



UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION

# FIELD CROP NOTES

SISKIYOU COUNTY

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## SUMMER 2002

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For special assistance regarding our programs please contact us.

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*To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products that are not mentioned.*

**Noxious Weed-Free Hay Program**

### **Forage Field Day at Intermountain Research and Extension Center (Tulelake)**

There will be a Forage Field Day at the Intermountain Research and Extension Center in Tulelake on Tuesday September 17. Dan Drake and I have several research projects at the Field Station that will be featured at the Field Day. I recognize that Tulelake is a long way to go for some Siskiyou County forage producers, but the time should be well spent. Some of the projects/topics that will be discussed include:

- alfalfa variety selection
- alfalfa cutting schedules to maximize profit
- alfalfa weed control developments for the future
- triticale planting date for grazing/haying
- ryegrass/triticale companion plantings
- grazing management for triticale
- pasture grass and Timothy variety evaluations
- deficit irrigation strategies for alfalfa in drought years

**It should be a very interesting Field Day (with a FREE lunch)—I hope to see you there!** Lunch will be sponsored by the Klamath Basin Hay Growers Association.

Adapted from an article by Integrated Pest Control Branch California Department of Food and Agriculture

Many of you may have heard about the new Noxious Weed Free Forage and Mulch Program (NWFFM) recently started in California. Noxious non-indigenous weeds are invading public and private lands at an alarming rate. The NWFFM in California was initiated to help prevent noxious weed dispersal through forage, feed and mulch. The intent is to reduce the economic impacts of these noxious weeds on rangeland, agriculture, and private land and to assist governmental eradication and control efforts.

Implementation of the NWFFM Program will require that users of public land (i.e. individuals, equestrians, permit holders, construction agencies) use certified, noxious weed free forage, mulch and straw on many public lands in California. The U.S. Forest Service, Bureau of Land Management, and National Park Service, are currently acquiring the authority to implement the NWFFM Program on their lands throughout California. Growers will have the option of participating in the certification program. Those that voluntarily choose to participate will have the opportunity to produce a certified product that they may be able to sell at a premium.

#### Producing a Certified Product

The California Agricultural Commissioner's and Sealer's Association (CACASA) formulated certification Guidelines in 2000. The guidelines may be viewed electronically at <http://pi.cdfa.ca.gov/weed/wff/finalcert.htm>. The list of noxious weeds that are referred to in the guidelines were adapted from Barclay's California Code of Regulations, Title 3, Division 4, Chapter 6, Subchapter 6, Section 4500. The list can be obtained from the Siskiyou County Agricultural Commissioner's Office.

Growers interested in having their field certified need to contact the Siskiyou County Agricultural Commissioner's office

14 days prior to harvest. Already baled products will not be certified, as a field inspection is imperative. Currently, the Agricultural Commissioner's Office does not charge for the certification or inspection. That may change in the future, as field inspections take time away from other responsibilities. If a fee has to be implemented in the future, it would be just to recover costs.

Areas that will be inspected include the field to be certified, in addition to surrounding roads, checks, and fencerows. The field will be certified as noxious-weed free if the aforementioned areas are free of noxious weeds. However, if there is a small population of noxious weeds and it can be determined that the noxious weeds will not be in a propagative state at the time of harvest, the field may also be certified. The grower will receive a certificate stating that his particular field was inspected and found to be apparently free from noxious weeds.

In addition to the issued certificate, a special twine configuration (such as dual-color twine that will be used for two ties) will eventually be used in order to easily identify a certified product. The special twine is not currently available, but when it is, California will likely use its own twine identification so that it can be distinguished from other states' programs. All California grown certified weed-free forage will be inspected to California standards.

The Noxious Weed Free Forage Program is not "set in stone" and Stakeholder Meetings are held approximately every two to three months to review the status of the program, discuss concerns and/or difficulties that may be foreseen or have developed among those that are currently producing certified products in California.

For additional information or other concerns you may have regarding the NWFFM Program, please contact Stephanie Balsdon at (916) 654-0768 or e-mail her at [sbalsdon@cdfa.ca.gov](mailto:sbalsdon@cdfa.ca.gov).

## New Products Just Registered for Alfalfa

*Raptor (herbicide for seedling and established alfalfa)*

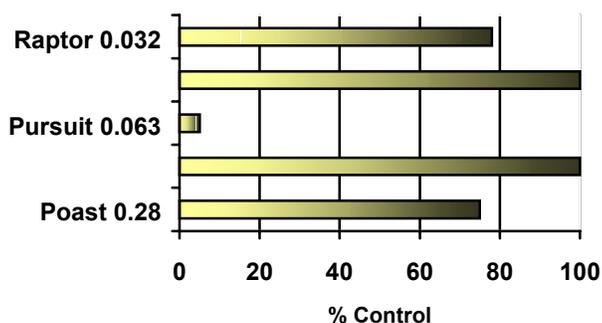
*Steward (insecticide for weevil and summer worm control)*

**Raptor® Registration** As expected, Raptor, a new herbicide for use in alfalfa, was just cleared for use in California. Raptor is very similar to Pursuit—the primary herbicide currently used for weed control in seedling alfalfa. In comparing Raptor and Pursuit:

- Raptor has shorter soil residual so herbicide carry-over is less of a problem for subsequent crops.
- The use rate (in terms of active ingredient per acre) is slightly above half that of Pursuit.
- Raptor controls annual grasses, whereas, Pursuit does not adequately control most winter annual grasses and volunteer cereals.
- Raptor is also more effective on some broadleaf weeds (including fiddleneck and lambsquarters).

The most exciting aspect of Raptor is that it controls both broadleaf weeds and grasses (see Figures below). Ordinarily, a tank mix of herbicides is required to achieve this.

**Downy brome (cheatgrass) Control**

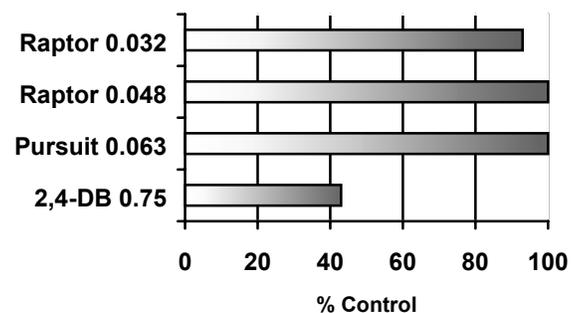


Raptor is especially well suited for controlling weeds in late-summer seeded

alfalfa. It controls nearly all of the broadleaf weeds and grasses (including foxtail, downy brome and volunteer cereals). Like Pursuit, it does not control the weeds prickly lettuce and annual sowthistle. Fortunately, these are not major weed problems but if they are present, a tank mix of herbicides is needed. It is believed that Raptor will primarily be used for weed control in seedling alfalfa but it may have some usefulness in established alfalfa as well.

**Steward® Registration** A new insecticide, Steward, was just registered for use in alfalfa in California. The active ingredient in Steward, indoxacarb, is a new class of insecticide chemistry with a different mode of action. Steward has a minimal impact on most beneficial insects, both parasites and predators. Tests have shown Steward is effective for the control of armyworms (fall armyworm and yellowstriped armyworm). It also provides acceptable control of the alfalfa weevil. While armyworms and other summer worms are not common in intermountain alfalfa fields, the alfalfa weevil is a frequent pest. Steward is not effective for controlling aphids and therefore, would not be the insecticide of choice when both weevils and aphids are present.

**Shepherd's Purse Control**



## What happened with alfalfa acreage and price and what about next year?

*Highest alfalfa acreage recorded since 1970s...*

### Acreege Increase of 15% Flips Hay Markets

by Seth Hoyt, California Agricultural Statistics Service, CDFA

*The USDA June Acreage Report released on June 28 estimated alfalfa hay acreage in California in 2002 at 1,160,000, up 15% from 2001. This was the largest alfalfa hay acreage in California since the 1,190,000 acres in 1973. The last several years, alfalfa has been the highest acreage crop in California.*

This increase in acreage comes as little surprise to many, since 2002 follows a year of near record high hay prices, and miserable profitability situations for other ag commodities. The people in the hay industry I talked with the past seven months had predicted 5 to 25% more alfalfa acres in California in 2002, with most estimates between 10 and 20%.

It appears that much of the increased acres were in the San Joaquin and Sacramento Valleys. On June 13, 2002, the Imperial Irrigation District reported alfalfa hay acres at 178,000, up only 3% or 5,800 more acres than June of last year. Contrary to what some people thought last fall, it does appear that substantial cotton acres in central California were planted to alfalfa. Industry sources also indicated that grain and Sudan hay acres, particularly in the northern valley, were converted to alfalfa hay.

As I stated at the California Alfalfa Symposium in Modesto in Dec., I felt that even with a 15% increase in alfalfa acres, the market would probably still be good on early cuttings of high quality alfalfa in the southern desert and San Joaquin Valley. This proved to be true. However, the market began to deteriorate in April, a little sooner than I had anticipated. I also stated that a 15% increase in alfalfa acres would be a

challenge to the alfalfa hay market the second half of 2002. I did not anticipate the market to be under such bearish pressure in May, particularly middle to lower quality alfalfa (*Good* and *Fair* quality) in the northern valley. *Fair* quality alfalfa hay prices (non-rain damaged) in the Sacramento Valley in late May brought \$70 to \$90 per ton F.O.B. ('Free on Board' or without shipping charges), according to USDA Market News. These prices were \$10 to \$20 below the Central Valley and the Imperial Valley.

In spite of declining alfalfa hay prices in May-June, alfalfa hay prices for the higher-quality categories (*Supreme*, *Premium*) are still fairly good considering the quantity of acreage in California. Originally, I didn't think the spread between the top and bottom of the market in California in 2002 would be wider than in 1999, but I'm beginning to change my mind.

It doesn't take a rocket scientist to know that with 15% more alfalfa acres, supplies of middle to low quality alfalfa hay are going to build significantly this summer. Much of the increase will be in the northern San Joaquin and Sacramento Valleys. Some growers may pull out older stands, depending on the market at midsummer, and the supply of irrigation water.

**'Other' Hay.** In the last ten years alfalfa hay acres accounted for 65 to 67% of all hay acres in California. In 2002, alfalfa hay accounts for 70% of all California hay acres, indicating both a moderation in 'other hay' acres and an increase in alfalfa. The USDA estimate for other hay in California in 2002 is 500,000 acres, down 6% from the 530,000 acres in 2001. Industry sources report that Sudan hay acres are down in the Imperial Valley, Sacramento Valley, and down slightly in the San Joaquin Valley.

Oat and grain hay acres appear to be mixed. Due to tight oat seed supplies last fall and drought conditions in southern California, some areas saw a decline in oat and grain

hay production this spring. However, it appears that in north central and northern California some growers obtained oat seed, some from out-of-state, and grain hay production was up in some areas. Another development was increased wheat hay production due to a depressed grain market in early spring. However, the wheat grain market surged upward in June due to lower than anticipated yields and production in the early winter wheat harvest in the central US.

**Cause for Optimism?** Maybe I'm an eternal optimist, but there is the possibility that the high quality alfalfa hay market could stabilize and possibly even firm in some areas. According to industry sources, supplies of alfalfa hay testing 56 TDN or above have tightened. Drought conditions and tight water supplies in Utah and parts of Nevada and other western states could reduce supplies of high quality alfalfa hay in the months ahead.

Again, trying to find something positive in a gloomy price situation is the news that export hay buyers are becoming more aggressive in California. One source said export buyers in late June were bidding \$5.00 to \$10.00 per ton above domestic buyers for *Good* quality alfalfa hay in north central California. The alfalfa hay market may have dropped to a level where export buyers, driven out of the California market in 2001 due to high prices, are back. Horse and retail hay buyers may not be very aggressive as they see an increase in offerings and appear to be playing the market for the best deals. However, competition from export buyers could support the *Good* quality alfalfa hay market in some areas. However, the bottom line is that we have experienced one of the largest single year jumps in alfalfa acreage, due to the 2001 favorable alfalfa hay market, coupled with very limited cropping options in the San Joaquin and Sacramento Valleys. In spite of continued growth in dairy cow numbers, there is little doubt that increased hay supplies will cause short-term pressure

on alfalfa hay prices during the latter half of this year.

It's hard enough to predict hay prices for this year, much less next year. However, there are some indications that alfalfa acreage may decline next year. Some cotton growers increased their alfalfa hay acres this year because of the uncertainty in the Farm Bill about a possible payment limitation in the cotton loan program. At planting time, with the Farm Bill still being debated, cotton growers in central California planted more alfalfa. Now that the Farm Bill has passed and there is no payment limitation on cotton, growers may increase cotton acres next year and reduce alfalfa acres. Sources stated that we could see a 100,000-acre increase in cotton in California in 2003. They were guessing that around half of that increase could be alfalfa hay going back into cotton. A reduction in alfalfa acres next year could result in an improvement in the alfalfa hay market.

### **Triticale Grazing/Haying Program:** *It's time to plant*

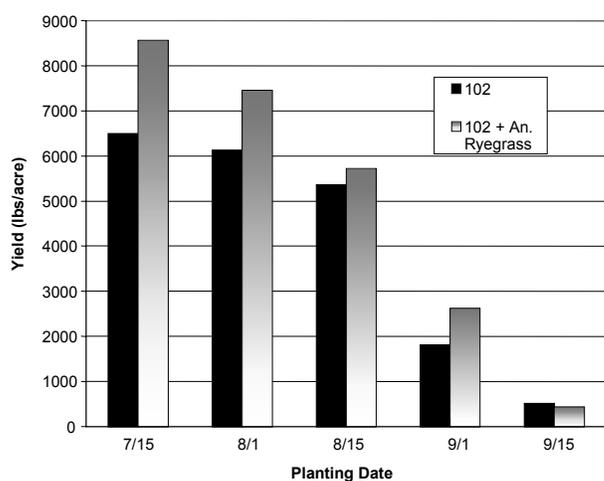
For several years Dan Drake and I have been researching a grazing/haying program using winter annual grasses, primarily triticale (a wheat/rye cross). The program typically involves the following:

- seeding the triticale in late August to early September
- grazing in late October to early November
- grazing again in April to early May
- harvesting the regrowth at flower stage for hay in June

This program has worked well for many Siskiyou County producers and recently growers in other counties throughout the Intermountain Region have tried the practice with excellent results. There have been some dryland triticale fields in Siskiyou County. Perhaps because of the rye background in triticale and its extensive root system, triticale has yielded relatively well

even under less than optimum moisture conditions.

An important question has been *When is the optimum time to plant triticale for fall grazing?* Dan and I have had a research project in Tulelake to answer this question. Planting dates from July 15<sup>th</sup> to September 15<sup>th</sup> have been evaluated. The results to date on the effect of the planting dates on the amount of fall forage available for grazing are presented in the graph below. (Average of 2000 and 2001 trials)



A July or very early August planting date in most cases is not worth the extra effort. It is often impractical to seed during the peak of summer and irrigation is difficult. In addition, the yield of Trical 102 (the winter hardy variety we recommend) was not significantly higher with the earliest planting dates compared with mid August. However, the key point to be aware of is the drop in yield with September planting dates. Temperatures and day length decline dramatically at that time of year and each day delay in planting has a large effect on fall forage. Shasta and Scott Valley are warmer than Tulelake so planting date can be delayed somewhat compared with what the Tulelake data would indicate. Therefore, for this area, if fall grazing is desired, we recommend planting in late August to the first week of September—that means preparations to seed must be done before

those dates. If you can't seed the first week of September, you are probably better off to forgo the fall grazing and plant during the usual window for winter cereals, October to early November. So, if fall grazing is desirable...**Plant Now!!!**

## Winter Wheat, Barley and Triticale Test Plot Results

Small grains specialist Lee Jackson and I conducted winter cereal trials this past season in cooperation with the Peter's Ranch in Montague. As everyone is well aware, irrigation water in the Shasta Valley has been in short supply the last couple of years. The 2001/2002 plots were harvested, but the yield was significantly lower than usual because an additional irrigation was needed.

Barley yielded the highest—most likely due to the earlier maturity date of barley making an additional irrigation less important. The early irrigation termination also affected the ranking of the barley varieties. The variety Kold has been one of the highest yielding varieties but Eight-Twelve and Steptoe performed better in this trial because of their earlier maturity.

Wheat yields were much lower than normal, averaging only 2980 lbs/acre. The highest yielding variety in past years, Lambert, still performed relatively well this year ranking 2<sup>nd</sup> overall for the wheat varieties.

For years we have been researching the use of triticale as a forage crop. This year we evaluated triticale grain varieties as well in our winter cereals evaluation program. The results show triticale has significant potential as a feed grain in Siskiyou County. The triticale stayed green longer into the season than did the wheat or barley, despite the shortage in soil moisture. Triticale grain yield was intermediate between barely and wheat. Again, barley most likely performed better because of its early maturity. We plan to evaluate triticale again in this year's field plots. Hopefully, rainfall this year will be at least "normal."

## WINTER BARLEY

Name	Yield (lbs/acre)	Test Wt (lbs/bu)	Plant Ht (in)	Lodging (soft dough)	Lodging (harvest)
STEPTOE	5140(02)	49.0	50	2.8	3.0
SCIO	4620(04)	44.5	42	1.0	1.0
HESK	3590(06)	45.2	42	4.3	4.3
BOYER	3420(08)	45.4	41	2.8	2.5
EIGHT-TWELVE	5840(01)	46.1	41	1.3	1.8
WESTBRED SPRINTER	3730(05)	43.9	39	2.0	1.3
KOLD	3560(07)	48.3	40	4.0	3.8
STRIDER	4850(03)	48.5	40	2.3	2.8
MEAN	4340	46.4	42	2.5	2.5
LSD (.05)	580	1.4	2	1.4	1.4

Rating scale for lodging: 1 = 0-3%, 2 = 4-14%, 3 = 15-29%, 4 = 30-49%, 5 = 50-69%,  
6 = 70-84%, 7 = 85-95%, 8 = 96-100%.

Numbers in parentheses indicate relative rank in column.

## WINTER WHEAT

Name	Type	Yield (lbs/acre)	Test Wt (lbs/bu)	Plant Ht (in)	Lodging (harvest)
YAMHILL	sww	2410(17)	51.4	40	1.0
STEPHENS	sww	2970(08)	46.9	37	1.0
MALCOLM	sww	2840(12)	48.0	34	1.0
ROD	sww	2940(09)	48.5	35	1.0
MADSEN	sww	3110(05)	51.0	34	1.0
ROHDE	club	3560(04)	50.8	35	1.0
PROMONTORY	hrw	3860(01)	58.0	38	1.0
LAMBERT	sww	3670(02)	50.4	38	1.0
BOUNDARY	hrw	3070(07)	54.3	37	1.0
BASIN	sww	2630(15)	52.5	27	1.0
FOOTE	sww	2800(13)	46.2	38	1.0
WEATHERFORD	sww	2590(16)	50.4	38	1.0
TEMPLE	club	3660(03)	48.0	38	1.0
BRUEHL	sww	2910(11)	46.9	37	1.0
HILLER	club	3070(06)	47.2	36	1.0
EDWIN	club	1960(18)	50.8	44	1.5
CODA	club	2940(10)	49.6	36	1.0
FINLEY	hrw	2640(14)	52.4	48	1.0
MEAN		2980	50.2	37	1.0
LSD (.05)		650	3.4	3	-

Rating scale for lodging: 1 = 0-3%, 2 = 4-14%, 3 = 15-29%, 4 = 30-49%,  
5 = 50-69%, 6 = 70-84%, 7 = 85-95%, 8 = 96-100%.

Numbers in parentheses indicate relative rank in column.

Type: sww = soft white winter; hrw = hard red winter; club = soft white winter club

WINTER TRITICALE

Name	Yield (lbs/acre)	Test Wt (lbs/bu)	Plant Ht (in)
ALZO	3520(08)	46.90	48
TRICAL 336	4930(02)	51.30	54
TRICAL 815	3590(07)	48.60	48
DECOR	4900(03)	52.90	49
1029E	5060(01)	56.50	54
XZ1636	4420(05)	55.10	52
1439-960	4420(04)	51.30	50
RSI 143	4200(06)	50.30	53
RSI 273	3440(09)	47.00	42
STEPHENS (sww)	3280(10)	48.40	35
MEAN	4170	50.8	48
CV	8.0	1.6	4.3
LSD (.05)	490	1.8	5

Numbers in parentheses indicate relative rank in column.

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