

Determination of Micronutrients in the Fruit of *Cydonia oblonga* Miller

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Abstract : Analyzing the chemical composition of locally consumed food products is one of the urgent problems in the health sector today. Taking this into account, it analyzed the microelement content of *Cydonia oblonga* Miller (COM) fruit growing in the Republic of Uzbekistan using the ISP MS inductively coupled mass spectrometry method. Fruits brought to a constant mass in the analysis were mineralized in a mixture of nitric acid-HNO₃ and hydrogen peroxide-H₂O₂ in a ratio of 3:2. The mineralized extract was diluted to 50 milliliters with double-distilled water and analyzed. The results of the analysis showed that the fruit is rich in micronutrients necessary for the human body, especially potassium-K and phosphorus-P among macroelements, Strontium-Sr and barium-Ba from microelements are more than other microelements. It was observed that the amount of trace elements contained in COM fruit does not exceed the permissible standards. Therefore, it can be recommended to eat this fruit every day to prevent various diseases that occur in the human body.

Keywords : *cydonia oblonga miller*, macroelement, microelement, inductively coupled mass spectrometry, hydrolysis, mineralization

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