New 2014 hop varieties for research trial

1. **AlphAroma vf 1151 - 2013**: New Zealand super alpha aroma
2. **Cashmere 2013**: Higher alpha acid content than Cascade and twice as much humulene. Provides smooth bitterness with mild aroma.
3. **Cluster L-8**: Classic all-purpose, original “C” citrus hop
4. **Columbia vf1152 - 2013**: developed for Budweiser in 1960s; favored by brewmasters in 6 out of 6 brew tests; overruled by head brewer at the time.
5. **Copper** (aka T212) new proprietary variety bred at Great Lakes Hops
6. **Crystal**: super aroma, often used with Magnum
7. **Fuggle H**: USA version of classic, with higher oils and more potent than original.
8. **Glacier**: all-purpose aroma flavor with low cohumulone level that brews a very smooth, balanced beer.
9. **Horizon**: high alpha / aroma variety
10. **Magnum**: German extract/bittering hybrid
11. **Newport**: new high alpha bittering variety
12. **Saniam**: all-purpose aroma hop bred from Tettnanger/Hallertauer noble cross
13. **Serebranioka vf 2013 “Silver Hop”**: Russian noble aroma hop. Name translates in Russian to “smooth tongue”
14. **Southern Brewer**: South African high alpha aroma variety
15. **Southern Cross**: New Zealand high alpha aroma variety
16. **Spalter Select**: a superior Noble aroma hop used in ultra-premium beers. Pairs well with Magnum.
17. **Ultra**: Noble cross, reports of good yields in northern growing areas.
18. **Vojvodina**: Yugoslavian high-alpha aroma hop; “Super Golding” with double the alphas of Golding.
19. **Wye Challenger**: English Svaloef cross, unusually higher alpha profile
20. **Yeoman**: high alpha aroma. Robust bittering variety with high oils.
21. **Zeus**: super high-alpha commonly included with CTZ, but different. Makes a “heady” IPA
22. **Zenith**: high alpha aroma variety bred at Wye College in England.

Second-year 2013 hop varieties

23. **Amallia**: vigorous, native New Mexico variety with strong orange citrus notes
24. **Brewer’s Gold**: heirloom American hop
25. **Cascade**: by far, the most popular craft brewing hop among Montana brewers.
26. **Centennial**: sometimes called “Super Cascade”, has nearly double the alpha profile.
27. **Chinook**: Popular super alpha hybrid, dual purpose bittering/flavoring hop
28. **Columbus** (aka CTZ): very high alphas & oils. High bittering qualities.
29. **Galena**: vigorous super-alpha bittering-type hop
30. **Golding**: Classic English aroma hop
31. **Liberty**: noble aroma variety
32. **Mount Hood**: noble aroma variety, most popular variety in Hallertauer breeding program
33. **Multihead**: Newer native New Mexican variety; not much is known. Floral aspects, can produce double cones. Good all-around hop.
34. **Neo 1**: Native New Mexican variety, “super lemon” citrus aspect
35. **Northen Brewer**: Good versatile all-purpose hop with high-oils.
36. **Nugget**: high alpha bittering / flavoring variety in the US and Germany
37. **Sterling**: improved Saazier type. A noble / American aroma type
38. **Tettnanger**: Noble-type aroma variety derived from Swiss Tettnanger clone. Dual purpose hop.
39. **Willamette**: a widely grown, quality aroma / flavoring “workhorse” hop