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MALT ANALYSIS

Parameter	Value	Unit
Moisture content	4.1	%
Extract on fine grind dry basis	81.3	%
Extract on coarse grind dry basis	80.0	%
Difference in fine and coarse extract	1.3	%
Color spectrophotometrical	2.7	° SRM
Total protein content	12.0	%
Soluble protein dry basis	5.0	%
Free amino nitrogen	185.2	mg/l
Diastatic power of malt Am. Soc. Brewing Chemists	112.2	ASBC DP
Alpha amylase	54.0	DU
Friability	94.1	%
Soluble beta-glucans	89.3	mg/l
pH	6.0	
Filtration	Normal	
Clarity	Clear	



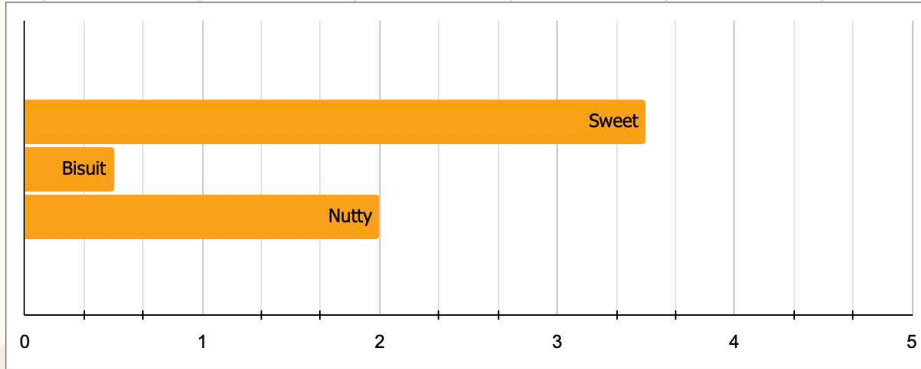
Grain History

Farm: Stober Family Farm
 Field: "Boat Dock"

This malt was made from Copeland two-row barley that was planted and harvested by Stober Farms. Stober Farms is a 6th generation family farm located near Goodrich, ND and has been producing the highest quality grains for over 100 years.

Two Track malting uses grain grown without irrigation by growers practicing regenerative agriculture. This results in the highest quality grain grown with the least environmental impact

Malt Sensory Profile



Hot Steep Method

Items needed to perform the Hot Steep Method:

- Malt to be tested
- 24-ounce Thermos
- Funnel
- Cone coffee filter
- Coffee grinder
- Scale capable of weighing 50.0 g (± 0.1 g)
- Glass beaker, tall, 600 mL volume
- Thermometer, standard, 0-200°C
- Quart sized large or small mouth canning jars
- Heating apparatus, capable of heating water to 65°C

- Grind 50 g. of malt in coffee grinder (grind for 10-15 seconds)
- Add 400 ml of 65°C (149°F) water to Thermos
- Add malt grist to water, cap thermos and shake for 20 seconds
- Let rest for 15 minutes
- When timer is up, swirl for a few seconds then pour into filter in funnel over large jar
- Collect 100ml of wort and add it back into filter
- Collect and taste

Check Your Malt Grind

Take 100g of milled malt grist and place in a #14 sieve stacked over a #30 sieve over a #60 sieve over a pan. Slide 18" back and forth on a smooth surface for 3 minutes, stopping to tap stacked sieves sharply on surface every minute. Record grain retained in each sieve. **Chart below gives percentage of what should be retained in each sieve for each grind.**

100 gram sample	#14 sieve	#30 sieve	#60 sieve	Pan
Coarse grind	78 grams	14 grams	4 grams	4 grams
Medium grind	53 grams	28 grams	11 grams	8 grams
Fine grind	25 grams	25 grams	30 grams	20 grams

Calculating PPG and OG

PPG (Specific gravity of 1 lb of fermentable in 1 gal of water)
 $PPG = 46.214 \times (DBCG / 100 - MC\% / 100 - 0.002)$

Original Gravity Calculation

$OG = 1 + (EF\% / 100) \times (PPG \times MW / BV)$

MW = Malt weight in pounds
 BV = Batch volume in gallons
 EF% = Mashing efficiency
 OG = Original gravity
 PPG = Pounds per gallon
 MC = Moisture content
 DBCG = Dry basis coarse grind extract

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