeding lines were evaluated for ToCV reaction under natural exposure to the viruliferous vector in both field conditions (in Capão Bonito-SP) and under greenhouse conditions (in Brasília-DF). Evaluation was based upon visual symptoms. Under field conditions the hybrids 'Alambra', 'Debora', 'Pizzadoro', and 'Tytanium' were found to be susceptible. However, the experimental hybrid 'HEM CDL' was found to be tolerant displaying only mild symptoms. In Brasília, the accessions *S. pimpinellifolium* 'CNPH 1678' 'Dominador', 'Ellen', 'Santa Clara', 'Tx 468-RG', 'San Vito', and 'Alambra' were found to be susceptible. However, one *S. lycopersicum* breeding line (named 'LAM 148') was identified as one source of tolerance to ToCV. The phenotypic expression of the tolerance to ToCV was characterized by mild systemic symptoms and lower levels of viral RNA accumulation. To our knowledge, this is the first report of tolerance to Brazilian isolates of ToCV. From the breeding for disease resistance standpoint, this is an important finding because this disease is now causing yield losses in many tomato-growing areas of Brazil.