

Summer of SMaSH

SMaSH – 5.5 Gal - OG 1.050 – FG 1.010 – ABV 5.3% - IBU 30 – SRM 5

A couple of fun new ingredients are rolling into the store, and we thought it would be a good time to make some SMaSH'es. For those unfamiliar, a SMaSH beer refers to a Single Malt and Single Hop. Basically, it's a way to focus in on flavours of a specific set of ingredients. Most beers are made of multiple grains and hops leading to a delicious combination, but in this case, we want to see what our new malts and hops taste like.

What are the new ingredients? Well, we have a Pale Ale Malt from Belgian Malting company Dingemans. We find their grains have an amazing fresh aroma unlike any other. The Pale Ale malt gives beer a full-bodied flavour with a delightful golden colour. It's a perfect base malt for a SMaSH.

For hops, we have two new varieties. We're making a SMaSH for each of them. The new hops are Evergreen and Zamba. These are both proprietary hop blends from our friends at BSG. **Evergreen** is your classic West Coast IPA hop. With notes of peach, apricot, but also classic floral and pine IPA flavours. **Zamba** on the other hand is all about the juice. Notes of pineapple, mango, stone fruit, and lots and lots of tangerine abound in this hop. It could be used for NEIPAs and other hazy beers. Finishing off this beer is the classic Cali Ale from Guelph's own Escarpment Labs. It's going to deliver a great, consistent fermentation that really lets the fresh hops and malts come through!

Ingredients

Grains

Belgian Pale Ale Malt (Dingemans)

Amount (lbs)

10.0

Acidulated Malt

0.2

Hops

Evergreen or Zamba

1.0

Boil Schedule (minutes)

30 minutes

Evergreen or Zamba

2.0

0 Minutes (Hold temp for 5 minutes)

Evergreen or Zamba

2.0

DRY HOP – Add 4 days into Fermentation

Yeast

Cali Ale – Escarpment Labs

1 Package

Extras

Gypsum

½ tsp in mash

Helps promote hop flavour and aroma for Guelph water

DME/Dextrose

150g (1/2 cup) at bottling for priming

Check a priming calculator to confirm correct amount

Important Tips on Brewing

- Be extra cautious when cleaning! Once you have stopped boiling your wort everything that gets in contact with the beer MUST be sanitary.
- The temperature of your mash is ABSOLUTELY CRITICAL. Not being in the 150-155f range can drastically affect your beer. Make sure you correct the temperature ASAP once all of the grain has been added to the mash.
- Always let your beer ferment for 10 days! Do not disturb it, do not open the lid (unless dry hopping). It is absolutely natural for the airlock to stop bubbling after a few days, it is still fermenting though.
- When racking your beer, **we recommend attaching a nylon or muslin bag around the siphon output to catch any hop residue.** This is especially important if kegging. One hop chunk can clog up your entire keg line.
- Oxidization: Airspace is always something to consider. When undergoing primary fermentation airspace is needed so that the beer can bubble up and ferment vigorously without leaking out of the container. The fermentation creates a layer of CO₂ that remains in the pail due to the airlock. Once primary fermentation is over, and the lid has been opened, the layer of CO₂ dissipates, and oxygen replaces it. That airspace can ruin your beer.
- Before bottling, make sure you use a priming calculator (many can be found online) to verify the amount of sugar that needs to be added.

Instructions

Mashing -> converting the grain into a fermentable liquid.

- 1) Bring 6 gallons of water in your brew pot to 155°F. This is our strike temperature. Turn off the heat to the pot.
- 2) If you are using standard Guelph tap water, 1/2 teaspoon of Gypsum to the water. This will help promote hop flavour and aroma.
- 3) Wrap the muslin/nylon bag around the brew pot and slowly pour all the milled grains into the bag. Stir them in while adding to prevent clumps. The addition of grain should drop the temperature down to 150-155°F.
- 4) We want to mash the grain at 154°F for 60 minutes. It is very important to hold the temperature at 154°F. If the temperature rises above 155°F it hurts the fermentation, or if it dips below 149°F it can lead to a thinner tasting beer.
 - a. The first 15-30 minutes are essential for the success of your brew. The temperature HAS TO BE IN THE RANGE OF 150-155°F. Sometimes adding the grain to the strike water does not lower the temperature enough, in this case add a little bit of cold water to bring the temperature down. Cover the pot with your lid and let it sit.
 - b. Most brew pots will be able to maintain 154°F without adding heat for 20 minutes, we recommend checking the temperature every 15 minutes, and if it drops add more heat to bring it up. We recommend opening the lid and using a thermometer in the liquid.
- 5) After 60 minutes, bring the temperature of the mashing grain up to 170°F and hold for 10 minutes. This is our mash out.
- 6) Time to remove the grain. Lift the bag full of grain out of the brew pot. Let the liquid in the bag dribble into your wort. Once that is done, put the bag inside of a brewing pail, or another empty pot. There will be about 4 gallons of wort in the brew pot, we need to get it to 6 gallons before we can begin the next stage.
- 7) Run warm water through the grains in the bag, aim for 170°F – let it run through the grains and add to the brew pot. Add until you reach 6 gallons.
 - a. PSA: It is natural to think that the grains need to be squeezed to get all of the liquid out of them, **DO NOT DO THIS**. Aggressively squeezing the grains will lead to tannin extraction and a doughy taste in your beer. Lightly pressing the bag is fine, but do not try to squeeze every last drop out.

Boiling -> Sterilizing the wort time.

- 1) Bring 6 gallons of your wort to a rolling boil, and let it boil for 5 minutes, this is called the hot break. Start a 60-minute timer. Keep the wort boiling (212°F) and uncovered.
- 2) With 30 minutes left in the timer, add 1 ounce of Zamba or Evergreen.
- 3) With 15 minutes left in the timer add 1 tsp of Irish Moss, and if you have a wort chiller, we recommend adding it at the 15-minute mark.
- 4) When your timer goes off, turn off the heat, and now it's time to add more hops!

Cooling & Whirlpooling -> Let's Get Hoppy

- 1) We do not want to cool the beer down yet. We want to add hops and let them **sit for 10 minutes**. This gives the perfect balance of flavour and aroma additions, along with proper bitterness to make an IPA.
- 2) So, when the timer goes off, turn off the heat and immediately add 2 ounces of Zamba or Evergreen. If you have a wort chiller in the pot, do not use it yet, let it sit. Set a timer for 10 minutes, once again, **do not** actively cool the beer.
- 3) After 10 minutes have passed, it is now time to start cooling the beer. Cool the beer down to 25°C.

Fermentation -> Turning the wort into beer

- 1) After the boil is done it is time to be extra careful in regard to sanitation. We recommend using a no-rinse sanitizer called Starsan. Mix ¼ tsp of it with water in a 500ml spray bottle. **Before we touch any part of the beer, we spray it with Starsan.**
- 2) Transfer the cooled wort into your fermenting pail or carboy. Run it through a strainer to catch any hop or grain residue. With all of the hop matter in this beer, it might take a while to strain through all the hops.
 - a. It is also an important time to take a hydrometer reading. It should be around 1.050 give or take a few points.
- 3) Make sure the wort has been cooled to at least 27°C!!! Adding yeast at a higher temperature will likely kill it.
- 4) Once the beer is in the fermenter, shake up and pour in the package of Cali Ale yeast.
- 5) Put the bung and airlock in the hole (make sure there is water filled up to the line in the airlock). If using a pail, make sure the lid is sealed tight. Put the pail in a room that is in the range of 19-23°C.
- 6) **DRY HOP TIME**: Fermentation will be quite vigorous for the first couple of days, we want it to slow down before adding dry hops. Add the 2 ounces of Zamba or Evergreen four days into fermentation. Let the dry hops sit in the beer for 6 days until day 10 of the fermentation.
- 7) After 10 days have passed, take a hydrometer reading. It should be somewhere between 1.010-1.015.
- 8) Lately, we have been of the opinion that secondary is an unnecessary step. Unless you are kegging, we recommend proceeding to the bottling stage. Clarification can occur in the bottle rather than in a carboy, and the risk of oxidization is greatly reduced.

Bottling -> We're getting close to Beer Time now.

- 1) Rack the now fermented beer into a bucket.
 - a. Because of how many hops are in the beer, we recommend wrapping a muslin bag with a zip tie on the output of your siphon tube. This will catch any hop debris in the pail.
- 2) At the same time, mix the priming sugar with 300ml of boiling water and add to the beer. Stir it in VERY gently.
- 3) Rack the beer into your bottles or growlers. Then, let them sit for 2-3 weeks at room temperature. Chill and enjoy!