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Vermicompost - a Sustainable Option for Organic Agriculture: A Brief Review

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Abstract:
The word "Vermi" means worms and "compost" refers to a process of making vegetable waste to manure. Vermicompost uses earthworms to convert biodegradable solid waste into organic fertilizer. It has very high nutrient value is considered better than inorganic fertilizers. Due to its high nutritional value, it can be considered as a clean and sustainable approach towards managing biodegradable kitchen wastes. A nutrient rich organic fertilizer can be seen as a viable option for handling the soil nutrition loss as well as mitigating soil pollution. Looking at the manufacturing and distribution of the kitchen-waste-generated Vermicompost, it has proved to be a low-investment and highly profitable source of income. Vermicompost can create a good source of employment as it requires a lot of manpower. Application of compost from kitchen waste to agricultural land helps in a meliorating the soil's physio-chemical property. Apart from that, it also assists in improving biological response of cultivated land. Keeping the present situation in mind, this review critically discusses the current scenario, agricultural utilization of kitchen waste-based compost, role of soil microbial response on kitchen waste-based compost application. The results indicated that Vermicompost can be taken as efficient technology to convert kitchen waste into nutrients rich bio-fertilizer.

Keywords:
Kitchen waste, biofertilizer, biodegradable solid waste, compost.