



Brewing with Specialty Grains

If you have become comfortable with the extract brewing process highlighted in the beginner section, you may want to try your hand at brewing extract recipes that also utilize specialty grains. This involves soaking malt that does not require mashing in your boil water prior to adding the malt extract.

Why Brew Extract Recipes with Specialty Grains?

Tasty beer can be made exclusively with extract, but there can be issues with the freshness of ingredients. Liquid and dry malt extracts have less noticeable affects from aging than fresh ingredients, so it is possible to brew a beer entirely with extract, conduct your process perfectly, but still come out with an off-tasting product. Utilizing specialty grains will allow for more combinations of flavors and aromas, while taking some of the spotlight off of the extract. Brewing with specialty grains is also a great way for new brewers to become familiar with fresh ingredients and develop an understanding of which grains instill which qualities to certain styles of beer.

Am I Mashing Yet?

Though sometimes confused, utilizing specialty grains is not the same as mashing. The concepts are similar—soak crushed malt in a specific amount of water, at a specific temperature, for a specific amount of time—but the biological processes differ, which cannot necessarily be seen with the naked eye.

In short terms, the point of mashing is to create the right conditions for enzymes to convert grain starches into fermentable sugars. Specialty malts, like caramel and roasted malts, do not require a mashing step because their starches have been converted to sugars by heat when kilned. On the other hand, if you do not mash base malt, like pale or maris otter, the starches will not be converted to sugars and the yeast will have little to nothing to convert into CO₂ and alcohol.

Walk Me Through It Already!

Brewing with specialty grains only requires one additional step to the extract process that is covered in the beginner section. Essentially, you are steeping the specialty grains in 150° to 170° F (65.5°- 76.7° C) water for about 30 minutes prior to adding the malt extract. Most brewers use a grain bag to contain the specialty malt while steeping, much like a large tea bag. This makes it easier to remove the grains from the kettle when the steeping is done. As a tutorial, we will be using a recipe and set of procedures from Chapter 13 of John Palmer's How To Brew.



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Port O'Palmer Porter

Ingredients for 5 U.S. gallons (18.92 L):

- 6.6 lb (3 kg) | Pale malt extract (liquid)
- 0.5 lb (227 g) | Crystal 60°L malt
- 0.5 lb (227 g) | Chocolate malt
- 0.25 (113 g) | Black Patent malt
- 0.5 oz (14 g) | Horizon hops (12% Alpha Acid) (60 minutes)
- 0.75 oz (21 g) | Willamette hops (5% Alpha Acid) (40 minutes)
- 0.5 oz (14 g) | Willamette hops (5% Alpha Acid) (20 minutes)
- London Ale liquid yeast

Specifications:

Boil Gravity for 3 gallons: 1.047 (13.3 °P)

OG for 5 gallons: 1.054 (11.7 °P)

IBUs: 38

Fermentation: Primary for 2 weeks at 65° F (18° C)

Procedure:

1. The only change from your regular extract brewing procedure is that you will be steeping the grain in the brew pot before you add the malt extract. For the best flavor results, the ratio of steeping water to grain should be less than 1 gallon per pound.
2. Heat 1 gallon of water in the brew pot until it reaches 160° F (71.1°C) give or take 10° F (5.5°C)
3. Immerse the grain bag in the pot for 30 minutes. The grain bag may be dunked and swirled like a teabag during this time to make sure all the grain is wetted. Moving it around will help to improve the yield, but don't splash. Maintaining temperature during the steep is not vital.
4. After 30 minutes, remove the grain bag from the pot, and let it drain to avoid dripping on the stove.
5. Now you have a preliminary wort to which the malt extract is added. Stir in one can (3.3 lbs., 1.5 kg) of pale malt extract. Add more water to the pot to bring the wort volume up to 3 gallons (11.4 liters)
6. Bring the wort to a boil, add hop additions as listed in the recipe.
7. When the wort is finished boiling, add the remaining can of pale malt extract to the brew pot. Stir it in to make sure it is fully dissolved. After 10 minutes total time has elapsed, the additional extract is pasteurized, and you can proceed to cooling the wort, pouring it into the fermenter, pitching the yeast, etc.



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