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## Study on Bioactive Chemical Constituents of the Kazakh Traditional Medicinal Plants

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## ABSTRACT

In Kazakh traditional medicine, the plant resources have been efficiently used in the treatments of different kinds of diseases such as bronchitis, bronchial asthma, brohepatitis, urethritis, chronic rheumatoid arthritis, nephritis, urolithiasis, pharyngitis, periodontitis, stomach pain, hyperacidity, diarrhea, hemostasia, metrorrhagia, snakebite, and cancer. We focused our attention on study of the bioactive chemical constituents of some Kazkh medicinal plants such as Atriplex tatarica, Dracocephalum nutans, Bergenia crassifolia, Thymus altaicus, and halloxyllon ammendendron.

The all crude plant extracts were partitioned with n-hexane, chloroform, and n-butanol. Biological activities of the resulting extracts were screened. Chemical constituent studies were performed on plants which possessing significant cytotoxic effects on several human cancer cell lines (HL-60, MCF7, and HepG2), antioxidant, antimicrobial and anti-diabetic activities. The active principles are responsible for the activity which were identified as diterpens, sequiterpens, lignans, alkaloids, tannins and flavonoids.

Keywords: Bioactive chemical constituents, Kazakh traditional medicinal plant.

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