

**UTILIZATION OF INDUSTRIAL WASTES AS
A COMPONENT OF POTTING MIXES IN
GROWING PECHAY**

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Utilization of industrial wastes as a
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ABSTRACT

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"Utilization of Industrial Wastes as a Component of Potting Mixes for Pechay. Adviser:
Dr. Danilo F. Guinto.

This study was conducted to characterize the physical and chemical properties of selected industrial wastes; formulate potting mixes on the industrial wastes and determine the waste that has potential as good potting medium for pechay. The idea is to reduce our solid waste disposal problem and for wastes to serve as an alternative to soil when the time comes that it becomes scarce because of rapid conversion of agricultural lands.

Industrial wastes were collected from Carmona, Cavite. Dicalite and grit were collected from a factory that manufactures perlite while filter cake was collected from a factory that manufactures carrageenan. Treatments include the standard potting mix (1 part soil; 1 part chicken manure and 1 part rice hull by volume), three potting mixes based on wastes which replaced the soil component of the standard potting mix and the three wastes in pure form.

The results showed that in terms of leaf biomass, pure filter cake is superior to all treatments including the standard potting mix. The leaf biomass on the waste mixes produced comparable leaf biomass with the standard mix indicating that all wastes were effective as an alternative to soil provided that nutrients and water are supplied in sufficient amounts. However, leaf biomass of plants grown on pure dicalite and grit were inferior due to low water- and nutrient-retention capacities of these wastes.

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