MANUFACTURE OF JELLY IN PILOT PLANT

Exercise 1: Pineapple Jelly, Standard Full Fruit Quality (45% fruit content)

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Pineapple juice</td>
<td>4.0 kg</td>
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<tr>
<td>Sugar</td>
<td>4.9 kg</td>
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<tr>
<td>150 grade pectin</td>
<td>30 grams</td>
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<tr>
<td>Citric acid</td>
<td>25 grams</td>
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a) Mix pectin powder with about 200 grams of sugar and put to one side.

b) Place pineapple juice in kettle and bring to a boil.

c) When boiling, turn off steam and add the sugar-pectin mixture and stir for 1 – 2 minutes.

d) Turn steam on again, add the sugar and boil to about 219 – 220ºF (104.0 to 104.5ºC).

e) Check soluble solids with a refractometer.

f) Boil to an end point of 67º - 69º Brix.

g) When Brix is reached, remove surface scum, fill into preheated jars, close, and stand on lid to cool.

The jars are preheated by standing water for several minutes at 130 – 150ºF (55 – 65ºC), then drain and fill hot jelly. The preheating prevents cracking of the glass from thermal shock.

After two minutes, the jars may be cooled by standing up to the neck in water at 120 – 130ºF (50 – 55ºC). The water temperature can gradually be reduced as the jelly cools.

Notes:
1. An easy way to obtain the pineapple juice is to purchase large cans of juice.
2. Use whatever grade of pectin is available adjusting the quantity if it is not 150 grade.
3. The citric acid can be replaced by an equal amount of any fruit acid such as tartaric or malic acid but do not use acetic acid (vinegar).

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