

ABSTRACT

Farnesol is an isoprenoid alcohol produced by yeast *Candida albicans*. It is a quorum sensing factor, that is effective on morphology of this yeast. The effect depends on environmental conditions and on the size of the yeast population at the same time. Our study was focused on the influence of farnesol on seven strains of *C. albicans* - CA RVVK 8797, CA RVVK 26 580, CA VVK 25 188, CA VVK 26 736, CA 26 453/00, CA 26 677/00 and ATCC 90028. Our results confirmed, that farnesol inhibits germ tube formation in *C. albicans*. In addition we marked that the sensitivity to farnesol is strain-dependent. For example strain VVK 25 188 reacted on presence of exogenous farnesol very slightly, on the other hand another strains were influenced very distinctively. The effect of farnesol was highly influenced by medium used for the experiment. The inhibition of germination was less apparent in medium NYP than in precolostral serum. The size of inoculum also influenced the results of experiments with external added farnesol. The results of experiments with 10^5 cfu/ml inoculum were very similar to results of experiments with inoculum of size 10^6 cfu/ml. When the 10^7 cfu/ml inoculum was used, we observed the effect of exogenous and endogenous farnesol at the same time and the inhibition of germination was more expressive.