

Beer Name: Buckwheat Stout      Version 1  
Release Date: 11/21/2020

### Homebrew Recipe for 5 gallon batch

#### Target Water Profile (ppm)

Calcium	112.7	Sodium	33.6
Magnesium	18.5	Bicarbonate	208
Sulfate	71.1	Chloride	40

#### Grain Bill

	<u>lbs</u>	<u>oz</u>
Biscuit Rice Malt	3	12
Pale Rice Malt	2	4
Pale Buckwheat Malt	2	4
Roasted Unmalted Buckwheat	1	10
Gashog Rice Malt	0	13
Caramel 240L Millet Malt	0	13

Total Grain Weight      11      8

#### Enzymes

	<u>mL</u>
Ceremix Flex	12.5
Ondea Pro	12.5
Termamyl	12.5

#### Mash Step

	Temp (Fahrenheit)	Time Length (Minutes)
1	125	15
2	145	45
3	175	30

#### Boil Addition

	<u>Quantity</u>	<u>Time Added</u>
Columbus Hops	0.42 oz	90 min
Yeastex 61 Nutrient	2 grams	10 min
Irish Moss	1/4 tsp	10 min

#### Fermentation

Yeast: Fermentis S-04  
Temperature: 68 degrees F  
Time: 2 weeks

#### Targets

Mash pH	5.13
First Runnings Gravity	1.082
Preboil Gravity	1.052
End of Boil Gravity (OG)	1.062
Final Gravity	1.013
ABV	6.5%
IBU	21
Carbonation	2.3 vol CO2

#### Recipe Notes

Boil length is 90 minutes total  
All enzymes added at start of mash  
HERMS, RIMS, or BIAB required for rising step mash  
All malts should be milled with a mill gap of 0.65 mm  
Ingredients available through [glutenfreehomebrewing.com](http://glutenfreehomebrewing.com)  
Contact [jason@mutantis.beer](mailto:jason@mutantis.beer) with questions!