

**MICROELEMENT COMPOSITION OF SLENDER JON'S
WORT (*HYPERICUM ELEGANS STEPH.*)**

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Medicinal plants are source natural of mineral compounds. Medicinal plants are a natural source of mineral compounds. These compounds are essential for metabolic processes in the human body as part of the specific organic compounds (enzymes, hormones, vitamins, etc.) and often determine their chemical and biological activity. The main advantage of the element of the complex of medicinal plants is a harmonious union and complete assimilation by the human body.

The purpose of this study was to investigate the microelement composition of herb Slender Jon's wort (*Hypericum elegans Steph.*).

The object of our study was to St. John's wort herb collected in different years in the territory of the Kharkov region. Qualitative and quantitative composition of the mineral compounds in the plant was determined by atomic emission spectroscopy of the analyst, which is based on the complete evaporation of the substance in the discharge arc of variable-current (excitation source - PVS-28) and the detection of radiation-spektogra vom DFS-8. Certified standards materials were prepared on the basis of coal powder os.ch. Administration of 7-4 dose volumes of standard solutions of metals. Both methods identify the elements, regardless of the form in which they are present in the samples.

The sample herb St. John's wort contains of about 18 elements, such as iron, zinc, copper, cobalt, manganese, molybdenum, chromium, and arsenic. In the largest amount of iron in the feed accumulate also in considerable quantities contains manganese, chromium, aluminum, copper and silicon. The quantitative content of toxic elements does not exceed the permissible limits.

Iron, chromium, manganese, copper, zinc, molybdenum are essential. Iron deficiency leads to hypochromic anemia, zinc - lead to underdevelopment of the nervous and reproductive systems, deeply connected with the problems of immune deficiency, copper - to a violation of the elasticity of the connective tissue. Equally important is the lack of cobalt, which plays an essential role in the homeostasis of hematopoietic and nervous system, manganese - an integral part of enzyme systems, participates in oxidation-reduction processes, affect the metabolism of proteins.

The data obtained elemental composition can be used to create remedies from herbs St. John's wort with new pharmacological actions.