

ANALYSIS OF LOCAL POPULATIONS OF *FUSICOCOCCUM AMYGDALI* FROM PEACH AND ALMOND FOR PRODUCTION OF FUSICOC-CINS

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An equal number of isolates (60) of *Fusicoccum amygdali* were obtained from infected peach and almond trees in two agricultural areas of southern Italy. Pathogenicity of the isolates was tested by cross inoculations on peach and almond.

The isolates were grown in stirred culture and screened for toxin production. The presence of fusicoccin (FC), monoacetylfusicoccin (MAF) and diacetylfusicoccin (DAF) was visualized on chromatograms by comparison with standards.

The results allowed to group the isolates of *F. amygdali* from peach as high producers of DAF (91%) and MAF (85%) and moderate producers of FC (25%), and the isolates from almond as high producers of MAF (81%), DAF (68%) and FC (51%). The ability to produce fusicoccins did not change after several inoculations on the same host plant. However, the toxin yield of the isolates from peach increased after re-isolation from the artificially infected peach trees. Finally, the production of FC and its analogues decreased when the isolates from almond were inoculated on peach trees. It has been also observed that the isolates obtained from old cankers formed on proximal parts of the infected twigs of almond produced more toxins than the isolates from young cankers developed on distal parts of the same twigs.

TOXIN PRODUCTION IN CULTURE BY THREE STRAINS OF *SEIRIDIUM UNICORNE*

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Seiridium unicorne is a widespread and plurivorous fungus associated with a slow-growing canker of cypress in certain parts of the Mediterranean area.

A Portuguese isolate of *S. unicorne* from cypress was grown for one month on plates of Czapek's medium containing 2% corn meal, at 20 or 23 °C in the dark. Three variants were selected on the basis of their cultural characteristics. Pathogenicity of the three strains was assessed by inoculating 3-year potted plants of *Cupressus sempervirens*, *C. macrocarpa* and *C. arizonica* in a greenhouse. No canker developed on the artificially infected trees. However, a necrotic lesion extended over the bark around the inoculation wound.

The same strains were grown in liquid medium at 20 °C (at 23 °C the toxin