

ABSTRACT

Charles University

Faculty of Pharmacy in Hradec Králové

Department of Pharmaceutical Botany and Ecology

Candidate: Martina Vítková

Supervisor: RNDr. Jitka Vytlačilová, Ph.D.

Title of diploma thesis:

The biological activity of the selected drugs of traditional Chinese medicine

The subject of this diploma thesis was to prepare aqueous extracts of five selected drugs from traditional Chinese medicine and deal with their biological effects. Namely it was *Magnoliae officinalis cortex*, *Houttuyniae herba*, *Paeoniae radix alba*, *Psoraleae fructus* and *Typhae pollen*. These drugs have a high potential for use in our medicine due to their beneficial effects on the human organism.

The theoretical part contains a description of individual drugs and their therapeutic effects. Also there are described methods of toxicity testing. The experimental part describes the course of the acute toxicity test of used drugs on the model organism *Artemia salina*. LC₅₀ was used as the endpoint.

Testing with *Artemia salina* showed low toxicity of the tested drugs. For *Magnoliae officinalis cortex* the LC₅₀ was found to be 0,6613 mg/ml, *Psoraleae fructus* 1,777mg/ml, *Houttuyniae herba* 4,079 mg/ml and *Typhae pollen* 4,34 mg/ml. No toxicity was detected for *Paeoniae radix alba* even at the highest measured concentration which was 15 mg/ml.

Keywords: *Magnoliae officinalis cortex*, *Houttuyniae herba*, *Paeoniae radix alba*, *Psoraleae fructus* a *Typhae pollen*, *Artemia salina*, acute toxicity