

Super-Sub

English IPA – 5.5 Gal - OG 1.053 – FG 1.011 – ABV 5.5% - IBU 52 – SRM 9

In soccer a Super-Sub is someone who comes off the bench and delivers in a time of need. Well, this month we needed a super sub. Our original Beer of the Month for March 2021 was something different, but that recipe needs a little more refining. Enter, the Super-Sub – this one we have had in our back pocket for a couple of months now and we're very excited to be sharing it. This recipe is Jeremy's take on an English IPA.

It focuses more on bitterness and malt character rather than the more modern juice bombs that are all the rage right now. It has a great clean bitterness backed up by slightly sweet malt character from the English grains. Its fermented beautifully by the English Ale II strain from Escarpment Labs. Just about everything in this recipe is English, except for the hops. Jeremy took a slightly different route, instead of using classic British hops, he went with more fruit forward American hops. The Magnum delivers the clean bitterness this recipe needs, while the Amarillo adds subtle grapefruit, apricot, and melon notes.

Ingredients

Grains	Amount (lbs)		
Maris Otter	5		
Golden Promise	2.5		
Flaked Oats	1		
Golden Naked Oats	1		
Crystal Light	1		
Carafoam	0.5		
Acidulated	0.1		
Hops	Amount (oz)		Boil Schedule (minutes)
Magnum (12% A.A.)	0.5		60 minutes
Amarillo (9.9% A.A.)	1.0		30 minutes
Amarillo (9.9% A.A.)	1.0		5 minutes
Yeast			
English Ale II – Escarpment Labs	1 Package		
Extras			
Gypsum	¾ TSP at Mash		<i>Enhances the hop bitterness and aroma</i>
DME/Dextrose	150g (1/2 cup) at bottling for priming		<i>Check a priming calculator to confirm correct amount</i>

Important Tips on Brewing

- Be extra cautious when it comes to 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.
- 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. At this point 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.

[Step by step Instructions on the other side](#) →→→

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, add ¾ tsp of GYPSUM to the water. *This raised the sulfates in the water which brings out more hop aroma, and crisper hop bitterness.*
- 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 temp 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 temp 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. Add ½ ounce of Magnum hops to the boil and 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 Amarillo hops to the boil.
- 3) With 15 minutes left in the timer add 1 tsp of Irish moss to the boil. If you have a wort chiller, we recommend adding it at the 15-minute mark. With 5 minutes left, add 1 ounce of the Amarillo hops to the boil.
- 4) When your timer goes off, turn off the heat, and cool the wort down to 75°F (20-25°C) as quickly as possible
 - a. We love using a wort chiller for this, it can get the beer down to temp in 20-30 minutes. Otherwise, you can immerse the brewpot in an ice bath or wait it out. The longer it takes, the greater risk of infection.

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 good time to take a hydrometer reading. It should be around 1.055 give or take a few points.
- 3) Make sure the wort has been cooled to at least 30c!!! 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 English Ale II 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) After 10 days have passed, take a hydrometer reading. It should be somewhere between 1.009-1.014.
- 7) 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.
- 2) At the same time, mix the priming sugar with 300ml of boiling water and add to the beer. Stir it in VERY gently.
 - a. Make sure to check out a priming calculator to verify the correct amount of sugar. Too much sugar and your beer will end up foamy, or even start blowing the caps off! Too little and the beer won't be fully carbonated.
- 3) Rack the beer into your bottles or growlers. Then, let them sit for 2-3 weeks at room temperature. Chill and enjoy!