Abstract:

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Title of Thesis: Alcaloids: Structural analysis employing NMR spectroscopy

Keywords: NMR spectroscopy, analysis of spectrum, alcaloids

This diploma thesis is devoted to the problematics of the structure detecting of unknown substances via nuclear magnetic resonance. In the theoretical part the thesis generally summarizes the characteristics of the plants, which were the substances isolated from. This case concerns alkaloids, that were isolated at the Department of Pharmaceutical Botany and Ecology from the plants called *Papaver Rhoeas* from the family of *Papaveraceae* and *Narcissus cv. PROFESSOR EINSTEIN* from the family of *Amaryllidaceae*. In the experimental part the thesis deals with the nuclear magnetic resonance and NMR experiments, which had been used for the structure detecting of unknown substances (^{1}H NMR, ^{13}C NMR, gHSQC, gHMBC, gCOSY a NOESY). In the last part the thesis summarizes the results of the experiments.