

A Study on Potting Media Preparation Using Commercial Compost and Organic Additives

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Abstract

Compost contains mineral nutrients and vital microorganisms. A mix of compost amended with locally-available additives could potentially be used as a superior seedling media. To evaluate the potential of compost mix used for seedling media, a methodology of preparing effective compost mixes from 29 commercial compost products incorporated with six locally-available additives, were investigated. The six additives used were coconut husk, nitantai, vermiculite, sawdust, rice husk, and bagasse. Growing tests were conducted on each of the prepared compost mix. The test plants used were cucumber and green pepper. If a compost mix exhibited a 90% healthy growth rate during the growing test, that particular compost mix is a satisfactory potting media. The results indicated that 1) two to five commercial compost products can be used as potting media without amendment. Furthermore, seeding growth in these compost products are better than in the commercial potting media; 2) seven to twenty five compost products can become effective potting media after they are amended with proper additives; 3) two to seventeen compost products, which have been amended with any one of six additives, can not be used as an effective potting media; 4) compost mix amended with either peat moss or coconut shreds, or vermiculite, or sawdust are most effective, while the compost mixes amended with either rice hull or bagasse are least effective when used as potting media; 5) the compost mixes prepared with sawdust or coconut husk exhibit excellent potential as potting media because the preparation costs are the lowest; and 6) sawdust obtained from yukiali tree, wax apple tree, and liuan tree are effective additives but shiansu tree's sawdust is not.

Key words: Compost, Seedling media

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