Abstract

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Title of Diploma Thesis:	Pyrazine Derivatives as Potential Antituberculosis Drugs II.

Tuberculosis still presents serious worldwide problem of today. The situation is complicated especially by increasing proportion of strains resistant to common antituberculotics. Therefore the need of a new compound active against mycobacterial causer of the disease is very actual.

Synthesis of compounds derived from pyrazinamide, very effecitve anti-mycobacterial substance, is one of the perspective way of new drugs development.
Department of Pharmaceutical Chemistry and Drug Control, Faculty of Pharmacy in Hradec Králové, beside others, deals with this problem in a long term. There were synthesized hundreds of compounds containing pyrazine core and they were tested to antimycobacterial activity.

The target of this thesis is join this effort and contribute to increase the number of compound that has been studied for antituberculosis activity.

At the beginning of thesis, there is a summary of facts about tuberculosis, such as incidence, patogenesis and cure. Next, there are informations about newly developed compounds active against tuberculosis.

The heart of the thesis is synthesis of six compounds , derivates of 3-(benzylamino)pyrazin-2-carboxamide. This compounds were synthetised by a clasic way in boiling solvent while stirring and they were purificated by flash chromatography. Properties of this compounds, including IR spectrum and ^{1}H-NMR a ^{13}C-NMR values, are adduced in the thesis. There is also biologic evaluation of synthetized compounds and conclusion at the end.