In This Issue

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Editor: Tammy Luck | Department of Entomology, Purdue University, 901 W. State St., West Lafayette, IN 47907

Armyworm Pheromone Trap Report

Armyworm Pheromone Trap Report

County/Cooperator	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10
Dubois/SIPAC Ag Center	0	0	11	3	136	19	18	0	4	102
Jennings/SEPAC Ag Center	0	0	2	5	8	1	0	0	3	70
Knox/SWPAC Ag Center	0	27	44	45	25	11	15	26	51	32
LaPorte/Pinney Ag Center	0	0	3	3	14	9	13	19	9	27
Lawrence/Feldun Ag Center	0	28	89	144	74	43	30	25	8	247
Randolph/Davis Ag Center	0	0	273	80	340	68	72	132	67	12
Tippecanoe/Meigs	0	0	1	5	5	23	0	1	7	40
Whitley/NEPAC Ag Center		0	22	22	86	94	9	17	27	30

Wk 1 = 3/29/18-4/4/18; Wk 2 = 4/5/18-4/10/18; Wk 3 = 4/11/18-4/18/18; Wk 4 = 4/19/19-4/25/18; Wk 5 = 4/26/18-5/2/18; Wk 6 = 5/3/18-5/9/18; Wk 7 = 5/10/18-5/16/18; Wk 8 = 5/17/18 – 5/23/18; Wk 9 = 5/24/18-5/30/18; Wk 10 = 5/31/18-6/5/18

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Growth Stage Cutoffs for Herbicide Applications in Corn and Soybean

Authors: Joe Ikley and Bill Johnson

After a delayed start to our planting season, we were able to plant both corn and soybean across the state in record or near-record time during May. This coincided with our hottest May on record, which was also dry in many areas of the state. This has allowed crops to emerge out of the ground quickly and rapidly progress through growth stages. We already have reports of waist high corn and flowering soybeans across the state. This article serves as a reminder for growth stage, height restrictions, and pre-harvest interval cutoffs for herbicide applications in both crops.

Corn. There are a number of corn fields that did not receive a preemergence herbicide before the crops emerged from the ground. Many of these preemergence herbicides can also be applied postemergence. Some of the earliest cutoff timings are 8-inch corn for broadcast applications of 2,4-D, and any atrazine must be applied before corn reaches 12-inches in height. If corn is 12 inches or taller, the atrazine must be left out of the tank. See table 8 in the weed control guide for height and growth stage restrictions of postemergence herbicides in corn.

Soybean. Even though we are still a few weeks away from the summer solstice, we are seeing soybeans start to bloom across the state. Shawn Conley at the University of Wisconsin wrote a nice article explaining some causes behind this (http://coolbean.info/2018/06/03/soybean-flowering-summer-solstice-fallacy/). What this means for herbicide applications, is that the window of application for some postemergence herbicides has either ended, or is about to end in those fields that are entering reproductive stages. We have heard reports that up to 25% of our soybean acres might be Liberty Link, and up to 50% could be Roundup Ready Xtend varieties. The cutoff for glufosinate (Liberty, Cheetah, Interline, others) applications in Liberty-Link soybean is R1. In other words, once the soybeans are flowering, applying glufosinate is off-label. The cutoff for Engenia, FeXapan, and Xtendimax in Xtend soybeans is R2, or full flower. With these flowering soybeans still being small in many areas, it is imperative to include residual herbicides in these postemergence applications to help reduce weed pressure until crop canopy. See table 18 in the weed control guide for growth stage restrictions and pre-harvest intervals of soybean herbicides.

Table 8. Rainfast Intervals, Spray Additives, and Crop Size for Postemergence Corn Herbicides

This table shows the required time interval between herbicide application and rainfall and summarizes label recommendations for spray additives and maximum crop stage. Check herbicide labels for additive rates. Information in this table applies to field corn only.

Herbicide	Rainfast Interval (hours)	Spray additives/Maximum Crop Size (field corn)
2,4-D Amine	6-8	No additives. Broadcast up to 8-inch corn; directed spray before tassel stage.
2,4-D Ester	2-3	No additives. Broadcast up to 8-inch corn; directed spray before tassel stage.
Accent Q, NIC-IT	4	MSO, COC or SURF (Addition of UAN or AMS is recommended). Broadcast up to 6 collars or 20-inch corn; directed spray up to 10 collars or 36-inch field corn.
Aim	1	SURF. AMS or UAN may be added if required by tank-mix partner. Do not use COC or tank-mix with EC formulations of other crop protection chemicals except as specifically directed by label. Apply up to 8-collar corn.
Armezon PRO	1	MSO or COC plus UAN or AMS. Can use SURF in mixtures. Up to the V8 stage or 30-inch corn, whichever occurs first.
Atrazine	2	MSO or COC. Apply before corn is 12 inches tall.
Basagran	8	COC + UAN or AMS, depending on weed species present.
Bestow	4	NIS + UAN or AMS. Broadcast up to 12 inches or 5-collar stage.
Bromoxynil	1	No additives. Apply before tassel emergence.
Bromoxynil+atrazine	2	No additives. Apply before corn is 12 inches tall.
Cadet	4	NIS, COC, or MSO. UAN or AMS can be added. Preplant up to 48 inches tall, and before tassel emergence.
Callisto GT	-	NIS + AMS. COC can be used instead of NIS but increases risk of crop injury. Broadcast up to 30-inch or V8 corn.
Callisto Xtra	-	COC or NIS + UAN or AMS. Apply up to 12-inch corn.
Capreno	1	COC + UAN or AMS. Apply broadcast from V1 to V6 corn; directed spray up to V7 corn.
Dicamba	6-8	Add UAN if velvetleaf is present. SURF, COC, or UAN may be added under dry conditions. Do not apply with COC when corn height exceeds 5 inches. Broadcast up to 5th-leaf stage or 8-inch corn; directed spray up to 36-inch corn.
Dicamba/atrazine	6-8	Add UAN if velvetleaf is present. SURF, COC, or UAN may be added under dry conditions. Do not apply with COC when corn height exceeds 5 inches. Apply broadcast up to 5-leaf stage or 8-inch corn.
DiFlexx	6-8	Can add SURF, COC, or MSO + UAN or AMS. Broadcast spray from spike through V10 stage and corn less than 36 inches tall.
DiFlexx DUO	4	COC or MSO is recommended, plus UAN or AMS. HSOC can also be used. Broadcast up to but not including V7 stage, or 36 inches tall; directed spray up to V10 or 36 inches tall, or 15 days prior to tassel, whichever occurs first.
Enlist One/Duo	24	See Enlist website for adjuvant information. Broadcast up to V8 or 30 inches, whichever occrs first; directed spray up to 48 inches.
Glufosinate	4	AMS. Broadcast or directed up V6 (Liberty) or up to 24-inch or V7 corn (Cheetah/Interline). Directed spray up to 36-inch corn.
Halex GT	2	SURF + AMS. Broadcast up to 30-inch or 8-leaf corn.
Halosulfuron	4	SURF, MSO, or COC. UAN or AMS may be added. Apply through layby stage of corn.
Harness Max	1	SURF or COC. UAN or AMS can be added. Popcorn - SURF only. Up to 11-inch corn.
Harrow	4	SURF, COC, or MSO plus UAN or AMS. Broadcast from spike to 2-collar stage, and not more than 6 inches tall.
Hornet	2	SURF, COC, or MSO. UAN or AMS may be added under extremely dry conditions. Broadcast up to 20-inch corn or 6 collars; directed spray up to 36-inch corn.
Impact/Armezon	1	MSO or COC + UAN or AMS. SURF can be used in combinations with other broadleaf herbicides. Apply broadcast or directed up to 45 days before harvest.
Laddok	8	MSO, COC, UAN, AMS, DASH, or combinations of these. Apply before corn is 12 inches tall.
Laudis	1	MSO + UAN or AMS. Broadcast up to V8 corn.
Laudis + atrazine	2	COC + UAN or AMS. Broadcast up to 12-inch corn
Mesotrione	1	COC + UAN or AMS. Apply up to 30-inch or 8-leaf corn.
Northstar	4	SURF, COC or MSO up to 12-inch corn. Only SURF between 12 and 36-inch corn. UAN or AMS may be added. Broadcast 4 to 20-inch corn; directed spray up to 36-inch corn.
Peak	4	COC unless mixed with glyphosate. Broadcast up to V6 or 20-inch corn; directed spray up to 30 inches.
Realm Q	4	SURF or COC + UAN or AMS. Broadcast or directed up to 20 inches and prior to the 7-collar stage.
Revulin Q	4	COC or HSOC + UAN or AMS. Broadcast up to V5 stage or 20 inches tall, whichever occurs first.
Resolve Q	4	NIS + UAN or AMS, unless mixed with a glyphosate product or lignite. Broadcast up to 20-inch or 6 collar corn.
Resource	1	COC. UAN or AMS may be added to improve control of certain species. Apply up to the 10-leaf stage.
Shotgun	6	No additives. Apply before 12-inch corn.
Solstice	1	COC or NIS + UAN or AMS. COC is preferred adjuvant. Do not use MSO. Up to V8 or 30-inch corn.
Starane	1	An adjuvant can be used if required by tank-mix partner. Broadcast up to the V5 stage; directed spray after the V5 stage.
Status	4	SURF, COC, or MSO + UAN or AMS. Broadcast from 4 to 36-inch corn (rates up to 5 oz/A)
Steadfast Q	4	COC, MSO, or SURF + UAN or AMS. COC or MSO is preferred over SURF. Broadcast up to and including 6 collars or 20-inch corn
Stinger	6-8	No additives. Up to 24-inch corn.
WideMatch	6	No additives. Broadcast up to the V5 stage; directed spray after the V5 stage.
Yukon	4	SURF or COC. UAN or AMS may be added. Apply broadcast or directed up to 36-inch corn.

Table 18. Harvest and Feeding Intervals for Soybean Herbicides

Soybean Herbicides	Days to Harvest	
	Grain	Forage
Aim	Apply up to third trifoliate	Do not feed
Assure II/Targa	80	Do not feed
Basagran	30	30
Basagran + 2,4-DB	60	60
Basagran + thifensulfuron	60	Do not feed
Basagran + Reflex	Apply prior to bloom	Do not feed
Basagran + Cobra	90	Do not feed
Cadet	60	Do not feed
Classic	Apply 60 days before maturity	Do not feed
Clethodim	60	Do not feed
Cobra	45	Do not feed
Engenia/XtendiMax/FeXapan	Do not apply after R1 stage	7
Extreme/Tackle/Thunder Master	Apply prior to bloom and 85 days before harvest	Do not feed
FirstRate	70	25
Fomesafen	45	Do not feed
Fusilade DX	Apply prior to bloom	Do not feed
Fusion	Apply prior to bloom	Do not feed
Liberty/Cheetah	Apply prior to bloom.	Do not feed
Poast/Poast Plus	75	Do not feed[1]
Previx/Vise	90	Do not feed
Pursuit	85	Do not feed
Raptor	85 and apply prior to bloom	Do not feed
Resource	60	Do not feed
Storm	50	Do not feed
Synchrony XP	Apply 60 days before maturity	Do not feed
Thifensulfuron	60	Do not feed
Torment	85	Do not feed
Ultra Blazer/Avalanche Ultra	50	Do not feed
Warrant Ultra	45	Do not feed

[1]Soybean hay may be fed.

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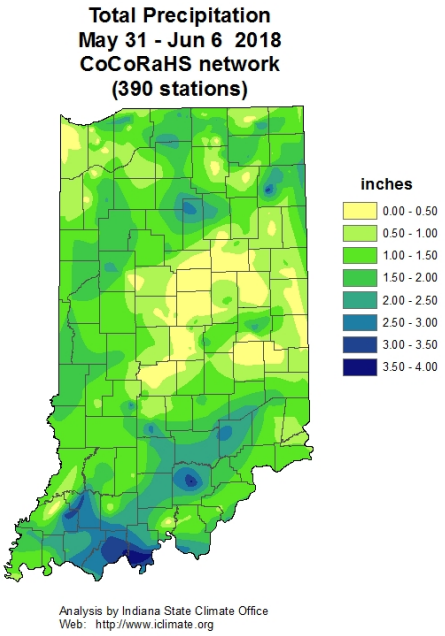
Total Precipitation May 31-June 6, 2018.



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Average Temperature Departure from Mean May 30-June 5, 2018