Effect of Bag containing NPK-ORGANO-ZEOLITE on the growth of Morus alba

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AGREX'17
INTRODUCTION

EUTROPHICATION

characterized by an abundant accumulation of nutrients that support a dense growth of algae and other organisms
INTRODUCTION

Agricultural Practices

* Improved productivity
* Produced N-Zeo & K-Zeo Fertilizers
* Reduce the amount of Nitrate pollution (Li, 2003)

NPK-ORGANO-ZEOLITE

New! Application in the tea-bag

Malek et al., 2014, Hamzah et al., 2014
OBJECTIVES


2. To study the performance of NPK-Organo-Zeolite in the tea-bag application.

3. To compare the effectiveness of NPK-Organo-Zeolite in the tea-bag application with the top dressing application.
METHODOLOGY

APPLICATION OF NPK-ORGANO-ZEOLITE IN TEA-BAG APPLICATION

- Plant growth study
- Plant biomass
- NPK contents

Reusable Tea bag  →  White mulberry  →  Used NPK-Organo-Zeolite
METHODOLOGY

Tea-bag NPK-Organon-Zeolite

Stem length

Number of leaves, fruits & branches

Leaf area

Top Dressing

Roots length

Ramanjulu et. al., 1998
RESULTS & DISCUSSIONS

FOURIER TRANSFORM INFRARED SPECTRA

Tanaka et al., 2012 & Malek, 2011
RESULTS & DISCUSSIONS
PLANT GROWTH STUDY

Tea Bag (NPK)
RESULTS & DISCUSSIONS

PLANT BIOMASS

Leaves  | Roots  | Stems

Big loss of water

<table>
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<tr>
<th>Parameters</th>
<th>Control</th>
<th>Cli</th>
<th>MAP</th>
<th>MKP</th>
<th>NPK-Organo-Zeolite</th>
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<tr>
<td>Total Leaves Dry</td>
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Ramanjulu et al., 1998
## RESULTS & DISCUSSIONS

### NPK CONTENT IN LEAVES

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<th>N (%)</th>
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<th>K (%)</th>
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</table>

Ramanjulu et al., 1998
CONCLUSION

NPK in leaf

√plant growth study

used natural zeolite

tea bag

NPK in leaf study

√plant growth study

used natural zeolite

tea bag

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REFERENCES


Thanks!