

02

OF RICE AND ZEN

FIFTH HAMMER BREWING CO / NEW YORK

ALL-GRAIN

Batch size: 11.7 Hectoliter
Brewhouse efficiency: 83%
OG: 11 Plato
FG: 2 Plato
IBUs: 23
ABV: 4.8%
Final Product: pH 4.16

MALT/GRAIN BILL

136 kg Briess Pilsen Malt
68 kg Briess Brewers Brown Rice Flakes
23 kg Briess Carapils Malt
39 kg White Koji
*11kg Full mash
28kg Lauter

HOPS SCHEDULE

227 g Citra 13% AA at First Wort [5 IBUs]
907 g Citra 13% AA at 30 minutes [15 IBUs]
1360g Citra 13% AA at Flame out [3 IBUs]

YEAST

Imperial L13 Global Lager Yeast



DIRECTION

Mix 693 Liters of 167°F water with the milled grains to achieve a mash temperature of 167°F. Add white koji as needed to achieve and maintain a pH of 5.4. Let mash rest for 75 minutes. After 75 minutes, add the remaining koji and raise mash temperature to 168.8°F. Lauter 11 bbls of wort to kettle. As you begin the lautering, add the First Wort hop addition. Bring wort to a boil. Boil for 90 minutes, adding the second hop addition after 60 minutes. After 90 minutes, turn off heat and add final hop addition. Whirlpool 5 minutes, and let rest 15 minutes. Transfer wort into fermenter at 11 degrees Celsius. Add yeast and yeast nutrient (zinc sulfate heptahydrate). Ferment at 11 degrees Celsius for 30 days (longer if possible - 5+ weeks is ideal). Separate beer from yeast and force carbonate to 2.52 volumes of CO₂. Package in desired format/s.

BREWERS NOTE

We chose Citra hops to play into expected citrus like qualities of the White Koji contribution. In that interest of achieving white koji flavor contribution, we deliberately used more koji than what was simply required for mash pH. We added the gratuitous koji into the mash following full mash conversion and prior to lautering. With this, we achieved more flavor contribution at the same time as driving our pH down pretty low compared to most worts at the beginning of fermentation. This said, during fermentation the pH did not lower to unpleasant acidity levels. It remains a delightfully bright and crisp refreshing lager without treading into sour territory. Very fun to use koji in this way.