

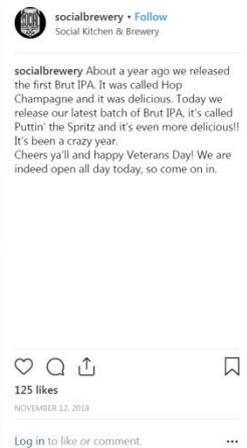


Brut IPAs
Sean O'Toole
Presented at MCB Meeting January 2019

This is a relatively new “style” of beer which originated in San Francisco late 2017.

It is a pale, bone dry, light in body, fizzy beer with plenty of hop aromatics, but not as much bitterness as a typical American IPA.

The first commercial example is recognised as being brewed by Kim Sturdavant of San Francisco’s Social Kitchen and Brewery. He “considered calling it Champagne IPA... but, after consulting with a wine-minded friend, settled on Extra Brut IPA, eventually shortened to Brut IPA”¹, the *Brut* name coming from the term used in wine making for a dry sparkling wine.



I’ve brought a few commercial examples along with me today so you can taste them as we discuss.

Beer Name	Brewery	ABV
Spark Dust	By The Horns	6.3%
Hollow Point	Salopian / Green Duck Collab	5.8%
Hop Fizz	Siren Craft	6%
Cuvée Brut IPA	Siren Craft	6%
Patrons Project 6.06 / White Grape Brut IPA / Jon Simmons / What Fools These Mortals Be	Northern Monk / Edge Brewing Collab	7%



Rules of the Style²

“As pale as possible in color”

“It needs to be very dry ... knock it below 1° Plato” and get it as close to zero as possible

“It needs to be in balance and very good and tastes really good ... a very hop forward IPA.”

...or at least that’s what the creator of the style says. With such a new style brewers are experimenting it .



Grain Bill

Light as possible although breweries are experimenting with this. I've come across a rose Brut, Hibiscus Brut. Maybe they are something else rather than a true Brut. Sturdivant was targeting as pale as possible utilising adjuncts such as flaked corn and flaked rice to help lighten the beer, but that's just his preference.

Hops

Sturdivant says he thinks the resinous tropical hops work best rather than grassy earthy hops I've seen hops such as Lemon Drop, Nelson Sauvin or Hallertau Blanc used.

IBUs

As is the recent trend in hazy juicy New England IPAs, Brut IPAs are also low on bittering IPAs and heavy on the dry hops.

Hopping very late in the boil or even only at flame out can add enough IBUs targeting no more than 20-25IBUs.

When it comes to dry hopping, use as much as you find appropriate. 10g/litre sounds good to me.

ABV

As you will see by the samples I have brought today, Brut IPAs typically are in the range 5.5-7.5%. Those that I have tasted at the upper end of this have not been as easy drinking as I'd have liked.

Enzyme

The enzyme, Amyloglucosidase (AMG) has been used previously to reduce the sweetness of higher ABV beers such as Imperial stouts or TIPAs.

At the end of the fermentation cycle, unfermentable dextrines remain which contribute to the mouthfeel and body of a beer. AMG works by breaking these molecules freeing up glucose molecules which can then be fermented, leading to a higher ABV (for a given OG) and drier beer.

Experimentation going on whether to add the enzyme to the mash or the FV.....or both. See the recent Brulosophy xBmt ³.

If you harvest and reuse your yeast, you need to understand that if you add AMG to the FV, the enzyme will live on in the yeast and affect your next batch.

The other alternative is to use the enzyme in the mash. The enzyme is denatured at higher temperatures and is destroyed in the boil, hence if adding it in the mash, ensuring a lower mash temperature say 64°C can help ensure its efficacy. One disadvantage of using it in the mash is that more enzyme is required (than if being used in the FV) and it needs to be well distributed throughout the mash to ensure the starches are broken down. On the other hand, the advantage of using it in the mash is that as the enzyme is broken down in the boil and not carried through to the FV.

How much enzyme to use.

In the UK, the enzyme is available from The Malt Miller ⁴ at £3.95 for 15ml. Application rates of 0.03-0.08ml per litre of wort. I went with the upper end of this range for my first Brut. See below recipe.



Yeast

Any neutral & well attenuating yeast will do the job.....let the hops get do their job.

As you will see below I chose Nottingham in my first Brut IPA. I have used it several times and it always produces dry crisp Golden Ales typically finishing at 1006 or 1007. I figured the enzyme should then have not trouble hitting 1.000.

Carbonation levels:

Kim Sturdavant of San Francisco's Social Kitchen and Brewery says they carbonate to 2.5vols CO₂ because that is what their system can do, but they would carbonate higher if their system allowed. As you will see below I have initially carbonated my first Brut IPA at 3.5 vols but I will experiment with even higher CO₂ vols over the next few weeks.

BJCP

So which BJCP category? Is it really an IPA with low level IBUs? I've seen lots of Internet chatter on this but no clear sign of what was the best category. Comments I came across included;

"It's just a hoppy Pilsner"

"we have those in Belgium....it's called a Belgian golden ale."

It can take several years before a category becomes defined for a style to see if it really has become a style or whether a particular type of beer is just a passing fad.

I therefore asked Gordon Strong (three times winner of the US National Homebrew Comp and now President and ranking judge in the BJCP) via twitter, if a Brut IPA should be entered as 21B (Speciality IP) or 34C (Experimental Beer) and he confirmed 21B.

Conclusion.

Taste some for yourself. For me they are a great summer drinking crisp, dry beer. It does however remain to be seen if Brut IPAs become a style in their own right or whether they are a passing fad.

Sean O'Toole

24/01/19

References

¹ Craft Beer & Brewing / Holl, John (2018) The Birth of the Brut IPA, Available at: <https://beerandbrewing.com/the-birth-of-the-brut-ipa/> (Accessed: 11 January 2019)

² Jensen, Dave (2018) Brut IPA Q&A with Kim Sturdavant, Available at: <https://beer47.com/brut-ipa-q-a-with-kim-sturdavant-28fd32b607> (Accessed: 24 January 2019).

³ Fraser, Malcom (2018) ADDING ENZYME TO THE MASH VS. TO THE BEER IN BRUT IPA | EXBEERIMENT RESULTS!, Available at: <http://brulosophy.com/2018/11/26/adding-enzyme-to-the-mash-vs-to-the-beer-in-brut-ipa-exbeeriment-results/> (Accessed: 24 January 2019).

⁴ <https://www.themaltmiller.co.uk/product/nbs-amyloglucosidase-300-enzyme/>

Useful Links

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<http://midlandsbeerblog.co.uk/2019/01/14/brut-the-trend/> (Accessed: 24 January 2019).

Recipe

As mentioned above, I have had a go at brewing a Brut IPA myself. It's a bit of an experiment. I have brought some bottles with me today for you to sample. It's only been I the keg a week and bottled from the keg last night. It may not be the finished article but I'd be interested to get some feedback.

I went with a pale grain bill although it could have been paler if I had reversed the Golden Promise/Pilsner Malt percentages and reduced the Carahell. Also, inspired by the Salopian/Green Duck Hollow Point I added a litre of white grape juice at the end of the boil.

Name: #046 High & Dry

Style: Brut IPA

OG 1.044

FG 0.999

ABV 5.9%

SRM 4.11 (EBC 8.1)

IBU 25.6

Mash pH = 5.41

AMG 300 enzyme:

2ml of Amyloglucosidase 300 enzyme added to the mash after 60mins. Then stirred in well..

2ml of Amyloglucosidase 300 enzyme added to FV at pitching..

Boil Time: 90 mins

Batch size: Planned at 23 litres FV before trub losses.

Pre-boil gravity: 1036

Yeast: 1 x 11.5 g sachet of Nottingham rehydrated in 200ml boiled and cooled water.

Packaging:

19L Corny keg at 3.5vols CO₂

Today's samples bottled from keg.

Fermentables

Quantity		Fermentable	PPG	% grain bill	
2.5	kg	Crisp Gold Promise Malt	37	59.0%	Mash
1.13	kg	Weyermann Bohemian Pilsner Malt	38	26.7%	
0.42	kg	Pale Wheat Malt	37	9.9%	
0.125	kg	Carahell Malt	34	3.0%	
0.06	kg	Weyerman Acidulated Malt	27	1.4%	
4.235	kg				
1	litre	100% Pure Pressed White Grape Juice	4.8 (est)	N/A	Added at the end of the boil at flame out

Hop Schedule

Amount	Variety	AA	Leaf / Pellet	Use	Time
10g	Mosaic	12.0	Pellet	Aroma	5
22g	Mosaic	12.0	Pellet	Whirlpool at 75°	20min
22g	Nelson Sauvín	11.6	Pellet	Whirlpool at 75°	20min
75g	Mosaic	12.0	Pellet	Dry Hop	
150g	Nelson Sauvín	11.6	Pellet	Dry Hop	

Brew Progress

#046 High & Dry (Brut IPA)						
	Date	Time since Pitch days:hrs:mins	Set Temp	Actual Temp	Gravity	Observations
Sun	30/12/2018 17:15	00:00:00	N/A	18.5°C	1.044	Yeast Pitched
Sun	30/12/2018 22:45	00:05:30	N/A	18.5°C		Airlock under pressure
Mon	31/12/2018 10:00	00:16:45	N/A	20.0°C		Bubbling. Krausen up.
Tue	01/01/2019 10:00	01:16:45	N/A	20.0°C		
Tue	01/01/2019 18:30	02:01:15	N/A	18.8°C	1.011	Bubbling about every 15s.
Wed	02/01/2019 07:30	02:14:15	N/A	18.0°C		Bubbling about every 22s.
Wed	02/01/2019 18:15	03:01:00	N/A	17.0°C	1.0045	Bubbling about every 40s.
Thu	03/01/2019 06:30	03:13:15	N/A	18.0°C		
Thu	03/01/2019 19:00	04:01:45	N/A	18.0°C	1.0025	Occasionally bubbling
Thu	03/01/2019 22:30	04:05:15	N/A	18.0°C		Dry hops added (150g Nelson pellets & 75g Mosaic Pellets)
Sat	05/01/2019 04:30	05:11:15	N/A	21.0°C		
Sat	05/01/2019 16:00	05:22:45	N/A	21.0°C		
Sun	06/01/2019 17:30	07:00:15	N/A	18.4°C	0.9995	
Fri	11/01/2019 20:00	12:02:45	N/A	18.0°C	0.999	Into Utility fridge to cold crash
Sat	12/01/2019 19:30	13:02:15	N/A	10.0°C		
Sun	13/01/2019 20:30	14:03:15	N/A	2.0°C		
Mon	14/01/2019 20:30	15:03:15	N/A	2.0°C		
Tue	15/01/2019 19:30	16:02:15	N/A	2.0°C		
Sat	19/01/2019 19:30	20:02:15	N/A	2.0°C	0.999	Kegged at 3.5 vols CO2

OG	1.044
FG	0.999
% ABV	5.91

FV - 30L PP Bucket
 Brew fridge was in use with another brew so fermented in the Utility room using a heat pad as necessary targeting 18°C

