

Upcoming Events of Interest

Things that farmers, gardeners, and ranchers may want to check out:

- 2018 Farm Bill Meeting sponsored by K-State: Sept 5, 1-4:30pm, Nemaha County Community Building, Seneca. Info at <https://bit.ly/2ZBmll9>; RSVP online or call the office.
- Loess Hills Technology Farm field day: Sept 10, 9am, Troy Community Building. <https://bit.ly/2PdnHI0>
- Doniphan County Farm Bill Meetings sponsored by Doniphan county Extension and USDA offices: Sept 12, 10am and 6pm, Doniphan County fair building.
- Troy Invasive Weed Species Workshop: Sept 17, 10am-12pm, Troy City Park. RSVP to Conservation District by Sept 11 (785-985-2221x3). <https://bit.ly/2NJ8P1V>
- 2019 Agronomy Fall Field Day: Sept 20, Manhattan. Info at <https://bit.ly/2NwEjYQ>.

Details on local events will be posted on the county Extension website: www.doniphan.k-state.edu

Farm Bill

The 2018 Farm Bill has been passed, but since then has generated more questions than answers. Both the staff of K-State Research and Extension and USDA-FSA are working to answer those questions and help everyone get settled with the new programs and decisions to be made. Two days of informational sessions will be held for county producers (details in “upcoming events”):

- Sept 5: large regional meeting in Seneca that will feature around a half dozen speakers from K-State. This will include use of some tools to make the ARC or PLC decision easier, and will feature more upper-level information on the farm bill and what it might mean for farming the next few years.
- Sept 12: two smaller informational sessions in Doniphan County itself, put on by local USDA and KSRE staff. We will cover some of the

background and county-wide info, but will likely focus on nuts-and-bolts of how to go about making selections, changes to consider in crop insurance and/or conservation programs, etc.

Whether you can attend any of the sessions or not, the local extension and USDA office staff will be able to provide information on the farm bill, new programs, and offer some assistance into the ARC or PLC decision.

Status of disease pressure in corn and soybeans

Doug Jardine, Extension Plant Pathologist

It is middle of August and corn is rapidly progressing toward maturity with many fields in the hard dough to early dent stage of development. At these growth stages, there will be minimal returns to any fungicide applications.

Corn disease update

Southern rust. Based on recent scouting trips, there is little, if any, southern rust in the western third of the state at this time. In northeast Kansas, some level of southern rust can be found in many fields, but nothing seen would warrant a fungicide application at this point. Some fields are just silking and scouting should continue in these fields until the late soft dough stage of development.

Gray leaf spot. Late fields not past R2 should be evaluated for gray leaf spot (Figure 1). Some fields have high levels of gray leaf spot, but most of these are at hard dough when fungicide application would not be profitable. Other fields have very little gray leaf spot present. It is not clear if this is because a fungicide was applied, a resistant hybrid was used, or because weather conditions in the field were not conducive to disease development.

Stalk rot. As corn progresses to maturity, stalk rot is beginning to be identified. In a field near Perry, Kansas, both Fusarium stalk rot and charcoal rot were present. However, in this field, Fusarium was by far the predominant type of stalk rot. Wet springs

followed by a period of dry weather, such as we had in July, with a return to frequent rain is an ideal prescription for Fusarium stalk rot. The very hot and dry July would also be conducive to some charcoal rot, especially on drier upland or sandier soils.

Soybean disease update

The soybean crop is amazingly healthy at this point if fields are in the R3 to R5 growth stages. No frogeye leaf spot could be found in northeast Kansas on a recent scouting trip. The predominant disease has been bacterial blight. This disease is associated with big, blowing thunderstorms that spread bacteria around the field. Fungicides will not be effective on bacterial diseases; however, this disease is not known to be yield limiting. Fungicides for foliar disease problems are not warranted at this point of the season. Growers who had problems in 2018 with seed quality due to pod and stem blight, purple seed stain, and anthracnose may want to consider a fungicide application with the goal of improving seed quality, if not necessarily yield. Beginning pod fill (R5) would be the best time to make this type of application to provide protection longer into the pod-filling stage. Fungicide efficacy ratings for various soybean diseases can be found at:

<https://bit.ly/2LaheII>

Second Round of Market Facilitation Program (MFP2) Rates Released

The announcement of a second round of MFP payments was made some time ago, but only recently were the payment rates made public. To simplify the process, this time a single per-acre rate was determined for each county, and that will be paid to all eligible producers in that county regardless of what crop(s) were planted. There are different rates for specialty crops, as well as some livestock/livestock products, however.

For non-specialty crops, Doniphan county producers will be paid \$71/ac. This is one of the highest county rates in KS. There is some curiosity over how the county rates were calculated; while the exact formulas are unknown, it's meant to be a reflection of how severe the trade-related financial impact has been or will be. As a very high-yielding ag-based county, Doniphan stands to be hurt

severely by any trade-related decreases in crop prices, so our MFP rate is relatively high.

Payment rates for other commodities (non-specialty crops and livestock) have a single payment rate that does not differ by county. Dairy producers can expect \$0.20/cwt, and hog producers will receive \$11/hd.

In addition, producers (like a good many in Doniphan) who were forced into prevented planting this year because of weather conditions, will also receive an MFP payment of \$15/ac on fields planted to cover crops for harvest or forage. The cover crops must have been planted by Aug 1.

Program sign-up goes through Dec 6 2019. The first portion of payments should be on their way to participants.

For more information, contact the local USDA-FSA office, or go to the MFP website:

<https://www.farmers.gov/manage/mfp>

Mental Health First Aid Training Offered

On October 15 2019, K-State Research and Extension and the Doniphan County Health Department will be hosting a Mental Health First Aid (MHFA) training at the Community Building in Troy. The training will start at 8am and will conclude around 4:30, with a break for lunch (provided). Kailey Patton from KANZA Mental Health will be leading the workshop.

Mental Health First Aid encourages early detection and intervention by teaching participants about the signs and symptoms of specific illnesses like anxiety, depression, schizophrenia, bipolar disorder, eating disorders and addictions. The program offers concrete tools and answers key questions like "What can I do?" and "Where can someone find help?" Participants are introduced to local mental health resources, national organizations, support groups and online tools for mental health and addiction treatment and support. For more information, go to <https://www.mentalhealthfirstaid.org/>.

The course is free thanks to the Doniphan County Culture of Health Grant. Class size is limited – register with the extension office soon.

Hail Damage in Late-Season Crops

The burst of incredibly destructive rain and hail on August 15 made a mess of thousands of acres of row crops across the southern half of Doniphan county. Crop insurance adjusters should be out getting estimates in the near future, and both the extension and USDA staff members spent time on the road examining damage levels. I've included the following tables as a way to estimate yield loss based on leaf area loss.

Based on what I personally saw the morning after the storm, a lot of corn was in the dent phase, meaning loss of leaf area causes some but not massive yield loss. The corn was nearing the point where the ear is just drying down, rather than adding additional mass or dry matter. Using my visual observation and the following charts, these corn acres might expect 0-20% yield losses. Some fields were less mature and are looking at 30-40% yield loss, which is much more impactful.

Soybeans, meanwhile, were in early stages of pod and bean growth, so heavy leaf losses can be quite devastating. Most beans I saw were in the R3-R5 stage, and I estimate I saw everything from 0-90% leaf loss. This means anywhere from a 5-60% yield loss.

Growth stage	Expected % Yield Loss When % Leaf Area Destroyed Is																		
	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
VC-V(n)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R1	0	1	1	1	2	2	3	3	3	4	4	5	5	6	7	8	10	12	12
R2	0	1	2	2	3	4	5	5	6	7	7	8	9	10	12	14	16	19	23
R2.5	1	2	2	3	3	4	5	6	7	8	9	10	11	13	15	17	20	23	28
R3	2	3	3	4	4	5	6	7	8	9	11	12	14	16	18	21	24	28	33
R3.5	3	3	4	5	5	6	7	8	10	11	13	15	18	21	24	27	31	37	45
R4	3	4	5	6	7	8	9	10	12	14	16	19	22	26	30	34	39	46	56
R4.5	4	5	6	8	9	10	11	13	15	17	20	23	27	31	37	42	49	56	65
R5	4	6	7	9	10	11	13	15	17	20	23	27	31	36	43	50	58	66	75
R5.5	4	6	7	9	10	11	13	15	17	20	23	27	31	36	43	50	58	66	75
R6	1	3	6	8	9	10	11	13	14	16	18	20	23	27	31	36	41	47	53
R6.5	0	0	1	1	1	2	3	3	4	5	5	6	8	11	13	16	18	20	23

Source: Adapted from National Crop Insurance Service publication 6302, *Soybean Loss Instructions* (Revised, 1999).

Stage of growth	Approx equivalence with leaf collar method	Percentage leaf area destroyed																		
		10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
7-leaf	V5	0	0	0	0	0	0	1	1	2	3	4	4	5	5	6	7	8	9	9
8-leaf	V6	0	0	0	0	0	1	1	2	3	4	5	5	6	6	7	8	9	10	11
9-leaf	V7	0	0	0	1	1	2	2	3	4	5	6	6	7	7	9	10	11	12	13
10-leaf	V8	0	0	0	1	2	3	4	5	6	7	8	8	9	9	11	13	14	15	16
11-leaf	V9	0	0	1	1	2	3	5	6	7	8	9	10	11	12	14	16	18	20	22
12-leaf	V10	0	0	1	2	3	4	5	7	9	10	11	13	15	16	18	20	23	26	28
13-leaf	V11	0	1	1	2	3	4	6	8	10	11	13	15	17	19	22	25	28	31	34
14-leaf	V12	0	1	2	3	4	6	8	10	13	15	17	20	22	25	28	32	36	40	44
15-leaf	V13	1	1	2	3	5	7	9	12	15	17	20	23	26	30	34	38	42	46	51
16-leaf	V14	1	2	3	4	6	8	11	14	18	20	23	27	31	36	40	44	49	55	61
17-leaf	V15	2	3	4	5	7	9	13	17	21	24	28	32	37	43	48	53	59	65	72
18-leaf	V16	2	3	5	7	9	11	15	19	24	28	33	38	44	50	56	62	69	76	84
19- to 21-leaf	V17-19	3	4	6	8	11	14	18	22	27	32	38	43	51	57	64	71	79	87	96
Tassel	VT	3	5	7	9	13	17	21	26	31	36	42	48	55	62	68	75	83	91	100
Silked	R1	3	5	7	9	12	16	20	24	29	34	39	45	51	58	65	72	80	88	97
Bliester	R2	2	3	5	7	10	13	16	19	22	26	30	34	39	45	50	55	60	66	73
Milk	R3	1	2	3	5	7	9	12	15	18	21	24	28	32	37	41	45	49	54	59
Soft dough	R4	1	1	2	2	4	6	8	10	12	14	17	20	23	26	29	32	35	38	41
Dent	R5	0	0	0	1	2	3	4	6	7	8	10	12	14	15	17	19	20	21	23
Mature	R6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: adapted from the National Crop Insurance Association's "Corn Loss Instructions" (revised 1984) in Vorst (1993)