

NEWSLETTER 2015-16



Younger flavours

They say an old head is a wise head, but the same cannot be said for the nose. A younger nose is undoubtedly more sensitive and discriminatory. Fortunately, the BHA now has many younger growers and this next generation group have been actively involved in selecting for aroma and flavour amongst the seedlings from recent crosses. They have chosen which seedlings in the field to harvest and, from rub-and-sniff of the dried samples, whittled down to a short-list of interesting, unusual or intense samples which were then assessed by a trade panel of brewers and merchants. The result of their efforts is that thirteen new selections from these crosses are now being propagated and taken forward for further evaluation in larger plots. The future of the British hop industry is in their hands and they are actively shaping the new varieties which will be part of it.

Tasty Endeavours

Although still at the farm trials stage and not yet registered or released, interest in Endeavour continues to grow as a flavour variety. The BHA has now sanctioned five trial sites for this seedling of Cascade suitable for growing on hedgerow wirework and is allowing these to expand if desired. But the trials are revealing unexpected facets about Endeavour. In its early selection plots it was noted that rabbits and deer would preferentially graze its young shoots in the spring, shunning other adjacent hops. During the cold wet March of 2016, it seemed that slugs also much preferred Endeavour to other surrounding varieties. The flavour of Endeavour is clearly not just interesting and attractive to beer drinkers!

Stunt Viroid - it could also happen here!

The spectre of Hop Stunt Viroid has been hanging over the hop industries this side of the Atlantic for several years. The Wye Hops newsletter 2012-13 warned of the dangers of the introduction of this disease on imported plant rootstocks from the USA. Unfortunately, not all brewers and growers have heeded the advice. It has just been discovered that all the varieties imported from the USA by a brewer-grower in Spain are infected with Stunt Viroid and measures are urgently being taken to destroy these stocks and contain the outbreak. Fortunately, Wye Hops obtained clean stocks of Centennial from the USA last year. These are now available grown only through the certified and inspected UK hop propagation scheme, adding to stocks of Cascade, Chinook and Nugget. With these US varieties available here free of Stunt Viroid, and the now proven danger of importing rootstocks from the USA, why even consider taking the risk?

Wilt resistance and Fuggle combined

The search for a wilt-resistant Fuggle has taken a major step forward. Two very promising seedlings of Fuggle in advanced plots have been found to be highly resistant to wilt in the most recent tests conducted in Slovenia. Although some Fuggle seedlings have previously shown moderate resistance, this is the first time strong resistance has been detected from a cross with Fuggle. Hops from the 2016 harvest of both will be used in pilot brewing trials to see how well these daughters resemble their mother in the brew.

The importance of being ...

One of the most interesting outcomes so far from a re-evaluation of the aroma of old accessions in the germplasm collection is Prof. Ernest Salmon's final variety. Although from a cross he made back in 1921, it had been rediscovered because it was found to be resistant to wilt disease. It was on farm trials when he died in 1959. It was rejected by his successors after the 1960 brewing trials but its flavour now appeals to a new generation of brewers. It has been rediscovered for a second time and is back on two farms with production from this year's crop. In honour of its creator, the BHA has named it Ernest.



Molecular selection begins

Wye Hops has used classical hop breeding techniques since the start of the programme by Prof. Salmon over a century ago. Selection of new varieties has been from observations of their traits made over several years of field trials and tests. However, underlying such traits is the plant's DNA and new breeding techniques are being developed which allow selection based on "reading" the DNA sequences - the molecular blueprint - and predicting the expected characteristics from this. DNA is present from the earliest growth of a new seedling and is independent of environmental influences. Therefore, selection amongst the seedlings of a cross using molecular techniques can start just as soon as a leaf can be sampled. It should be more efficient, much quicker and more responsive to changing objectives, removing the need for extensive trials over many seasons to assess potential. All the crosses made in 2015 at Wye Hops were to develop suitable hop "marker" populations on which these new techniques can be developed and validated. The seedlings were established in the field during 2016 and, over the coming years, will be a resource taking British hop breeding forward into the molecular age.

Hardly a hop-aphid in sight

Last year we reported an absence of predators of aphids in the breeding plots. This season, the predators have been there, just waiting for the migration of the aphids into hops. The cold wet start to summer delayed the aphids which remained in the hedgerows some ten days later than usual and, eventually, only flew to hops in very low numbers. They were devoured by hungry predators as soon as they arrived and, despite being untreated with aphicides, the breeding plots until late July have had hardly an aphid to be found. Long memories suggest that 1968 was the last time this happened.

More talking

The high level of interest from the brewing industry and the beer-drinking public in all things to do with hops translates into a stream of requests to Wye Hops for advice, information, interviews, talks, tours and visits. This has built steadily over the last few years and, since the last newsletter, there have been again nearly fifty different events describing the work done for the British hop industry by Wye Hops, without counting the telephone calls!

Comments

If you have any comments or questions about the articles in this newsletter, or would like more detailed information, please contact Peter Darby

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The Directors of Wye Hops Ltd are Ali Capper, Clive Edmed, Andrew Hoad, Simon Parker and Bobby Neame, and they would also be pleased to give you further information about the work.

