

# The effect of homogenates of different tulip organs on the mycelium growth of some formae speciales of *Fusarium oxysporum*

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## Abstract

The effect of homogenates of different tulip organs cultivar 'Apeldoorn', bulb scales, leaves, stem, perianth, pistils, stamens and roots was evaluated on the mycelium growth of *Fusarium oxysporum* f. sp. *callistephi* (*Foc*), *F. oxysporum* f. sp. *narcissi* (*Fon*) and *F. oxysporum* f. sp. *tulipae* (*Fot*) on mineral Czapek-Dox-Agar (CzDA) medium. Tulip organs were collected on the beginning of May from field cultivation. Addition of homogenates of bulb scales, leaves, stem, perianth, pistils, stamens and roots to CzDA medium at a concentration of 3.0% evidently stimulated the mycelium growth of all these pathogens (*Foc*, *Fon*, *Fot*). However, the homogenate of tulip roots at a concentration of 1.0% greatly inhibited the mycelium growth of all these pathogens. Also lower concentrations of tulip roots homogenate (0.05, 0.1, 0.25 and 0.5%) substantially limited the mycelium growth of all pathogens proportionally to applied concentration. The metabolic significance of these findings will be discussed in relation to chemical constituents of different tulip organs.