## Peter's Home Brew Alcoholic Ginger Beer for Keg dispensing.

After fermentation I will be placing in a Cornelius ball lock 19 litre keg, for forced carbonation & maturation.

Target brew quantity is 19 + 1 = 20 litres, thus avoiding bottles (can't allow secondary bottle fermentation when back-sweetening).

I will need to back sweeten with appropriate natural sweetening products. For this I intend to use supermarket bought Pear Nectar, pear juice or apple juice. Back sweetening will be "by taste".

## The wort will comprise

500 grams approx of frozen ginger pulp, pulped in a food processor after peeling the root ginger then frozen in small lots for later convenient use

Note that my research shows wild variations in the quantity of root ginger used per litre. Kitchen experimentation on a small scale has shown that 250 grams is the minimum. I may need to be prepared to add more ginger up to 500 grams or more, total during or after fermentation.

1.7 Kg tin of Coopers light amber malt extract, added principally to allow fermentation to a level of about 4.5% ABV.

0.5 Kg of brown or Demarera sugar, some debate about the choice here, I am tending to the choice of Demerara, or 50:50. Any flavour carry over of molasses is thought to be a non issue.

1 Kg of 75% Dextrose-25% Maltodextrin.

4 gram sachet of Yeast Nutrient (commercial product, exact composition unknown.

5 gram sachet wine yeast – "Lalvin EC-1118". (Rehydration is called for on sachet label). Juice of two lemons.

## **Total fermentable material**

3.2 Kg (Compare typical beer fermentables for 23 litre brew = 3.9Kg)

## Wort prep:

- Boil gently the ginger pulp for 15 mins in 3 litres of water.
- Strain off the fluid, washing down with filtered water if necessart to improve extraction.
- Add ginger extract fluid to fermentor & disolve sugar, dextrose & malt extract, add up to a further 1.5 litres of boiled water to accomplish this.
- Add nutrient & lemon juice.
- Add filtered cold water aiming to pitch yeast at 24 Deg C.
- Allow temp to stabilise at 20 deg C, & aim to maintain this temp during fermentation.
- When fermentation has completed, allow 5 days for yeast to settle before transfering to keg.
- By taste back-sweeten in the keg. I used 2 litres of pear juice & one whole 750ml bottle of Bunderin Ginger Refresher Cordial (not reduced sugar).
- Sealup the keg, purge & start forced carbonation.

General opinion seems to be that adding direct to a wort around 25 deg C (after the wort has been aerated) is OK.

Complicated rehydration instructions direct from Lalvin are not well presented & leads to confusion.

**Comment:** Surprised to find that before fermentation & after extraction from ginger root, It was judged necessary to up the ginger root content to 600 grams, even then the taste was not particularly strong.

Need to be prepared to add more extract post fermentation.

In the above brew the yeast was added to wort at 25.5 deg C whilst ambient room temp was 20 deg C. Rehydration was judged unnecessary.

In future the pulping & freezing of ginger root will be followed because it leads to flexibility. But peeling the root is a tedious job & maybe a scrub wash would suffice then into the blender?

On my second brew my wifge scrubbed the rhizomes & peeled as little as she could. Then she sliced up the rhizomes to about 1.5 mm thickness (they are quit tough to cut). Pulping required a 1000 watt "Nutribullet" processor & the addition of water. Eventually, starting with 1 Kg of rhizomes, we filled to about 90% 24 cup cake mold tins. We have now more than sufficient for extraction by a 15 min boil, but will be able to easily adjust to taste.

**Result:** This was a first attempt & I was initially disappointed because there seemed to be a musty nose to the ginger beer.

Afterr 2 weeks, during which the yeast never properly settled, this seemed to disappear. The ginger taste is strong getting you in the back of the throat.

A good head ws observed, & I found myself just as inclined to drink this first GB, as any of my other beers.

The wife found the ginger a bit strong & she prefers a sweeter finish. I thought both were near ideal but would have been happy with a less sweet brew.

Very early in planning this brew I had intended to add chilli & cinamon. I never did this because I was not confident that I had any reliable measure of how much of either to use. Forums covering this do not adequately deal with this so no help there.

This is good GB, well worth brewing on an ongoing basis.

BTW I never bother much with ABV, In this case I think it is about 3.5%. Much stronger & the wife would complain.