

Abstract of the diploma thesis

CHALCONES AND THEIR ANALOGUES AS POTENTIAL DRUGS

VIII.

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In the theoretical part of this diploma thesis there are resumed antineoplastic activities of chalcones. Possible mechanisms of effect of the naturally occurring or synthetic chalcone derivatives are described there. Some chalcones interfere with the cell cycle, other derivatives start up the apoptotic process, influence the activity of enzymes or the function of membranes.

In the frame of the experimental part bromine substituted pyrazine analogues of chalcone were synthesized by Claisen-Schmidt condensation. There were prepared some of the intermediate products needed for the condensation. Seven final compounds, that have not been described yet in literature, were prepared. All the products were characterized by melting points, IR and NMR spectra. Their purity was checked by thin-layer chromatography and elemental analysis.

Compounds were tested on selected strains of fungi and some of them have been sent to antimycobacterial evaluation.