## Umami Ale-5 Gal-All Grain

Specialty Beer (23 A)

*Type:* All Grain *Batch Size:* 5.00 gal *Boil Size:* 6.53 gal *Boil Time:* 60 min *End of Boil Vol:* 5.99 gal *Final Bottling Vol:* 4.60 gal *Fermentation:* Ale, Two Stage

Name

Date: 26 Oct 2017 Brewer: Asst Brewer: Equipment: All Grain - Standard 5 Gal/19I Batch - Stainless Efficiency: 70.00 % Est Mash Efficiency: 80.5 % Taste Rating: 30.0



%/IBU

Volume

#

#### Taste Notes:

Amt

# Ingredients Type .0 SRM) Grain

12 lbs 8.0 oz	Pale Malt, Maris Otter (3.0 SRM)	Grain	1	92.6 %	0.98 gal
1 lbs	Brown Malt (65.0 SRM)	Grain	2	7.4 %	0.08 gal
0.75 oz	Magnum [12.00 %] - Boil 60.0 min	Нор	3	26.5 IBUs	-
16.00 g	Umami Powder (Boil 60.0 mins)	Spice	4	-	-
0.63 oz	Northern Brewer [8.50 %] - Boil 20.0 min	Нор	5	9.5 IBUs	-
0.63 oz	Northern Brewer [8.50 %] - Boil 0.0 min	Нор	6	0.0 IBUs	-
1.25 oz	Kombu (Dried Japanese Kelp) (Boil)	Spice	7	-	-
16.00 g	Gyokuro Kokyu Green Tea (Primary)	Spice	8	-	-
1.0 pkg	California Ale (White Labs #WLP001) [35.49 ml]	Yeast	9	-	-

Gravity, Alcohol Content and Color

Est Original Gravity: 1.071 SG Est Final Gravity: 1.014 SG Estimated Alcohol by Vol: 7.6 % Bitterness: 36.0 IBUs Est Color: 10.8 SRM Measured Original Gravity: 1.071 SG Measured Final Gravity: 1.010 SG Actual Alcohol by Vol: 8.1 % Calories: 238.6 kcal/12oz

#### Mash Profile

Mash Name: Single Infusion, Light Body, No Mash Out Sparge Water: 4.94 gal Sparge Temperature: 168.0 F Adjust Temp for Equipment: TRUE Est Mash PH: 5.60 Measured Mash PH: 5.20 Total Grain Weight: 13 lbs 8.0 oz Grain Temperature: 72.0 F Tun Temperature: 72.0 F Target Mash PH: 5.20 Mash Acid Addition: None Sparge Acid Addition: None

### Mash Steps

Name	Description	Step Temperature	Step Time
Mash In	Add 3.46 gal of water at 166.4 F	150.0 F	75 min

Sparge: Fly sparge with 4.94 gal water at 168.0 F

Mash Notes: Simple single infusion mash for use with most modern well modified grains (about 95% of the time).

#### Carbonation and Storage

Carbonation Type: Bottle	
Pressure/Weight: 3.61 oz	
Keg/Bottling Temperature: 70.0 F	

Volumes of CO2: 2.3 Carbonation Est: Bottle with 3.61 oz Corn Sugar Carbonation (from Meas Vol): Bottle with 3.93 oz Corn Sugar

file:///C:/Users/rgoeh/OneDrive/Documents/BeerSmith3/Reports/bsxtmp 5696.htm

Fermentation: Ale, Two Stage Fermenter:

Age for: 30.00 days Storage Temperature: 65.0 F

#### Notes

The goal is to maximize the "Umami" from each ingredient. Each one must be treated differently to accomplish this.

Kombu (dried seaweed)

Steep Kombu in the strike water, adding when the water is cold and soak while it warms up to strike temperature. Remove Kombu prior to mashing in.

Maitake "Umami" Powder:

Made from Maitake mushrooms. Add at beginning of boil. Can also substitute Shittake mushroom powder.

Green Tea:

At end of boil remove approx 2 L of wort. Cool to 80 C and add tea. Steep for 30 seconds. Strain tea-wort back into kettle and continue brewing as normal.

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