MACRO- AND MICROELEMENT COMPOSITION OF UKRAINIAN VARIETIES OF GARLIC

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Introduction. Garlic (*Allium sativum* L.) – is an annual or biennial herbaceous plant from the family (*Amaryllidaceae*) Onion genus (*Allium*). It is used in Ukraine and all over the world as a food supplement for different dishes as fresh bulbs, dried slices, flakes, granules, powder.

Ukraine produces over 120,000 tons of fresh garlic yearly and is one of the world's leading suppliers of this crop. The most well-known winter and ardent varieties, cultivated in Ukraine, are "Lyubasha", "Ukrainian violet", "Ukrainian white", "Sophiyivskiy", "Winner", "Kharkiv violet", "Gulliver" etc. Garlic is widely used as a medicinal plant.

Garlic bulbs contain essential oil with specific smell (S-containing compounds), polysaccharides, amino acids, phytoncides, vitamins. The green garlic sprouts have 2-3- times higher content of ascorbic acid than the bulbs do. Fresh garlic, ethanol tinctures, oil extracts of garlic are used in folk medicine. Numerous clinical researches confirm the data about healing properties of garlic. The main pharmacologic effects of garlic medicines are antibacterial, antiviral, fungicidal, antiatherosclerotic, and also it affects the hepatobiliary system.

Nowadays famous producers of phytoremedies and food supplements on herbal basis consider this plant as one of the most important components of these remedies. «Kwai» (Germany), «Revital Garlic Pearls» (India), «Kyolic» (USA), «Allicor», «Carinat» (Russian Federation), «Allochol» (Ukraine) are the examples of such remedies.

The **aim** of our research was the determination of element content of *Allium sativum* L. Bulbs of some Ukrainian varieties.

Materials and methods. The plant material samples were collected in the summer of 2015 in Sumy region. The qualitative composition and quantitative content of of macro- and microelements in the dried plant material samples was determined by the means of atomic-emission spectroscopy at the DNU STC "Institute for Single Crystals" of the NAS of Ukraine (Kharkiv).

Results. The presence of 19 macro- and microelements, with the prevalence of K – 640 mg/100 g, Ca – 255 mg/100 g, P – 190 mg/100 g, and Na – 130 mg/100 g, was determined.

Conclusion. The results obtained can be used for the quality parameters of the plant material working out.