

## **Abstract**

### **GEMMOTHERAPY AND ITS USE IN PRACTISE**

**Student:** Škodová Adriana

**Tutor:** PharmDr. Jitka Pokladníková, Ph.D.

**Department of Social and Clinical Pharmacy, Faculty of Pharmacy in Hradec Králové, Charles University in Prague, Czech Republic**

**Introduction:** Gemmotherapy or budding medicine is an herbal healing method, whose roots go back to the Middle Ages and folk healing. It uses germ-shaped parts of plants (especially buds) for the production of liqueur glycerin macerates, which are proven to contain larger quantities of some important substances with healing properties than adult parts of plants.

**Objectives:** The aim of this work was to summarize basic information about gemmotherapy from available literature; to summarize the description of the traditional use of selected plants and gemmotherapeutics prepared therefrom; to provide a summary of studies based on evidence-based literature, especially with regard to content and confirmatory medicinal properties, adverse effects, drug interactions and contraindications.

**Methods:** General information about gemmotherapy was mainly drawn from books available in the Czech language. Data collection took place from October 2016 to August 2017, and researches based on literature were mainly based on the electronic databases PubMed, Web of Science, Wiley Online Library, Science Direct, and Google Scholar.

**Results:** In the past, analytical studies focused on germ-content substances and pharmacological studies were conducted. For example, linden buds have confirmed strong sedative effects. Differences in the representation and concentrations of these substances between adult parts of plants and germ cells were observed. Currently, the most researched preparations are prepared from black currant, linden and birch. Regarding the undesirable effects of the medical treatment, contraindications and drug interactions, no studies have been found to point to them.

**Conclusion:** In 18 of the 44 investigated plants, studies confirming some therapeutic effects of gemmotherapeutics have been found. Gemmotherapy is a therapeutic and preventative method. Considering the friendliness it is suitable for long-term use. The benefit would be to continue to collect further information and, above all, carry out further research in this area.

**Key words:** gemmotherapy, traditional use, efficacy, mechanism of action, side effects, contraindications, drug interactions