



WHITE KOJI SAISON

CHORYO SHUZO / NARA, JAPAN

ALL-GRAIN

Batch size: 100 liters
Brewhouse efficiency: 72%
OG: 1.046
FG: 0.998
IBUs: 18
ABV: 6.5%
Final Product: pH 4.15
Titratable Acidity 3.12

MALT/GRAIN BILL

15 kg Pilsner Malt
3 kg Wheat Malt
1 kg Crystal Oak
2 kg White Koji
* 500 g Mash In
1,000g Mash End
500g Fermenter

HOPS SCHEDULE

20 g Sorachi Ace at 60 minutes [6 IBUs]
80 g Sorachi Ace at 10 minutes [8 IBUs]
100 g Sorachi Ace at Whirlpool [4 IBUs]
500g Sorachi Ace at Dip hop



PREPARE

- Make the **Koji Mash** in the day before brewing

MASH

- 50 min Mashing : temperature 147.2°F
- Adding white koji (500g) aim for a mash pH of 5.2–5.4

MASH OUT

- After saccharification is complete, add the remaining koji

LAUTERING

- Sparge at 168.8°F and top up as necessary

BOILING

- 60 min boiling: adding hops according to the schedule.
- **Dip Hop** in the fermenter at this time.

WHIRLPOOL

FERMENTATION

- Chill to about 69.8°F
- Add plenty of healthy yeast, and aerate if yeast required
- Ferment at 69.8°F, allowing the temperature to rise to 75.2°F.
- If possible, remove the hops and koji on the 4th day or so.
- Once the beer reaches terminal gravity, crash to 30°F, remove the yeast and hops, and condition 1 week before filtering and packaging.

FINAL PRODUCT

pH 4.15, Titratable Acidity 3.12. The result shows it's not so tart, but you can get a bit of refreshing tartness. Lemony citrus aroma without grassy hop aroma.

Koji Mash

At the start of the mash, put the koji and 5 times the amount of 147.2°F water in a separate container from the mash tun and mix well.

It allows for maximum sugar extraction and enzymatic action to reduce stickiness.

Dip Hop of White Koji

60 minutes before knockout, dip hop the fermenter with koji, hops, and 6 times their total volume of 149°F water to reduce the green aroma of hops without making them bitter.

Polysaccharides are broken down by glucoamylase and other saccharification enzymes to reduce specific gravity to 1.000 and create a dry taste.