



Hot Steep Malt Sensory Exploration

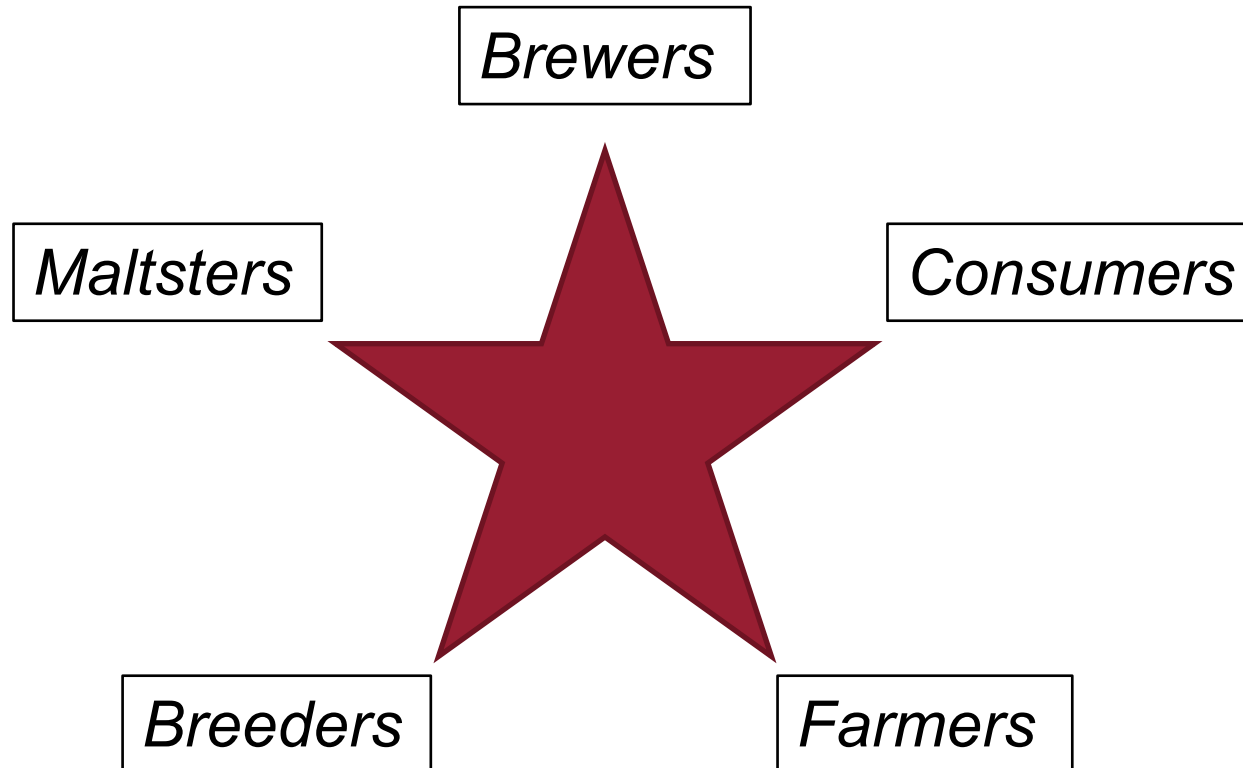
Presented by Evan Craine
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WSU Sustainable Seed Systems Laboratory



Breeding a Malt Quality Barley





Hot Steep Methodology

- Developed at Briess Malt & Ingredients Co.
- Beta tested by Briess, New Belgium, and Highland Brewing
- Validated by ASBC Sensory Technical Committee



Casey Poirier



Lindsay Barr

Anna Sauls



<https://www.google.com/url?sa=i&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwi4qvrPy8bhAhWijiQKHaluBYQQjRx6BAGBEAU&url=https%3A%2F%2Fwww.craftbeer.com%2Fcraft-beer-muses%2Fbeer-malt-science-breakthroughs&psig=AOvVaw1Tp836y2wgjCIRw8gaCopl&ust=1555022296681515>



Hot Steep Process





Hot Steep Process





Hot Steep Process



Intro to Tasting

1. Look
2. Sniff
3. Sip (**slurp!**)
4. Savor
5. Report perception

Huge Thank You to LINC Malt!

Samples

287	443	992
Baronesse	Lyon	CDC-Copeland

You're officially invited to

Joseph's Grainery
BARONESSE BARLEY
2019 harvest day



AUGUST 17, 2019
www.josephsgrainery.com

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LYON

SPRING BARLEY

Lyon is a two-row dual-purpose malt and feed barley developed by the Agricultural Research Center of Washington State University. Lyon is named in honor of Steven R. Lyon, a farmer and long-time wheat researcher at Washington State University.

Lyon is a high yielding, broadly adapted variety particularly well suited to intermediate and high rainfall zones of the Palouse where Bob, Baronesse, Lenetah, and Champion are currently being grown. Lyon has excellent stem rust resistance, high protein, and plump kernels across a wide range of environments.

AGRONOMICS

Yield Potential.....	Excellent
Protein	Very Good
Test Weight	Average
Maturity	Medium
Height.....	Medium
Plump Kernels.....	Excellent

DISEASE RESISTANCE

Stem Rust	Excellent
Leaf Rust.....	Excellent
Stripe Rust.....	Moderately Susceptible

WSU IN

FOOD & AGRICULTURE

WSU-I

unique

🕒 May 15, 2018

By Seth Truscott
Resource Science



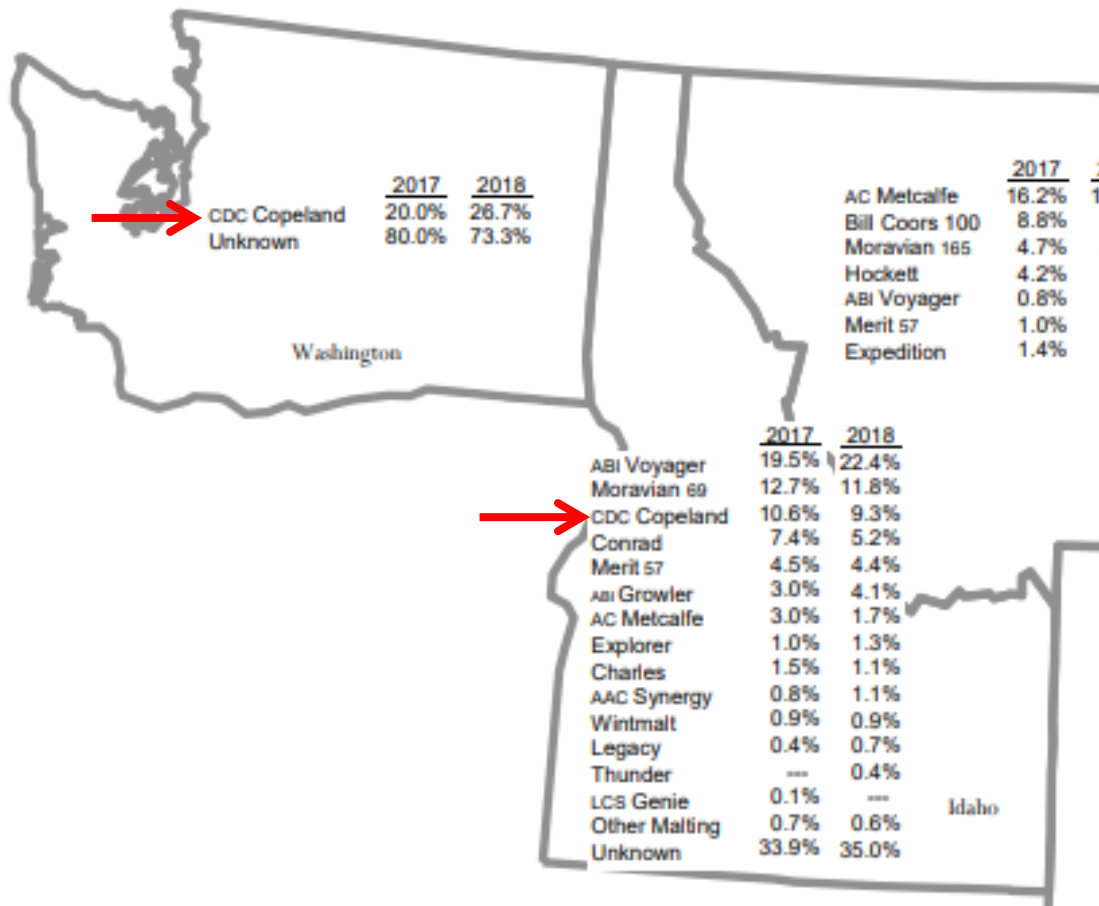
📷 *Lyon barley gives Hunga Dunga beer a clean, light and fresh taste, with a rich reddish-gold hue.*

ring
flavors



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American Malting
Barley Association
(AMBA) Survey

Samples

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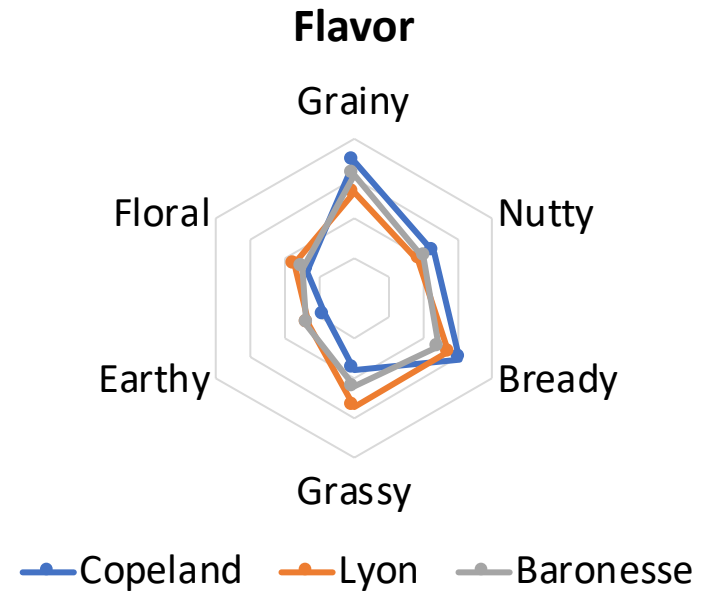
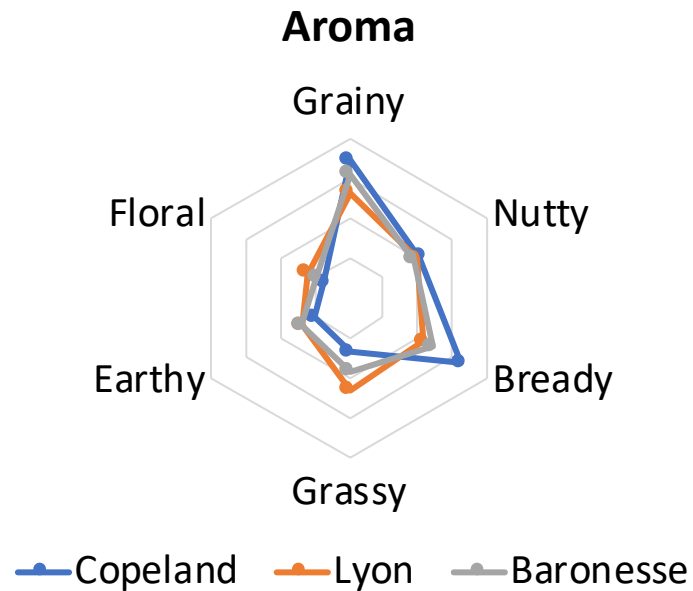
Malting Barley seeded area by variety - Acres

W. CANADA	2017	%	2016
→ CDC Copeland →	1,036,540	48.7%	1,033,452
AC Metcalfe	693,312	32.6%	780,487
AAC Synergy	156,947	7.4%	129,150
Bentley	34,513	1.6%	48,098
Newdale	54,131	2.5%	78,326
Legacy	64,804	3.0%	72,047
Celebration	23,197	1.1%	37,461
CDC Kindersley	11,232	0.5%	21,862
CDC Meredith	11,611	0.5%	39,478
Tradition	11,737	0.6%	19,718
CDC PolarStar	9,136	0.4%	19,055
CDC PlatinumStar	7,935	0.4%	0
CDC Bow	5,580	0.3%	330
AAC Connect	2,976	0.1%	0
Merit 57	1,215	0.1%	4,818
CDC Fraser	128	0.0%	0
Cerveza	0	0.0%	946
Other	4,914	0.2%	25,122
Total Malting Barley	2,129,908	100%	2,310,350



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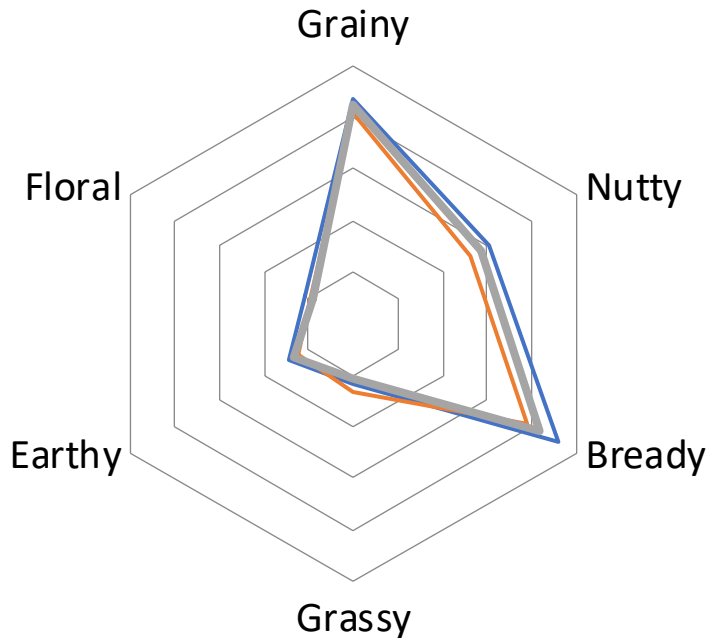


Data from tasting with same samples at 2018 Cascadia Grains East Pilot

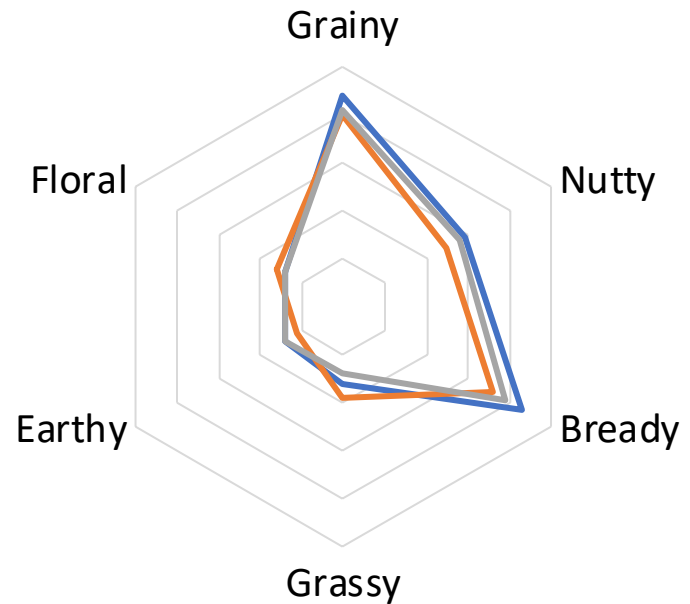
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Aroma



Flavor



— Baronesse — Lyon — CDC-Copeland — Baronesse — Lyon — CDC-Copeland

Data from tasting with same samples at 2018 Cascadia Grains East Pilot

Join Upcoming Trained Panels!

- Become a trained taster for hot steep malt and beer!
- Learn about sensory analysis
- Advance malt barley research

Beginning May, 2019!

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