NORTHERN BREWER

FUNKTIONAL FRUIT SOUR

Forget triple cherries...You just hit the homebrew jackpot with this fruity, funky kettle-soured ale. Prepare your palate for flavors both copious and complex – from tart and sour to subtle and sweet, thanks to the late addition of your favorite pick-your-own fruit puree! Funktional Fruit Sour starts out as a classic Belgian wheat, but things get funky pretty darn quick. Using unique kettle souring techniques, this recipe develops its tart, sour character in a few days, instead of months or years. All without the risk of contaminating any other batches you've got going on. **Note: The kettle souring method can take up to three days, so plan your time accordingly.**

O.G: 1.046 | **BREW TIME 6 WEEKS:** 2 WEEKS PRIMARY | 2 - 3 WEEKS SECONDARY | 1 - 2 WEEKS BOTTLE CONDITIONING

KIT INVENTORY

MAILLARD MALTS EXTRACTS & OTHER FERMENTABLES

- 3.15 lbs Wheat malt syrup
- 3 lbs Pilsen DME

HOPTIMUS REX™ PREMIUM HOPS & OTHER FLAVORINGS

- 1 oz German Tettnang (60 min)
- Fruit puree of your choice (Included - add when fermentation subsides, see step 20)

YEAST & OTHER CULTURES

Lactobacillus:

- Omega OYL - 605 Lactobacillus Blend. Optimum temp: 75°- 95°F

Dry Yeast:

- Fermentis Safbrew T - 58. Optimum temp: 59°- 75°F

Liquid Yeast Options:

- Omega OYL - 029 Belgian Wheat. Optimum temp: 64°- 74°F
- Wyeast 3944 Belgian Wit. Optimum temp: 62°- 75°F

UPON ARRIVAL UNPACK THE KIT

- Be sure you have all items and one of the selected yeast options listed in the Kit Inventory (above)
- **Refrigerate the yeast and lactobacillus**
- Contact us immediately if you have any questions or concerns!

READ ALL INSTRUCTIONS BEFORE STARTING

YOU WILL NEED:

- Homebrewing starter kit for brewing 5 gallon batches
- Boiling kettle of at least 3.5 gallons capacity with lid
- Optional - 5 gallon carboy, with bung and airlock, to use as a secondary fermenter. NOTE: You may skip the secondary fermentation and add an additional 2 - 3 weeks to primary fermentation before bottling
- Approximately two cases of either 12 oz or 22 oz pry-off style beer bottles

A FEW HOURS BEFORE BREW DAY

Remove the liquid lactobacillus package from the refrigerator, and leave it in a warm place (~70°F) to come to pitching temperature, about 3 hours.

BREWING - DAY 1

1. Heat 2.5 gallons of water.
2. Please note there are no steeping grains in this recipe.
3. Bring to a boil, remove the kettle from the burner and stir in the 3.15 lbs Wheat malt syrup and the 3 lbs Pilsen DME.
4. Return wort to a boil. The mixture is now called "wort", the brewer's term for unfermented beer. Boil the wort for 5 minutes to sanitize it, and then rapidly cool to 75°- 95°F.
5. Once cooled to 75°- 95°F, add the lactobacillus and cover the kettle with a sanitized lid.
6. Let the wort with lactobacillus rest at the same temperature in the boil kettle for up to three days. You can periodically taste the wort by drawing a sample with a sanitized utensil to gauge the level of sourness. Once the sourness is pleasing to you, proceed to the next step. If you are the science type, use a pH meter to determine when the lactobacillus is done. For a mild sourness, aim for a pH of 3.7 - 3.9, or for a pronounced tartness, aim for a pH of 3.2 - 3.4.

BREWING - POST SOURING

7. Remove the yeast from the refrigerator and allow to warm to room temperature.
8. Now that the wort is soured, bring it back to a boil to kill any lactobacillus bacteria present. Once boiling, add the 1 oz German Tettnang hops and boil for a total of 60 minutes.
9. When the 60 minute boil is finished, rapidly chill the wort to about 70°- 75°F.
10. Fill primary fermenter with 2 gallons of cold water, then pour in the cooled wort. Leave any thick sludge in the bottom of the kettle.
11. Add more cold water as needed to bring the volume to 5 gallons.
12. Aerate the wort. Seal the fermenter and rock back and forth to splash for a few minutes, or use an aeration system and diffusion stone.
13. Optional - Measure specific gravity of the wort with a hydrometer and record. The target gravity for this recipe is 1.046.
14. Add the yeast once the temperature of the wort is 74°F or lower (not warm to the touch). Sanitize and open the yeast pack and carefully pour the contents into the primary fermenter.
15. Seal the fermenter. Add approximately 1 tablespoon of water to the sanitized fermentation lock. Insert the airlock into rubber stopper or lid, and seal the fermenter.
16. Move the fermenter to a warm, dark, quiet spot until fermentation begins.

PRIMARY FERMENTATION

17. Active fermentation begins. Within approximately 48 hours of Brewing Day, active fermentation will begin – there will be a cap of foam on the surface of the beer, the specific gravity as measured with a hydrometer will drop steadily, and you may see bubbles come through the fermentation lock. The optimum fermentation temperature for this beer is 64°-74° F, move the fermenter to a warmer or cooler spot as needed.
18. Active fermentation ends. Approximately one to two weeks after brewing day, active fermentation will end. When the cap of foam falls back into the new beer, bubbling in the air lock slows down or stops, and the specific gravity as measured with a hydrometer is stable, proceed to the next step.
19. Optional - If you are transferring to a secondary fermentor, sanitize siphoning equipment and an airlock and carboy bung or stopper. Siphon the beer from the primary fermenter into the secondary. If you are not conducting a secondary, simply leave the beer in the primary fermenter.

SECONDARY FERMENTATION - OPTIONAL*

20. With a sanitized can opener, open your chosen fruit puree and add it directly to the new beer. **Note: Fermentation will be renewed as the yeast consumes the fruit sugars.** Allow the new beer and fruit to rest for 2 - 3 weeks to allow the renewed fermentation to complete before proceeding with the next step. Timing now is somewhat flexible. *See the "YOU WILL NEED" section and step19.

BOTTLING DAY - ABOUT 1 MONTH AFTER BREWING DAY

21. Sanitize siphoning and bottling equipment.
22. Mix a priming solution (a measured amount of sugar dissolved in water to carbonate the bottled beer). Use the following amounts, depending on which type of sugar you will use:
    - Corn sugar (dextrose) 2/3 cup in 16 oz water.
    - Table sugar (sucrose) 5/8 cup in 16 oz water.

    Bring the solution to a boil and pour into the bottling bucket.
23. Siphon beer into bottling bucket and mix with priming solution. Stir gently to mix—don't splash.
24. Fill and cap bottles.

CONDITIONING- ABOUT 1 MONTH AFTER BOTTLING DAY

25. Condition bottles at room temperature for 1–2 weeks. After this point, the bottles can be stored cool or cold.
26. Serving. Pour into a clean glass, being careful to leave the layer of sediment at the bottom of the bottle. Cheers!

BREWER'S NOTES

At Northern Brewer, we've always got your back. Our Brewmasters are available 7 days a week to help you brew your very best, and it doesn't end until you're completely happy with your latest batch...and looking forward to the next one. We'll never let you fail. Guaranteed.