

From Secretary Greg's Quill

by Greg Hackenberg

Hank has run out of things to say for the moment and asked me to fill in the columnar duties this month and write something. Me? Well, stupidly I said yes (it must have been something in that beer he handed me). So, now being on the hook, I asked, write about what? Hank suggested to write something I do that might be interesting. So there are quite a number of things I do, but the “interesting” part, now there’s the rub. I’m also guessing that it should involve beer. What to do. First, I put on some Miles Davis. Really, you can’t listen to too much Miles Davis. Then I savored a few beers from the stash. After getting halfway through Bitches Brew and a nice bottle of rum barrel aged Scotch ale, I settled on the topic of First Wort Hopping. So that’s it, a good brewing related topic.

Back in the day, that day being long before the great Huracan (the one legged Mayan deity) tossed a particularly disruptive storm, for which they are named, in our general direction (I’ve been told repeating the word “earth” is supposed to appease him but I can’t vouch for it), Elvis, the erstwhile proprietor of Brew Ha Ha who left the building shortly after the storm, described a technique dug out of brewing lore he had heard of. It seems some of the old German brewers (are there any young German brewers? Just asking) would add a large charge of hops (nearly all) to the kettle prior to filling it with the runnings. This the story went, that this somehow allowed the flavor and aromatics to survive the boil.

Poppycok! I thought. I didn’t say it, though. I don’t think I have ever actually said “poppycok” but it is such interesting word originating in middle Dutch and possibly Latin...but I digress. Anyway, everything brewing-wise I had read said all that stuff is blown off and boiled to oblivion. Hops that go through the full boil are largely irrelevant; all that is left is the bittering compounds, right? Everybody knows that.

Not so fast. It turns out an article first published in 1995 identified the technique (for convenience and to save on keystrokes “First Wort Hopping will be referred to as FWH from now on) and immediately sparked the first bit of attention and some real experimentation with the process that showed that it was possible to get something besides bitterness from those sorry old boiling hops.

At this point you are probably pretty well confused, and if you took my advice and put Kind of Blue on Miles should be cutting loose with the first solo on “So

What”, which can be distracting. What is this first wort stuff? Is there a second? All I’ve got is the one?

Okay, the short and the long, goes like this. Take your hop schedule. We all learned the general rule of thumb, 60 minutes – bittering, 20-30 minutes – flavor, 10 or less – aroma (I think I got that from Charlie Papazian). So how about this, you can shift some of the flavor hops to FWH by tossing them into the kettle before you start sparging and collecting wort, and you’ll get the flavor of the later additions AND the bittering from one addition of hops. My Scotch blood (frugal, not cheap!) likes the idea immensely, but there are a lot of other benefits. A lot of other benefits.

That first charge, steeping in the balmy runoff, does a number of things chemically. So goes the theory (now backed with quite a lot of data) says the flavor compounds bind chemically into the wort and resist being boiled off. Also, the pH is lowered increasing isomerization, so you will extract an additional 10% of IBU’s than if boiled in the conventional manner. Side by side tastings, and I can vouch for the results, show a smoother and less harsh bitterness, with more of the base flavors of the hop, and less harshness all around. Paired with some conventional flavor/aroma additions and a nice complexity comes through. I began using it on British style pale ales and other high bitterness beers (with excellent results), but now there are few beers that I do not employ some FWH.

Okay, so how do I figure all this out and work all this into a recipe? The physical process is simple as can be: dump the hops into the kettle before run off starts – that’s it. You will need a bit less bittering hops to account for the increased IBU’s. I have been using the Beersmith software which includes a category which adjusts for the additional 10% of IBU’s. Those 20-30 minute additions will need to be dialed back. It’s not a one to one ratio in my experience; I’ve been going with about 75%.

A couple of things to consider. Other hop additions will give you the regular amount of IBU’s, flavor and aroma. Don’t get carried away and FWH with everything (unless you are trying to make a hop bomb and are considering the flavor addition) as you can blow a beer out of balance. Generally, I am splitting the bittering hops between FWH and a regular 60 minute addition. In my experience, the lower alpha acid, noble and not so noble, hops really shine through with this technique.

Give it shot and enjoy.