

Abstract:

The inhibitory activity shown by different antagonist yeasts isolated from fig, prickly pear and citrus fruits and leaves against *Penicillium digitatum*, causal agent of citrus green mould was investigated. The results show that, among 237 strains isolated, the most effective microorganisms belong to the species *Pichia guilliermondii* and *Candida famata*. In particular, isolates 5A of *P. guilliermondii* and 43E of *C. famata* (10^8 cells ml⁻¹) showed inhibition values ranging between 98 and 100% against *P. digitatum* (10^5 and 10^6 conidia ml⁻¹) on artificially wounded orange and satsuma fruits. The least effective yeasts belong to the species *Rhodotorula mucillaginosa*, *R. minuta* and *Zygoascus hellenicus*. Pulsed-field gel electrophoresis (PFGE) was used to find difference in the electrophoretic karyotype and to obtain markers useful for isolate identification.