

Test by: Northland F.I.R.S.T., LLC Moorhead, MN

2022 Corn Grain Top 30 Harvest Report

Red River Central North Dakota & Minnesota [RRCE] EAST
GRAND FORKS, MN

Matthew Krueger, Polk County, MN 56721

Early-Season Test	80 - 85 Day CRM B2022RRCE03a
Top 30 of 40	For Gross Income (Sorted by Yield) Average of (4) Replications
PREV. CROP/HERB:	Soybeans / Roundup, Extendimax
SOIL DESCRIPTION:	Bearden-Colvin silty clay loam, mod. poorly drained, non- irrigated
SOIL CONDITION:	Conventional W/ Fall Till, very low P, low K, 8.2 pH, 4.8% OM, 27.5 CEC
PEST MANAGEMENT:	Roundup, Atrazine
FERTILITY - Applied N:	104 Spring
Applied N-P-K (units):	104-40-0
SEEDED - RATE - ROW:	May 25 34.5 /A 30" spacing
HARVESTED - STAND:	Oct 31 32.8 /A

TEST COMMENTS:

This location had adequate rainfall until the end of July and became very dry until harvest. Heavy soils helped, and there was no tip-back or zippering noticed throughout the plot. During a midsummer visit, we noticed green snap affecting a few hybrids. Root lodging was seen at this location, ranging from slight to moderate, causing goose-necking.

Company/Brand	Product/Brand	Technol.†	RM	Yield Bu/A ↓	Moisture %	Lodging %	Stand (x 1000)	Gross Income \$/Acre	Rank
NK Brand	NK8519-V ↗	V	85	192.7	19.7	7	32.9	1228	1
Thunder	T6983 VT2P ↗	VT2P	83	188.8	16.7	0	33.3	1217	2
Dairyland	DS-2531AM ↗	AM	85	186.4	17.6	0	32.4	1198	4
Hefty	H3262 ↗	VT2P	84	185.7	16.1	0	33.3	1200	3
Renk	RK223RR ↗	RR2	82	182.7	17.9	0	32.9	1173	5
Renk	RK256-3120-EZ ↗	AA	84	181.3	19.4	3	33.3	1156	8
Integra	3431 VT2PRIB ↗	VT2P	84	180.0	16.9	1	31.8	1160	6
REA	2B851 ↗	VT2P	85	179.1	16.3	1	32.5	1157	7
Golden Harvest	G85Z56-V ↗	V	85	177.7	19.3	1	31.9	1134	11
Dyna-Gro	D23VC83RIB ↗	VT2P	83	177.4	16.8	0	32.5	1143	9
Golden Harvest	G80Q01-V ↗	V	80	176.9	19.3	2	33.3	1129	13
Thunder	THX22-85 ↗	VT2P	85	176.1	16.7	4	32.9	1136	10
REA	83B33 ↗	VT2P	83	174.0	15.8	0	32.2	1126	14
Thunder	T6185 VT2P ↗	VT2P	85	172.7	17.1	0	32.2	1112	15
Channel	180-33VT2PRIB ↗	VT2P	80	169.7	15.3	0	32.9	1100	16
Thunder	T6085 VT2P ↗	VT2P	85	169.7	15.4	1	34.0	1100	17
Rob-See-Co	RC3041-3110A ↗	3110A	80	169.3	19.4	0	32.2	1080	22
Hefty	H3322 RIB ↗	VT2P	83	169.1	17.8	0	33.3	1086	18
Stine	9141-30 ↗	V	81	169.1	20.0	1	32.2	1076	24
NK Brand	NK8005-V ↗	V	80	168.7	19.7	0	32.9	1075	25
Thunder	T6181 VT2P ↗	VT2P	81	167.2	16.0	0	33.4	1081	20
Hefty	H3432 RIB ↗	VT2P	84	167.2	15.7	0	33.3	1082	19
Pioneer	P8588AM GC ↗	AM	85	167.1	15.8	0	32.2	1081	21
Hefty	H3442 RIB ↗	VT2P	84	167.0	15.9	0	34.4	1080	23
Dyna-Gro	D21VC81RIB ↗	VT2P	81	165.3	16.6	0	32.9	1066	26
Latham	LH 3325 VT2P RIB ↗	VT2P	83	164.1	16.8	0	30.9	1058	27
Proseed	1882 VT2PRIB ↗	VT2P	82	163.4	16.6	0	33.3	1054	28
BioGene	BG512V2 RIB ↗	VT2P	81	161.6	16.1	0	32.5	1045	29
BioGene	BG510AT ↗	V	81	159.9	20.2	1	32.9	1017	31
Proseed	2181 VT2PRIB ↗	VT2P	81	159.8	16.0	0	32.9	1033	30
DEKALB	DKC35-88RIB CK	VT2P	85	174.7	15.7	1	31.8	1131	12

Averages = **167.4** **17.0** **2** **32.8** **1079**

LSD (0.10) = 11.2 0.7 4

LSD (0.25) = 5.9 0.4 2

C.V. = 7.3

Historic yield: 160.64 bu/a, 4 yr(s)

Luke Brendemuhl

luke.brendemuhl@firstseedtests.com, (218) 790-4497

Yield & Income Factors:

Base Moisture = 15.0%

Shrink = 1.3

Drying = \$0.025

Prices: GMO = \$6.49

Report Date: 11/01/2022

† See last page for abbreviation descriptions. Dark colored row identifies the check product found in early- and full-season tests. **Bold** yields are significantly above test average by LSD(0.10). **Italicized** brands exceed the grain moisture limit for this test. **ns** = column values not significantly different. ↗ Links to full product yield results at www.firstseedtests.com

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PEST MANAGEMENT:	Roundup, Atrazine
FERTILITY - Applied N:	104 Spring
Applied N-P-K (units):	104-40-0
SEEDED - RATE - ROW:	May 25 34.5 /A 30" spacing
HARVESTED - STAND:	Oct 31 32.6 /A

TEST COMMENTS:

This location had adequate rainfall until the end of July and became very dry until harvest. Heavy soils helped, and there was no tip-back or zippering noticed throughout the plot. During a midsummer visit, we noticed green snap affecting a few hybrids. Root lodging was seen at this location, ranging from slight to moderate, causing goose-necking.

Company/Brand	Product/Brand	Technol.†	RM	Yield Bu/A ↓	Moisture %	Lodging %	Stand (x 1000)	Gross Income \$/Acre	Rank
Thunder	T6389 VT2P ↗	VT2P	89	191.7	18.8	0	32.9	1226	1
REA	EXP88B04 ↗	VT2P	88	191.0	18.6	0	32.9	1223	2
REA	3B903 ↗	VT2P	90	190.0	18.8	0	32.2	1215	3
DeKalb	DKC40-99RIB ↗	TRE	90	189.1	19.5	0	33.7	1206	4
Renk	RK400VT2P ↗	VT2P	90	188.1	21.2	1	32.9	1192	6
Hefty	H3712 RIB ↗	VT2P	87	187.7	18.8	3	32.9	1201	5
Hefty	H4052 ↗	VT2P	90	186.2	21.1	1	32.2	1180	8
Thunder	T6888 VT2P ↗	VT2P	88	185.7	19.2	2	31.0	1186	7
NK Brand	NK8760-V ↗	V	87	183.3	21.5	0	32.9	1160	9
Thunder	T6987 VT2P ↗	VT2P	87	179.8	18.0	2	32.9	1153	10
Latham	LH 3827 VT2P RIB ↗	VT2P	88	179.4	19.6	0	33.3	1144	11
Golden Harvest	G87A53-V ↗	V	87	179.0	22.0	0	31.0	1130	16
Rob-See-Co	RC3601-GTA ↗	GTA	86	178.9	19.8	0	33.7	1140	13
Dairyland	DS-3022AM ↗	AM	90	178.5	19.9	0	31.4	1136	14
Dyna-Gro	D27VC87RIB ↗	VT2P	87	178.2	18.2	4	32.2	1142	12
Renk	RK297VT2P ↗	VT2P	89	177.5	20.0	0	32.2	1130	17
Hefty	H4064 ↗	STX	90	177.0	20.3	0	31.8	1125	20
Latham	LH 3867 VT2P RIB ↗	VT2P	88	176.9	18.1	0	32.2	1134	15
Golden Harvest	G84J92-AA ↗	AA	84	176.3	21.1	9	32.9	1117	22
Latham	LH 3695 VT2P RIB ↗	VT2P	86	176.0	18.5	6	33.7	1127	19
NK Brand	NK9023-DV ↗	DV	90	175.1	21.2	15	32.5	1109	23
REA	86A94 ↗	STX	86	175.1	18.2	0	32.5	1122	21
Innotech	IC3983-3220 ↗	V	89	173.7	21.1	6	32.5	1101	24
Latham	LH 3937 VT2P RIB ↗	VT2P	89	172.8	21.7	1	32.2	1092	25
REA	2B863 ↗	VT2P	86	170.6	20.6	0	33.7	1083	27
Dyna-Gro	D28VC33 ↗	VT2P	88	169.0	17.8	0	31.8	1084	26
Thunder	6090 AA ↗	AA	90	167.7	20.5	3	32.5	1065	29
Hefty	H3632 ↗	VT2P	86	166.2	17.9	0	32.5	1066	28
Proseed	1790 VT2PRIB ↗	VT2P	90	164.8	22.9	1	32.9	1037	30
Legacy	LC403-22 ↗	AA	90	147.1	22.7	22	32.9	926	31
DEKALB	DKC35-88RIB CK	VT2P	85	175.5	17.3	0	33.7	1129	18

Averages = **176.3** **19.8** **3** **32.6** **1122**

LSD (0.10) = 11.7 0.9 3

LSD (0.25) = 6.1 0.5 2

C.V. = 7.2

Historic yield: 160.64 bu/a, 4 yr(s)

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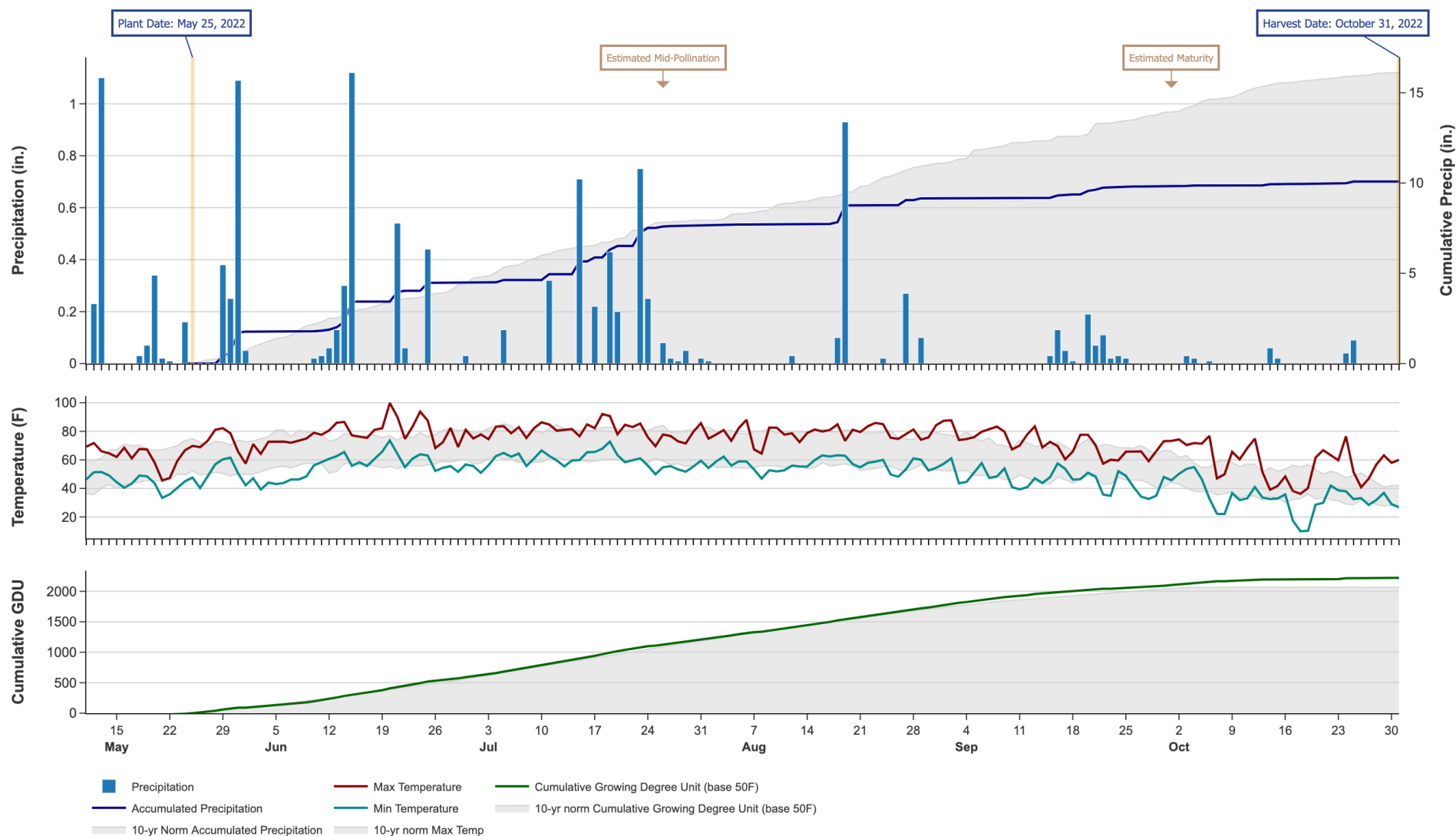
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2022 Corn - Red River Central North Dakota & Minnesota [RRCE]

Weather Conditions Summary at EAST GRAND FORKS, MN

Weather Data Retrieved: 11/01/2022

Monthly Total	May*	Jun	Jul	Aug	Sep	Oct*	Total
Precip (in) Normal (Diff)	3.7 2.1 (+1.6)	2.8 3.8 (-1.0)	3.2 3.5 (-0.4)	1.5 3.1 (-1.7)	0.7 2.8 (-2.2)	0.3 2.2 (-1.9)	12.0 17.6 (-5.6)
GDU Normal (Diff)	187 190 (-3)	501 495 (+5)	616 628 (-12)	548 533 (+14)	337 320 (+16)	129 20 (+108)	2318 2189 (+128)



* First monthly total starts on the date 14 days prior to planting and final monthly total ends on the harvest date.

Note: Weather information from PRISM Climate Group. Data may be revised by the provider after retrieval. FIRST will not revise or update reports to reflect any weather data changes. For information purposes only.

2022 Corn - Red River Central North Dakota & Minnesota [RRCE]

Early-Season Test Products (40 Total)

Company/Brand	Product/Brand	Technology	RIB	RM	Seed Treat.
BioGene	BG510AT	V	Y	81	CM,C2,Vi
BioGene	BG512V2 RIB	VT2P	Y	81	AC
Channel	180-33VT2PRIB	VT2P	Y	80	AC,P5V,EDC-B
Dairyland	DS-2505Q	QR	Y	85	Lum, L1
Dairyland	DS-2531AM	AM	Y	85	Lum, L1
DeKalb	DKC35-88RIB CK	VT2P	Y	85	AC,P5V,EDC-EL
Dyna-Gro	D21VC81RIB	VT2P	Y	81	AC,P5V
Dyna-Gro	D23VC83RIB	VT2P	N	83	AC,P5V
Golden Harvest	G80Q01-V	V	Y	80	AVC,C2,CM,C5,Vi,Va
Golden Harvest	G85Z56-V	V	Y	85	AVC,C2,Vi,Va
Hefty	H3122	VT2P	N	81	HC
Hefty	H3262	VT2P	N	84	HC
Hefty	H3322 RIB	VT2P	Y	83	HC
Hefty	H3432 RIB	VT2P	Y	84	HC
Hefty	H3442 RIB	VT2P	Y	84	HC
Integra	3009 VT2PRIB	VT2P	Y	80	AC,P5V,SU+Zn
Integra	3282 VT2PRIB	VT2P	Y	82	AC,P5V,SU+Zn
Integra	3431 VT2PRIB	VT2P	Y	84	AC,P5V,SU+Zn
Latham	LH 2977 VT2P RIB	VT2P	Y	79	AC,P2
Latham	LH 3325 VT2P RIB	VT2P	Y	83	AC,P2
Legacy	LC354-20	3110	N	85	CM,C2,Vi
NK Brand	NK8005-V	V	N	80	AVC,C2,Vi,Va
NK Brand	NK8519-V	V	Y	85	AVC,C2,Vi,Va
Pioneer	P8048AM GC	AM	Y	80	NA
Pioneer	P8588AM GC	AM	Y	85	NA
Proseed	1882 VT2PRIB	VT2P	Y	82	CM,C2,Vi
Proseed	2181 VT2PRIB	VT2P	Y	81	CM,C2,Vi,Va
REA	2B851	VT2P	Y	85	AC,P5V,EDC-B
REA	83B33	VT2P	Y	83	AC,P5V,EDC-B
Renk	RK223RR	RR2	N	82	AC,P2
Renk	RK227VT2P	VT2P	N	82	AC,P2
Renk	RK256-3120-EZ	AA	Y	84	CM,C2
Rob-See-Co	RC2862-3220	V	Y	78	CM,C2,Vi
Rob-See-Co	RC3041-3110A	3110A	N	80	CM,C2,Vi
Stine	9141-30	V	N	81	Se,Sa,Sn,Sp
Thunder	T6085 VT2P	VT2P	Y	85	AC,P2
Thunder	T6181 VT2P	VT2P	Y	81	AC,P2
Thunder	T6185 VT2P	VT2P	Y	85	AC,P2
Thunder	T6983 VT2P	VT2P	Y	83	AC,P2
Thunder	THX22-85	VT2P	N	85	AC,P5V,EDC-B

* FIRST does not inspect products for refuge blend. N* indicates the product was entered without a refuge component by the sponsoring seed company. Prior year entries may contain refuge blend.

2022 Corn - Red River Central North Dakota & Minnesota [RRCE]

Full-Season Test Products (32 Total)

Company/Brand	Product/Brand	Technology	RIB	RM	Seed Treat.
Dairyland	DS-2919AM	AM	Y	89	Lum, L1
Dairyland	DS-3022AM	AM	Y	90	Lum, L1
DeKalb	DKC35-88RIB CK	VT2P	Y	85	AC,P5V,EDC-EL
DeKalb	DKC40-99RIB	TRE	Y	90	Treated
Dyna-Gro	D27VC87RIB	VT2P	N	87	AC,P5V
Dyna-Gro	D28VC33	VT2P	N	88	AC,P5V
Golden Harvest	G84J92-AA	AA	Y	84	AVC,C2,CM,C5,Vi,Va
Golden Harvest	G87A53-V	V	Y	87	AVC,C2,Vi,Va
Hefty	H3632	VT2P	N	86	HC
Hefty	H3712 RIB	VT2P	Y	87	HC
Hefty	H4052	VT2P	N	90	HC
Hefty	H4064	STX	N	90	HC
Innotech	IC3983-3220	V	Y	89	AVC,C2,Vi,Va
Latham	LH 3695 VT2P RIB	VT2P	Y	86	AC,P2
Latham	LH 3827 VT2P RIB	VT2P	Y	88	AC,P2
Latham	LH 3867 VT2P RIB	VT2P	Y	88	AC,P2
Latham	LH 3937 VT2P RIB	VT2P	Y	89	AC,P2
Legacy	LC403-22	AA	Y	90	AC,P2
NK Brand	NK8760-V	V	Y	87	AVC,C2,Vi,Va
NK Brand	NK9023-DV	DV	Y	90	AVC,C2,Vi,Va
Proseed	1790 VT2PRIB	VT2P	Y	90	CM,C2,Vi,Va
REA	2B863	VT2P	Y	86	AC,P5V,EDC-B
REA	3B903	VT2P	Y	90	AC,P5V,EDC-B
REA	86A94	STX	Y	86	AC,P5V,EDC-B
REA	EXP88B04	VT2P	Y	88	AC,P5V,EDC-B
Renk	RK297VT2P	VT2P	N	89	AC,P2
Renk	RK400VT2P	VT2P	N	90	AC,P2
Rob-See-Co	RC3601-GTA	GTA	N	86	CM,C2,Vi
Thunder	6090 AA	AA	Y	90	AC,P2
Thunder	T6389 VT2P	VT2P	Y	89	AC,P2
Thunder	T6888 VT2P	VT2P	Y	88	AC,P2
Thunder	T6987 VT2P	VT2P	Y	87	AC,P2

* FIRST does not inspect products for refuge blend. N* indicates the product was entered without a refuge component by the sponsoring seed company. Prior year entries may contain refuge blend.

Footnotes and Abbreviations Descriptions

Brand Footnotes

^	Innotech™ brand seed is distributed by Rob-See-Co, LLC. Power Plus® brand seed is distributed by Burrus. Innotech™ is a trademark of Syngenta. Power Plus® is a registered trademark of Corteva Agriscience.
CK	Identifies a check product included in early- and full-season tests.
GC	Grower Comparison product included by FIRST when space permits.

Corn Technologies

3110	Agrisure® Viptera® 3110 (Vip, CB,LL,GT)
3110A	Agrisure® Artesian® Viptera® 3110 (Vip, CB,LL,GT)
AA	Agrisure® Above (CB,HX,LL,GT), formerly Agrisure® 3120
AM	Optimum® AcreMax®
DV	DuracadeViptera™ (Vip,CB,HX,RW,RW2,LL,GT), formerly Agrisure Duracade® 5222
GTA	Agrisure® Artesian® GTA
QR	Qrome™
RR2	Roundup Ready® 2 Corn
STX	SmartStax®
TRE	Trecepta®
V	Viptera™ (Vip,CB,HX,LL,GT), formerly Agrisure Viptera® 3220
VT2P	VT Double PRO®

NOTE: The refuge component genetics may vary in a refuge blend seed product.

Corn Seed Treatments*

NA	Not Available
AC	Acceleron® unspecified
AC,P2	Acceleron® 250
AC,P5V	Acceleron® Poncho 500/Votivo
AC,P5V,EDC-B	Acceleron® BASIC Poncho 500/Votivo with Enhanced Disease Control
AC,P5V,EDC-EL	Acceleron® ELITE Poncho 500/Votivo with Enhanced Disease Control
AC,P5V,SU+Zn	Acceleron® Poncho 500/Votivo, StepUp SP, StepUp Zn
AVC,C2,CM,C5,Vi,Va	Avicta® Complete 250, CruiserMaxx 500, Vibrance®, Vayantis®
AVC,C2,Vi,Va	Avicta® Complete 250, Vibrance®, Vayantis®
CM,C2	CruiserMaxx® 250
CM,C2,Vi	CruiserMaxx® 250 with Vibrance
CM,C2,Vi,Va	CruiserMaxx® 250 with Vibrance, Vayantis®
HC	Hefty Complete
Lum, L1	(2022) LumiGEN, Lumisure 1250
Se,Sa,Sn,Sp	Senator 250, Sativa, Spirato, Sebring
Treated	Treated seed, unspecified

* Seed treatments may include unspecified plant health promoting components.