

Effects of spraying mineral water onto farm products on their growth and nutrition

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Abstract

The effects of spraying mineral water onto agricultural crops on their yields and mineral contents were examined. We sprayed a solution containing a large quantity of essential minerals onto the leaves of various agricultural crops every other week for a few months. The mineral concentrations in the agricultural crops and of the sprayed solution were measured by PIXE (Particle Induced X-ray Emission). It was found that the effect of spraying mineral water on the crops was remarkable, especially for rice and soy-beans, for which the yields became nearly three times higher and the concentrations of many essential minerals increased in their stems and leaves. However, no clear increase in the mineral contents was observed for polished rice. In addition, not all of the farm products showed positive effects. This indicates that an effective method and timing of spraying mineral water should be examined depending on the conditions of each individual agricultural crop.