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PROSPECTS OF USING BULKING AGENTS IN IMPROVING THE QUALITY OF COMPOSTS

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Abstract

Recently, bulking agents have drawn a lot of attention for their effects on composting. The aim of this study is to find out the potentiality of using bulking agents in improving the quality of composts. This review paper specifically focused on the effects of low-cost and widely available bulking agents such as sawdust, rice husk, tea waste, wood shavings, water hyacinth, garden prune, and wood chips, which have been utilized in several composting experiments. The findings of this review paper demonstrated that the utilization of bulking agents in composting improved compost stability, enhanced the initial C/N ratio, adjusted pH and electrical conductivity to a suitable range, reduced nitrogen loss, achieved an optimal germination index, and reduced compost maturation time. By incorporating bulking agents, the composting process becomes more efficient and producing nutrient-rich compost. This review highlights the potential of locally available bulking agents to enhance sustainable waste management practices, offering insights into their effectiveness in different composting scenarios.

Key words: bulking agent**,** compost, C/N ratio, electrical conductivity, germination index

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