

COMPARISON OF CHEMICAL COMPOSITION
OF COMPOST MADE OF DIFFERENT PROPORTION
OF RICE STRAW, GLYRICIDIA AND COIR DUST

BY

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ABSTRACT

The study was conducted to compare C:N ratio and available P of compost made using different proportion of rice straw, glyricidia and coir dust. The field experiment was set up at University experimental farm in Dodangolla. Three different ratios $1/2 : 1 : 1\ 1/2$, $1:1:1$ and $1\ 1/2 : 1 : 1/2$ of rice straw: glyricidia: coirdust were tested using the heap method of composting. The experiment was done for 8 weeks with 3 replicates.

The amount of mineralizable N and release of P with time were compared by determining C:N ratio and available P of composting material during 2nd, 4th, 6th and 8th week time intervals. Statistical analysis of data were done using 2 factor-factorial CRD design.

The highest C:N ratio were found in treatment-1, in which more coir dust was used. In all treatments C:N ratio gradually decreased with time and available P gradually increased with time. This indicates an increase in availability of inorganic N and P due to mineralization process by micro organisms.

Among the three treatments, the treatments 2 and 3 were better than treatment-1, as they showed low C:N ratio and high available P than treatment-1.

CONTENTS

	Page
ABSTRACT	I
ACKNOWLEDGEMENT	II
CONTENTS	III
LIST OF TABLES	IV
1. INTRODUCTION	1
2. LITERATURE REVIEW	3
2.1 Compost	3
2.1.1 Composting	3
2.1.2 Historical Development	3
2.1.3 Principles of Composting	4
2.1.4 Composting Materials	5
2.1.5 Methods of Composting	6
2.1.6 Accelerating the composting process	6
2.2 Merits of compost over raw manure	7
2.3 Comparison between Compost and mineral fertilizer	10
2.4 Factors affecting composting process	12
2.4.1 Micro Organisms	12
2.4.2 Particle size	13
2.4.3 Food C:N ratio	13
2.4.4 Aeration	14
2.4.5 Moisture Content	15
2.4.6 Temperature	16
2.4.7 pH	17
2.5 Effects of compost on soil factors	18
2.5.1 Effects of compost on physical properties	18
2.5.1.1 Macro structure	18
2.5.1.2 Water Holding Capacity (WHC)	18
2.5.1.3 Aggregation and soil stability	19
2.5.1.4 Prevention of soil hardening	19
2.5.1.5 Soil Colour	19
2.5.2 Effects of compost on soil chemical properties	19

2.5.2.1	Retention of cations in soils	19
2.5.2.2	Release of inorganic nutrients	20
2.5.2.3	Prevention of Phosphorous fixation	20
2.5.3	Effects of compost biological properties of soils	21
3.	MATERIALS AND METHODS	22
3.1	Preparation of slurry	22
3.2	Construction of heaps	22
3.3	Turning of heaps	23
3.4	Sampling	23
3.5	Analysis of samples	24
3.5.1	Chemical analysis of samples	24
3.5.2	statistical analysis of samples	24
4.	RESULTS AND DISCUSSION	27
4.1	C : N ratios	27
4.2	Available P	29
5.	CONCLUSION	31
6.	REFERENCE	32
	APPENDIX - I	35
	APPENDIX - II	38

LIST OF TABLES

1.	Table-I	C:N ratios	25
2.	Table-II	Available P	26
3.	Table-III	Mean C:N ratio	27
4.	Table-IV	Mean available P	29