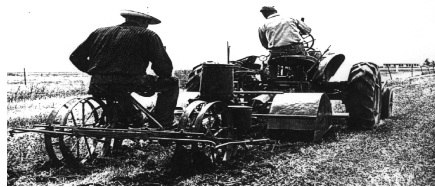


Field

Serving the Northern



Crops

Sacramento Valley

University of California

Cooperative Extension

Butte, Glenn & Tehama Counties

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Volume VII Issue I

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Field Crops Newsletter Index

Wheat and Barley Stripe Rust Update

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Farm Advisor

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FIELD CROP NEWSLETTER

This issue starts the seventh year of my Field Crop newsletters for the northern Sacramento Valley. There was only one newsletter issue during 2001, my sixth year here, since I was gone on a sabbatical leave.

I've made an index of all my newsletter articles (except for meeting announcements) for the years 1996 through 2000. I hope it will be a useful reference for growers and PCA's when looking for information on field crops production in the northern Sacramento Valley.

Most of these newsletter articles are based on local research and observations. One of the most helpful results of this local research has been the identification of a new high yielding cotton variety for the Sacramento Valley. This variety, DeltaPine 388, is 10 percent higher yielding than our previously highest yielding variety, Stoneville 474. DeltaPine 388 is almost 20 percent higher yielding than the previously widely planted variety, SureGrow 404. This yield increase is very significant, both statistically and economically. After just two years of testing, DeltaPine 388 was planted on the majority of the Sacramento Valley cotton acreage in 2001.

During my sabbatical leave, I studied and did some research with site-specific farming tools. Global positioning satellites (GPS) are used to accurately locate important features in a field. Geographical information systems (GIS) are computer programs for managing and evaluating this information. Then a variety of equipment is used to control the application of pesticides, fertilizers, fungicides, and other important inputs to the field to put the materials more specifically where they are needed in the field.

This year, I'm starting some local research in what I hope will be practical applications of site specific farming applications for field crops weed control. I am enthused about this new area of research and how it may help us be more competitive in a world market.

Field Crops Newsletter Subject Index

1996 to 2000

Barley

| | | |
|------|-----------|---|
| 2000 | September | Plant Dryland Wheat or Dryland Barley? |
| 1999 | September | Barley in the Northern Sacramento Valley? |
| 1997 | September | Barley in the Northern Sacramento Valley? |

Beans - Dry

| | | |
|------|----------|-------------------------------|
| 1999 | November | Dry Bean Cost Study Available |
| 1997 | March | Lygus and Common Beans |
| 1996 | November | Dry Bean Disease Alert |

Clover

| | | |
|------|----------|--|
| 2000 | April | Timing the Clipping of Red Clover to Increase Seed Yield |
| 1999 | April | Timing the Clipping of Red Clover to Increase Seed Yield |
| 1999 | April | Herbicides for Buckhorn and Dog Fennel in Clover |
| 1998 | February | Clipping Red Clover to Increase Yields |
| 1998 | February | Herbicides for Buckhorn and Dog Fennel in Clover |

Corn

| | | |
|------|-----------|---|
| 2000 | September | Herbicides for Velvetleaf Control in Corn |
| 2000 | February | 1997 - 99 Northern Sacramento Valley Corn Trial Results |
| 2000 | February | Corn Herbicides for Velvetleaf Control |
| 1999 | March | 1998 Grain Corn Variety Trial Results |
| 1998 | April | Southern Sacramento Valley Corn Variety Trials |
| 1998 | April | 1997 Corn Silage Trial |
| 1997 | December | 1997 Grain Corn Variety Trial Results |
| 1997 | March | Sacramento Valley Field Corn Variety Trials |

Cotton

| | | |
|------|-----------|--|
| 2001 | February | Cotton Variety Performance in the Sacramento Valley 1996 to 2000 |
| 2000 | June | Sacramento Valley Cotton Pest Management Trials |
| 2000 | March | Early Season Cotton Tips for 2000 |
| 2000 | March | 1999 Cotton Starter Fertilizer and Nitrogen Sidedressing Trial |
| 2000 | February | Temik at Planting on Cotton |
| 2000 | February | 1996 - 99 Sacramento Valley Cotton Quality |
| 2000 | January | Cotton Variety Performance Trials in the Sacramento Valley |
| 1999 | September | How Good Was the Timing of the Final Cotton Irrigation? |
| 1999 | July | 1999 Cotton Bottom Crop Fruit Retention |
| 1999 | May | Lygus Treatment in Safflower to Avoid Migration to Cotton |
| 1999 | March | Suggestions for Sacramento Valley Cotton Production |
| 1999 | March | 1999 Cotton Planting Forecast |
| 1999 | March | Starter Fertilizer and Temik at Planting Trial |
| 1999 | January | Considering Cotton for 1999? |
| 1999 | January | Cotton Variety Performance Trials in the Sacramento Valley |

| | | |
|------|-----------|--|
| 1998 | September | How Good Was the Timing of the Final Cotton Irrigation? |
| 1998 | July | 1998 Sacramento Valley Cotton Progress |
| 1998 | May | Rice Ground Cotton Trial |
| 1998 | March | 1997 Sacramento Valley Cotton Insect Trial |
| 1998 | March | 1998 Sacramento Valley Cotton Planting Forecast |
| 1998 | March | 1997 Sacramento Valley Cotton Seeding Rate Trial |
| 1997 | December | Cotton Variety Performance Trials in the Sacramento Valley |
| 1997 | November | Glenn, Tehama, Butte, Colusa 1997 Cotton Research |
| 1997 | November | Cotton Production Manual Available |
| 1997 | November | Rice Ground Cotton Trial |
| 1997 | February | 1996 Sacramento Valley Cotton Variety Evaluations |
| 1997 | February | 1996 Sacramento Valley Cotton Variety Trials and Fiber Quality Results |
| 1997 | January | Cotton and Phenoxy Herbicides Yield Reductions |

Field Crops - General

| | | |
|------|----------|--|
| 1999 | November | A Brief History of Pest Management |
| 1998 | April | Deadline Changes for "Application to Produce Certified Seed" |
| 1997 | August | Some Reasons for Crop Rotation |

Safflower

| | | |
|------|----------|---|
| 1999 | May | Lygus Treatment in Safflower to Avoid Migration to Cotton |
| 1997 | February | Does it Pay to Irrigate Safflower? |

Sugarbeets

| | | |
|------|-----------|--------------------------|
| 1997 | February | Sugarbeets and Smartweed |
| 1996 | September | Fall Planted Sugarbeets |

Wheat

| | | |
|------|-----------|---|
| 2000 | September | Wheat Variety Selection for the 2001 Crop |
| 2000 | September | Plant Dryland Wheat or Dryland Barley? |
| 2000 | May | Canarygrass Control in Wheat and Wheat Stripe Rust Update |
| 1999 | September | Wheat Variety Selection for the 2000 Crop With the Threat of New Races of Stripe Rust |
| 1998 | October | Selecting a 1999 Wheat Variety |
| 1998 | October | Bedding for Winter Wheat |
| 1997 | September | The Wild Oat Herbicide Avenge and the Wheat Variety RSI 5 |
| 1997 | September | New Wheat Seed Treatments |
| 1997 | September | Which Wheat to Plant in 1998? |
| 1997 | August | Bedding for Winter Wheat |
| 1996 | October | Choosing the Best Wheat Variety for 1997 |
| 1996 | May | Kernel Bunt of Wheat |
| 1996 | April | Wheat Nitrogen Fertilizer - How Much is Enough? |

Wheat and Barley Stripe Rust Update

Doug Munier and Lee Jackson

Wheat

Several different wheat varieties are grown in the Sacramento Valley with varying degrees of susceptibility to wheat stripe rust. Susceptible wheat varieties in the Sacramento Valley, particularly in the Delta area of the Central Valley, suffered moderate damage from stripe rust in 2001.

The variety Express is a very popular Sacramento Valley wheat variety, planted on about half of the Sacramento Valley wheat acreage. It is susceptible to stripe rust in the seedling stage, but currently has adult plant resistance, so it is continuing to do well. All wheat varieties must be closely monitored, since new races of wheat stripe rust continue to appear.

This season, another variety has become a casualty to new races of wheat stripe rust. According to Lee

Jackson, UC Specialist for cereal, the wheat variety Bonus, previously resistant, is showing high susceptibility to stripe rust this season in several areas. He has found fields in the Delta area that are particularly affected. He has also received reports of affected Bonus fields in the Dunnigan and Grimes areas.

Barley

A similar, but separate disease, barley stripe rust, has emerged as a severe disease of barley in California. There is a new barley variety, UC 937, which currently has good resistance to barley stripe rust. It also has very good resistance to other important barley diseases. It has been grown successfully for several years in the northern Sacramento Valley. This variety should be harvested as soon as it is mature, since it is susceptible to entire heads breaking off under windy conditions once it is mature. Seed is being increased of another new variety, UC 933. It is a higher yielding variety than UC 937, with excellent disease resistance.

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