

The Effect of Biochar, Inoculated Biochar and Compost Biological Component of the Soil

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Abstract : Biochar can be produced from the waste matter and its application has been associated with returning of carbon in large amounts into the soil. The impacts of this material on physical and chemical properties of soil have been described. The biggest part of the research work is dedicated to the hypothesis of this material's toxic effects on the soil life regarding its effect on the soil biological component. At present, it has been worked on methods which could eliminate these undesirable properties of biochar. One of the possibilities is to mix biochar with organic material, such as compost, or focusing on the natural processes acceleration in the soil. In the experiment has been used as the addition of compost as well as the elimination of toxic substances by promoting microbial activity in aerated water environment. Biochar was aerated for 7 days in a container with a volume of 20 l. This way modified biochar had six times higher biomass production and reduce mineral nitrogen leaching. Better results have been achieved by mixing biochar with compost.

Keywords : leaching of nitrogen, soil, biochar, compost

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