

**Investigations on the effects of compost fertilization of crops of *Aronia melanocarpa* (Michx) Elliott and *Ribes rubrum* L.**

**ABSTRACT**

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**Keywords:** *Aronia melanocarpa* [Michx] Elliott, *Ribes rubrum* L., sewage sludge compost, compost from plant residues

The aim of the research was the comparative analysis of the effect of soil fertilization with compost obtained from a mixture of sewage sludge with plant residues applied at rates of 20 t/ha and 40 t/ha and with compost obtained from plant residues applied at rates of 30 t/ha and 40 t/ha on crops of *Aronia melanocarpa* [Michx] Elliott, variety 'Nero' and *Ribes rubrum* L., variety 'Jonker van Tets'.

Complex analysis of crop quality indicators and soil agrochemical indicators showed that crop efficiency steadily improved as microbiological and physico-chemical processes occurred leading to improved soil quality. The nutrients contained in the applied compost doses created adequate growing conditions. Both types of compost provided protection against abiotic stress.

In addition, the skills acquired during the doctoral internship supported my teaching career. New learning methods and scientific research techniques were identified and integrated into the teaching work, which helped students to discover the mysteries of science more easily.