## Fermenation Notes

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# Chapter 1

# Introduction

Just a place to archive / backup my fermentation notes while learning a bit about R and bookdown.

Testing github pages update

## Chapter 2

## Kombucha

## 2.1 Grapefruit

#### **Bulk Ferment**

Sunday, 23 May

Scoby and starter donated from Daniella.

 $\label{lem:method:https://food52.com/blog/13548-my-adventures-in-brewing-kombucha-how-you-can-do-it-too} \\ Method: https://food52.com/blog/13548-my-adventures-in-brewing-kombucha-how-you-can-do-it-too} \\$ 

- 6 cups boiled, then steeped with 8 bags of black tea, 20 minutes
- 1 cup of sugar dissolved in hot water
- 6 cups cold added + 1 more when added to crock
- Added Daniela's mother and the starter it came in
- Covered with tea towel

#### Second Ferment

Wednesday, 2 June

- Bottled
- Output:  $5 \sim 16$  oz bottles
- Flavor: all 5 (2 tbsp)  $\sim$ 25 ml grapefruit juice

## 2.2 Ginger and Honey

#### **Bulk Ferment**

Wednesday, 2 June

• Made a new batch using same instructions as listed above; kept the mother in the crock and just added new tea to it

#### Second Ferment

Saturday, June 12

- Bottled second batch
- Output: 5 bottles
- Flavor: ginger ( $\sim$ 1in worth of matchsticks) +  $\sim$ .5 teaspoon honey

### 2.3 Grapefruit

#### **Bulk Ferment**

Saturday, June 12

• Made another batch, same instructions

#### **Second Ferment**

• ~30 ml grapefruit juice added to each bottle

### 2.4 Grapefruit and Orange

#### **Bulk Ferment**

Tuesday, June 22

Made another batch, same method

#### Second Ferment

Tuesday, June 27

- Flavor for second ferment was one grapefruit and one orange.
- $\sim$ 25 ml in each
- Did a plastic bottle for first time; had meant to leave more air.
- Next time fill to base of tapered neck.

## 2.5 Watermelon, Lime, and Mint

#### **Bulk Ferment**

Sunday, June 27

Same recipe, a little extra water.

#### **Second Ferment**

Tuesday, July 6

- Watermelon, mint, and lime.
- Juiced half a watermelon.
- Muddled about a dozen mint leaves with a little sugar and splash of water.
- Added juice of two limes
- $\sim$ 40-50 ml of this juice added to each bottle, filled with kombucha
- Used old kirkland kombucha bottles from a friend and one plastic coke bottle as a carbonation gauge.

### 2.6 Peach and Ginger

#### **Bulk Ferment**

Tuesday, July 6

Brewed new batch as usual. Added one 16 oz bottle of water to fill the crock.

Plastic bottle was hard after a few days, put in fridge. Could have let it get harder, as bottles didn't have much carbonation, but gained some in fridge (we were gone July 11-16).

#### Second Ferment

Sunday, July 18

- 12 day first ferment
- Peaches and ginger
- One plastic bottle as carbonation gauge

#### 2.7 Peach

#### **Bulk Ferment**

Sunday, July 18

No notes.

#### Second Ferment

Flavored with just peach. Opinion: ginger and peach is better.

## 2.8 Strawberry Kiwi

#### **Bulk Ferment**

No dates / notes

#### Second Ferment

Sunday August 29

Flavor: **strawberry kiwi**, Cara and Arlo liked best yet.

## 2.9 Nectarine and Blueberry

#### **Bulk Ferment**

Sunday August 29

No notes.

#### **Second Ferment**

Saturday September 18

Nectarine and frozen blackberries

## 2.10 Ginger and Mint

#### **Bulk Ferment**

Saturday September 18

#### Second Ferment

Ginger and mint

## 2.11 Apple and Ginger?

No date / notes

#### Second Ferment

Apple and ginger maybe?

## 2.12 Mystery?

#### **Bulk Ferment**

Sunday October 31

#### Second Ferment

No date

Ginger and lemon

## 2.13 Pear and Ginger

#### **Bulk Ferment**

No date / notes

Left for a few months. Checked periodically to ensure nothing looked off.

#### **Second Ferment**

Sunday January 23, 2022

Had reduced to <4 bottles during F1, trying f2 for science. One plastic bottle for carbonation guage.

- Flavor: pear and ginger
  - 1 cc size cubes
  - Sugar: 1/2 tsp in each bottle

Unknown date

Update: none carbonated, f2 for a couple of weeks at room temp. Tasted fine though, maybe a bit more tart than usual.

## 2.14 Strawberry

#### **Bulk Ferment**

Sunday January 23, 2022

#### Second Ferment

Tuesday, May 17

Again let sit for several months.

- Quantity: 4 soda bottles filled to top of label
- Flavor: about 12 strawberries and a sizable scoop full of sugar
  - Macerated the strawberries in the sugar. ∼60 ml per bottle

Thursday may 26

All four soda bottles firm enough to not give, refrigerated

• Thoughts: a bit too sweet

## Chapter 3

# Ginger Beer

#### 3.1 Batch 1

#### Bug

Early September 2021

Started a ginger bug, chlorine evaporated water from starter sourdough jug. Arbitrary amount of grated ginger in small amount of initial water. After about a week added more ginger and a bit of sugar. Started shaking it, got bubbly.

#### **Bulk Ferment**

September 18 2021

- Cut up a few chunks of skinned ginger and simmered in 2 qts of tap water for  $\sim 15$  minutes.
- Strained out ginger solids
- Added 2 cups sugar, stirred too dissolve
- Added 2 qts of tap and let cool
- Added strained ginger bug
- F1 in cloth covered crock

#### **Second Ferment**

No notes, but it was pretty good. Definitely different than commercial versions.

#### 3.2 Batch 2

#### Bug

May 24-ish, 2022

Started bug with occasional feedings of arbitrary amounts. Grew vigorous after a few days, but ran out of ginger mid-covid quarantine so had to wait for a grocery pick up and bug grew stagnant. Revived with a couple (two) feedings, noticed a *few* bubbles on May 31st. All feedings used de-chlorinated water left out overnight and ginger (skin included) grated on the fine side of a box grater.

#### **Bulk Ferment**

May 31, 2022

Loosely followed The Art of Fermentation method.

- Simmered 2 quarts of water with ~5 in of coursely grated ginger (skin included, not sure if appropriate to have left it on) for about 15 minutes
- Dissolved 2 cups 400 g sugar
- Added 2 quarts cool water to dilute, tasted and let cool to room temp for several hours (very warm day)
- Added bug (slightly less than  $\sim 2$  cups)
- Mixed then strained through fine mesh sieve

#### Output

Split perfectly between a half-gallon mason jar and a 2 liter kliner jar.