



EFFECT OF DOMESTIC WASTES ON GERMINATION OF MARUA (ORIGANUM MAJORANA) AND MAIZE (ZEA MAYS)

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ABSTRACT:

The present paper deals with effect of domestic wastes on germination of Marua and Maize. Assaying the activity of enzymes related with hydrolysis of reserve food of seeds. The work of cowdung, whey, papaya peel, orange residue waste liqued sprayed on Marua and Maize. The result revealed on germination of Maruas and Maize the domestic waste would be beneficial for crop plants.

KEYWORDS:

DOMESTIC WASTE, MARUA, MAIZE, SEED GERMINATION.

INTRODUCTION

The waste of cow dung, whey, papaya peel, orange residue are beneficial for the crop plants. The waste influence Maize is popularly known as "corn" and belongs to family of Graminae. Maize is a leafy stalk whose kernels have seeds inside. It is an angiosperm, which means that its seeds are enclosed inside a fruit or shell. Marua is a coarse grain crops and considered to be the poor man's stable nourishment and suitable to cultivate in dry lands Marua helps in reducing weights, diabetes and osteoporosis and marua aata useful in religious purposes..

MATERIAL AND METHODS

50g of wastes of whey, papaya peel, orange residue and cow dung were taken and soaked for 18 hours separately in 200 ml of processed wastes at 10°C taking them in plastic mugs. The mug were covered with polyethylene sheets.

The content of mug was shaken at an interval of 3 hours with glass rod to maintain homogeneity of the wastes.

Soaked seeds were washing with tap water taking 10 seeds per most blotter in ten replicates. These were maintained at 30±0.5°C for six days in diffused light of 5000 lux control was maintained of the seeds soaked only in tap water. The records of germination percent besides the rate of germination was calculated.

RESULT & DISCUSSION

The work treatment on germination of Marua in cow dung 78.6, whey 86.0, papaya peel 70.6, orange residue 76.6 and control 63.3 and in Maize the waste in cow dung 58.6, whey 86.0 papaya peel 62.2, orange residue 62.2 and control 58.6 and Rate of germination in Marua in cow dung 18.52, whey 18.92, papaya peel 20.26, orange residue 18.76, and control 18.06 and an Maize the cow dung 22.54, whey 20.36, papaya peel 22.62, orange residue 22.52 and control 18.86.

TABLE-1 GERMINATION (%) AND RATE OF GERMINATION OF TREATED PLANTS MARUA AND MAIZE SEEDS

SI. No.	Content	Plants	Waste				
			Cow dung	Whey	Papaya Peel	Orange Residue	Control
1	Germination	Marua	78.6	86.0	70.6	76.6	63.3
		Maize	58.6	80.6	62.2	62.2	58.6
2.	Rate of germination	Marua	18.52	18.92	20.26	18.76	18.06
		Maize	22.54	20.36	22.62	22.52	18.86

CONCLUSION

1. The use of domestic waste in plant nourishment would be beneficial for crop plants viz. Marua and Maize.
2. All the four wastes provided the best for Marua by cow dung and Maize.
3. The rate of germination of seeds was higher due to

effect of wastes.

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