Brewfather
www.brewfather.app

Paavo Pruul’s Koduõlu - 7.6%

Sahti
Author: Lars Marius Garshol

Type: All Grain

IBU	: 9 (Tinseth)
BU/GU	: 0.12
Colour	: 15 EBC
Carbonation	: 2.4 CO2-vol
Pre-Boil Gravity	: 1.059
Original Gravity	: 1.077
Final Gravity	: 1.019

Fermentables (1.89 kg)
1.892 kg - Vienna Malt 8 EBC (100%)
^ The Malt Miller (UK) MAL-00-014

Hops (5.1 g)
60 min - 5.1 g - Saaz - 4.4% (9 IBU)
^ The Malt Miller (UK) HOP-06-000

Miscellaneous
Mash - 1.65 ml - Calcium Chloride (CaCl2) 33...
^ Lot # 115038
^ Brouwstore (NL) 055.035.0
Mash - 0.17 g - Canning Salt (NaCl)
^ Albert Heijn (NL)
Mash - 0.49 g - Epsom Salt (MgSO4)
^ Lot # /2119000091
^ Brouwstore (NL) 055.027.7
Mash - 1.66 g - Gypsum (CaSO4)
^ The Malt Miller (UK) CHE-03-004
Mash - 0.589 items - Juniper Branches
Mash - 1.3 ml - Lactic Acid 80% 80%
^ Lot # 20200213
^ Brouwstore (NL) 003.002.3
Sparge - 0.295 items - Juniper Branches
Sparge - 0.73 ml - Lactic Acid 80% 80%
^ Lot # 20200213
^ Brouwstore (NL) 003.002.3
Boil - 0.589 items - Blackcurrant Leaves
Boil - 1.768 items - Sweet Gale Stalks

Yeast
0.8 pkg - Fermentis SafAle English Ale S-04
^ The Malt Miller (UK) YEA-02-024

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

Batch Size	: 5.6 L
Boil Size	: 7.76 L
Post-Boil Vol	: 5.96 L
Mash Water	: 5.68 L
Sparge Water	: 4.02 L
Boil Time	: 60 min
Total Water	: 9.7 L


15 EBC

Brewhouse Efficiency: 71.8%
Mash Efficiency: 73.3%

Mash Profile
01 One Step Mash (60 min)
68.7 °C - Strike Temp
63 °C - 60 min - Temperature

Fermentation Profile
Ale
20 °C - 14 days - Primary

Water Profile
NL Hoofddorp Rein Tap Water (2020-Q3 WQR) (St...
Ca 100 Mg 15 Na 75 Cl 138 SO 164

SO/Cl ratio: 1.2
Mash pH: 5.39
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:

Recipe Notes

Target: ABV = 6.6 %, IBU = -14, EBC = 15.8, OG = 1.066, FG = 1.016.

I’ve had to extrapolate some of the numbers and ingredients from other brewers on Hiiumaa and Saaremaa, since Paavo never weighed his hops or measured the alpha acids in them.
The malts really should be homemade, and most brewers use Estonian bread yeast, but obviously that’s not going to work here.
The juniper must be Juniperus communis, branches, not too thick, with some green or blue berries on them.

Paavo Pruul’s Koduõlu

Recipe Notes

Ingredients
14 lbs. (6.4 kg) Vienna malt
1–2 blackcurrant leaves (not necessary)
3–4 juniper branches
5–6 stalks of sweet gale (60 min.)
19.6 AAU Saaz hops (60 min.) (7 oz./200 g at 2.8% alpha acids)
Fermentis S-04 or a hefeweizen yeast

https://byo.com/article/raw-ale/

Step by Step
First, remember that you are making a farmhouse ale. You don’t have to hit any of the numbers exactly. A day or two before brew day, make a 1-quart (1-L) yeast starter with (optional) crushed blackcurrant leaves mixed in.

On brew day, mill the grains, then put 2–3 juniper branches in the bottom of the mash tun and the malts above them. Add hot water, about 3–3.5 gallons (11.4–13.3 L) to hit a mash temperature of 160 °F (71 °C), and stir well. This should be a very thick mash at this point (where a heavy wooden mash paddle will slowly tilt to the side). Make sure the mash tun is well insulated so the temperature stays high. Leave for two hours. After the first hour, bring about 1 gallon (4 L) of water to a boil with hops and sweet gale in it and boil for one hour. Add the boiling hop- and sweet gale-infused water addition, bringing the mash back up to 160 °F (71 °C), stir again, and start boiling the sparge water with a juniper branch in it. At the end, when you’ve mashed four hours, the mash temperature should be roughly 153 °F (67 °C). Finally, sparge with enough of the juniper-infused water to collect about 5.25 gallons (20 L) in the fermenter.

Pour the wort into the fermenter so it splashes against the bottom, getting lots of oxygen into the wort. Cool the wort to 68 °F (20 °C), then pitch the yeast. Let it ferment 72 hours, then transfer to keg with spunding-valve. Leave the keg in a warm place so the beer carbonates. Note that the carbonation should be well below that of modern beer.