Thematic area: Developmental mycology

FUNGAL INTERACTIONS OF HYPHOLOMA FASCICULARE

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The microorganisms living in the soil establish constant interactions among themselves and also with plant roots. This huge diversity of interactions contributes to the soil fertility and to plant development, nutrition and health. Hypholoma fasciculare is a common woodland basidiomycete in the chestnut orchards of Trás-os-Montes region (Portugal). Due to its high antagonistic activity, this saprotrophic fungus has already been described as a biological agent to control Armillaria root disease.

In order to evaluate the consequences arising from the use of H. fasciculare as a biological control agent, the antagonistic spectrum of this fungus was assessed against different fungi present in chestnut orchards. Using an in vitro dual culture method, H. fasciculare exerts an antagonist action against distinct fungi, but also presents its growth affected by the interaction. A dense and compact H. fasciculare mycelium was observed in the interacting zone, which could function either as a defensive barrier or as invasive cords. During interaction, the detection of amylase, cellulase, laccase and lipase activities, all produced by H. fasciculare, suggests its involvement in the mechanism of interaction.

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MEASUREMENT OF MYCELIUM GROWTH RATE OF HOMOKARYOTIK MYCELIUM OBTAINED FROM SINGLE SPORE ISOLATES OF HERICIUM ERINACEUS IN DIFFERENT CULTURE MEDIA AND THEIR COMPATIBILITY

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