DANK DUBS

Double IPA – 5.5 Gal - OG 1.080 – FG 1.012 – ABV 8.7% - IBU 30ish – SRM 4

The beer of the summer is here. The hazy days of the summer are fast approaching and the team at KJ felt we needed to release a beer that captured the unique vibe of the summer season. We present to you *Dank Dubs*.

This is a Double IPA featuring a light malt and oat backbone that is the perfect vehicle for the earthy/peach notes of Idaho 7 and the tropical fruit bounce of a Galaxy dry-hop. But don't let the laid-back feel of this beer fool you. At 8.8% ABV it packs a punch. Perfect for hot summer nights or lazy days on the beach, Dank Dubs is officially your new summer jam.

Ingredients

Grains	**Amount (lbs)**
2 Row	13.0
Oat Malt	3.5
Flaked Oats	1.6
Carafoam	1.0
Acidulated	0.2
Yeast Lightning	1 gram

Hops	**Amount (oz)**	**Hop Schedule**
Idaho 7	4	0
Idaho 7	4	Whirlpool at 180F

Please note, we may be packaging the Idaho 7 hops in this recipe in one 8oz bag to cut down on wasted packaging. Because the additions are so close together, we feel our customers can eyeball the amounts to add if they do not have a scale.

Amarillo	2	Dry Hop 1-2 days before bottling
Galaxy	3	Dry Hop 1-2 days before bottling

Yeast

Arset Kveik – Escarpment Labs	1 Package

Extras – *Sold Separately*

Calcium Chloride	3/4 teaspoon at mashing	Brings the dankest haze
Irish Moss	1 tsp w/ 15 minutes left in boil	
DME/Dextrose	150g at bottling for priming	

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 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. 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 vigoursley without leaking out of the container. The fermentation creates a layer of CO_2 that remains in the pail due to the airlock. Once primary fermentation is over, and the lid has been opened, the layer of CO_2 dissipates, and oxygen replaces it. At this point airspace can ruin your beer. When racking into carboys make sure they are filled to the top, or you blast CO_2 inside to prevent oxidization. Ask us for details on this!
- 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 6-7 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 Calcium Chloride to the water. *This raised the calcium in the water which makes the beer far hazier.*
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 153 °F for 60 minutes. It is very important to hold the temperature at 153°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 153°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 15 minutes left in the timer, add your wort chiller if you have one, and if you do not, don't do anything.
3) With 5 minutes left in the timer, add 1g of Yeast Lightning and keep boiling.
4) When your timer goes off, turn off the heat, and add 4 ounces of Idaho 7 hops.
5) The next stage is to cool the wort and add some more hops.

Cooling & Whirlpooling -> Let's Get Hoppy

1) We need to cool the beer a bit before adding more hops. Our target temperature is 180°F. This will not take too long to cool if you're using a wort chiller. Adding hops at 180°F will maximize the flavour of the hops but add just a little bitterness.
2) Once the wort is down to 180°F, add 4 ounces of Idaho 7. Let the beer sit for 10 mins. Do NOT actively cool the beer.
3) After 10 minutes are complete. Start cooling the beer down to 25°C, this is our yeast pitching temperature.

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 though 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 1.080 give or take a few points.
    b. Sometimes it can be tough to hit the target gravity on a beer with this much STUFF in it. If you are significantly lower, we do recommend adding some form of sugar at this point to bring the gravity closer to the target. DME of Dextrose are both going to work. Typically, 1kg of dextrose is enough for 18 points of gravity. 1lb of DME is about 8 points of gravity (e.g. 1.072 -> 1.080)
3) Make sure the wort has been cooled to at least 25c!!! 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 Arset Kveik 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 21-27°c. (Arset likes it hot)
6) Fermentation should take between 10-14 days. There is lots to ferment here so expect it to go a little longer than most recipes.
7) DRY HOP ADDITIONS: We want to dry hop this beer with the Amarillo and Galaxy about 1-2 days before you plan to bottle or keg the beer. This really expresses the hop aroma best.
    a. Aim to dry hop the beer when you know you will have time 1-2 days after to bottle or keg it. If the hops sit longer in the fermenter, then you will lose a lot of that delicious citrus aroma.
    b. When you are adding hops to your fermenter, you need to prevent excess oxygen getting into your fermenter. We recommend quickly removing the bung or airlock and adding the hops. And if it takes longer than 10-15 seconds then it would be a good idea to get more CO2 in there. If you have CO2 available, spray some from your tank into the fermenter. If you don't, then put a mixture of 100g of dextrose and boiled water in there. This will start a mini fermentation that will expel any oxygen that might have gotten into the vessel while dry hopping.
8) After the 1-2 days of dry hopping are complete, it is time to move to the bottling stage.
9) 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!
4) *If you are kegging*, rack the beer into the keg and put CO2 on it right away. 2 days at 30 PSI, followed by a 10 PSI taste test. If it is not carbonated enough yet, another day at 20 PSI before returning to 10. There are faster methods of carbonating a keg including using a Quick Carb, or by shaking the keg while attached to CO2 (ask us for details on that method)