



Studies of domestic wastes effect on germination of Ladies Finger and Bajara

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Abstract

The present paper deals with domestic wastes effect on germination of ladies finger and Bajara. 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 Ladies finger and Bajara. The result revealed on germination of Ladies fingers and Bajara the domestic waste would be beneficial for crop plants.

Keywords : Domestic waste, Ladies finger, Bajara, Seed germination

Introduction

The waste of cowdung, whey, papaya peel, orange residue are beneficial for the crop plants. The waste influence Bajara is popularly known as “Pearl Millet” and belongs to family of Graminae. Bajara is a course grain crops and considered to be the poor man’s stable nourishment and suitable to cultivate in dry lands Bajara helps in reducing weights and Ladies finger or Okra 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 10⁰c 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 mountain homogeneity of the wastes.

Soaked seeds were washing with tap water taking 10 seeds per most blotter in ten replicates. These were maintained at $30\pm 0.5^{\circ}\text{C}$ 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 Ladies finger in cowdung 78.6, whey 86.0, papaya peel 70.6, orange residue 76.6 and control 63.3 and in Bajara 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 Ladies finger in cowdung 18.52, whey 18.92, papaya peel 20.26, orange residue 18.76, and control 18.06 and an Bajara the cowdung 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 ladies finger and Bajara Seeds

| Sl. No. | Content | Plants | Waste | | | | |
|---------|---------------------|---------------|---------|-------|-------------|----------------|---------|
| | | | Cowdung | Whey | Papaya Peel | Orange Residue | Control |
| 1 | Germination | Ladies Finger | 78.6 | 86.0 | 70.6 | 76.6 | 63.3 |
| | | Bajara | 58.6 | 80.6 | 62.2 | 62.2 | 58.6 |
| 2. | Rate of germination | Ladies Finger | 18.52 | 18.92 | 20.26 | 18.76 | 18.06 |
| | | Bajara | 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. Ladies finger and Bajara.
2. All the four wastes provided the best for Ladies finger by cowdung and Bajara.
3. The rate of germination of seeds was higher due to effect of wastes.

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