

# HQG Meeting Notes --- February 15, 2019

## Call to Order: 2/15/19 (11am MST) & Welcome (John):

- Welcome & Introduce new member
  - Cloudburst – Steve
  - Gigantic – Van
  - Alvarado Street - JC
  - Cellarmaker - Connor
  - Trillium – Jean-Claude
  - Maine Beer Co - Cole
  - *Breakside – will be introduced next mtg*
- HQG is up to 32 members.
- Potential New Members on the call: Modern Times, New Realm
- **Rules of the Road for All members.**

## Coordinator Updates (Zach):

- Housekeeping
  - Appts to come from Zach for monthly HQG meetings (11am MST), delete old appts from John Mallett.
  - Call for agenda items a week before to committee chairs, agenda out a week before meeting. Notes following calls.
- Upcoming Sabbatical – Zach role to be minimal over sabbatical.
- Update on Committees; solicit other members for committees.
  - If you want to be added or deleted from a committee, please reach out to Zach and/or the committee chairs.

## Financial/Governance (Vinnie & Natalie):

- \$5,000 invoices to come out soon (April?)
- HQG looking to update bylaws

## Membership (Zach):

- Contacts for potential new members – any updates since hop convention?
- Introduction to potential new members (New Realm, Modern Times)
- Suggestions for other new members?
  - Other Half (JC will contact)
  - Monkish (JC)
  - Pint House, Austin (Matt Brynildson)

- Avery (Alec)
- Cigar City (Alex, Tim)
- Pfreim (Jamie)

#### Grower Relations (Jeremy):

- Grower Visit dates:
  - OR (Daniel Sharp) – Week of August 5<sup>th</sup>
  - WA (Jeremy M) – Week of August 12
  - ID (Alec Mull) - ~~Week of August 5<sup>th</sup>~~ **Jeremy M. request to change to Week of August 12**
- Matt J. to reach out to the Smiths for BBQ at their place for WA dates
- Oregon/Idaho: Daniel Sharp (OR) and Alec Mull (ID) leading these again? Do they need any help/assistance in coordinating BBQs and trip?
- We will look to discuss who to visit in the coming months to be strategic with the goal of seeing farms and or pickers we haven't seen yet, farms that needed work, etc.
- Review format/process for Farm Feedback to growers with the goal of having the feedback delivered back to the vendors/farms within 2 weeks (good timeline? We might have said 1 week but prob 2 is more realistic) of the visit.
- **Zach** – to give state by state feedback for potential 2019 Grower visits.

#### Technical (Tom):

- Thiol analysis discussion
- Discussion of interpretation of OSU research
- Confusion with Hop Creep; how does this discussion align with HQG's efforts
- Cascade Cup winner (B&D Farms). This is the last diesel direct fire kiln. How to message?
- Discussion on nitrogen levels
- Tom – some interest to have ½ acre of HQG hops at Sierra Nevada.
- Val – Need decision on hops to move ahead from the HQG program in the next 4-6 weeks from the 63 selections (final 63 approved by Henning) sent to all breweries.
  - Cut down originally from 3,000 plants to 63 plants.
  - Suggestion – select 10-20 plants for 2019. Ideal to possibly have 30 plants per hop. Per John H. – we'd need about an acre to pull this off.
- Tom – we need to establish brewery member guidance for any HQG hops taken out of the program. This process would also need to lay out expectation.
  - Things getting lost (a concern)
  - Proper Transfer protocols
  - Where to put hops?
    - Val – in the Midwest
    - WA:
      - Prosser (easiest option at WSU per John Henning.

- Segal Ranch (old AB plots were at Segal)
    - ID: Nate Jackson
    - MI, CA, OR?
- New Committee some day for the HQG Breeding Program?
- What does the HQG Breeding Program look like in 2020?
  - Rhizomes → Greenhouses → Soft Wood Cuttings
- Val to send out a list of what to propagate...
- Tom – do we have a list of other agronomic results (disease, yields, alpha, beta, etc.)?

#### **Marketing (Scott):**

- Tabled

#### **Pellet mill team (Alec)**

- New committee formed
- Would like to start touring with audit checklist
- Val – go in off season to inspect equipment

#### **Int'l Growers Relations (Matt)**

- Working on building committee
- Some focus in UK, Spain (Alec)

#### **Website (Zach)**

- Tabled

#### **New Business:**

- **Tabled due to time, needs action.** Succession planning, formalization of an executive committee?
- **Tabled** - BA Hop Sensory testing
- Need someone to write a Cascade Cup Press release (Zach?)
- **See Below**

## Varietal Selections from the Hop Breeding Program to Expand in the Spring of 2019

### Val Peacock to the HQG February 1, 2019

The Hop Quality Group needs to decide by mid-March which hops from those sampled from the 2018 harvest to expand to larger plantings. Ideally, we should expand 6-15 of our favorites from the current one plant to at least 15 and possibly 30 plants at the USDA fields in Corvallis. This stage of expansion is not very expensive, so my recommendation is to promote anything that is very pleasing to any one brewer and somewhat pleasing to a number of brewers. Half of these selections will likely fail in a year or two for agronomic or other reasons and can be easily replaced by newer selections. This is a reason to be a little aggressive here. We should also consider planting an additional 6-15 plants at a location in Yakima to see how the selections would perform there. We may even wish to put a few plants up in the Midwest to see how they do there.

In our January meeting, there was some discussion of expanding some selections to maybe 1-3 acres. This can be done but is costly and risky. We would probably need to pay a farmer \$5000-\$7000 and acre to do this – even in the first two years when we will likely not get a crop. In addition, we would need to pay a propagator \$10K to generate and establish sufficient cuttings to plant one acre. There is also a 50% chance the selection does so poorly, that the hop will not be interesting anyway. But if you are frustrated with the slow pace of hop breeding and evaluation, you may choose to accept this gamble.

Expanding to more than a dozen plants will likely need to be done by taking softwood cuttings of the only existing plant. Softwood cuttings are usually not nearly as vigorous at getting established as root cuttings, so it is likely we would not get a crop to harvest until the third year in the ground in cooler climates and the second year in hot climates in Yakima and Parma ID. We definitely do not want to harvest the first year – we want all the vigor the plant has to establish itself so we can judge its real yield potential.

At a minimum, we should expand the 5 top selections of the slide John Henning had at the end of his presentation at the HGA to 15 plants. I also recommend we expand the other 9 selections in that slide to a minimum of 15 plants. These selections were all rated by at least one brewer to be in their top three choices in the samples sent out to you in December. There is also room for a handful of selections of exceptional interest by individual brewers. If you have something in mind, please speak up. One selection, 029-011 seems to be especially interesting to many brewers. We can discuss on our February conference call if we wish to expand this hop, or some others, more than the rest.

There really was not all that much agreement among brewers as to which were the most interesting hops. This is expected, and you should not worry that there is not really a consensus about the hops promoted. If a handful of brewers are interested enough in a hop, it will be a commercial success even if most are not interested. Also, do not be shy about promoting what YOU like. But we need to have a plan soon, before spring.

## Jan - Feb 2019 Report (John Henning)

### 1.) Spraying Round-up while hops are dormant.

While hops are dormant, we spray Round-up to kill off winter-weeds and grasses. This gives hop plants a great head-start in the Spring as the winter weeds can't choke out growth. Our next spraying event will be to spray Chateau (pre-emergent herbicide) and Select (herbicide for grasses).

### 2.) Planting HQG 2016 Selections (currently dormant and in 5 gal pots)

Selections from the 2016 HQG selections were planted at the USDA-ARS hop yard during February. These were the remaining lines from the 2016 crosses that have undergone selection for downy and powdery mildew in the field in 5-gal pots on the low-trellis. A number of these flowered last year and we have marked those as either male or female.

### 3.) Designing platform to house hammer mill and pelletizer machine.

End-of-the-year fiscal funds were spent on purchasing a hammer mill and a liquid-Nitrogen cooled pelleting machine--along with a walk-in freezer. Electricity and a new roof are being submitted for bids to perform construction on the hop building. Internal work we are doing included designing and building a platform to place the pellet mill at working height and position the hammer mill nearby. Both of these instruments will be near the kiln and walk-in freezer.

### 4.) Restocking the "Male hop yard" with new rootstock (for weak or dead male accessions).

We have been pursuing a multi-year project to rejuvenate and restore the male lines used for crossing the past several years. The plants to use for restocking have been growing for two years and are now ready to be used to get new rhizomes to restock lines that were in poor health or dead. This was a large project that has taken up much of the last three weeks.

5.) We have sampled leaf material from over 300 plants to develop a molecular marker for identifying male hop seedlings. This project is based upon identifying regions of the Y-chromosome in hop (already completed), and testing those markers on 150 males and 150 female lines. Prior to testing we needed to gather the tissue and then weigh out a specific amount of leaf tissue and then extract DNA from these samples. We are currently in the process of extracting the DNA. The plan is to still use this to identify male lines from final selections (after downy and powdery mildew screening) prior to planting out in the field.

6.) Seedlings from HQG 2018 crosses have been germinated (up at F&B Nurseries-Woodburn, OR) and are almost ready to be inoculated for first round of downy mildew selection.