

### **Abstract:**

In tulip bulbs infected by *Fusarium oxysporum* f. sp. *tulipae*, and also in healthy bulbs stored together with bulbs with symptoms of fusariosis induction of gums take place. Ethylene is a common factor involved in the induction of gummosis. Physiological role of gums in plants is unknown but is believed that gums have a function in limiting the spread of pathogens by isolating the infected tissues. It was shown that addition of tulip gums to solid Czapek-Dox-Agar medium (CzDA) greatly stimulated mycelium growth and sporulation of *F. oxysporum* f. sp. *tulipae*. Supplementation of liquid Czapek-Dox-Broth medium (CzDB), both containing sucrose and the mineral medium (m-CzDB), increased secretion by the pathogen of some enzymes connected with degradation of tulip gum polysaccharides. It is possible that polysaccharides of tulip gum may act mainly as elicitor and/or partially as substrate in regulation of mycelium growth and sporulation of *Fusarium oxysporum* f. sp. *tulipae*.