



## CYANOBACTERIA BIOACTIVE COMPOUNDS

D. Begimbetova , S. Orazova , X. Bobrova , S. Kolumbayeva ,  
T. Saliev<sup>1</sup>, A. Masoud<sup>1</sup>

<sup>1</sup> *Center for Life Sciences, National Laboratory Astana,  
Nazarbayev University (Astana, Kazakhstan)*

<sup>2</sup> *Al-Farabi Kazakh National University (Almaty, Kazakhstan)*  
[dinara.begimbetova@nu.edu.kz](mailto:dinara.begimbetova@nu.edu.kz)

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**Introduction:** In the conditions of the deteriorating ecological situation, the search for new preparations of natural biologically active compounds (BAC) is important. It is known that many species of microalgae accumulate in the cells and secrete metabolites with high biological activity in the process of vital activity.

**Methods:** We extracted the natural compounds produced by the prospective blue-green microalgae and carried out a chromatographic qualitative and quantitative analysis of extracts from their biomass and *culture fluid of interesting* cyanobacteria.

**Results:** Analysis of the data showed that cyanobacteria in biomass accumulate significant amounts of significant industrially structural types of BAC: alkaloids - from 0.26% in *Pseudoanabaena* sp. up to 0.32% for *Anabaena constricta*, triterpenoids - from 1.93% for *Anabaena laxa* to 4.51% for *Amorphanostoc paludosum* and phenols - from 3.44% for *Pseudoanabaena* sp. to 4.61% for *Anabaena laxa*. *Cyanobacterial culture fluid* was characterized by a lower content of metabolites:

alkaloids - from 0.18% in *Anabaenopsis* sp. up to 0.24% in *Pseudoanabaena* sp., Triterpenoids - from 0.11% in *Anabaena* sp. up to 0.35% for *Anabaena constricta* and phenols - 2.71% for *Anabaenopsis* sp. up to 3.53% from *Anabaena* sp.

**Conclusion:** Thus, it was established that the studied *cyanobacteria* species were characterized by a relatively high content of alkaloids, triterpenoids and total phenols, and the culture of *Anabaena laxa* was characterized by a relatively high content of total alkaloids and phenols. Present data can be useful for the study of biological activity of present bioactive compounds and can be recommended for the development of natural protectors, that is a very promising strategy for addressing a number of practical problems of health.