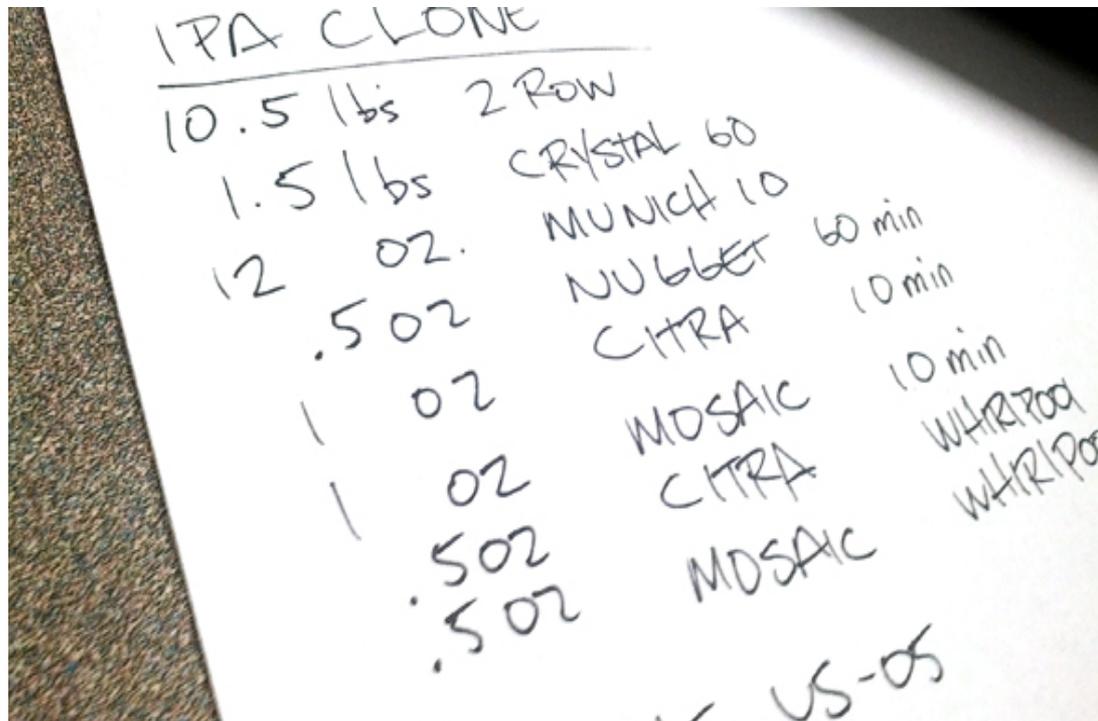


Recipe Modifications:

Making Recipes Your Own and Adjusting Your Own



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Recipe Modifications:

Making Recipes Your Own and Changing Your Own

Overview

Make Them Your Own

- Modernizing Old Recipes
- Commercial Beer recipes
- Brewing Classic Styles (and other book recipes)

Changing Your Own Recipes

- Improvement for judging or personal taste

Modernizing Old Recipes

Changing up an old recipe -

- While retaining what makes it great, take an old recipe favorite and apply new brewing techniques and ingredients
- Use new malt, hops, and yeast to bring new life to a recipe

Pliny The Elder Clone

For 6 gallons (22.7 L)

Grist:

13.25 lb (6.01 kg) two-row pale malt

0.6 lb (272 g) crystal 45° L malt

0.6 lb (272 g) Carapils (dextrin) malt

0.75 lb (340 g) dextrose (corn) sugar

Pliny The Elder Clone

Hops:

3.5 oz (99 g) Columbus hops, 13.9% a.a. (90 min)

0.75 oz (21 g) Columbus hops, 13.9% a.a. (45 min)

1.0 oz (28 g) Simcoe hops, 12.3% a.a. (30 min)

1.0 oz (28 g) Centennial hops, 8% a.a. (0 min)

2.5 oz (71 g) Simcoe hops, 12.3% a.a. (0 min)

1.0 oz (28 g) Columbus hops, 13.9% a.a. (dry hop, 12-14 days total)

1.0 oz (28 g) Centennial hops, 9.1% a.a. (dry hop, 12-14 days total)

1.0 oz (28 g) Simcoe hops, 12.3% a.a. (dry hop, 12-14 days total)

0.25 oz (7 g) Columbus hops, 13.9% a.a. (dry hop, 5 days to go in dry hop)

0.25 oz (7 g) Centennial hops, 9.1% a.a. (dry hop, 5 days to go in dry hop)

0.25 oz (7 g) Simcoe hops, 12.3% a.a. (dry hop, 5 days to go in dry hop)

Pliny The Elder Clone

Yeast:

White Labs WLP001 California Ale Yeast or Wyeast 1056
America Ale Yeast

Specifications:

- Original Gravity: 1.072
- Final Gravity: 1.011
- ABV: 8.2%
- IBU: 90-95 (actual/not calculated)
- SRM: 7
- Efficiency: 75%

Pliny The Elder Clone

Directions:

To make this Pliny the Elder clone, mash grains at 151-152°F (66-67°C) for an hour or until starch conversion is complete. Mash out at 170°F (77°C) and sparge. Collect 8 gallons (30 L) of runoff, stir in dextrose and bring to a boil.

After a 90 minute boil, chill wort to 67°F (19°C) and transfer to a fermenter. Pitch two packages of yeast or a yeast starter and aerate well.

Ferment at 67°F (19°C) until fermentation activity subsides, then rack to secondary.

Add first set of dry hops on top of the racked beer and age 7-9 days, then add the second set. Age five more days then bottle or keg.

Recipe is from the AHA website.

Pliny Mods

The recipe is a classic but dated compared to current IPAs using more recent hop varieties. New IPA recipes have also moved away from using crystal malts in the grist. Dry-hopping philosophies have also changed, for when to add the hops and how long they are in contact with the beer.

With these observations, let's put together a new version of Pliny The Elder.

Pliny Mods

New grist:

13 lb two-row pale malt

0.7 lb Biscuit or Victory or Aromatic malt

0.5 lb Carapils (dextrin) or Carafoam malt

1.0 lb dextrose (corn) sugar

Pliny Mods

New hop schedule:

- 1.5 oz Columbus hops (60 min)
- 2.0 oz Columbus hops (10 min)
- 2.0 oz Simcoe hops (10 min)
- 2.0 oz Citra hops (10 min)
- 2.0 oz Centennial hops (0 min)
- 2.5 oz Simcoe hops (0 min)
- 2.5 oz Citra hops (0 min)
- 2.0 oz Columbus hops (dry hop, 5 days total)
- 2.0 oz Centennial hops (dry hop, 5 days total)
- 2.0 oz Simcoe hops (dry hop, 5 days total)
- 2.0 oz Citra hops (dry hop, 5 days total)

Pliny Mods

The rest:

Same yeast, make a big starter (at least 2L)

Mash closer to 148-150°F to help dry out the beer more.

Start fermentation at the same temperature and let it rise after a few days to 70°F+.

Dry-hop upon fermentation completion.

Pliny Mods

The takeaway:

IPA recipes and techniques have changed a lot of the years as the style has become the most popular in craft beer.

Despite the changes made to the recipe, the goal was to still retain the something similar but with updating the recipe to make it our own.

Commercial Beers

Altering clone recipes –

- Taking a known commercial beer recipe and altering it to your liking
- Give the recipe its own “terroir”
- Substituting ingredients because of scarcity or cost

Founders KBS Clone

For 5 Gallons (19 L)

Grist:

13.25 lb (6.01 kg) pale malt

1.5 lb (0.68 kg) flaked oats

0.75 lb (340 g) roast barley

0.75 lb (340 g) Belgian chocolate malt

0.5 lb (227 g) Belgian debittered black malt

0.5 lb (227 g) 120°L crystal malt

Founders KBS Clone

Hops and adjuncts:

- 1.0 oz (28 g) Nugget pellet hops, 13% a.a. (60 min)
- 1.25 oz (35 g) Willamette pellet hops, 5% a.a. (25 min)
- 1.75 oz (49 g) Willamette pellet hops, 5% a.a. (10 min)
- 2.5 oz (71 g) Belgian bittersweet chocolate (15 min)
- 1.5 oz (42 g) unsweetened cocoa nibs (15 min)
- 2.0 oz (57 g) ground Sumatran coffee (flameout)
- 2.0 oz (57 g) cold brewed Kona coffee (in secondary)
- American or California Ale yeast

Founders KBS Clone

Yeast and Specifications:

American or California Ale yeast

Original Gravity: 1.092

IBU: 73

SRM: 60

Founders KBS Clone

Directions:

To brew this Kentucky Breakfast Stout clone, perform an infusion mash at 155°F (68°C) for 60 minutes. Boil for 90 minutes, adding hops, chocolate and coffee as specified. Ferment for two weeks at 65°F (18°C). Soak 0.25 oz (7 g) toasted French oak chips in 1 cup (237 ml) Kentucky bourbon for two days. Soak ground Kona coffee in 1 cup (237 ml) boiled, cooled water and leave overnight, covered, in refrigerator. Strain out grounds and add cold-brewed coffee, bourbon and wood chips to sanitized secondary. Rack fermented stout onto this mixture and condition in secondary at 55–60°F (13–16°C) for 2 to 6 months.

Recipe is from the AHA website.

KBS Mods

Cloning a barrel aged without a barrel can be done in many ways. If you can get a small barrel to age this beer in, it will certainly be the best way to go about it. This recipe calls for toasted French oak chips but now cubes and spirals are available in all kinds of toast levels. Coffee gets added at flameout and secondary. This would leave a more faint coffee character after aging. The cocoa nibs are also added 15 minutes into the boil, which is not necessarily needed.

Also this recipe scaled for the OG of 1.092 requires 90% efficiency!!!!

With these observations, let's put together a new version of KBS.

KBS Mods

New grist:

18 lb pale malt

1.5 lb flaked oats

0.75 lb roasted barley

0.75 lb Chocolate malt (US or UK)

0.5 lb Pale Chocolate malt

0.5 lb Carafa II

0.5 lb 120°L crystal malt

1.0 lb corn/table sugar

KBS Mods

New hop schedule:

2.0 oz Nugget/Magnum/Northern Brewer/Galena (60 min)

2.0 oz (49 g) Willamette/Mt. Hood/Nugget/Chinook pellet hops
(10 min)

KBS Mods

New adjunct schedule:

4.0 oz Belgian bittersweet chocolate (5 min)

4.0 oz unsweetened cocoa nibs (toasted) (keg or secondary)

4.0 oz whole bean/course ground locally roasted coffee (keg or secondary)

KBS Mods

New directions:

Perform an infusion mash at 152°F (68°C) for 60 minutes.

Boil for 90 minutes. Ferment starting at 65°F (18°C) for 2 to 3 days and let rise to 70°F+ to finish out. Rack to secondary or keg or barrel.

Use yeast from a prior batch or make a big 3L or more starter.

Coffee and cocoa additions should be done in keg or secondary after desired oak character has been achieved.

KBS Mods

Oak options:

- Putting the beer into a barrel for secondary aging (best option and closest to the real deal).
- Adding bourbon soaked oak chips/cubes/spirals to secondary for extended aging
- Adding a bourbon oak tincture straight to the keg

KBS Mods

The takeaway:

- Cocoa and coffee should be added closer to when the beer is ready to drink to get the most character out of them.
- There are many oak options these days. Always age to taste.
- Don't brew a recipe without checking the scale and expected efficiency.

Brewing Classic Styles (and other book recipes)

Don't know where to start when you want to brew a new beer? Well checking out *Brewing Classic Styles* or other beer recipe books can help.

Make changes based on personal taste or brewing techniques.

Jamil's Bohemian Pilsener

5 gallons / 19 L batch

Grist:

10.75 lb. (4.8 kg) Durst continental Pilsner malt (or similar) 2 °L

0.75 lb. (340 g) Briess Carapils® malt (or similar) 2 °L

Jamil's Bohemian Pilsener

Hop schedule:

- 4.83 AAU Czech Saaz hops (1.38 oz./39 g for 3.5% alpha acid) (60 min)
- 5.8 AAU Czech Saaz hops (1.67 oz./47 g for 3.5% alpha acid) (30 min)
- 2.9 AAU Czech Saaz hops (0.83 oz./24 g of 3.5% alpha acid) (10 min)
- 2.9 AAU Czech Saaz hops (0.83 oz./24 g of 3.5% alpha acid) (0 min)

Jamil's Bohemian Pilsener

Yeast and specifications:

White Labs WLP800 (Pilsner Lager), Wyeast 2001 (Urquell)
or Fermentis Saflager S-23 yeast

OG = 1.056 (13.9 °P)

FG = 1.016 (4.2 °P)

IBU = 40

SRM = 4

ABV = 5.3%

Jamil's Bohemian Pilsener

Directions:

Mill the grains and dough-in targeting a mash of around 1.5 quarts of water to 1 pound of grain (a liquor-to-grist ratio of about 3:1 by weight) and a temperature of 154 °F (68 °C). Hold the mash at 154 °F (68 °C) until enzymatic conversion is complete. Infuse the mash with near boiling water while stirring or with a recirculating mash system raise the temperature to mash out at 168 °F (76 °C). Sparge slowly with 170 °F (77 °C) water, collecting wort until the pre-boil kettle volume is around 6.5 gallons (25 L) and the gravity is 1.044 (10.9 °P).

The total wort boil time is 90 minutes, which helps reduce the SMM (S-methyl methionine) present in the lightly-kilned Pilsner malt and results in less DMS (Dimethyl Sulfide) in the finished beer. Add the first hop addition with 60 minutes remaining in the boil. The other hop additions are at 30, 10, and zero minutes left in the boil. Add Irish moss or other kettle finings with 15 minutes left in the boil.

Jamil's Bohemian Pilsener

Chill the wort to 50 °F (10 °C) and aerate thoroughly. The proper pitch rate is 20 grams of properly rehydrated dry yeast, four packages of liquid yeast or one package of liquid yeast in a 9-liter starter.

Ferment around 50 °F (10 °C) until the yeast drops clear. With healthy yeast, fermentation should be complete in two weeks or less, but don't rush it. Cold fermented lagers take longer to ferment than ales or lagers fermented at warmer temperatures. If desired, perform a diacetyl rest during the last few days of active fermentation.

Rack the finished beer to a keg and force carbonate or rack to a bottling bucket, add the priming sugar, and bottle. Target a carbonation level of 2 to 2.5 volumes.

A month or more of cold conditioning at near freezing temperatures will mellow some of the flavors and improve the beer. Serve at 43 to 46 °F (6 to 8 °C).

Jamil's Bohemian Pilsener Mods

9L starter? Four packages of liquid yeast? Jamil sure likes a lot of yeast. Yes, you need a lot of yeast for lagers but Jamil might be crazy for these pitching rates.

You can do a decoction mash for pilsners but Jamil is going with a single infusion to keep it simple.

Other than that, a simple recipe, I like it.

But what did I do to it?

Ryan's Czech Pilsner

New grist:

12 lbs. Weyermann Pilsner Malt (or their floor malted version)

0.4 lb. Carapils

0.25 lb. Melanoiden Malt

Ryan's Czech Pilsner

New hop schedule:

2.50 oz. Saaz (60 min.)

2.00 oz. Saaz (10 min.)

1.50 oz. Saaz (5 min.)

2.00 oz. Saaz (flameout/whirlpool)

Ryan's Czech Pilsner

Different yeast and directions:

White Labs WLP833 German Bock or WLP830 German Lager. Start with a 1L starter and after two days add more wort to bring it to 3.5-4L. Let that go two to three days before brew day.

Single infusion mash at 152°F.

Start fermentation at 50°F and let rise to 55°F after two days and then let slowly rise to 62-65°F.

Ryan's Czech Pilsner

The takeaway:

Jamil is great brewer so I didn't want to change his recipe much. Melanoiden malt was used to fake a decoction mash character and hop character was bumped up with more late additions. A slow rising fermentation profile can help accelerate primary fermentation.

Don't complicate a simple recipe to make it your own.

Changing Your Own Recipes

Not liking your recipe even though you did everything right during the brewing, fermentation, and packaging process?

Need to modify the recipe based on judge's feedback in competition?

Time to modify your recipe to dial in the beer.

Wet Hop Pale Ale

6 gallon batch

Grist:

13.5 lbs. Great Western Pale High Color

Hops:

0.2 oz. Pekko (60 min)

Freshly picked Centennial and Chinook (weight unknown) (10 min, 5 min, and whirlpool)

Yeast:

Mangrove Jacks west coast yeast

Wet Hop Pale Ale

Specifications:

Single infusion mash at 152F.

Ferment at 67F and let rise to 72F after a few days.

OG = 1.057

FG = 1.014

ABV = 5.6%

Wet Hop Pale Ale Mods

Like a lot of “firsts”, you have to start somewhere. In my case, an educated guess was used on the malt profile to match to the hop and yeast profile, along with the quantity of hops used.

And with the case of using homegrown hops for the first time, an unknown hop flavor profile and IBUs.

Wet Hop Pale Ale Mods

New recipe:

Grist:

13 lbs. Weyerman Pilsner malt

Hops:

0.2 oz. Pekko/Magnum/whatever (60 min)

Freshly picked Centennial and Chinook (weight unknown) (10 min, 5 min, and whirlpool) **BUT MORE!!!**

Yeast:

Whatever clean yeast on hand.

Wet Hop Pale Ale Mods

Directions:

Single infusion mash at 152F.

Ferment at 67F and let rise to 72F after a few days.

After primary fermentation is complete, taste and smell a sample and determine if you want to dry-hop the beer to improve the hop character.

Wet Hop Pale Ale Mods

The takeaway:

In the future, expect a different flavor profile from commercially grown hops.

Based on the projected hop flavor profile, modify the malt used to support it.

If the yield is low, supplement with more hops despite the desire to only use homegrown hops in order to get a better end result.

Ultimately this a change of a single ingredient (the malt used). Try to keep changes to a minimum when trying to improve recipes.

Wet Hop Pale Ale Mods

But what do you guys think?

What feedback would you give me on this beer?

(You won't hurt my feelings if you don't like it. I want to know what you think will make it better)

Recipe Modifications:

Making Recipes Your Own and Adjusting Your Own

Final Thoughts

As much as we would like to perfectly clone recipes that are not our own, most of the time that is not possible. So instead, make them your own and with time you can learn to develop your own style.

With the recipes you do create, try to be your harshest critic. Try to put aside what you tried to create and ingredients used, and focus on what you actually taste. Rely on your peers for feedback and make the adjustments you feel are appropriate.

And sometimes, you just have to trust your gut based on past experiences and knowledge obtained from others.

In the end, always strive to make better beer.

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**QUESTIONS
AND/OR
COMMENTS?**