

Title Mucor species in orchard soil – population dynamics and pathogenicity on pear fruit
Author Marta Mari, Tiziano Cembali, Lucia Casalini and Gian Carlo Pratella
Citation European Journal of Plant Pathology 106 (5): 449-454. 2000.
Keywords zygomycetes; packinghouse; dump-tank waters; propagules

Abstract

Strains of *Mucor piriformis* were isolated from orchard soils and from packinghouse dump-tank waters. Pathogen propagules were not found in fruit sample washings. *M. piriformis* was the most prevalent of the *Mucor* isolates, only one of 67 isolates was a different *Mucor* sp., possibly *M. racemosus*. The population of the pathogen propagules fluctuated in an annual cyclic pattern, declining in warm months and increasing after harvest. The viability of sporangiospores was markedly affected by rain. There was a good correlation ($r=0.88$) between the number of recovered propagules in the soil and the amount of rainfall. *M. piriformis* isolates caused decay on pear at 0°C after 14 days.