University of California Cooperative Extension - Siskiyou County

2020 Spring Newsletter

Announcements

Siskiyou Golden Fair

As you may have heard the Siskiyou Golden Fair has been cancelled. However, they are committed to supporting the 4-H, FFA, and Independent youth in completing their livestock projects and supporting them by working with the Junior Livestock Auction Committee to host an auction to support the culminations of their efforts. In order to maintain social distancing and comply with group gathering sizes, the sale will be over a three night period and will be available for in person biding and virtual sales. All Beef Steers and Replacement Heifers will sell on Friday, August 14th. Pens of Rabbits, Pens Chickens, of Turkeys, Goats, Lambs and Dairy Heifers sell on Saturday, August 15th. All Market Hogs sell on Sunday, August 16th. (Plans could change. Contact the fair office or check out their social media sites to stay up to date on changes or schedules).

<u>New UCCE Livestock and</u> <u>Natural Resources Advisor</u>

We are glad to announce that Siskiyou County has a new Livestock and Natural Resources Advisor. Grace Woodmansee accepted the position and will be starting on January 4, 2021. Welcome to our team, Grace!

Hot topics

Aphids

In early April, our office received some calls regarding aphid infestation in alfalfa fields. The main two types of aphids that can be found in Siskiyou County are pea aphids (*Acyrthosiphon pisum*) and blue alfalfa aphids (*Acyrthosiphon kondoi*). While both of them are very similar in appearance, they can be distinguished by examining the antennae. The antennae of the pea aphids have narrow dark bands on each segment, whereas those of the blue alfalfa aphids gradually darken towards the tip.

Usually, natural enemies such as lady beetle, lacewigs larvae, soldier beetles, and syrphid larvae are enough to keep aphids population in check. However, insecticides, preferably target specific, may be necessary in case aphid populations are above the economic threshold as shown in the following table:

Plant height	Pea aphids	Blue alfalfa aphids
Under 10 inches	40 to 50 per stem	10 to 12 per stem
10 to 20 inches	70 to 80 per stem	40 to 50 per stem
Over 20 inches	100 + per stem	40 to 50 per stem

Let us know if you have any questions regarding the available options for aphid control.

Marlahan mustard or Dyer's woad

As previous years, our clientele had many questions about controlling dyer's woad or Marlahan mustard (*Isatis tinctoria*). For many decades, this weed was confined to Scott Valley but now it is becoming a problem in Shasta Valley and other parts of California as well.

Marlahan Mustard is a biennial or short-lived perennial that germinates in the fall or early spring. The plants remain in the rosette form during



Mature plant of dyer's woad. Photo by Steve Orloff.

the first growing season and produce flower and seeds in the following year.

The most effective control measure is prevention. In stablished infestations, it's crucial to prevent plants from producing seeds to avoid further spread. Keep in mind that seeds can germinate even when the seedpods are still green. In addition, the plant can produce viable seeds when herbicide is applied during the flowering period.

Cultural control such as rogueing or digging individual plants can be relatively effective in small or scattered infestations. If flowers or seedpods are present, plants need to be uprooted, bagged and removed from the field. Mowing to prevent seed formation can help but multiple passes are required as plants usually re-sprout after a single cutting. Chemical control can be effective when herbicides are applied at appropriate growth stages. Even with timely herbicide applications, multiple years of control may be necessary to exhaust the soil seedbank.

Drought

According to NIDIS (National Integrated Drought Information System), Siskiyou County is currently (July 14, 2020) having three different drought intensities: D1 (moderate drought), D2 (severe drought), and D3 (extreme drought).

D1: Moderate Drought - Some damage to crops and pastures, some water shortages developing, voluntary water-use restriction requested;

D2: Severe Drought - Crop or pasture loss is likely to happen, water shortages are more common, and water restrictions imposed;

D3: Extreme Drought – Major crop or pasture losses are expected, widespread water shortage or restrictions

Weekly updates are available in the U.S. Drought Portal at: <u>https://www.drought.gov/drought/states/california</u>. The data is updated weekly and released on Thursdays.

Research Updates

2020 Nitrogen Fertilizer Management in small grains

In collaboration with UC specialist and advisors, we are currently conducting a nitrogen fertilizer management project in the Intermountain Research and Extension Center (IREC) in Tulelake-CA. As part of a statewide project, the objectives are to demonstrate and enable best nitrogen management practices in California small grains.



GreenSeeker device. Photo by Giuliano Galdi.



Soil nitrate quick test. Photo by UC Small Grains Blog

Scott Valley Variety Trial list Ameristand 518 NT

1

2	Ameristand 427TQ
3	Ameristand 415 NT RR
4	Ameristand 545 NT RR
5	WL 377 HQ
6	6422Q
7	6585 Q
8	SW3407
9	SW4107
10	SW 4412Y
11	SW5210
12	AFX 579
13	AFX 460
14	Hybriforce 3400
15	AFX Hybriforce 4400
16	AFX Magnum 8
17	AFX 360 Highgest
18	Nexgrow 6516
19	DG 4210 Dynagrow
20	LG 4R300
21	LG Camas
22	LG EXTERRA (5FD)
23	LG 5R300 (5FD)
24	DG 5315

While the nitrate quick test provide information about nitrate concentration in the soil, GreenSeeker and *atLEAF CHL* are tools that help to determine plant vigor by measuring light reflected or absorbed by plant canopy or leaves. The information collected by these tools are close related to the crop nitrogen status and serve as guidance to future fertilization decisions. You can find more information at:

https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=42903.

Scott Valley Alfalfa Variety Trial

After some delay due the late May and early June rains, our alfalfa variety trial was harvested in mid June. The second cutting will be in late July. The 24 varieties yearly yields will be shared in the winter Newsletter.

Future Research

MESA / LESA / MDI irrigation systems

In times of drought and water scarcity, efficient irrigation methods are extremely important to guarantee a productive and sustainable agriculture. While MESA (Mid Elevation Spray Application) has application efficiency about 85% and operating pressure of 40 psi, LESA (Low Elevation Spray Application) has irrigation application efficiency typically about 97% and operating pressure of 15 psi. It means that Siskiyou growers could save water and money with pumping costs. Although there are some studies comparing MESA and LESA, UCCE Siskiyou will keep investigating the benefits and drawbacks of each system and add MDI (Mobile Drip Irrigation) to our future study. We will be applying for grants to support this research in November, so fingers crossed and stay tuned.



Current Resident or

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Introducing the new Siskiyou County Livestock and Natural Resources Advisor

"My name is Grace Woodmansee and I am very excited to join UC Cooperative Extension as the Siskiyou County Livestock and Natural Resources Advisor. I grew up in Chico and spent my childhood in 4-H raising market lambs and actively involved in club leadership. These experiences inspired me to earn undergraduate degrees in Animal Science and Sociology from CSU, Chico. As an undergraduate research assistant at the Chico State Beef Unit, I discovered my passion for rangeland science and management - a discipline that combines my interests in social, ecological and livestock production research. I have enjoyed expanding these interests as a graduate student and will complete my Master of Science in Agronomy at UC Davis this fall. For the past 5 years, I have worked with Cooperative Extension and am committed to conducting collaborative, applied research to address management challenges on grazing lands. I look forward to meeting you soon!

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2020 SPRING NEWSLETTER FIELD CROP NOTES

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