Comparative Study of Soil Reclamation Using Vermicompost and Neem Compost Amended Theri Soil

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Abstract

A special type of Red sandy dunal soil [Theri-soil] of Tamil Nadu is called Theri-soils. Theri-soils are located in Tuticorin, Tirunelveli and Kanyakumari districts of Tamil Nadu. The Merits of Theri lands are deep sand zone, good permeability and quality ground water. The Demerits of Their lands are unsuitable for agriculture, the surface of the soil is not plane. They are subjected to higher level of soil erosion. They are low nutrients and minerals and Low water holding capacity. Vermicompost and Neem Compost are the materials used for the amendment of the Theri soils selected for the study to improve the fertility constraints of the soil. Measurements were made on the physico chemical and physical properties such as pH, EC, Particle density, Bulk density, Porosity, Water-holding capacity, Organic carbon content, and Hydraulic conductivity. To convert this soil into a cultivable land, attempts were made to improve the soil moisture characteristics of the soil using soil amendment. The observations were taken for both the Vermicompost added Theri soil and the Neem compost added Theri soil. Comparing the above eight properties of the amended Theri soil, the best amendment among the two was found out.

Keywords: Theri soils, Vermicompost, Neem Compost

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