

ABSTRACT

Monika Vostřelová, The volume of alkaloids in *Fontinalis antipyretica*, The diploma thesis, Charles University Prague, School of Pharmacy Hradec Králové, diploma thesis tutor: PharmDr. Jan Martin, Ph.D., Hradec Králové, 2010, 53 pages

This diploma thesis called “The volume of alkaloids in *Fontinalis antipyretica* aquatic moss” focuses on the setting of alkaloids and flavonoids volume in the above-mentioned aquatic moss. The aim of this thesis was to collect samples of *Fontinalis antipyretica* in different habitats of the Czech Republic (Rychnovek, Debrné, and Ledce), to determine alkaloids and flavonoids presence, to set their volume in the samples from different habitats and to describe the conditions of collection. The volume of alkaloids and flavonoids was determined by the method of high-performance liquid chromatography (HPLC). The results conclude that the highest volume of alkaloids can be found in the Rychnovek region (the Metuje river), also harmalol and harmine alkaloids were detected there. The habitat with the highest volume of flavonoids is Ledce (the Dědina river). In some samples myricetin and hyperosid flavonoids were found. The volume of the monitored groups in the habitat of Horní Debrné (the Labe river) was very low.

Key words: alkaloids – harmalol – harmine - *Fontinalis antipyretica* - flavonoids