

GERANIOL AND LINALOOL SURVEY RESULTS FROM THE U.S. CROP 2020 HARVEST – PART 1

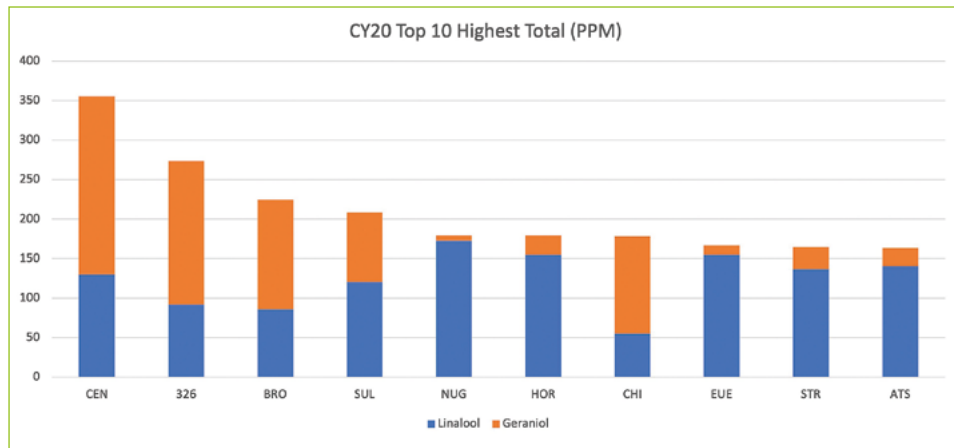
| TECHNICAL SUPPORT |

Oxygenated hop oil compounds, Geraniol and Linalool, when added to the whirlpool and/or during fermentation can take advantage of biotransformation as a result of when yeast converts oxygenated hop oils into floral and citrus tasting compounds (see also January 2019 newsletter).

These aroma active compounds have also been described as working synergistically with each other and volatile thiols (4MMP) resulting in increased aroma intensity in modeled solutions (Ref. 1) which is favorable to produce hop forward beers such as Pale Ales, American IPA's and New England IPA's known as Hazy or Juicy IPA's.

The chart below reflects the top 10 Crop 2020 U.S. varieties for total Linalool and Geraniol [ppm] out of 48 (Graph 2 – please see next side) that were analyzed by the Hopsteiner lab in Yakima, Washington (Ref. 2). Brewers can use this information in formulating recipes with varieties requiring less pounds/bbl. (kilos/hL) to take advantage of the higher Geraniol and Linalool concentrations.

Five of the top ten varieties analyzed with the highest levels shown below were developed and released from the Hopsteiner Breeding program at the Golden Gate Hop Ranches in Yakima, Washington.



Graph 1: Geraniol and Linalool Survey Results from the U.S. Crop 2020 Harvest

Commercial Hopsteiner Varieties

326 – Hopsteiner Experimental 09326

BRO – Bravo

SUL – Sultana

EUE – Eureka!

ATS – Altus

Commercial Public Varieties

CEN – Centennial

NUG – Nugget

HOR – Horizon

CHI – Chinook

STR – Sterling

If you like to get more information, please don't hesitate to contact our technical teams.

Simon H. Steiner, Hopfen, GmbH *S.S. Steiner, Inc.*

Newsletter, May 2021

WEBINAR-SERIES



Factors of influence on the input and yield of hop compounds in dry hopping

June, 10th – Frank Peifer

Best practice for the application of hop products

July, 8th – Mathis Geserer

You can register using the direkt links above or using the form our homepage under:

<https://www.hopsteiner.com/de/hopsteiner-webinare-en/>

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(Ref. 1) Takoi, K., Itoga, Y., Takayanagi, J., Matsumoto, I., Nakayama, Y. (2016) Control of hop aroma impression of beer with hop-blending using geraniol-rich hop and new hypothesis of synergy among hop derived flavor compounds. Brew. Sci. 60:85-93

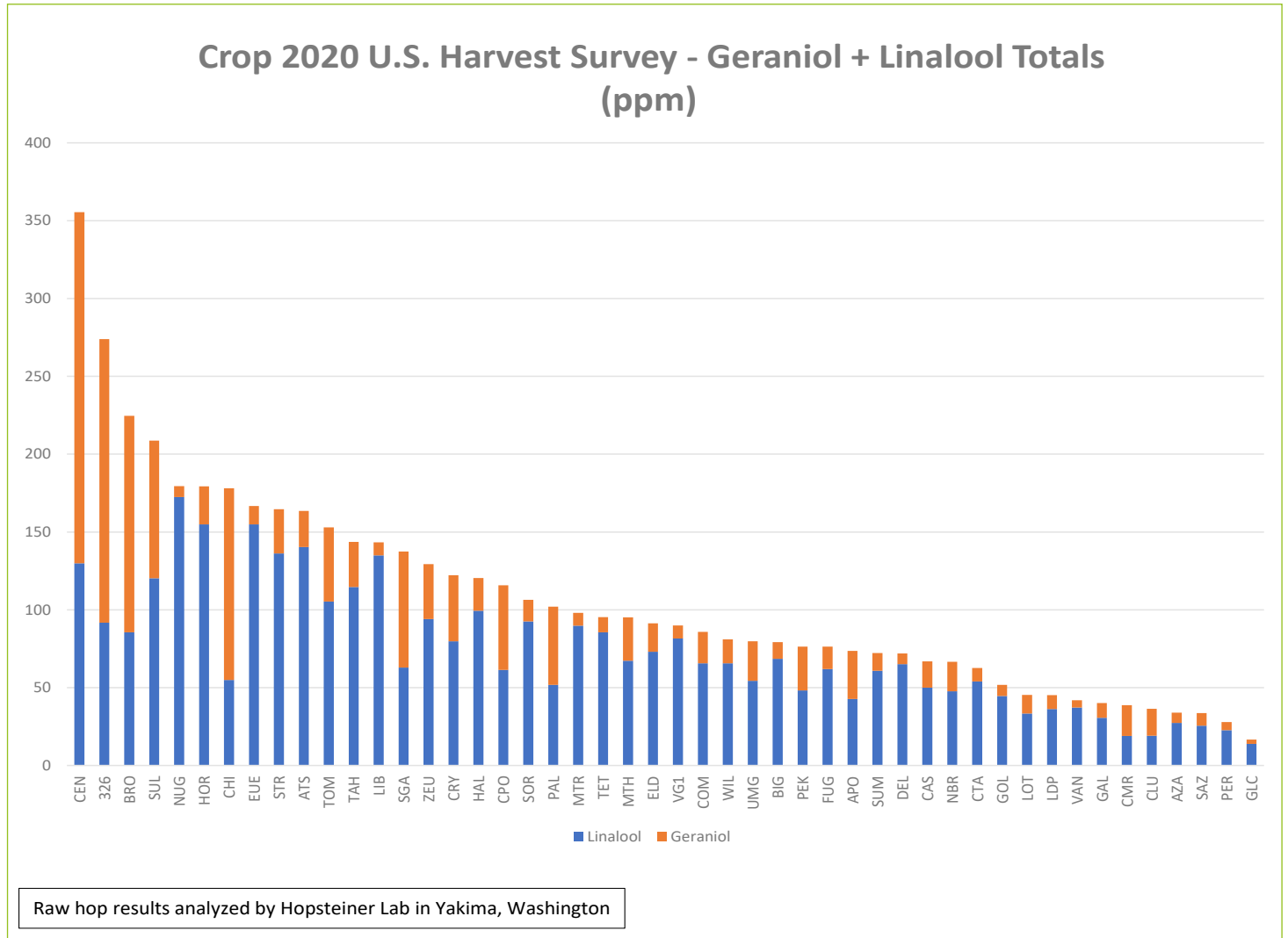
(Ref. 2) Hopsteiner Crop 2020 U.S. Survey Linalool + Geraniol Totals

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GERANIOL AND LINALOOL SURVEY RESULTS
FROM THE U.S. CROP 2020 HARVEST – PART 2
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Graph 2: Hopsteiner Crop 2020 U.S. Survey Linalool + Geraniol Totals

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