

ria (LAB) were tested for antifungal activity against nine mycotoxigenic *Fusarium* spp. LABs were grown on MRS broth for 48 h at 37°C in anaerobic conditions. The cell free supernatants (CFS) were concentrated by lyophilization, filtered and tested for the antifungal properties using a diffusion agar method. Minimum inhibitory and minimum fungicidal concentrations of each CFS were determined in 96-well microplates. All LABs tested produced growth inhibition of the nine fungi on solid medium. The minimal inhibitory concentrations ranged from 4 to 16 g L⁻¹, and minimum fungicidal concentrations from 8 to 31 g L⁻¹. Further investigations will focus on development of a natural biocontrol agent against *Fusarium* spp. contamination in cereals and derivate products.

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Detection of Southern tomato virus in seed and seedlings of commercial tomato varieties

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Southern tomato virus (STV) is a member of the new genus *Almalgavirus* (family *Almalgaviridae*), with a 3.5 kb double stranded RNA (dsRNA) genome containing two partially overlapping open reading frames (ORFs), coding for the putative coat protein gene and with typical motifs of the RNA-dependent RNA-polymerase (RdRp). This virus is related to families *Totiviridae* and *Partitiviridae*. STV is efficiently seed transmitted, with a transmission rate >70%. Since the first report of STV in Spain in 2013, it was detected in several commercial and local varieties of tomato from different Spanish tomato production areas. STV-infected fruits are symptomless or show uneven ripening, and the virus is often found in mixed infections with other typical tomato-infecting viruses. This project assessed whether tomato germplasm is generally infected with STV. Twenty seed lots and more than 30 seedling samples of different commercial and local tomato varieties from commercial nurseries, were analyzed. These assessments showed that STV is widespread through the tomato germplasm. Although STV is a cryptic virus characterized by no developing important plant diseases, its presence could interfere in the evolution of other symptomatic viruses and also in the host. The role of STV in infected tomato plants requires clarification.

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Effects of the co-infection of Pepino mosaic virus and Southern tomato virus on tomato plants.

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