## Phenolic compounds in the overground parts of hypericum perforatum I. Growing on the territory of the Republic of Tatarstan

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## **Abstract**

© 2016,International Journal of Pharmacy and Technology. All rights reserved. The article is dedicated to study of the influence of ecological, phytocenotic and climatic conditions on accumulation of various groups of phenolic compounds in Hypericum perforatum L. plants in a climate of the Republic of Tatarstan in different vegetation communities, i.e. in steppe meadows, at pine and broad-leaved forest borders. There was demonstrated advisability of phytochemical analysis of phenolic compounds in Hypericum perforatum extracts. The qualitative and quantitative composition of flavonoids and anthracene derivatives in the plant overground part was examined. The study results showed that ecological, phytocenotic and climatic growth conditions had impact on qualitative content of phenolic compounds in the overground part of Hypericum perforatum L., at that the maximum level of these compounds was observed in the meadow cenopopulations. Examination of the nature of accumulation of this class of compounds in Hypericum perforatum L. demonstrated that their content was determined by a geographical region of the plants growth in the forest-steppe zone climate of the Republic of Tatarstan. The maximum indices of content of flavonoids and anthracene derivatives were registered in the region of the West Cis- Volga forest-steppe zone.

## **Keywords**

Anthracene derivatives, Flavonoids, Hypericum perforatum L, Phenolic compounds, St.-John's wort