Pioneer Agronomy Update 5-15-2024



Area Update ... 'Mother's Day Curse be

DAMNED!!!' - Sure enough, the third planting window swung WIDE OPEN on Mother's Day. In this year of predictably unpredictable weather a farmer has to take advantage of a planting window when it occurs. Every year there's a worst day or series of days to have planted corn or soybeans, and you never know til afterwards. It could turn out that despite the historical baggage associated with plantain on or around Mother's Day that things could turn out better this year. The coming weeks and months will tell the story.



Corn Emergence Challenges - The prolonged cold and wet conditions that followed the mid and late April planting windows has created emergence challenges for corn. Poorly drained areas where water stood and soils that remained saturated for extended periods of time are where corn has struggled the most. In such areas crusts and/or a layer of dense soil an inch to inch and a half above the seed has presented several challenges: the dense often sticky soils have less oxygen and stay cold longer. Additionally, they present a physical restriction to the coleoptile (shoot) pushing its way to the surface. Often resulting in plants leafing out below ground.



Elsewhere surface crusts have occurred often in areas with higher clay content. Coleoptiles within 1/4-1/2 inch of the surface can benefit from a rotary hoeing but that window is **closing fast or has pretty much closed by now**. Especially on April 13-15 planted fields. And by week's end on April 21-24 planted fields. By the end of this weekend assessments of final stands for possible replant decisions can be made.

Corn Replant Decisions - As you take stand counts use the chart on the following page as your guide. SELECT the current corn stand and planting date that applies to find the *'Estimated % Yield Potential'*. NEXT select the Replant Date, Planting Population and corresponding 'Estimated % Yield Potential'. Compare the two to help guide your decision to replant. Large gaps in the stand further compound the impact of reduced populations on

yield.	Stand Counts: # of plants in 1/1000 th /A x 1,000					
	Row width (inches)	Row length for 1/1000 acre				
	7.5	69' 8"				
	15	34' 10"				
	20	26′ 2"				
	22	23′ 9"				
	30	17' 5"				
	36	14' 6"				
	38	13′ 9"				

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	Plant Population (1000 plants/acre)						
Planting	10	15	20	25	30	35	40
Date	% of maximum yield						
25-Apr	57	70	81	91	97	100	100
30-Apr	57	70	80	90	96	99	99
5-May	57	69	79	89	94	97	96
10-May	56	68	77	86	92	94	93
15-May	54	66	75	84	89	91	90
20-May	52	64	73	81	86	88	87
25-May	51	63	71	79	84	86	84
30-May	49	61	69	77	82	83	81
4-Jun	45	56	64	72	76	77	75
9-Jun	40	51	59	66	70	71	69
14-Jun	36	47	54	61	64	65	63
19-Jun	32	42	49	56	59	59	57

Replant yield data was interpolated from University of Illinois population response data (E. Nafziger, E. Adee, and L. Paul) and University of Minnesota planting date response data (Hicks et al.).

2024 Pioneer Memo & Agronomy Resource

Book - In addition to product specific information you will find many useful agronomic resources including the charts mentioned above and more. If you don't have yours' yet be



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Have an UNBELIEVABLE Week!!!

sure to contact your Pioneer Sales Rep for your copy of the 2024 version.

Stand Loss Reduction Chart							
			% of				
	38"	30"	22"	20"	15"	7.5"	Optimum
Plants per Acre	N	umber o	w	Yield			
180,000	131	103	76	69	52	26	100
160,000	117	92	67	61	46	23	100
140,000	102	80	58	53	40	20	100
120,000	87	69	50	45	34	17	99
100,000	73	57	42	39	29	14	94
80,000	58	46	34	31	23	11	86
60,000	44	34	25	23	17	9	76
40,000	29	23	16	15	11	6	64
20,000	15	11	9	8	6	3	46

Soybean Replant Decisions - Thus far I have not received any calls regarding poor soybean stands and replanting considerations. However, I thought I would include that chart as well should you need it.

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Soybean Yield Potential by Planting Date					
Planting Date	Soybean Yield Potential				
1-May	100%				
10-May	100%				
20-May	97%				
30-May	92%				
10-Jun	85%				
20-Jun	73%				
30-Jun	58%				
10-Jul	38%				
ources: University of Minnesota, Iowa State University					

2024 Growing Degree Units April & May Planting Windows

Location	4/13 - 5/14	4/24 – 5/14	5/12 - 5-14
Glencoe	214	152	30
LeSueur	234	165	32
Mankato	242	163	32
Mapleton	245	177	31
Waseca	216	151	29

NEXT Week ... Black Cutworn update and more

Jay Zielske Field Agronomist 507.838.2583 Twitter /X - @seedzeke

