

ST. JAMES GATE FOREIGN EXTRA STOUT (All Grain)

Official NORTHERN BREWER Instructional Document

This beer is a mighty, midnight-black strong stout in the tradition of Dublin's tropical export ales. Overtones of Turkish coffee and ultra-premium dark chocolate. Malt and residual sweetness spar with roast barley and a hefty charge of IBUs without a clear winner. You, the brewer, choose the ultimate character of this beer – modern or antique? Controlled sourness with mild-to moderate acid and esters; or the old-skool Victorian program with introduction of Brett to the entire batch during a lengthy secondary for a truly wild fermentation? The choice, dear homebrewer, is in your hands.

This kit includes two yeast packs – an ale yeast for alcoholic fermentation, and a culture of *Brettanomyces claussenii*, the bacteria responsible for the funky, fruity undertones in vatted old ale. Brewed strong and hoppy for export to the far corners of the empire, foreign extra stouts took on a “vatted” character from Brett fermentation during transport and storage. The modern paragon of this style blends a percentage of pasteurized, Brett-fermented wort with *S. cerevisiae*-fermented wort to add acidic sourness and estery high notes to a more stable product. See the additional instructions on the back side of this document for further details on the two different fermentation schedules.

OG 1.071 READY: 4 MONTHS+

Suggested fermentation schedule:

- 1-2 weeks primary; 2-3 months secondary;
- 2-4 weeks bottle conditioning

MASH INGREDIENTS

- 9.25 lbs. Maris Otter
- 2 lbs Flaked Barley
- 1.25 lbs Roasted Barley

BOIL ADDITIONS & TIMES

- 1 oz Summit @ 60"
- 1 oz Fuggle @ 30"
- 1 lb dextrose (corn sugar) @ 0" (the end of the boil)

YEAST

- **WYEAST 1084 IRISH ALE.**
Temperature Range: 62-72°F.

MASH SCHEDULE: SINGLE INFUSION

Sacch' Rest: 152° F for 60 minutes

Mashout: 170° F for 10 minutes

BOIL ADDITIONS & TIMES

1 oz Summit @ 60"

1 oz Fuggle @ 30"

1 lb dextrose (corn sugar) @ 0" (the end of the boil)

YEAST

Wyeast 1084 Irish Ale.

Temperature Range: 62-72°F.

SPECIAL INSTRUCTIONS – PLEASE READ BEFORE BREWING!

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BEFORE YOU BEGIN BREWING, DECIDE WHICH SCHEDULE YOU WILL FOLLOW FOR FERMENTATION:

FERMENTATION SCHEDULE A – MODERN

This method splits the batch into separate fermentations, one with each yeast; the *Brettanomyces* wort is heat-pasteurized after fermentation and blended with the main batch at packaging. This will yield mild- to moderate acid and Brett character in a more shelf-stable beer.

ADDITIONAL EQUIPMENT REQUIRED:

- a glass jug, bottle, or flask that can hold about 20 oz of wort, plus an airlock & stopper
- a saucepan or double boiler
- a glass or metal-probe thermometer

SCHEDULE A:

Primary, main wort: 1-2 weeks

Secondary, main wort: 3-11 weeks, or until sour wort is ready

Primary, sour wort: 4-12 weeks

PROCEDURE:

Split the batch: On brewing day, when the boil is finished and the wort is chilled, divert 600 ml (approximately 20 oz.) of chilled wort from the boil kettle to the sanitized glass container; pitch the *Brettanomyces clausenii* into the 600 ml of wort and attach the sanitized stopper and airlock – this is the sour wort. Put the remaining 4.75 gallons or so of wort into the primary fermenter and pitch the Irish Ale yeast – this is the main wort.

Ferment the two worts: Ferment the main wort and rack to the secondary fermenter as normal. The sour wort needs to ferment in the glass vessel for 4 to 12 weeks – do not rack! Compared to ale yeast, *Brettanomyces* is a slow fermenter and there may be little to no visible activity. A film or skin may develop on the surface of the sour wort – this is good! The sour wort is ready when the aroma is fruity, funky, and acidic enough; follow your instincts. If in doubt, give it more time.

Pasteurize, blend, & package: Sanitize racking and bottling equipment or keg. Using a saucepan or double boiler and thermometer, heat the sour wort to 180F and hold for a few minutes, stirring gently – it's important that the heat is evenly distributed. Immediately add the pasteurized sour wort to the sanitized bottling bucket or keg and rack the main wort on top of it. Stir gently to mix, and proceed with bottling or kegging as normal.

FERMENTATION SCHEDULE B – ANTIQUE

This method is simple – inoculate the entire batch with *B. clausenii* in the secondary and age 12 weeks (or more) before packaging to mimic the effects of barrel aging Victorian-era export-strength stout. This will yield a beer that will continue to evolve, developing higher levels of acidity and Brett character over time; this sour, aged stout can in turn be used for blending with younger batches.

ADDITIONAL EQUIPMENT REQUIRED:

- none

SCHEDULE B:

Primary: 1-2 weeks

Secondary: 12 weeks or longer

PROCEDURE:

Primary fermentation: Boil and chill wort, pitch Irish Ale yeast to primary. Ferment to attenuation and rack to secondary fermenter.

Secondary fermentation: Add *B. clausenii* to beer in secondary, attach airlock, and let it do its thing for 12 weeks or more. Ready for packaging when the aroma and flavor are sufficiently *Brettanomyces*-tinged for your taste.