

ABSTRACT

CHARLES UNIVERSITY

PHARMACEUTICAL FACULTY IN HRADEC KRÁLOVÉ

DEPARTMENT OF PHARMACEUTICAL BOTANY AND ECOLOGY

Title of the Diploma thesis: ELLAGITANNINS – OCCURENCE, METABOLISM AND EFFECTS ON HUMAN BODY

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Ellagitannins belongs to a class of hydrolysable tannins, which are susceptible to hydrolysis to give ellagic acid in the digestive tract. Ellagitannins occur in many plant families, for example plants in the family Rosaceae, Myrtaceae or Lythraceae. There are naturally found in some fruits (pomegranate, strawberries, blackberries, raspberries, grapes), but also in the seeds of walnuts and thus form a diverse group of bioactive polyphenols with anti-inflammatory, antitumor, antioxidant and antimicrobial activity.

Special instrumental methods (HPLC, DAD, MS) are most often used for subsequent evidence of occurrence of these compounds in plants and their identification.

This diploma thesis is a literature review, which aimed at processing the available knowledge about the ellagitannins. Attention was focused on the biological activity demonstrated in an animal or human organism.

Keywords: ellagitannins, occurrence, metabolism, effects, human body