

## OP8. ELEMENTAL COMPOSITION OF THE *ANABASIS APHYLLA* FROM QAZAQSTAN

Zh.A. IBATAYEV<sup>1\*</sup>, S.Zh. KUDAIBERGENOVA<sup>1</sup>, A. ASHIRBEK<sup>1</sup>, A.B. BUKEEVA<sup>1</sup>,  
S.N. POLEZHAEV<sup>2</sup>, R.N. SULEIMEN<sup>3</sup>

<sup>1</sup>S.Seifullin Qazaq Agrotechnical Research University, Astana, Qazaqstan

<sup>2</sup>D. Serikbayev East Qazaqstan Technical University, Oskemen, Qazaqstan

<sup>3</sup>L.N. Gumilyov Eurasian National University, Astana, Qazaqstan

\*Corresponding Author. E-mail: [ZharkynAstana@gmail.com](mailto:ZharkynAstana@gmail.com)

We have determined the ash content of the *Anabasis aphylla*, which grows in the south part of Qazaqstan. The ash composition was analyzed by ICP-MS. A comparative analysis of data for approximately 50 years shows a relative constancy of the composition [1-3]. The data indicate that *Anabasis aphylla* is a stress-resistant plant, since the climate and ecological situation in the region have changed a lot over 50 years. The modern analysis method also made possible to determine trace elements that were previously unavailable. The ash content of the plant is quite high (about 18% of the dry aerial part) compared to other plants (usually in average 5- 10%). The ash contains elements such as K - 12.9%, Na-11.3%, Ca-6.2%, Mg-5.1%, P-0.7%, Fe- 0.1%, Sr- 0.05%, Al-0.03%, Ti -0.025%, Mn-0.015% etc.

Thus, *Anabasis aphylla* can be considered a valuable complex raw material that can be used to obtain alkaloids, organic acids, pectins, potash, soda and other microelements. The amount and variety of mineral elements in the ash composition makes it a promising source in producing fertilizers and additives for feed.

**Keywords:** *Anabasis aphylla*; ash content; elemental composition; ICP-MS.

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