



Brewer's Notes

Experimental IPA - Test #1

SUMMARY

West Coast IPA featuring a newly available Australian HAAS hop variety, Eclipse, in the form of a new advanced hop product, "Spectrum". We are pairing Eclipse with Mosaic to generate a crisp IPA with notes of mandarin oranges, tropical fruit, citrus peel, and fresh pine needles.

Intro:

For our first collaboration with Haas for 2024, we will be highlighting their new advanced hop product called Spectrum. Spectrum is a flowable dry-hop addition that is designed to replace the typical T90 and higher lupulin pellets. The hope in using this product is twofold; both higher yields and less conversion of complex sugars into simpler sugars through enzymatic activity, a process known as hop creep.

Yield:

One of the biggest impacts of dry-hopping is that 1lb of T90 pellets can absorb nearly 5 gallons of liquid, which in turn impacts how much beer is able to be produced. Many breweries target somewhere in the realm of 2lbs per barrel, which on a 30 barrel batch, could result in a yield that is 2 barrels, or nearly 7%, short of expected volume. In turn, this affects the cost per barrel, a major KPI in the brewing world. By using Spectrum, our hope is that we are able to consistently produce our target volumes and drive our cost per barrel down to be more comparable to non dry-hopped beers.

Hop Creep:

A major phenomenon called hop creep emerged in the brewing industry throughout the 2010s as heavily dry-hopped, hop forward hazy IPAs took the industry by storm. It wasn't until the last couple of years that hop creep became better understood. It is now widely understood that hop creep is the result of enzymes that are present in hop pellets converting complex sugars (dextrins) into more fermentable sugars. Hazy IPAs are brewed in such a way that creates more dextrins, so when dry hops are introduced, it can lead to continued fermentation as those dextrins are converted into digestible sugars for the yeast. This results in a drier beer, which is far from ideal for hazy IPAs, which should be slightly sweet to seem more juicy. If the brewer is not allowing for this continued fermentation



to happen in their tanks and their beer is not pasteurized prior to packaging, then this continued fermentation can happen in the package. This results in a highly carbonated liquid and poses the risk of cans exploding. This phenomenon caused companies like Haas to develop dry hop alternatives like Spectrum, which can help mitigate hop creep to a certain degree.

Hop Variety:

Spectrum is available in 9 hop varieties at the moment, with more likely to be developed as time goes on. For this first collaboration we have chosen to work with Eclipse, a new hop variety out of Australia. With the sensory notes coming back with notes of mandarin oranges, citrus peel, and fresh pine needles; we are excited to try it out. We will be pairing Eclipse with the modern classic American hop, Mosaic. Mosaic is mostly known for its tropical fruit notes, but oftentimes people are able to pick up on citrus and piney notes as well, which when paired with Eclipse we believe will make a well-balanced, fruity yet resinous hop profile; perfect for the classic West Coast IPA.