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DEVELOPMENT ; M.Sc. (APPROPRIATE TECHONLOGY FOR  
RESOURCE DEVELOPMENT)

KEY WORDS : FEASIBILITY / BIOTECHNOLOGY / BIOEXTRACT.

SAKORN KHEMKHAN:FEASIBILITY STUDY OF BIOEXTRACT PRODUCTION  
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The purpose of this study was to consider the feasibility of reducing and recovering  
garbage collected from vegetables waste and food waste. The process of fermentation used was a  
Biotechnology Method for digesting garbage and molasses anaerobic bacteria , It took seven days  
of microorganism to produce theBioExtract.

To compare the growth of marigold the experiment was a completely randomized design  
with 3 treatment and 4 replication The experimental Marigold was divided into three different  
groups and each was completely grown four times as follows:

1. using dilute BioExtract from food waste 1:500 cc. every two day
2. using dilute BioExtract from vegetables waste 1:500 cc. every two day
3. growing marigold without using chemical fertilization

when comparing growth marigold and flowers using BioExtract from food waste grew better than  
without using chemical fertilization. A significant difference was found when comparing  
BioExtract ( $P<0.05$ ) but there was no significant difference between the two groups using  
BioExtract.

The findings indicased two groups of marigold using BioExtract from food wase and  
vegetable wase grow better than without using chemical fertilization. After using BioExtract tree  
stems were taller and the brush was broader, the stems of flowers were longer and the size of the  
flower was also bigger. A highly significant difference was found when using BioExtract ( $P<0.05$ )  
but there was significant difference between the two groups of using BioExtract.

It can be concluded that using BioExtract instead of chemical fertilization

From this experimental research, BioExtract can be used to grow many kinds of  
plants. It is reccomented has growth and experimental research be conducted again for vegetables.