

Beer Name: Sour Mango Chicha Version 1
Release Date: 6/10/2021

Homebrew Recipe for 5 gallon batch

Target Water Profile (ppm)

| | | | |
|-----------|-----|-------------|----|
| Calcium | 66 | Sodium | 4 |
| Magnesium | 12 | Bicarbonate | 9 |
| Sulfate | 108 | Chloride | 78 |

Grain Bill

| | <u>lbs</u> | <u>oz</u> |
|-----------------------|------------|-----------|
| Pale Yellow Corn Malt | 4 | 11 |
| Pale Rice Malt | 2 | 15 |
| Flaked Quinoa | 1 | 8 |
| Total Grain Weight | 9 | 2 |

Enzymes

| | <u>mL</u> |
|--------------|-----------|
| Ceremix Flex | 7.3 |
| Ondea Pro | 10.6 |
| Termamyl | 10.6 |

Mash Step

| | Temp (Fahrenheit) | Time Length (Minutes) |
|---|-------------------|-----------------------|
| 1 | 125 | 20 |
| 2 | 175 | 60 |

Rise from Step 1 to Step 2 should take 45 minutes

Souring

Boil wort for 5 minutes, then add lactic acid to drop pH to 4.3
Cool wort to 105 degrees F and pitch Lallemand WildBrew Helveticus Pitch
Maintain temp in 95-105 degree range for 2-3 days, until pH reaches 3.6 at most. Then proceed to boil.

Boil Addition

| | <u>Quantity</u> | <u>Time Added</u> |
|---------------------|-----------------|-------------------|
| Sorachi Ace | 0.4 oz | 10 min |
| Agave Nectar | 1 lb 3 oz | 10 min |
| Yeastex 61 Nutrient | 1.5 grams | 10 min |
| Irish Moss | 1/4 tsp | 10 min |

Fermentation

Yeast: Lallemand Voss Kveik
Temperature: 92 degrees F
Time: 7 days

Add 2.5 lbs of aseptic mango puree after 3 days of fermentation

Targets

| | |
|--------------------------|-------------|
| Mash pH | 5.5 |
| Preboil Gravity | 1.049 |
| End of Boil Gravity (OG) | 1.061 |
| Final Gravity | 1.014 |
| ABV | 6.2% |
| IBU | 10 |
| Carbonation | 2.6 vol CO2 |

Recipe Notes

Boil length is 10 minutes total
All enzymes added at start of mash
HERMS, RIMS, or BIAB required for rising step mash
All malts should be milled with a mill gap of 0.65 mm
Ingredients available through glutenfreehomebrewing.com
Contact jason@mutantis.beer with questions!