



Yakima Chief Inc.
2004 U.S. Hop Crop Report #5
Week of September 19

1. **Water & Weather** – The weather was great this week allowing everybody on the farm and at the warehouse to stay quite busy. Harvest peak is now history with activity rapidly winding down. We estimate that 90% of the crop is received at the time of writing. The bigger farms will be trickling bales into the warehouse for the next week to ten days. The late crop will be mainly Nuggets and some late super-alphas. Based upon the 10-day forecast, we maintain an optimistic expectation for a timely wrap-up of harvest.

The “big picture” on water is less rosy. Water storage levels have begun to deteriorate (<http://www.usbr.gov/pn/hydromet/select.html>) and the greater Columbia Basin is expected to receive little precipitation in the near future. You may see the current prediction at: http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html

The National Oceanic and Atmospheric Administration (NOAA) has officially proclaimed the emergence of an “El Niño”. This episode is predicted to be a mild version so we still have reasonable hopes for normal precipitation in the Yakima Basin between now and the next irrigation season.

2. **Pest Pressure** – Cool night temperatures have eliminated any concerns here.
3. **Aroma Hop Crop** – The aroma crop harvest is complete as related in the last report.
4. **Bitter Hop Crop** – We are staying with earlier prediction of “supers” yield between 2800-2900 lbs/acre. Alpha content is seemingly stuck at the 16.0% mark. The general tables of yield and alpha performance are as follows:

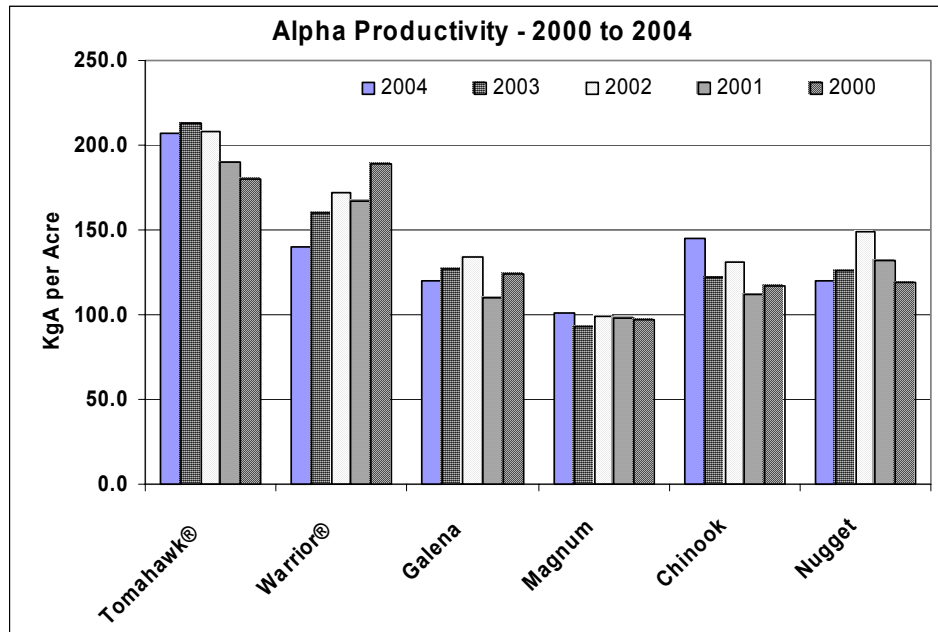
VARIETY	Yield in lbs/acre				
	2004 ⁽¹⁾	2003	2002	2001	2000
Tomahawk®	2,850	2,818	2,719	2,493	2,564
Warrior®	2,000	2,126	2,087	2,300	2,634
Galena	1,900	1,914	2,094	1,679	1,891
Magnum	1,500	1,500	1,400	1,424	1,616
Chinook	2,100	1,903	2,009	1,717	1,957
Nugget	1,975	1,882	1,979	1,968	1,854

(1) Current estimates, Tomahawk® adjusted to include Columbus/Zeus

VARIETY	Alpha Acid by ASBC UV Spectro				
	2004 ⁽¹⁾	2003	2002	2001	2000
Tomahawk®	16.0	16.7	16.9	16.8	15.5
Warrior®	15.4	16.6	18.2	16.0	15.8
Galena	13.9	14.6	14.1	14.4	14.4
Magnum	14.9	13.6	15.6	15.2	13.3
Chinook	15.2	14.1	14.4	14.4	13.2
Nugget	13.4	14.8	16.6	14.8	14.2

(1) Current estimates, Tomahawk® adjusted to include Columbus/Zeus

The composite of these tables provides the following review of productivity in KgA per acre.



The supers are maintaining their position of superior alpha productivity. With current market pricing not providing a significant varietal premium, it is reasonable to expect further homogenization of the bitter crop into this category. As can be seen below, there is already a concentration of nearly 40% into this group, a group which rests on a very narrow genetic base.

	KgA by Variety	% of Total Crop KgA
Nugget	264,124.2	8.7%
Galena	404,394.9	13.3%
Col/Tom®	618,038.6	20.4%
Zeus	610,149.7	20.1%
Warrior®	113,303.1	3.7%
Millennium	223,419.5	7.4%

Percentage of 2004 KgA from all super & high alpha varieties **73.6%**

Percentage of 2004 KgA from CTZ, Warrior® and Millennium **51.5%**

If this trend continues, it will pose an increasing danger to both grower and brewer over the long-term. While short-term economic benefit is unmistakable, the risks associated with restricted diversity in hop variety production will grow each year. In addition, because of the narrowed harvest window with only few varieties representing a large percentage of the production, the farm infrastructure is tasked beyond workable limits under these circumstances. Asset utilization becomes very poor and quality labor will be difficult to find for such a brief period of time.

- a. **Oregon/Idaho** – No updates this past week.
 - b. **Overall US Crop** – Unchanged since last week.
5. **Market Activity** – No activity reported this past week.

This report marks the end of our regular reporting season. A final update will be issued if required.