



The homebrew club for brewers of all levels based in and around London.
We meet monthly, come and join in.

LONDON AMATEUR BREWERS HOP TRIAL – MARCH TO JUNE 2013

REPORT TO WYE HOPS LTD

Aim and Objectives

The aim was to brew a standard English style bitter using an experimental Fuggle seedling (coded 19/6) bred, grown on and harvested at Wye Hops Ltd during the 2012 growing season. The objective of the trial was to assess the qualities (flavours, tastes, bitterness etc.) of the new hop and compare it to the commercially available Fuggle, with the view that, if it proved to be a suitable substitute, it should be grown on during the 2013 season.

Background

The experimental seedling 19/6 came out of a recent Institute of Brewers and Distillers' project to develop breeding materials with Fuggle pedigree. Some assessors consider that its aroma is similar to Fuggle, and if initial brewing trials confirmed similar qualities in the finished beer, it will be planted at a farm trial site during 2013.

London Amateur Brewers (LAB) is a group of enthusiastic home brewers with a track record of brewing high quality award winning beers of all styles. The group comprises highly experienced and technically proficient brewers, qualified competition beer judges and owners and employees of commercial breweries. LAB was approached by Peter Darby in February 2013 with a view to brewing a number of small batch brews (around 20 litres each) using 19/6 and to compare it to their usual experience of Fuggle.

Parameters

The type of beer brewed should be a standard English session bitter with 19/6 being used for the whole brew, including dry hopping. The finished beer should be complex, probably amber or dark, with a relatively low alcohol content of up to 4.5% ABV. Hopping rates should be appropriate to the style and, with an alpha-acid of around 4%, the bitterness of the finished beer would be in the region of 35-40 IBUs.

The brewing qualities of the commercially available Fuggle are: delicate, minty, grassy, slightly floral aroma and produces a clean, refreshing, full-bodied flavour present in many traditional ales (description taken from Charles Faram website).

Samples of the finished beers are to be sent to Will Rogers (Charles Faram) and Peter Darby (Wye Hops) for independent tasting and assessment.

Method

Samples were given to five brewers who brewed a total of seven beers between March and May 2013. No restrictions were placed on the recipes other than those prescribed in the above parameters. The strength of the beers brewed ranged from 3.8% ABV to 5.5% ABV. Although the latter was outside of the strength parameter, it was felt that it would be useful to assess how 19/6 performed in stronger beers. This beer was also used as part of a heritage malt trial (Chevalier), being undertaken concurrently by fellow brewers in the Durden Park Beer Circle.

The colours of the beers ranged from amber to dark amber, with grists including pale malt and up to 4.8% crystal malt. The yeasts used were Nottingham, US05, Batemans and Westerham. Vital statistics of the recipes are set out below.

Comparator beers were brewed using commercially available Fuggle. This proved to be a valuable means of “setting the scene” and provided an anchor point of reference.

A tasting group was formed involving the brewers themselves and experienced tasters from within LAB. The group, which met on Monday 10th June, assessed the beers for their integrity, and any with faults, whilst it was agreed that they contributed to the assessment of the hop profile, would not be sent outside of the group for independent assessment.

Overall Impression

The tasting was conducted on the understanding/assumption that the characteristics of hops will inevitably vary from farm to farm, from season to season, how they are handled by the hop merchant and their age. Also, flavours will vary according to brewing factors such as grist composition and the timing and quantity of hop additions in the boil.

The flavours and aromas that came through from all of the samples included most of those set out in the Charles Faram description (under parameters above). This inevitably has to be qualified by the fact that tastes are personal, subjective and perhaps influenced by the commercial descriptions. Nevertheless, a consensus was reached among the tasting group, who are experienced enough not to be influenced by the commercial description or other subjective factors. Also, as well as using personal experience from using Fuggles, together with descriptions available, the comparator brews provided a useful reference point and enabled the group to assess 19/6 against a commercial Fuggle.

Flavours and aromas - there were gentle floral notes and/or lemon sherbet flavours in most of the samples, together with some earthiness and some spicy pepper. It was noted that the sample with the lemon sherbet flavours used 100g of 19/6 as flame-out hops. None of the other samples used the hops in this way. This flavour outcome could possibly be the effect of high levels of hopping, but there were other variables at work (recipe, different yeasts etc.) which also might have been responsible for the hop profile. There were fewer grassy or minty notes, although they were nevertheless present. Overall, the hop aroma and flavours were delicate and nothing was strident or



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aggressive about the hop character, even in the one beer where 100g of hops were added at flame-out.

Bitterness - was difficult to judge and compare against the comparators for a variety of reasons, such as recipe formulation and age of the hops used. But there was nothing aggressive or astringent about either the 19/6 sample brews or the comparators.

Impact of yeast – this was arguably the most significant factor that came through from the tasting. In all, four different yeasts were used: Bateman's Brewery, Danstar Nottingham, Fermentis US-05 and Westerham Brewery. This was most evident in the samples from one brewer who brewed two 25L batches to the same recipe, but then fermented them with two different yeasts, US-05 and Westerham Brewery yeast.

The brewery yeast accented the malt character of the beer which in itself provided a good background for the characteristics of the hop to come through, with floral notes and spicy pepper uppermost. By comparison, however, the US-05 did the hop no justice at all, noticeably changing the character of the hops.

Impact of ABV – although low ABV beers were specified in the parameters, one was fermented with Nottingham yeast to an ABV of 5.5%, and was then split into two batches, one batch hopped with 19/6 and the other with commercial Fuggle. In this instance the hop character was not as forward as with the lower strength beers, but, as with the one brewed with Westerham Brewery yeast, the more malty character of the beer provided a backdrop that enabled the character of the hop to come through. The group thought that the 19/6 beer was brighter, fresher and slightly more floral compared to the commercial Fuggle.

Conclusion

Overall, the differences between 19/6 and the commercial Fuggle were slight and marginal. The group felt that 19/6 had all of the characteristics you would expect from a commercial Fuggle and that there was no reason why it could not be used successfully as a Fuggle substitute.

London Amateur Brewers

June 2013

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