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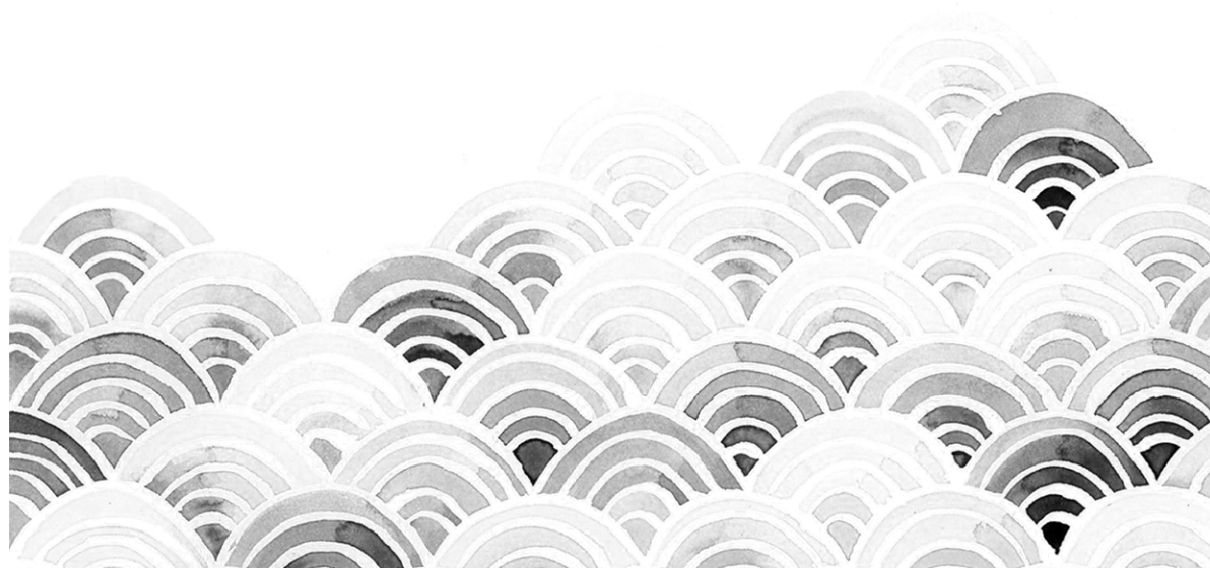
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IX_PP2_Determination of selected macro- and microelements in black chokeberries (*Aronia melanocarpa* L.)

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Black chokeberries (*Aronia melanocarpa* L.), belonging to the Rosaceae family, are considered to be functional food due to the presence and the high content of various bioactive components such as vitamins, minerals and polyphenols [1]. Aronia berries are a good dietary source of essential elements, in addition to their high content of beneficial nutrients for health and well-being [2]. There is little research on the mineral composition of the chokeberries, so the presented study is focused on the determination of twenty-four elements in black chokeberry fruits. Analysed elements were: aluminium (Al), arsenic (As), boron (B), barium (Ba), calcium (Ca), cadmium (Cd), cobalt (Co), chromium (Cr), copper (Cu), iron (Fe), potassium (K), lithium (Li), magnesium (Mg), manganese (Mn), molybdenum (Mo), sodium (Na), nickel (Ni), phosphorus (P), lead (Pb), sulphur (S), selenium (Se), strontium (Sr), vanadium (V) and zinc (Zn), using the optical emission spectrometry with inductively coupled plasma (ICP-OES) technique.

The multi-elemental composition and substances performing a beneficial impact on health can vary depending on factors such as cultivar, fertilization, maturation or climate conditions, as well as the date of their harvest [3]. According to the obtained results, concentrations of major elements in the sample were: 281.94 (Ca), 1587.07 (K), 147.19 (Mg), 314.24 (P) and 92.18 (S), expressed as $\mu\text{g g}^{-1}$. Concentrations of the toxic elements As, Cd and Pb were below method quantification limits in the studied sample.

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