

Beer Name: Winter Gruit Version 1
Release Date: 1/1/2021

Homebrew Recipe for 5 gallon batch

Target Water Profile (ppm)

Calcium	165	Sodium	73
Magnesium	31	Bicarbonate	324
Sulfate	206	Chloride	31

Grain Bill

	<u>lbs</u>	<u>oz</u>
Pale Millet Malt	4	9
Pale Rice Malt	4	4
Biscuit 15L Rice Malt	1	1
Roasted Buckwheat Seed		12
Total Grain Weight	10	10

Enzymes

	<u>mL</u>
Ceremix Flex	11.3
Ondea Pro	11.3
Termamyl	11.3

Mash Step

	Temp (Fahrenheit)	Time Length (Minutes)
1	125	20
2	148	45
3	175	20

Fermentation

Yeast: Fermentis S-04
Temperature: 68 degrees F
Time: 4 weeks

Boil Addition

	<u>Quantity</u>	<u>Time Added</u>
Crushed Sage	0.4 oz	60
Toasted Sage	0.26 oz	30
Irish Moss	1/4 tsp	10
Yeastex 61	1.5 g	10
Caraway Seed	0.32 oz	10
Crushed Juniper Berry	1 oz	5
Coriander	0.8 oz	5
Juniper Berry	1 oz	Dry Hop - 10 days

Targets

Mash pH	5.2
Preboil Gravity	1.039
End of Boil Gravity (OG)	1.058
Final Gravity	1.012
ABV	6.1%
IBU	0
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
Contact jason@mutantis.beer with questions!