

# Spain: Potential soil pathogen inoculum sources for strawberries

The decline and death of strawberry plants in Spain was mainly attributed to three pathogens - *Macrophomina phaseolina*, *Phytophthora cactorum* and *Fusarium* spp.

Researchers from IFAPA in Seville (Spain) studied the inoculum sources of *M. phaseolina* and *P. cactorum* as well as the incidence of all three genres both in nurseries and open fields for three consecutive seasons.

"It emerged that *M. phaseolina* and *P. cactorum* inoculum sources were present both in fumigated production soils (50 and 20% respectively) and in nursery fumigated soils (47 and 15% respectively), even though the pathogen was not detected in mother nor runner plants."

The average incidence of *M. phaseolina* and *P. cactorum* in production plants is of respectively 4.2% and 3.7%. As regards *Fusarium* spp., inoculum sources have yet to be quantified, though test showed that *Fusarium oxysporum* f. sp. *fragariae* (Fof) was absent. It also emerged that *F. solani* is the main pathogen of the *Fusarium* genre.

Researchers concluded that ineffectively fumigated soil and infected plants can be sources of inoculum of pathogenic agents for strawberries cultivated in Spain.

*Source: Ana María Pastrana, María José Basallote-Ureba, Ana Aguado, Nieves Capote, 'Potential Inoculum Sources and Incidence of Strawberry Soilborne Pathogens in Spain', 2017, Plant disease.*

**Lien article :** <http://www.freshplaza.com/article/176022/Spain-Potential-soil-pathogen-inoculum-sources-for-strawberries>