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DETERMINATION OF HEAVY METALS AND C VITAMIN IN ALLIUM PLANTS (GARLIC AND ONION)

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Abstract

Analyses of plants render important information in toxicological and environmental investigations since plants are a very significant link in the trophic chain. The aim of this study was to analyze quantitatively the distribution of heavy metals and ascorbic acid in *Allium* plants: *Allium sativum* L. (garlic) and *Allium cepa* L. (onion). Heavy metals accumulation in garlic and onion was quantified by flame atomic absorption spectrometry (FAAS) after the chemical mineralization of the samples with nitric acid and hydrogen peroxide in a Digesthal device. To determinate of vitamin C we used a titrimetric method with potassium brommat-bromide solution in acid medium, when vitamin C is oxidized to dehidroascorbic acid by bromine. Our results indicate a high concentration of vitamin C in leaves of the studied *Allium* plants.

Keywords: heavy metals, vitamin C, Allium plants, FAAS

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