ABSTRAKT

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This study deals with the issue of tuberculosis, which is a second leading cause of deaths after HIV from all infectious diseases worldwide. This is supported by an ever increasing number of mycobacteria, which is resistant to conventional antituberculotics. Because of grow of the multidrug-resistant tuberculosis, there is need for the development of new drugs in the therapy of this disease.

The design of final compounds was based on the previously prepared pyrazine-2-carboxilic acid, which exerted antituberculotic activity. The object of study was to verify the effectiveness of *N*-(pyrazine-2-yl)benzamides created by an imaginary variation of the connecting bridge between the pyrazine and benzene ring. In the experimental part of the work the synthesis of twenty three substances derived from 2-aminopyrazin or 6-chlor-2-aminopyrazin is described. All products have been described by melting point, ^{1}H, ^{13}C NMR, IR spectroscopy and the elementary analysis. The substances were send for the biological evaluation, where were tested for antibacterial, antifungal and antimycobacterial activity. Detailed test results are described and discussed in the conclusion. The replace of the connecting bridge -CONH- for -NHCO- bridge in the structure of antimycobacterial effective pyrazine-2-carboxilic acid (to form of *N*-(pyrazin-2-yl)benzamids) led usually to reduce or loss of the antimycobacterial activity.