



# AG NOTES

Growing Advice for Superior Results

## Glyphosate Resistant Weeds Are on the Move

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GLYPHOSATE RESISTANT WEEDS HAVE BEEN IN CONVERSATION AND A FOCAL POINT IN CROP PRODUCTION FOR GOOD REASON.

Their ability to survive via selection has been most impressive and persistent along with their ability to reproduce and expand in population. The two primary weed species at this time finding weaknesses and overcoming susceptibility to Glyphosate at American Crystal Sugar Company have been Common ragweed and Waterhemp with future concern of Kochia and others.

Suspected resistant weeds have been identified as recently as this past fall in areas as far north as Grafton, ND and Euclid, MN, so this is not just a southern Red River Valley issue at all. Another level of a resistant weed surprise attack remains at the river system with reported Waterhemp identified along the banks of the Red River, posing a potential future threat especially considering any future flooding and the dispersal of resistant weed seed.

### To slow the spread of resistant weed seed:

**Crop rotation:** The best crops to control glyphosate resistant weeds are rotational crops other than sugarbeets as nearly all have more herbicide options available with varying chemistries. Use a “systems approach” mentality for weed control considering that rotational crops play a vital role in the success of weed control prior to planting sugarbeets.

**Weed seed bank:** Be cognitive of weed seed production and minimize seed production and deposits into the weed seed bank by means of pulling suspected weeds, hoeing, or at the bare minimum mowing or cutting to keep the seed from out of production and more importantly away from maturation. Ditches, shelterbelts and field borders are all areas to focus on throughout the growing season amidst any production on your farm.

**Application:** Use of other PPI, PRE, Split Lay-by, and POST products offer extra protection and resistant weed control options in sugarbeet production.

**Tillage:** Consider deep tillage such as moldboard plowing to bury weed seed.

**Equipment:** Be cognitive of used equipment purchases and thoroughly clean before use.



- Fertility
- Variety Selection
- Stand Establishment
- Weed Control
- Disease & Insect Control
- Harvest

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AmericanCrystal SugarCompany

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### Ask David

For prompt answers to your questions and comments, call and leave a message and David Berg or one of his staff will respond to your call as soon as possible.

**Shareholders:**  
**Toll Free**  
**1-800-633-8941**



Left: Damaged Common ragweed with questionable control from Glyphosate application.

Below: Waterhemp picture taken this summer north of Hillsboro, ND.



### We've Got Agronomy Apps for That

The American Crystal Sugar Agronomy App is available for further Cercospora management and DIV (Daily Infection Values) readings for your nearest NDAWN station.

### For Your Information:

A recap of the past 10 Crop Years at American Crystal Sugar Company in regard to stand count, growing days and weight/beet with resulting crop:

	Avg Stand Count/100 ft	Avg Growing Days	Avg Weight beet	% sugar	% SLM	Yield t/a	RSA
2015	187	162	1.47	17.80	1.14	27.9	9,291
2014	193	135	1.20	17.40	1.10	23.1	7,531
2013	188	147	1.31	17.33	1.13	25.2	8,165
2012	187	170	1.39	19.14	1.30	27.1	9,675
2011	179	147	1.16	18.04	1.27	20.7	6,935
2010	187	165	1.36	18.06	1.04	26.3	8,942
2009	145	145	1.25	16.69	1.05	22.3	6,980
2008	157	157	1.51	17.60	1.13	25.4	8,357
2007	168	160	1.46	18.05	1.12	23.5	7,967
2006	177	152	1.46	18.20	1.26	25.4	8,611
Avg	177	154	1.36	17.83	1.15	24.7	8,245



## Crop Summary by Factory - 2015 Crop

	Net Tons	Harv. Acres	Acres Lost	Yield	Sugar%	SLM%	Rec Sugar/Ton	Rec Sugar/Acre
<b>Factory</b>								
Moorhead	1,843,220.22	66,611.2	49.2	27.7	18.01	1.21	336	9,307
Hillsboro	1,859,799.71	64,227.6	0.0	29	18.46	1.13	347	10,063
Crookston	1,314,850.25	47,710.4	6.4	27.6	18.45	1.19	345	9,522
EGF	2,776,474.37	99,135.2	348.3	28	17.66	1.13	331	9,268
Drayton	3,288,667.10	119,498.3	188.1	27.5	17.14	1.1	321	8,828
Red River Valley	11,083,011.65	397,182.7	592.0	27.9	17.8	1.14	333	9,291
<b>Station</b>	<b>Net Tons</b>	<b>Harv. Acres</b>	<b>Acres Lost</b>	<b>Yield</b>	<b>Sugar%</b>	<b>SLM%</b>	<b>Rec Sugar/Ton</b>	<b>Rec Sugar/Acre</b>
HILLSBORO	603,661.75	20,652.0	22.8	29.2	18.28	1.17	342	9,986
WAUKON	109,083.98	4,076.4	0.0	26.8	18.33	1.07	345	9,246
ADA WEST	194,518.16	6,671.7	0.0	29.2	18.37	1.16	344	10,045
ADA NORTH	177,677.45	6,151.1	1.9	28.9	18.95	1.12	357	10,317
MIDWAY	253,717.98	8,527.9	0.0	29.8	18.41	1.23	344	10,251
REYNOLDS	526,128.26	18,031.8	1.9	29.2	18.48	1.06	348	10,162
MOORHEAD	312,645.01	10,937.0	5.2	28.6	18.21	1.17	341	9,753
HITTERDAL	173,734.78	5,949.9	4.0	29.2	18.36	1.05	346	10,103
LYNCHBURG	137,340.36	5,270.6	0.0	26.1	17.56	1.31	325	8,483
KINDRED	105,675.92	4,331.8	40.0	24.4	18.09	1.29	336	8,198
AMENIA	128,427.85	4,775.2	0.0	26.9	17.07	1.23	317	8,527
PERLEY	277,786.14	9,435.0	0.0	29.4	18.42	1.19	345	10,143
FELTON	306,046.19	10,856.7	0.0	28.2	17.72	1.18	331	9,334
SABIN	116,583.76	4,495.7	0.0	25.9	18.15	1.26	338	8,754
GLYNDON	125,442.88	4,625.2	0.0	27.1	18.36	1.25	342	9,268
CROOKSTON	957,228.11	35,328.0	3.8	27.1	18.47	1.19	346	9,377
NIELSVILLE	137,111.03	4,901.6	0.0	28	18.45	1.16	346	9,688
ELDRED	170,310.41	6,692.0	1.0	25.4	18.84	1.17	353	8,966
SCANDIA	210,489.51	7,255.8	1.6	29	18.24	1.16	342	9,918
WARREN	248,583.77	9,013.3	0.0	27.6	17.11	1.16	319	8,804
O'MEARA	296,585.96	10,735.7	0.0	27.6	17.92	1.15	335	9,246
EGF	1,141,369.43	39,175.4	10.8	29.1	18.17	1.12	341	9,923
ARDOCH	201,659.79	7,192.4	153.2	28	16.96	1.13	317	8,876
VOSS	117,902.79	3,954.6	46.0	29.8	17.02	1.11	318	9,476
OSLO	224,403.33	7,731.3	44.1	29	17.62	1.16	329	9,541
ARGYLE	225,492.90	9,524.2	17.9	23.7	16.96	1.15	316	7,489

Station	Net Tons	Harv. Acres	Acres Lost	Yield	Sugar%	SLM%	Rec Sugar/Ton	Rec Sugar/Acre
ALVARADO	312,209.65	11,875.8	4.5	26.3	17.35	1.15	324	8,521
DRAYTON	882,737.30	31,390.5	84.5	28.1	17.02	1.1	318	8,936
MCARTHUR	140,525.82	5,077.0	6.5	27.7	17.51	1.08	329	9,113
BATHGATE	231,515.08	9,076.0	2.8	25.5	16.75	1.12	313	7,982
HAMILTON	285,061.07	9,827.5	0.0	29	17.48	1.09	328	9,512
GRAFTON	267,097.57	9,020.6	34.7	29.6	17.51	1.1	328	9,709
HUMBOLDT	310,181.99	11,094.6	9.4	28	17.02	1.13	318	8,904
STEPHEN	240,468.09	9,669.6	37.1	24.9	16.74	1.17	311	7,744
ST.THOMAS	611,872.95	21,318.8	17.6	28.7	17.1	1.06	321	9,213
KENNEDY	284,316.46	10,988.3	40.7	25.9	17.1	1.15	319	8,262