



## DOMESTIC WASTES- EFFECT ON GERMINATION OF TWO CROPS. BRINJAL AND TOMATO (SOLANACEAE)

POONAM KUMARI <sup>1</sup> | V K PRABHAT <sup>2</sup>

<sup>1</sup> P G DEPARTMENT OF BOTANY, NALANDA COLLEGE BIHARSHARIF, NALANDA, BIHAR, INDIA.

<sup>2</sup> P G DEPARTMENT OF BOTANY, DR A H RIZVI COLLEGE, KARARI, KAUSHAMBI, U P, INDIA.

### ABSTRACT:

The present paper deals with domestic wastes effect on germination of brinjal and tomato. 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 brinjal and tomato. The result revealed on germination of brinjals and tomato the domestic waste would be beneficial for crop plants.

### KEYWORDS:

DOMESTIC WASTE, BRINJAL, TOMATO, SEED GERMINATION.

### INTRODUCTION

The waste of cowdung, whey, papaya peel, orange residue are beneficial for the crop plants. The waste influence tomato belongs to family of **Solanaceae**. Tomato is a course grain crops and considered to be the poor man's stable nourishment and suitable to cultivate in dry lands tomato helps in reducing weights and brinjal brinjal is a plant species in the nightshade family Solanaceae. Solanum melongena is grown worldwide for its edible fruit. Most commonly purple, the spongy, absorbent fruit is used in several cuisines. it is most common vegetable in India. The crop tender green fruits, which are mucilagenous and cooked in various ways on germination of crops.

### MATERIAL AND METHODS

50g of wastes of whey, papaya peel, orange residue and cowdung 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 brinjal in cowdung 78.4, whey 86.0, papaya peel 70.4, orange residue 76.6 and control 63.3 and in tomato the waste in cowdung 58.6, whey 86.0 papaya peel 62.2, orange residue 62.2 and control 58.6 and Rate of germination in brinjal in cowdung 18.50, whey 18.54, papaya peel 20.26, orange residue 18.76, and control 18.06 and an tomato the cowdung 22.54, whey 20.36, papaya peel 22.62, orange residue 22.50 and control 18.84.

TABLE - 1 GERMINATION (%) AND RATE OF GERMINATION OF TREATED PLANTS BRINJAL AND TOMATO SEEDS

Sl. No.	Content	Plants	Waste				
			Cowdung	Whey	Papaya Peel	Orange Residue	Control
1	Germination	brinjal	78.4	86.0	70.4	76.6	63.3
		tomato	58.6	80.6	62.2	62.2	58.6
2.	Rate of germination	brinjal	18.50	18.92	20.26	18.76	18.06
		tomato	22.54	20.36	22.62	22.50	18.84

### CONCLUSION

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

effect of wastes.

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