CANNING OF FRUITS AND VEGETABLES

INTRODUCTION

Canning is a preservation technique used to preserve fruits and vegetables in order to increase their shelf life. It also enables the processor, to store excess amount of fruits and vegetables available in season to be used in off-season.

Objectives

After going through this experiment, you should be able to:

- utilize fruits/vegetables for canning;
- increase the shelf life of the fruit/vegetable; and
- process seasonal fruits/vegetables to be used in off-season.

EXPERIMENT

Principle

The principle of canning is to sterilize the food inside by a heat process, after sealing the can, to increase its shelf life.

Requirements (Equipment/Machinery/ Instrument and Chemicals/Material)

- Heating vessels (SS Patiala)
- Stainless steel sieve
- Weighing balance
- Measuring cylinders-Plastic
- Heating equipment a) cooking gas cylinder; b) gas burner
- Double seamers.

Procedure

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Canning of fruits and vegetables

Canning of fruits/vegetables involves the following steps:

A) Preparation of fruit and vegetable for canning

- i) Sorting and grading
- ii) Washing
- iii) Peeling, coring and pitting

The washed fruits and vegetables are prepared for canning by peeling, coring, etc.

- a) Peeling
 - By hand or with knife
 - By machine
 - By heat treatment
 - By lye solution
- *b) Cores and pits:* In fruits they are removed by hand or by machine. e.g., Pineapple. Coring removes fibres and proteolytic enzymes.
- iv) Blanching
- B) Filling in the cans
- C) Syruping or Brining
- D) Liding
- E) Exhausting
- F) Sealing

Flow Diagram of Canning Operation

Receiving raw material & selection Weighing Washing Cutting into slices Pitting/Coring Sorting Washing Filling in the pre-sterilized cans Syruping/Brining Exhausting Closing & Sealing Processing Cooling Storage Marketing

Observations

- Size of the can used
- Amount of fruit or vegetable/Number of cans used
- Time of exhausting
- If there is any leakage
- If there is any swelling of can
- If can remains flat (seems to be normal and properly processed without any defect)
- Tapping sound a) metallic; b) dull.

Results

The given fruit/vegetable is adequately canned. The procedure followed for canning of fruits and vegetables is correct. The can remains flat and without any defect.