

Sour Belgian/American Wheat Beer - 4.9%

Mixed-Fermentation Sour Beer

Author: Miðgarð Brewhouse

Type: All Grain

IBU : 19 (Tinseth)
 BU/GU : 0.41
 Colour : 6 EBC
 Carbonation : 2.6 CO2-vol

Pre-Boil Gravity : 1.034
 Original Gravity : 1.044
 Total Gravity : 1.047
 Final Gravity : 1.010

Fermentables (1.11 kg)

408 g - Hana Malt 2 EBC (36.8%)
 304 g - Torrified Wheat 3.9 EBC (27.4%)
 ^ The Malt Miller (UK) MAL-03-006
 203 g - Wheat Malt 4.1 EBC (18.3%)
 ^ Get 'er Brewed (NI) GEB2147
 102 g - Flaked Torrefied Oats 5 EBC (9.2%)
 51 g - Hana Vienna 3.9 EBC (4.6%)
 ^ tweak me
 41 g - CaraGold 12 EBC (3.7%)
 ^ The Malt Miller (UK) MAL-01-000
 35 g - Bottling - Sugar, Table (Sucrose) 2 EBC
 ^ Albert Heijn (NL)

Hops (34.2 g)

5 min - 11.2 g - Simcoe - 12.2% (14 IBU)
 ^ Hopeye (GB) HE-50G-HOPS-SIMCOE (50 grams)
 5 min - 6.2 g - Amarillo (T90) - 8.4% (5 IBU)
 ^ The Malt Miller (UK) HOP-05-007

Dry Hops

4 days - 11.2 g - Simcoe - 12.2%
 4 days - 5.6 g - Amarillo (T90) - 8.4%

Miscellaneous

Mash - 0.28 g - Baking Soda (NaHCO3)
 ^ Lot # 41190621/3
 ^ Brouwstore (NL) 003.106.2
 Mash - 0.49 g - Calcium Chloride (CaCl2) 33 %...
 ^ Lot # 115038
 ^ Brouwstore (NL) 055.035.0
 Mash - 0.47 g - Canning Salt (NaCl)
 ^ Albert Heijn (NL)
 Mash - 0.19 g - Epsom Salt (MgSO4)
 ^ Lot # /2119000091
 ^ Brouwstore (NL) 055.027.7
 Mash - 0.19 g - Gypsum (CaSO4)
 ^ The Malt Miller (UK) CHE-03-004
 Mash - 20 g - Juniper Berries
 ^ Brouwmaatje (NL) 054.114.1
 Mash - 1 ml - Lactic Acid 80% 88%
 ^ Lot # 20200213
 ^ Brouwstore (NL) 003.002.3
 5 min - Boil - 4 g - Coriander Seed
 ^ The malt Miller (UK)
 5 min - Boil - 2 g - Grains of paradise
 5 min - Boil - 5 g - Orange Peel, Bitter
 ^ Brouwpunt (NL)

Yeast

01 Brouwpunt 5L (60min) (rev 4)

Batch Size : 5.6 L
 Boil Size : 7.76 L
 Post-Boil Vol : 5.96 L

Mash Water : 2.42 L
 Sparge Water : 6.23 L
 Boil Time : 60 min
 Total Water : 8.65 L



6 EBC

Brewhouse Efficiency: 71.8%

Mash Efficiency: 73.3%

Mash Profile

01 One Step Mash (60 min)
 72.1 °C - Strike Temp
 66 °C - 60 min - Temperature
 76 °C - 10 min - Mash out

Fermentation Profile

01 Ale + DR + Conditioning
 18 °C - 10 days - Primary
 21 °C - 4 days - Diacetyl rest
 18 °C - 14 days - Carbonation
 18 °C - 28 days - Conditioning

Water Profile

02 NL Spa Reine Flat Mineral Water (www.ah.nl...)
 Ca 17 Mg 4 Na 33 Cl 50 SO 25

SO/Cl ratio: 0.5

Mash pH: 5.35

Sparge pH: 6

Measurements

Mash pH:

Boil Volume:

Pre-Boil Gravity:

Post-Boil Kettle Volume:

Original Gravity:

Fermenter Top-Up:

Fermenter Volume:

Final Gravity:

Bottling Volume:

Sour Belgian/American Wheat Beer

Recipe Notes

Target: OG = 1.044.

Sour Belgian/American Wheat Beer Brewday (Part 1).

Brewing Belgian beers and specifically Witbier is what got me into brewing all those years ago, so I seem to be rather good at them after lots of practising, Wits especially. So I thought with a bit of extra time this festive break I'd try and mix it up a bit.

What I devised was a similar base to my regular Wit Eostre but with 18g of crushed Juniper berries in the mash and trying out Crisp Malt Hana malt.

So that's 38.1% Hana, 24.8% Torrified Wheat, 19% Wheat, 9.5% Flaked Torrified Oats, 4.8% Hana Vienna and 3.8% Cara Gold.

First part of the kettle souring process is to mash (66 C) and sparge (76 C) as normal, then boil for 5 mins before cooling to 30 C to pitch Omega Yeast Lacto blend into the Brewzilla.

Cover that over and leave for 24-72 hours, holding 30c. Not sure how long it'll take but at least I have a pH reader this time. Aiming for about 3.0-3.7 pH.

I'll post again soon when I get onto part 2.

Sour Wheat Brewday (Part 2).

Bit late posting this but you know, Christmas and that got in the way.

Well it actually took about 32 hours to drop the wort pH from 4.9 to 3.2 with the Lacto pitch held at 29 C. So Christmas Eve morning was spent with the second part of the Brew getting underway.

I brought it all up to boil for 40 minutes before adding any of the next load of ingredients. Slight disaster was that I only had 4 g of coriander seeds when I wanted to add 25 g but I subbed in 2 g of Grains of Paradise along with 20 g Bitter Orange peel and the rind and juice of 1 lemon to spice it up a bit more.

Now the 2nd twist was some fruity American hops, 30 g Amarillo and 50 g Simcoe. All this was added for the last 5 minutes of the boil, then I cooled in the brewzilla before transfer. Pitching Mangrove Jack's M21 Belgian Wit Yeast with a dash of Yeast nutrient.

I'll also be looking to dry hop with 25 g Amarillo and 50 g of Simcoe later.

Took a little while for the Yeast to get going but by Christmas morning it was bubbling away. Gravity wasn't far off target at 1.044, I think my volumes were up a touch though so probably balances out.

Sample was very promising, so fingers crossed.