



Strategies for Hop Selection- Making the Case for Quality

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MBAA- RM Technical Summit
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May 20, 2017

Costs- 2 people/ 3 nights

Expense	Notes	Cost
Airfare	2 people (coach/RT/ Alaskan)	\$800
Hotel	3 nights/ shared room	\$600
Meals etc.	3 squares- 4 days	\$400
Rental car	Seattle Airport (4 days)	\$250
Total		\$2050



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Contracts

- Typically this is needed with a supplier in order to get a seat at the selection table
 - In some but not all cases minimum volume required to select
 - Due to rapid growth in # of breweries
 - Time considerations
 - Storage limitations
- Helps to guarantee supply in a transitory market
 - 2008 vs. 2016
 - Don't be fooled by recent markets and favorability of spot pricing.
 - Communicates to growers what varieties need to be in the ground
 - Price stability and increased predictability in financial planning



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Contracts

- How far out do I contract?
 - Public vs. proprietary varieties
 - Difference in availability
 - Suppliers have records of what you have selected in the past and can work to assure relevant selection choices
 - Especially important with proprietary hop varieties
 - 100% > 75% > 50% > 25%



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Why do I find Hop Selection Important?

- Trends in Craft Beer flavor profiles- American IPA's!!!!
- Develop relationships with your suppliers and network with other brewers
- Education
- Quality in an increasingly competitive landscape
 - Flagship consistency
 - Seasonal distinction
- Qualities in your beer that you/ your customers find pleasing
 - Developing brand definitions helps to define specific profiles from varietal spectrums
 - HOPS ARE A PLANT!



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Mosaic

- General Profile
 - Earthy
 - Floral
 - Fruity
- Specific Aromas:
 - Blueberry
 - Tangerine
 - Papaya
 - Rose
 - Blossoms
 - Grass
 - Bubblegum



Direct Relationship with Supplier

- Supplier opportunity for better customer service
 - Brokers select from growers
- Intel on harvest outlook
- Exposure to and ability to get new varieties
- Education
- Meet the people who are part of your supply chain and see the facilities



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Planning Your Trip

- Harvest starts at the end of August and goes through September
 - Aroma varieties typically harvested first followed by the alpha hops
 - Multiple trips are great if feasible but has added expense and time expenditure
 - I try to limit to 2 appointments/ day
 - Communicate with your supplier about what selections are important to you and they can provide timing advice.



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Other Activities Available

- Tour of farms-
 - Operations
 - Harvesting and picking operations
 - Drying
 - Bailing
 - Walk the fields and have opportunity to sample hops
 - Perspective
 - Experimental yards
 - Legacy yards



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Other Activities Available

- Tour of Processing
 - Storage/ handling conditions
 - State regulatory process and sampling procedure
 - Tasting room with beers featuring new hops
 - Pelletizing Plant
 - Blending capabilities, process temperature control, packaging quality and overall conditions



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What to Expect

- Selection Room
 - Varied levels of sophistication
 - Often have break areas to “rest”
 - Will be presented with harvested lots that will cover your contract
 - Numbered by state, grower id and farm location
 - Analytical data



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Strategies for Selection

- Know what you are looking for !
 - Brand definitions that include hop flavor and aroma character
 - Hop profile descriptions
 - What hops in what beers when
 - I try to bring more than one person to have several data points to evaluate
 - Take notes on a standardized evaluation sheet that results in a numeric value that is comparable
 - GET DIRTY!
 - If you can't get there, oftentimes with direction from you, your broker can select on your behalf
 - Sometimes when schedule allows can occur remotely (i.e. GABF)



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Evaluating or Rubbing Hops

- Begin with a visual evaluation
 - Inspect the edge of the cut
 - Cone color should be yellowish- green
 - Grey indicates less ripe
 - Brown indicates over- ripe or heat damage
 - Disease or insect damage
 - Blackened indicates mold
 - White indicates mildew
 - Red/ Brown flecks indicate spider mite damage



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The Visual Rub Continued

- Purity of sample
 - Look for leaf and stem and other impurities. Should be less than 3%.
- Cone shape
 - Uniform and “large”
 - Leaves should not be open. Tightness indicates proper ripeness



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The Visual Rub Continued

- Inspect Lupulin
 - Split the cone longitudinally with your fingers
 - Should be yellow to golden yellow, abundant and sticky
 - A rusty color indicates over- heating or age



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Tactile evaluation

- Hop cones should be at 8%- 12% moisture
 - Indicators of proper dryness:
 - Adherence or lack of fracturing of leaves from the sprig
 - Indicator of wetness:
 - Cones stick together when squeezed in your palm



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Aromatic Evaluation

- Pull a sample from the cut closer to the middle. Enough to fill your palm adequately and comfortably.
- Rub hands together vigorously to roll the hops in your palms, breaking open the lupulin glands and generating some heat to increase aromatic volatility.
- Place nose in cupped hands sniffing with short sniffs and progressing to longer deeper inhalations.
- Do this several times with several samples
- Take notes
- Get dirty!



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Aromatic Evaluation Continued

- Aroma should...
 - ...possess the qualities for which you are looking based on your defined brand description.
 - ...be persistent across several samples from the lot in quality and intensity
 - ...be devoid of undesirable character
 - Most common is garlic/ onion
 - Especially common in hops traditionally used for bittering. What is your use?
 - Anything that strikes you as off from what should be displayed or what you are looking for.



Hop Evaluation Sheet

Based on *Technology Brewing and Malting 3rd Ed.*, Kunze and Manger (2004), VLB Berlin

Hop Evaluation Sheet

Supplier	Variety	Lot #

Visual

Color (Yellow- Green?)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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Purity (Leaves, Stems, other impurities under 3%)

1	2	3	4	5
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Cone Shape (Uniform/ Appropriately sized)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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Lupulin (Abundant, Sticky)

2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
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Tactile (Appropriately dried?)

1	2	3	4	5
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Aroma (Desirable/ Consistent/ Clean)

2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
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Disease/ Damage/ Seed formation (blackness, browning, reddish tips)

-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15
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Mishandling (Brown, Burnt Lupulin/ moisture deterioration/ loss of bracts etc.)

-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12	-13	-14	-15
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Notes:

Total +	Total -	Overall



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Questions?



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