LIME JUICE
SMALL-SCALE PRODUCTION

Limes are often grown in abundance in tropical and sub tropical countries. Their seasonal availability gives rise to gluts in the market, which means that growers do not get the full reward for their labours. Fresh limes are perishable items. It is often difficult to get them to the fruit market in a state where they still fetch a good price. Making the limes into lime juice can alleviate these problems. The technology required is simple and due to the very acidic juice of limes (pH 2.0), spoilage or food hygiene problems are minimal. Lime juice is popular as it is an important ingredient in many a cuisine, or can be made into a drink. The skin can be incorporated into lime pickle to reduce wastage.

Recipe
Raw lime juice
Preservative (Sulphur dioxide 350ppm) derived from sodium metabisulphite

Preservatives are controlled by legal limits, these limits vary from country to country, you should check the limits at your Bureau of Standards.

Method
Wash whole fruits and discard any bad fruit.

Cut the fruits in half and squeeze out the juice by hand or with a squeezer (this can be two grooved wooden rollers). Separate the seeds from the juice. The yield of juice from whole limes is 40%.

Pasteurise the juice at 90°C for one minute in a stainless steel saucepan, or earthenware pot. Pasteurisation of the lime juice stops separation and browning during storage.

Hot fill the juice into clean, sterilised bottles and lie the bottles on their side to cool. One 190ml bottle holds the juice from approximately 16 lime fruits.

Process summary

- Wash limes
- Squeeze/extract the juice
- Add sodium metabisulphate
- Pasteurise
- Bottle
- Cap
- Cool
- Label
References and further reading

- Practical Action Technical Briefs (Juices)
  - Mixed fruit juice manufacture
  - Lime juice
  - Lime cordial
  - Nas naran lime juice
  - Passion fruit juice

- Lime Marmalade, Practical Action Technical Brief
- Lime Oil & Juice, Practical Action Technical Brief
- Pickled dry salted lime, Practical Action Technical Brief

- Small-scale processing of ready to drink pineapple juice, Food Chain No 27
- Principles and practices of small and medium-scale fruit juice processing, FAO Agricultural Services Bulletin 146, Food and Agriculture Organization of the United Nations (FAO), (2001).
- Technical manual on small-scale processing of fruits and vegetables, Food and Agriculture Organization of the United Nations (FAO)
- Setting up and Running a Small Fruit or Vegetable Processing Enterprise: Opportunities in Food Processing, CTA
- Starting a Small Food Processing Enterprise by Peter Fellows, Ernesto Franco & Walter Rios
- Practical Action Publishing/CTA 1996
- Fruit and Vegetable Processing UNIFEM Practical Action Publishing, 1993