

PROSPECTS FOR PHARMACOGNOSTIC RESEARCH OF TANACETUM PARTHENIUM

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Introduction. In search of new medicinal substances scientists turn to natural sources more and more. Medicinal plant raw material is inexhaustible resource of biologically active substances. Nowadays research on cultivated and wild plant for development of medicinal drugs with different spectrum of pharmacological activity is a topical task of pharmacy. Representatives of the *Pyrethrum* genus are of particular interest. This genus counts about 100 species, which belong to 14 sections and spread all over Europe. 56 species grow on the territory of Ukraine and CIS countries. Among these species *Tanacetum parthenium* is used in medicine. This species is included in monographies of European, British, American, German, French Pharmacopoeia and State Pharmacopoeia of Ukraine of second edition. *Tanacetum parthenium* is widely used abroad as drugs from migraine and inflammatory diseases of the joints, but there are no drugs on its basis in Ukrainian market, so research on this species is a task of current interest of pharmaceutical science.

Aim. To analyze and summarize information about chemical composition and spectrum of biological activity of *Tanacetum parthenium* from different sources of literature.

Materials and methods. Descriptive, comparative and systematic search.

Results and discussion. *Tanacetum parthenium* contains mono- and bicyclic sesquiterpenes, and especially parthenolid as the main one, which accounts for 85% of all sesquiterpenes. There are also flavonoids, based on kaempferol, quercetin, apigenin, luteolin, chrysoeriol; essential oils, mainly camphor, camphene, p-cymene, and bornyl acetate; melatonin mainly in leaves; coumarin isofraxidine and its ester in the composition. Parthenolid determines a whole range of pharmacological effects, such as anti-inflammatory, cytotoxic, analgetic, spasmolytic, hypoglycemic, antihypertensive and so on. So wide spectrum promotes application of this species in the treatment of neurological, inflammatory and cancer diseases.

Conclusions. The results of the studies carried out prove that *Tanacetum parthenium* is a promising plant for further studies as a source of biologically active substances and creation of drugs on their basis.