IMPACT OF CLIMATE CHANGE

BIODIVERSITY & ENVIRONMENT

Ajay Kumar Vashisht
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Impact of Climate Change Biodiversity and Environment

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Effects of Organic Amendments Inoculated with Trichoderma Fungal Microbial Consortium on Reclamation of Clay

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Soil is an integral part of an ecosystem and it is considered as the most important gift for the survival of mankind. All the basic needs and the habitats depend on the soil, but the human interactions adversely affect the characteristics of the soil and destruct the soil health and wealth. Soil reclamation is a method used to return disturbed land to a state, where it is useful. A pot experiment was conducted on soil samples to compare and assess the reclamation ability of different organic amendments and their combinations inoculated with *Trichoderma* fungal microbial consortium for soil quality improvements. Controlled conditions were compared with the media prepared by mixing soil with sawdust, cow dung, coir pith, and vermi-compost in various combinations. Organic amendments were applied at 50 per cent of soil weight and these organic amendments with soil kept to amelioration for 100 days. After the amelioration process the soil quality improvements and compost stability was checked by planting a pea variety (*Pisum sativum*) and was grown in these seven pots including control. Results obtained for Trichoderma microbial consortium inoculated soil samples showed the significant differences in bulk density, moisture content, water holding capacity, pH, EC, TDS, TSS, organic carbon, organic matter, and NPK among the treatments and the control showed a decline trend in all the properties. Organic amendments singly or in combinations