ABSTRACT

Cecílie Šmolíková, Stability of vacuoles isolated from *Scutellaria baicalensis Georgii* suspension cultures, diploma work, Charles University in Prague, Pharmaceutical Faculty in Hradec Králové, trainer of diploma work: Pharm. Dr. Jan Martin Ph.D., Hradec Králové, 2008, 49 pages

The ambition of my work was to develop the methodology for purification of vacuoles from *Scutellaria baicalensis Georgii* suspension cultures and determination of their stability in different solutions. My work is a continuation of the diploma work of Šárka Ševčíková. ⁽⁵⁹⁾ For my work I used her final solution of vacuoles from which I removed other organelles, the remains after lysis of cellular walls and the plasmatic membranes. The best solution for storage of the purified vacuoles proved to be the solution made up from: 500 mM manitol; 10 mM hepes pH= 7, 4; 5 % ficoll 400.

Key words: purification of vacuoles, *Scutellaria baicalensis*, neutral red, baicalin, baicalein, ficoll 400, tonoplast