Prospects of Using Gentians of Siberian and Far Eastern Flora in Medicine

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Gentians (Gentiana s.l.) are little investigated genus in flora of Siberia and Russian Far East. As medicinal plants gentians are growing in popularity among the inhabitants of different regions of Siberia and Far East. They are widely used in multicomponent species of antiinflammatory, hemostatic and cholagogic action (Gentiana macrophylla, Gentiana decumbens, Gentianopsis barbata, Gentianella acuta). In folk medicine of Siberia Gentiana macrophylla is widely used, its foliage is recommended for slowly healing wounds. This genus is the subject of our chemical and pharmacological investigation. The raw material is overground flowering mass. In Gentiana macrophylla herb flavonoids (0.97%), cumarins (0.26%), phenol acids (2.7%), vitamin C, iridoids, traces of alkaloids have been found. Flavonoids are represented as flavonic C-glycosides homoorientin, saponaretin and their 4’-O-glycosides cumarins: umbellipheron, skopoleten, eskuleten, eskulen.

Alcoholic extracts of Gentiana macrophylla herb in 40% and 70% ethanol in vitro possessed marked antiinflammatory, wound healing, antitumoral effect. For the first time positive effect of 40% ethanol extract on rheologic blood properties has been found. The raw material is not toxic. The received pharmacological data confirm rational use of Gentiana macrophylla herb in multicomponent species and allow to recommend this plant for using in research medicine. The draft of temporary Pharmacopeia article allowing to use raw material as antiinflammatory, wound healing preparation as well as preparation effecting rheologic properties of blood has been developed.