

The copper influence on germination process of vegetables

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Abstract Copper is a major component of fungicide which is used in plants protection by fungi's and parasites. In this paper are presented one study about copper salts influence on germination process of some vegetables: allium's plants (garlic bulbs and onion), peas (*Pisum*) and kidney bean (*Phaseolus vulgaris*). In this purpose were used different concentrations (10g/L, 1g/L and 1mg/L) of CuSO₄, CuCl₂ and (CH₃COO)₂Cu solution. Flame atomic absorption spectrometry (FAAS) was used for the quantitative determination of copper in vegetables. Analyses were performed after the chemical mineralization of the samples with nitric acid and hydrogen peroxide in a Digesdahl device. The study demonstrates that high concentrations of copper added during the germination process of vegetables are toxic for the normal plants growth.

Keywords: FAAS, copper, germination, garlic, onion, peas, beans.
