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## **PERSPECTIVE OF PHYTOCHEMICAL RESEARCH OF STUDY SPECIES OF FLORA PLANTS OF UKRAINE**

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Today the priority task of the scientific society is to find medicinal plants with sufficient raw materials and the prospect of creating new phyto-preparations with maximum therapeutic effect and no side effects. Analyzing the information search on phytochemical studies of plants, it was found that a large number of studies of phytoresources are aimed at studying the qualitative and quantitative content of BAS in plant raw materials (leaves, grass). The *Thyme* L. genus is quite common in Ukraine, herbal extracts are part of many effective herbal medicinal products that are widely used in modern medicine. Today, the specie of the genus *Thymus x citriodorus* (Pers.) Schreb. var. «*Silver Queen*» is poorly studied, but promising in terms of sufficient raw material base. It's gibrud. Lamiaceae is a fairly common species in Ukraine. In Ukraine, it grows mainly in the southern and central parts of the country. A comprehensive study of any plant group can only be done through a complete floristic analysis. *Thymus x citriodorus* (Pers.) Schreb. var. «*Silver Queen*» is a good preservative of natural origin, therefore it is actively used in the food industry. Thyme is also used as a medicinal tincture for the treatment of acute and chronic bronchitis, pneumonia, and diseases of the upper respiratory tract.

Thyme can be used to treat oral diseases, gynecological pathologies, gastrointestinal disorders and heartburn. Raw materials were harvested in herbaceous forest-steppe phytocenoses of Ukraine. In recent years, the world's leading phytolaboratories are working to find new plant species that will have not only a sufficient number of biologically active substances (BAS), but also

a pronounced biological activity GC-MS determination of the component composition of the plant grass extract is relevant and appropriate. [1-4]. The purpose of the work is to determine by the GC-MS method of the component extracts (1:10) compositions of *Thymus x citriodorus* (Pers.) Schreb. var. «*Silver Queen*» herbs from Ukrainian flora. For the experimental studies we used extracts of *Thymus x citriodorus* (Pers.) Schreb. var. «*Silver Queen*» from herbs (1:10) harvested in from Ukrainian flora. Analysis of scientific literature has shown that until recently, when studying the chemical composition of various types of thyme herb, the main attention was paid to the determination of a very limited set of biochemical parameters characterizing mainly the quantitative content of essential oils and their component composition, while other biologically active substances (BAS ) have not been sufficiently investigated. A number of studies have shown that non-pharmacopoeial Thyme species also have pronounced anti-inflammatory activity. At the same time, the essential oil of the herb of various types of thyme is characterized by the individual composition of the components [1-5]. The component composition of extracts were analyzed using an Agilent 7890B gas chromatography with 5977B a mass – spectrometric detector. By the GC-MS method were revealed up to 63 compounds. Two compounds were not identified. It is important to note, that seven biologically active compounds were revealed in a concentration over 5%: oleic acid, eucalyptol caryophyllene oxide, matricarin, trans-citral,  $\beta$ -bisabolene, thymol and other. Taking into account by GC-MS method, it can be concluded that the studied specie is relevant for further phytochemical study. The relevance of research lies in the prospect of defining this species as a separate phytobiological promising resource for phytochemical research in science.

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