Grape and Granary
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G & G Beer Brewing Kit

MALT EXTRACT- WITH GRAIN STEEPING

GG25
Ordinary Bitter- G & G

Ingredients

SyrupMalt Extract #1
Dry Malt Extract #2
Specialty Grains #3
Bittering Hops #4
Flavor Hops #5
Aroma Hops #6
Priming Sugar #7
Sock for Steeping
Yeast

Equipment

S.Steel or enamel canning pot
Primary fermenter w/ lid
Airlock and stopper
Siphon equipment
Hydrometer/thermometer
Sanitizer
Caps
Capper

Recipe Specifics

batch size- 5 us gallons
total grain-1 lb
anticipated SG 1.037
anticipated color SRM- 9
anticipated IBU-33
boil time- 45 minutes

Process Specifics

grain steeping temperature- 150-160 deg f.
recommended Yeast strain- wyeast 1968
fermentation temperature- 60-70 deg f.
primary fermentation time- 3-5 days
secondary fermentation time- 5-7 days
carbonation- 5 oz dextrose
ideal conditioning time- 4-6 weeks

For a complete list of instruction sheets, visit http://www.grapeandgranary.com/ggrec.htm

1) Sanitize primary fermenter, lid, airlock (preferably using one-step or iodine sanitizer)

2) Pour approximately 1 gallon dechlorinated water into your boiling kettle (**no more)**. Bring water to 150-160 degrees F. Place specialty grains (#3) in steeping socks and place socks in water. Allow grains to steep for 20 minutes at 150-160 deg. F. Stir well repeatedly throughout the 20 minutes to allow for maximum extraction of color, flavor and aroma. After 20 minutes remove grains. Add an additional 2-3 gallons of water to kettle and bring water to a boil.

3) Turn off heat. Add all malt-syrup (#1), dry malt extract (#2), and bittering hops (#4) . Stir well so that ingredients do not stick to the bottom of kettle. Hops may be put directly into kettle, straining bag not required.

4) Bring this mixture called 'wort' back up to a boil (watch for possible boil over). Allow to boil at a good rolling boil for 45 minutes. Control heat during boil so boil-over does not occur.

15 minutes before the end of the 45 minute boil add flavor hops (#5) and Irish Moss (whirlfloc tablet) into the boiling wort.

2 minutes before the end of the 45 minute boil add aroma hops (#6) into the boiling wort.

5) After 45 minute boil, turn off heat. If possible, place boiling pot into a sink of cold water. Circulate cold water around the outside of the pot for 15-20 minutes. Cool the wort to 110-120 degrees Fahrenheit. Pour or siphon wort from boiling kettle to primary fermenter (attempt to leave most of the hop residue and any proteins behind. Add enough cold water (refrigerated with no chlorine) to the wort and bring the volume up to 5 gallons.

6) Check temperature of wort and obtain 60-75 deg F.. If necessary, place primary fermenter into a sink of cold water to achieve this temperature range.

7) Add yeast- if using liquid yeast make sure it has previously been popped and incubated or have yeast starter ready. If dry yeast is being used, rehydrate according to manufacturers instructions or sprinkle on top of wort. Check starting specific gravity with hydrometer. Fill airlock half full with water and attach to primary fermenter lid. Fermentation will commence within 24 to 72 hours.

8) When airlock stops bubbling (only bubbles 1 time per minute) check specific gravity. If doing a one stage fermentation go to step 10.

9) **RECOMMENDED STEP-** Siphon beer off yeast sediment into a 5 gallon glass jug. Do not splash. Allow beer to sit in carboy until clear usually 5-7 days. Add a fining agent if needed (not included in this kit).

10) Sanitize recappable beer bottles. Siphon beer from primary or secondary fermenter into priming container. Dissolve priming sugar (#7) in 1 cup boiling water. Add this sugar mixture to the beer in the priming/bottling container. Stir well but do not splash.

11) Fill bottles to within one inch of the top. Cap bottles and allow to sit at 60-75 degrees F. for two weeks. The bottles may then be refrigerated. The beer may be consumed after two weeks but will continue to improve up to 2 months in the bottle. The beer will store well for a year or longer. Chill the beer to 45-55 deg. F. before drinking and decant into a clean beer glass that has the capacity to hold all of the beer in the bottle- Enjoy!

IF YOU HAVE PROBLEMS OR QUESTIONS, PLEASE CALL 800-695-9870

Ordinary Bitter

Low gravity, low alcohol level and low carbonation make this an easy-drinking beer. Some examples can be more malt balanced, but this should not override the overall bitter impression. Drinkability is a critical component of the style; emphasis is still on the bittering hop addition as opposed to the aggressive middle and late hopping seen in American ales.

History: Originally a draught ale served very fresh under no pressure (gravity or hand pump only) at cellar temperatures (i.e., "real ale"). Bitter was created as a draught alternative (i.e., running beer) to country-brewed pale ale around the start of the 20th century and became widespread once brewers understood how to "Burtonize" their water to successfully brew pale beers and to use crystal malts to add a fullness and roundness of palate.

Ingredients: Pale ale, amber, and/or crystal malts, may use a touch of black malt for color adjustment. May use sugar adjuncts, corn or wheat. English hops most typical, although American and European varieties are becoming more common (particularly in the paler examples). Characterful English yeast. Often medium sulfate water is used.