The League "The Beeper" (PE)

Belgian IPA (21 B)

Type: Partial Mash
Batch Size: 23.00 L
Boil Size: 6.00 L
Boil Time: 30 min
Final Bottling Vol: 21.49 L
Fermentation: Belgian Ale

Date: 11 Feb 2019
Efficiency: 55.00 %
Est Mash Efficiency: 59.5 %



Brewing Notes:
This beer is fermented at higher temperatures than typical ales. The higher fermentation temperatures are required to ensure maximum flavour contribution from the yeast and ensure complete attenuation.

1. Heat 3.8 litres of water to 68C, remove from heat, add grains mixing thoroughly, cover and let steep for 30 min.
2. Remove grains and rinse with 3.5 litres of warm water if using a grain bag or alternatively, top up with water to a boil volume of 6 litres.
3. Bring to a boil, add the bittering hops and boil for 30 min.
4. Remove from heat, add steep/whirlpool hops, and let set for 30 min uncovered.
5. When complete, strain and add to extract mixture in the fermenter. Top up fermenter to 23 litres.
6. Pitch at 18C and keep as close to this temperature as possible for 3 days. After 3 days, let rise up to a maximum of 25C and hold until fermentation is complete. If possible, cold crash for a few days before packaging and let age for a minimum of 2 weeks.
7. Carbonate to 2.6 volumes of CO2.

Mash or Steep Grains

Mash Ingredients

Amt	Name	Type	#	%/IBU	Volume
0.800 kg	Gladfield Vienna Malt (6.8 EBC)	Grain	1	17.2 %	0.52 L
0.400 kg	Gladfield Aurora Malt (58.0 EBC)	Grain	2	8.6 %	0.26 L
0.060 kg	Gladfield Sour Grapes Malt (acid malt) (4.0 EBC)	Grain	3	1.3 %	0.04 L

Mash Steps

Name	Description	Step Temperature	Step Time
Mash Step	Add 3.78 L of water and heat to 67.0 C over 0 min	67.0 C	30 min

Add water to achieve boil volume of 6.00 L
Estimated pre-boil gravity is 1.038 SG

Boil Ingredients

Amt	Name	Type	#	%/IBU	Volume
50.00 g	Rakau (Alpharoma) [9.00 %] - Boil 30.0 min	Hop	4	44.4 IBUs	-

Steeped Hops

Amt	Name	Type	#	%/IBU	Volume
50.00 g	Pacifica [4.50 %] - Steep/Whirlpool 30.0 min, 80.0 C	Hop	5	4.5 IBUs	-
50.00 g	Wai-iti [1.40 %] - Steep/Whirlpool 30.0 min, 80.0 C	Hop	6	1.4 IBUs	-
30.00 g	Mandarina Bavaria [7.60 %] - Steep/Whirlpool 30.0 min, 80.0 C	Hop	7	4.6 IBUs	-

Estimated Post Boil Vol: 5.58 L and Est Post Boil Gravity: 1.053 SG

Cool and Transfer Wort

Cool wort to fermentation temperature
Transfer wort to fermenter
Add water if needed to achieve final volume of 23.00 L

Pitch Yeast and Measure Gravity and Volume

Fermentation Ingredients

Amt	Name	Type	#	%/IBU	Volume
1.700 kg	Black Rock LME Unhopped Light [Primary] (5.9 EBC)	Extract	8	36.5 %	1.20 L
1.700 kg	Black Rock LME Unhopped Ultra Light [Primary] (5.9 EBC)	Extract	9	36.5 %	1.20 L
2.0 pkg	Belgian Abbey (Mangrove Jack's #M47)	Yeast	10	-	-

Measure Actual Original Gravity _____ (Target: 1.053 SG)
Measure Actual Batch Volume _____ (Target: 23.00 L)

Fermentation

11 Feb 2019 - Primary Fermentation (3.00 days at 18.0 C ending at 18.0 C)
14 Feb 2019 - Secondary Fermentation (2.00 days at 18.0 C ending at 25.0 C)
16 Feb 2019 - Tertiary Fermentation (10.00 days at 25.0 C ending at 25.0 C)

Dry Hop and Bottle/Keg

Dry Hop/Bottling Ingredients

Amt	Name	Type	#	%/IBU	Volume
70.00 g	Mandarina Bavaria [7.60 %] - Dry Hop 5.0 Days	Hop	11	0.0 IBUs	-
50.00 g	Pacifica [4.50 %] - Dry Hop 5.0 Days	Hop	12	0.0 IBUs	-
50.00 g	Wai-iti [1.40 %] - Dry Hop 5.0 Days	Hop	13	0.0 IBUs	-

Measure Final Gravity: _____ (Estimate: 1.010 SG)
Date Bottled/Kegged: - Carbonation: Bottle with 126.38 g Corn Sugar