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WASTEWATER FOR IRRIGATION IN AGRICULTURE: SOME EFFECTS OF EFFLUENT ON SOIL QUALITY AND CANOLA (*Brassica napus oleifera*) GROWTH

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Abstract

Considering the decrease water resources in the past decade, research for rational solutions on water use has become a worldwide concern. Agriculture is the largest consumer of water, and when the soil moisture level is not assured of precipitation, it is supplemented by irrigation. In the current context of climate change, and consequently the arid territories growth, the researchers are looking for solutions to rational water consumption, and equally to cover the deficit of water in agriculture. In recent years, the solution of wastewater capitalization in agriculture is often promoted, but chemical and bacteriological composition of wastewater can seriously affect both soil quality and of the products obtained (animals, humans). In this context, the paper aims at analyzing some effects on soil structure resulted from the use of two types of wastewater in irrigation, respectively primary and tertiary effluents.

Key words: agriculture, canola, effluent, tertiary, soil, wastewater

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