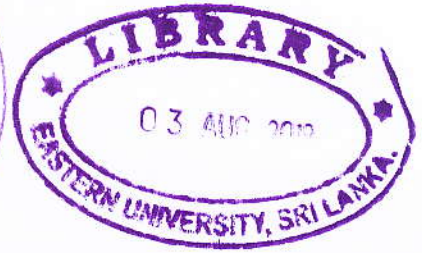
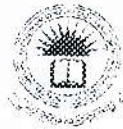


**EFFECT OF SEA WEED EXTRACTION,
PANCHAGAVYA AND JEEWAMIRTHA
ON GROWTH AND YIELD OF *Vigna unguiculata* L.**



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ABSTRACT

In present, people concern on their health and environmental aspects. For that, farmers are trend to use organic fertilizers and botanicals from natural resources to enhance the production of crops and sustain the environment.

In this regard, an experiment was conducted with jeewamitha, panchagavya and seaweed along with a control to investigate the effect of sea weed extraction, panchagavya and Jeewamirtha on growth and yield of *Vigna unguiculata* L. A Field experiment was carried out in Crop Farm, Eastern University Sri Lanka, from January to April 2019. The experiment was arranged with six treatments in Completely Randomized Design with five replications. Treatments included: T1: Control (Distilled water), T2: 20% Seaweed extraction, T3: Jeewamirtha, T4: Panchagavya, T5: Jeewamirtha and 20% seaweed extract, T6: Panchagavya and 20% sea weed extract.

The 20% seaweed liquid extract of *Halimeda tuna* combined with panchagavya was treated to improve plant height (21.78%), mean number of leaves per plant (12.5%), chlorophyll content of leaves (16.32%), leaf area (71.41%), fresh weight of shoot (65.74%), dry weight of shoot (71.67%), root length (32.25%), fresh weight of root (73.58%), dry weight of root (66.37%), total number of root nodules (75.35%), number of effective nodules (65.78%), mean number of flowers per plant (60%), average length of pods (47.51%), weight of a pod (38.97%), 100 seeds weight (51.71%) and total yield (79.25%) over the control plants.

It could be concluded that application of Panchagavya liquid organic mixture combined with natural 20% sea weed extraction and hence can be recommended to enhance the yield in sustainable and environmentally friendly manner for growth and yield of *Vigna unduiculata* L.

CONTENTS

ABSTRACT.....	i
ACKNOWLEDGEMENT	ii
CONTENTS	iii
LIST OF TABLES.....	ix
CHAPTER 1.....	1
1.0 INTRODUCTION	1
CHAPTER 2.....	6
2.0. LITERATURE REVIEW.....	6
2.1 Cowpea	6
2.1.1 Origin, Domestication and Diversity.....	6
2.1.2 Alternative common names.....	6
2.1.3 Uses.....	7
2.1.3.1 Commercial crop.....	7
2.1.3.2 Forage	7
2.1.3.3 Cover crop/green manure.....	7
2.1.4 Nutritional Value of Cowpea.....	7
2.1.5 Taxonomy.....	8
2.1.6 Morphological Description.....	8
2.1.7 Nitrogen fixation	9
2.1.8 Cowpea production in the World	10

2.1.9 Cowpea cultivation in Sri Lanka	10
2.1.10 Recommended varieties of cowpea cultivated in Sri Lanka.....	11
2.2 Sea weed	13
2.2.1 Green algae.....	14
2.2.2 Halimeda tuna.....	15
2.2.2.1 Taxonomy.....	15
2.2.2.2 Morphology of <i>Halimeda tuna</i>	15
2.2.2.3 Chemical constituents of <i>Halimeda tuna</i>	17
2.3.3 Effects of seaweed extracts in crops.....	17
2.3.3.1 Effect on seed germination and seedling growth.....	17
2.3.3.2 Effect on chlorophyll content of leaves	18
2.3.3.3 Effects of seaweed extracts in crops.....	18
2.3.3.4 Effect on yield of crops	19
2.3.3.5 Studies on effects of seaweed extracts on leguminous crops	19
2.3 Panchagva	21
2.3.1 Properties of Panchagavya stock solution	22
2.3.2 Ingredients used in preparation of Panchagavya liquid mixture	23
2.3.2.1 Cow dung.....	23
2.3.2.2 Cow urine.....	24
2.3.2.3 Cow milk.....	24
2.3.2.4 Cow curd.....	25
2.3.2.5 Jaggery	25
2.3.3 Principle microbes in Panchagavya.....	25

2.3.3.1 Nitrogen fixers	26
2.3.3.2 Phosphorus solubilizing bacteria	26
2.3.4 Effects of panchagavya in crops.....	27
2.3.4.1 Panchagavya as a growth promoter	27
2.3.4.2 Effect of Panchagavya on growth parameters	27
2.3.4.3 Effect of Panchagavya on Yield Attributes	27
2.5 Jeewamirtha	27
2.5.1 Ingredients used in preparation of liquid Jeewamirtha mixture	28
2.5.1.1 Cow dung	28
2.5.1.2 Cow urine	28
2.5.1.3 Pulse powder	28
2.5.1.4 Jaggery	28
2.5.1.5 Living soil	29
2.5.2 Effects of jeewamirtha in crops	29

CHAPTER 3..... 30

3.0. MATERIALS AND METHODS..... 30

3.1 Experimental site	30
3.2 Pot preparation.....	30
3.3 Seed germination	31
3.4 Seaweed	31
3.4.1 Collection of seaweed.....	31
3.4.2 Seaweed Liquid Extract preparation.....	32

3.5 Jeewamirtha	33
3.5.1 Jeewamirtha preparation.....	33
3.6 Panchagavya	33
3.6.1 Panchagavya preparation.....	33
3.7 Agronomy practices	34
3.7.1 Seeding and thinning out.....	34
3.7.2 Irrigation.....	34
3.7.3 Weeding.....	34
3.7.4 Pest and disease management.....	34
3.8 Experimental set up.....	34
3.9 Treatments.....	35
3.9.1 Treatments code and description.....	35
3.9.2 Treatment application of distilled water.....	36
3.9.3 Treatment application of Seaweed Liquid Extract	36
3.9.4 Treatment application of Jeewamirtha	36
3.9.5 Treatment application of panchagavya.....	36
3.10 Measurements	36
3.10.1 Growth parameters	37
3.10.1.1 Plant height.....	37
3.10.1.2 Number of leaves.....	37
3.10.1.3 Leaf area (cm ²)	37
3.10.1.4 Chlorophyll content of leaves.....	37
3.10.1.5 Fresh weight of leaves (g)	37

3.10.1.6 Dry weight of leaves (g)	38
3.10.1.7 Fresh weight of shoot	38
3.10.1.8 Dry weight of shoot	38
3.10.1.9 Root length (cm)	38
3.10.1.10 Fresh weight of roots (g)	38
3.10.1.11 Dry weight of roots (g)	39
3.10.1.13 Number of effective nodules	39
3.10.2 Yield parameters.....	39
3.10.2.1 Number of flowers per plant.....	39
3.10.2.2 Total number of pods per plant at 1st and 2nd harvest.....	39
3.10.2.3 Length of pods (cm)	40
3.10.2.4 Number of seeds per pod.....	40
3.10.2.5 Weight of pod (g)	40
3.10.2.6 Weight of 100 seed (g)	40
3.11 Analysis of Data.....	40

CHAPTER 4..... 41

4.0. RESULTS AND DISCUSSION..... 41

4.1. Growth parameters.....	41
4.1.1 Plant height.....	41
4.1.2 Number of leaves per plant.....	45
4.1.3 Chlorophyll content of leaves (SPAD values).....	49
4.1.4 Leaf area (cm ²).....	53
4.1.5 Fresh weight and dry biomass of Shoot (g).....	55

4.1.6 Root length (cm).....	58
4.1.7 Fresh and dry weight of root (g).....	60
4.1.8 Total number of root nodules and number of effective nodules.....	62
4.2 Yield Parameters.....	65
4.2.1 Number of flowers per plant.....	65
4.2.2 Average length of pod (cm), Number of seeds per pod, Pod weight (g) and 100 seed Weight.....	67
4.2.3 Pod Yield.....	70

CHAPTER 5..... 73

5.0 Conclusion 73

CHAPTER 6..... 74

6.0. Suggestions 74