

GENTIANA SPECIES AS PERSPECTIVE SOURCE OF BIOPHARMACEUTICAL PRODUCTS

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The actuality of topic is related with preservation of Red List plants of Ukraine and obtaining target compounds of medicinal application. The aim of work was to analyzed scientific data according *Gentiana* species as perspective source of biopharmaceutical products.

Gentiana, a cosmopolitan and important genus of the *Gentianaceae* family, comprises 400 species widespread among the world. There are some promising bioactivities for this genus that is unknown in modern medicine and some of them are still the basis of new remedies. *Gentiana*'s different exclusive forms of preparations are effective for treatment of some disorders such as menstrual over-bleeding, conjunctivitis, vitiligo, animals venom poisoning, injuries, infected wounds, pain and swelling of liver, spleen, stomach and sprains of muscles. There are some mechanism of action that are the same in traditional and modern medicine such as anti-inflammatory, hepatoprotective and diuretic effects. Phytochemical investigations on the title genus have led to characterization many secondary metabolites [1].

There are some species which are distributed throughout the south and central European high mountains and in Carpathians high mountains also. High-mountain species, including species of *Gentiana* L. genus, have a narrow range of tolerance to many environmental factors. However, in recent decades, climate change has become one of major threats. It is known that *Gentiana lutea* L., *Gentiana punctata* L., and *Gentiana acaulis* L. species are susceptible to the change of thermal regime of their habitats even by 2% (0.5 ° C or 100 J / m²). Secoiridoidal and iridoid glycosides such as gentiopicroside, xanthenes, monoterpene alkaloid; polyphenol and flavones are the constituents that have been shown the pharmacological activities in different gentian species [2].

References

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