

**EFFECT ON DIFFERENT CONCENTRATIONS OF STANDARD  
PLANT BOOSTER ON *Solanum lycopersicum* and *Capsicum annuum*  
MORPHOGENESIS**

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## TABLE OF CONTENTS

	<b>PAGE</b>
<b>ACKNOWLEDGEMENTS</b>	<b>i</b>
<b>TABLE OF CONTENTS</b>	<b>ii</b>
<b>LIST OF TABLES</b>	<b>iv</b>
<b>LIST OF FIGURES</b>	<b>v</b>
<b>LIST OF ABBREVIATIONS</b>	<b>viii</b>
<b>ABSTRACT</b>	<b>ix</b>
<b>ABSTRAK</b>	<b>x</b>
<b>CHAPTER 1 INTRODUCTION</b>	
1.1 Background Study	1
1.2 Problem Statement	3
1.3 Significance of Study	4
1.4 Objective of Study	5
1.5 Scope and Limitation of Study	5
<b>CHAPTER 2 LITERATURE REVIEW</b>	
2.1 Plant Tissue Culture	6
2.1.1 Seed culture of <i>Solanum lycopersicum</i> and <i>Capsicum annuum</i> plant species	7
2.1.1.1 Seed culture germination	7
2.1.1.2 Seed culture growth	8
2.1.1.3 Advantages and disadvantages of seed culture	8
2.1.2 MS media culture of <i>Solanum lycopersicum</i> and <i>Capsicum annuum</i> plant species	8
2.1.3 Callus culture of <i>Solanum lycopersicum</i> and <i>Capsicum annuum</i> plant species	9
2.2 <i>Solanum lycopersicum</i> and <i>Capsicum annuum</i> plant species	11
2.2.1 Medicinal values	14
2.2.2 Commercial values	14
2.2.3 Plantation and biotechnology problems	15
2.3 Plant booster (P.B)	16
2.3.1 Standard organic supplement commonly in culture media	17
2.3.2 Organic supplement ingredients in plant booster	18
2.3.3 Fruits as organic supplements ingredients in plant booster	20

<b>CHAPTER 3 METHODOLOGY</b>	<b>21</b>
3.1 Materials	21
3.1.1 Raw materials	21
3.1.2 Chemicals	21
3.1.3 Apparatus	
3.2 Methods	23
3.2.1 Plant booster solution preparation	23
3.2.2 MS media preparation for treatment in different concentrations of plant booster using	29
3.2.3 Sterilization technique	33
3.2.4 Seed culture preparation	35
3.3 Statistical analysis	38
<b>CHAPTER 4 RESULT AND DISCUSSION</b>	<b>39</b>
4.1 Germination seeds of <i>Solanum lycopersicum</i> and <i>Capsicum annuum</i> in different concentrations of plant booster using as a media	39
4.2 Growth morphology of <i>Solanum lycopersicum</i> and <i>Capsicum annuum</i> plant species	47
4.2.1 Formations of leaves	47
4.2.2 Measurements of heights	57
4.2.3 Developments of roots	63
4.2.4 Formations of branches	69
4.3 Callus formations	72
4.4 Contaminations in plant tissue culture methods by presence of plant booster	73
<b>CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS</b>	<b>75</b>
<b>CITED REFERENCES</b>	<b>76</b>
<b>GANTT CHART</b>	<b>81</b>
<b>APPENDICES</b>	<b>82</b>
<b>CURRICULUM VITAE</b>	<b>88</b>

## ABSTRACT

### **EFFECT ON DIFFERENT CONCENTRATIONS OF STANDARD PLANT BOOSTER ON *Solanum lycopersicum* and *Capsicum annuum* MORPHOGENESIS**

*Solanum lycopersicum* also known as “tomatoes” is an herbaceous annual where grown for its edible fruits. This plant species can be erect with short stems and also it long and spreading stems. *Capsicum annuum* also known as “chillies have tremendous economic values as crops and medicinal plants. This both plant species comes from family Solanaceae. Plant booster was proposed by MARDI and it consist of 10 types of organic supplements and also functioning for plant growth. The objectives were to investigate the effect of different concentration of plant booster in seeds germination and also identification of optimum concentration plant booster in both species. Moreover, the determination of callus presence in different concentrations of plant booster was also been studied. In initial stage, the plant booster solution was produced by used varieties of organic supplements such as pineapple (*Ananas comosus*), banana (*Musa acuminata*), squash (*Cucurbita pepo*), papaya (*Carica papaya*), kangkung (*Ipomea acuatica*), shrimp paste, milk, egg, yeast and coconut sugar. The explant form both species were cultured in five different plant booster concentration which is control (no addition of plant booster), 10ml/L, 15ml/L, 20ml/L and 25ml/L. Each treatments were consisted 30 number of samples. Findings showed that, the germination of seeds for both species were different. In *Solanum* species, the day for seeds germinations faster in control treatments as compared to other treatments. In *Capsicum* species, the day for seed germination in all treatment are same after one week observations. The optimum concentration from this research is control treatment compared treatments with additions of plant booster. The callus in this research are not presence. As a conclusion, the using plant booster solution as a media in plant tissue culture technique were not suitable for this both species. However, it is recommended for further studies on additional factors in the future by used in another families plants.