EXPERIMENT 6 PREPARATION OF JELLY

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6.0 OBJECTIVE

After completing this practical exercise, you should be able to:

• prepare jelly from fruits and preserve it.

6.1 INTRODUCTION

A Jelly is a semi solid produced prepared by boiling a clear, strained solution of pectin containing fruit extract, free from pulp, after the addition of sugar and acid. A perfect jelly should be transparent, well set, but not too stiff and should have the original flavour of the fruit. It should be of attractive colour and keep its shape when cut. It should not be gummy, sticky or syrupy or have crystallized sugar in. Guava, sour apple, plum, karonda wood apple, loquat, papaya are generally used for preparation of jelly. Pectin (present in fruits), acid, sugar and water are four essential ingredients. Pectin test and determination of end point of jelly formation are very important for the good quality jelly.

6.2 EXPERIMENT

6.2.1 Requirement

• Knives;
• Grater;
• Jelly thermometer;
• Jelmeter;
• Utensils;
• Glass jars; and
• Caps etc.

6.2.2 Procedure

• Select ripe and firm fruits;
• Wash the fruits, peel and make slices;
• Boil the slices with equal quantity of water;
• Add citric acid (g) while boiling;
• After 30 min boiling, strain the extract through a muslin cloth;
• Perform pectin test using jelmeter. Fill the jelmeter with extract and allow to drop the extract for one minute. Note the level of extract. It will indicate the amount of sugar to be added;
• Add about 750 g sugar for 1 litre of guava fruit extract;
• Boil the mixture till the consistency reached above 65 per cent (TSS). It can be checked by refractometer or when temperature reaches 105°C in jelly thermometer;
• Remove the scum and pour the jelly in bottles; and
• Let the jelly cool and cover it with a tight cap.

6.2.3 Observations

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Product</th>
<th>Weight of Fruit (kg)</th>
<th>Volume of Water (l)</th>
<th>Volume of Extract (l)</th>
<th>Volume of Sugar (kg)</th>
<th>Total Product (kg)</th>
<th>Approx. Cost (Rs.)</th>
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6.3 PRECAUTIONS

• The fruit slices should simmer gently and be thoroughly broken up before it is strained.
• The pulp should be allowed to strain without squeezing if a clear jelly is required.
• The sugar should be added only when the strained juice has sufficiently boiled.