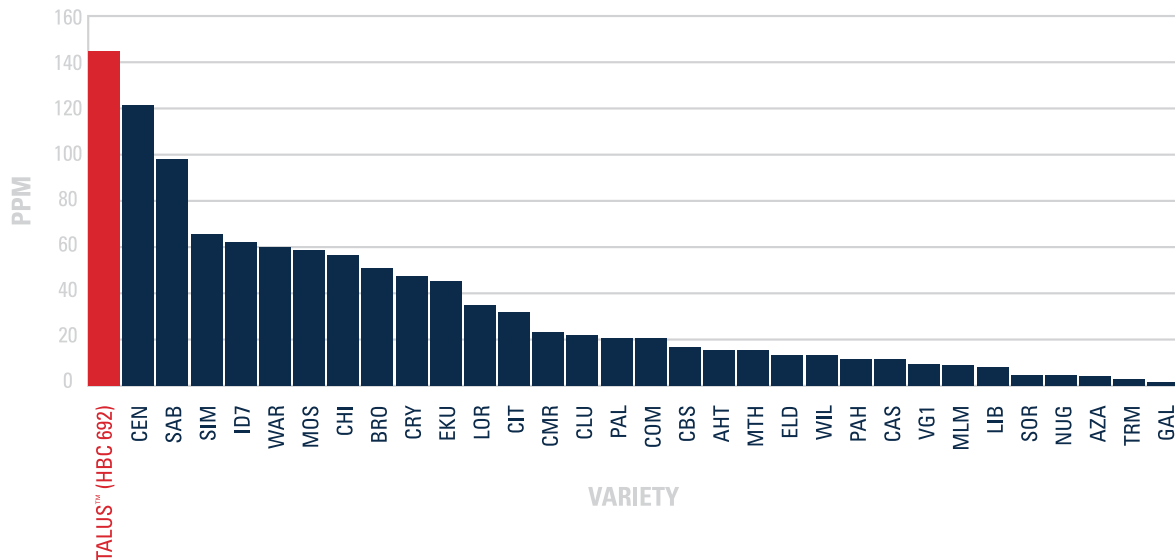


GERANIOL QUEEN: TALUS™ BRAND HBC 692

AVERAGE GERANIOL CONTENT OF YAKIMA CHIEF HOPS VARIETIES (CROP YEAR 2019)



Over the past few years, research has pointed to the potential importance of geraniol, a hop-derived monoterpene alcohol that delivers a high impact in finished beer aroma. Geraniol is generally described as having a sweet, floral, fruity, and rose-like aroma. As an individual component geraniol shows a strong “survivability” characteristic, meaning that it tends to survive the brewing process and show up in significant concentrations in finished beer¹. Research also suggests that geraniol may be an important raw material for yeast-derived biotransformation². Takoi et al suggest a possible biotransformation pathway in which yeast can convert geraniol to both linalool and β -citronellol during fermentation, causing a synergistic effect between the three compounds that can amplify the “citrus” character of hoppy beer aroma².

When compared with other cultivars, **TALUS™** shows an exceptionally high geraniol content, making it an excellent choice for whirlpool, active-fermentation dry hop, and post-fermentation dry hop scenarios. Because of the potential synergistic effects of geraniol with other monoterpene alcohols, **TALUS™** also makes an excellent blending hop, serving as an “amplifier” when used as a 20-40% portion of a hop blend. Consider using **TALUS™** in your next beer to unleash the awesome power of geraniol!

REFERENCES:

1. Tielkemeier, Spencer. *Sulfur: The Next Aroma Frontier*, Yakima Chief Hops, 2020.
2. Takoi, K., Itoga, Y., Koie, K., Kosugi, T., Shimase, M., Katayama, Y., Nakayama, Y. and Watari, J. (2010), The Contribution of Geraniol Metabolism to the Citrus Flavour of Beer: Synergy of Geraniol and β -Citronellol Under Coexistence with Excess Linalool. *Journal of the Institute of Brewing*, 116: 251-260. doi:10.1002/j.2050-0416.2010.tb00428.x



YAKIMA CHIEF HOPS®