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 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 *Amalgaviridae*), 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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Southern tomato virus (STV) was detected in tomato plants showing stunting, fruit discolouration and size reduction, and also in symptomless plants. This virus is efficiently seed transmitted and its role in the tomato infected plants is currently unknown. We evaluated effects of STV in single and mixed infections with *Pepino mosaic virus* (PepMV) in affected tomato plants. The assay consisted of four different combinations: single STV and PepMV infected plants, plants co-infected with PepMV and STV and non-infected plants (four plants of each treatment). Plants were grown a growth chamber, and different parameters were evaluated, including; time for symptom development, symptom severity index, virus concentration and plant biomass. All of the plants infected with PepMV developed symptoms. However, in plants co-infected with STV symptoms appeared 15 d later. Plants infected only with STV did not develop any symptoms during the assay. The co-infected plants presented greater biomass at the end of the assay than those with single infections of either PepMV or STV, and were similar to those of the uninfected plants. The concentration of STV remained almost constant during the assay, and PepMV concentration was greater at 15 d after infection and decreased in following evaluations, regardless of the single or mixed infections in the plants. These results indicate that co-infection of PepMV and STV could improve the development of tomato plants compared to those only infected with PepMV or STV, with similar biomass to the non-infected plants. Further studies are being undertaken to confirm these results.

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Identification and mycotoxigenic ability of *Aspergillus* spp. associated with black rot of pomegranate fruit. A. SUSCA[1], L. KANETIS[2], M. HAIDUKOWSKI[1], A. VILLANI[1], S. TESTEMPASIS[3], S. SAMUEL[4], A. LOGRIECO[1,] G. KARAOGLANIDIS[3]. [1]*Istituto di Scienze delle Produzioni Alimentari. Consiglio Nazionale delle Ricerche, via Amendola 122/O, 70126 Bari, Italy.* [2]*Department of Agricultural Sciences, Biotechnology and Food Science, Cyprus University of Technology, 3603, Limassol, Cyprus.* [3]*Aristotle University of Thessaloniki, Department of Agriculture, Plant Pathology Laboratory, 55132, Thessaloniki, Greece.* [4]*Department of Agriculture, Ministry of Agriculture, Rural Development and Environment, 1412, Nicosia, Cyprus. E-mail: antonella.susca@ispa.cnr.it*

Due to their nutritional value pomegranate is a rapidly expanding crop with promising prospects, consumed mainly as fresh fruit, juices and jams. Pomegranate fruit rots contribute significantly to crop losses, with black rot (caused by *Aspergillus* spp.) being a common disease. Black rot damages external fruit surfaces, resulting in fungal invasion of arils that are covered by spore masses of black aspergilli (*Aspergillus* section Nigri). This fungus group is considered the main source of ochratoxin A (OTA) contamination in numerous food commodities, and species of the section have been reported as fumonisin (FB) producers. Therefore, black rot may not only reduce yield, but also deteriorate products due to mycotoxin production, and compromise consumer health safety. Our purpose was to identify black aspergilli associated with pomegranate fruit rots and investigate their mycotoxin capacities. Thirty seven *Aspergillus* spp. isolates from pomegranate fruit showing black rot symptoms were collected from Greece, Cyprus and Italy. Species identification was performed at three genetic loci, beta-tubulin, calmodulin and translation elongation-1a. Thirty-five isolates belonged to *A. niger* "aggregate", mostly *A. tubingensis*, one to *A. japonicus* and one to *A. violaceofuscus*. OTA and FB capacity of the isolates was also investigated, with negative results, respectively, on YES and CY20S media. To our knowledge this is the first report of multi-locus characterization of black aspergilli associated with pomegranate black rot. Further studies on an enlarged set of strains, and evaluation of natural occurrence of the toxins, are required to better elucidate the potential mycotoxin risks on pomegranate fruit.

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Population structure of *Phytophthora infestance* causing to potato late blight in the Çukurova Region of Turkey. H. GÜNAÇTI[1], T. AY[1], C. CAN[2]. [1]*Biological Control Research Institute Koprukoy/Adana, Turkey.* [2]*Gaziantep University, Department of Biology. Gaziantep/Turkey.*