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'Our Business is Industry..."

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Livelihood Technology Series 44 Passion Fruit Processing

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PASSION FRUIT PROCESSING

INTRODUCTION

Passion fruit is found in many tropical and sub-tropical countries. It is popular because of its many uses. It is an ovoid shaped fruit which gives a juice with a very strong exotic flavor, and a bright orange color. The pulp of passion fruit can be preserved by heat processing and/or freezing. Fresh and/or processed juice is utilized in ice creams, sherbets, fruit nectars or juices or in combination with citrus, pineapple and other juices; jams, jellies and marmalades, and concentrates. On the other hand, passion fruit rind can be processed into candy and preserves.

PASSION FRUIT JUICE

It is the natural juice obtained after the removal of seeds and excess pulp. The juice offers a distinct flavor of passion fruit and golden yellow in color. Its pH is 2.7 to 3.4 and TSS $15^{\circ}Bx$.

RAW MATERIALS

passion fruit carboxyl methyl cellulose (CMC) sodium benzoate sugar

UTENSILS/OTHER MATERIALS

bottles thermometer knife chopping board spoon strainer stainless kettle double boiler ladle measuring cups & spoons weighing scale

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PROCESS

- 1. Wash fruit.
- 2. Cut and scoop out seeds and pulp.
- 3. Strain to obtain the juice.
- 4. Mix/Blend thoroughly 0.1% CMC and 0.01% sodium benzoate (based on the weight of the strained juice).
- 5. Heat the juice. Add the dry mixture. Pasteurize for 5 minutes, 80° ± 82°C.
- 5. Fill in bottle. Seal.
- 6. Process for 10 minutes in boiling water.
- 7. Air cool.

PASSION FRUIT NECTAR

Passion fruit nectar offers a distinct flavor of passion fruit, golden yellow in color, thicker in consistency than the ordinary fruit juice drink. Its pH is 2.7-3 and TSS is $49^{\circ}-50^{\circ}$ Bx.

RAW MATERIALS

passion fruitcarboxyl methyl cellulose (CMC)sugarsodium benzoate

UTENSILS/OTHER MATERIALS

Bottles Thermometer Knife chopping board Strainer ladle basin (plastic) stainless kettle double boiler measuring cups & spoons

PROCESS

- 1. Wash passion fruit.
- 2. Cut and scoop seed/juice.
- 3. Strain passion fruit juice.
- 4. Mix 1 part sugar with CMC (0.1% based on weight of strained juice) and 0.5 part water (1:0.5).

- 5. Add 0.01% sodium benzoate (based on the strained juice).
- 6. Pasteurize at 82°C for 1 minute.
- 7. Fill in bottles and process at 100°C for 10 minutes.
- 8. Cool to room temperature. Clean bottles, wipe to dry.
- 9. Label, pack in boxes and store in clean storage room.

RIND CANDY

Candied fruits are translucent sweetened fruits which come in various shapes usually in strips and cubes. They retain the color of the fresh fruit and appear firm but are soft and chewy.

RAW MATERIALS

passion fruit rind sugar lime

UTENSILS/OTHER MATERIALS

stainless steel knife chopping board colander ladle measuring cups & spoons weighing scale

PROCESS

- 1. Wash peels.
- 2. Pare (optional) and slice.
- 3. Soak in lime for about 2 hours. (Dissolve 1 tbsp lime in 4 cups water.)
- 4. Wash fruits under running water.
- 5. Blanch rinds for 5 minutes.
- 6. Cool under running water.
- 7. Prepare syrup enough to cover fruits, made up of one part sugar and one part water.
- 8. Boil rinds in syrup for 3 minutes.
- 9. Set aside overnight.

- 10. Drain rinds and add ¹/₂ part sugar (based on previously added sugar) to the syrup.
- 11. Add rinds (previously soaked overnight) and let it boil.
- 12. Set aside overnight.
- 13. Drain, wash and dry under the sun by using a solar drier or a cabinet dryer.

RIND PRESERVE

This product is similar to other traditional bottled sweet preserves like beans in syrup, langka in syrup, etc.

RAW MATERIALS

passion fruit rind sodium benzoate sugar

citric acid

UTENSILS/OTHER MATERIALS

knife chopping board strainer/colander Ladle stainless steel casserole Stove

PROCESS

- 1. Wash the peels.
- 2. Pare and slice into cubes.
- 3. Drain and blanch for 2 minutes.
- 4. Prepare syrup (2 parts sugar and one part water).
- 5. Add sodium benzoate (0.01% based on weight of edible portion).
- 6. Boil in fruit and add citric acid (if desired).
- Pack in bottles, exhaust (80°C for 20 minutes) and seal. 7.
- Process in boiling water for 30 minutes. 8.
- 9. Cool.

NOTE: Formulations and procedures for rind candy and preserves are based on other fruit preserves. These processing procedures were not yet scaled up for passion fruit.