Effects of different applications of sewage sludge on health of food crops

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Because many of the soils have low organic matter content they are exposed to degradation, erosion and desertification through intensive cultivation, excessive ploughing, allied to years of unsuitable agricultural practices. These practices reduce the quantity of vegetal remains returned to the soil and accelerate the mineralization of whatever humus is in the soil. The inevitable result is a progressive decrease of the organic matter content and the negative consequences that this entails [10].Investigations were carried out in order to determine the effects of sewage sludge application on soil and plants. In the course, plots with an area of 100 m2 were treated with different fertilization systems (mineral fertilization, organic fertilization, and mineral and organic fertilization). The effect of the tillage systems on the contents of these heavy metals, shows different results. A higher content of Cd in crops occurred in the no-tillage system and a higher content in Zn was found in crops of the minimal tillage system, excepting the content in Zn in rape seeds, where this higher Zn content occurs in crops of the conventional tillage system. A lesser content of Cd and Zn occurred generally in crops of the conventional tillage system.