

## **Abstract**

The thesis is focused on the pollen of selected allergenic plants. Thesis is structured into two parts., pollination and fertilization , development of the pollen grain , its structure and chemical composition. The end of the theoretical part, dedicated to allergies, is divided into subsections dealing with First, teoretical part describes the flower and its morphology, discusses the pollen grain, stamen anatomical structure immunity and allergies, naming and registration of allergens and cross- pollen allergy . The practical part contains an analysis of curriculum for students of secondary schools. An integral part of the work is a survey of teachers in secondary schools, in which method of questioning was used. The aim of this questioning was to determine the presence of solved issue in terms of representation of pollen and pollen allergens in textbooks for secondary schools , as well as the inclusion of this issue in the official curriculum, under the National Programme for the Development of Education in the Czech Republic. Based on the results of a questionnaire survey of secondary school teachers, teaching materials have been developed in the form of two worksheets for teaching botany and guidance on laboratory exercises in plant biology.