



# 2021 Corn Grain Field Crop Trials Results

Minnesota Agricultural Experiment Station and the College of Food, Agricultural and Natural Resource Sciences

The Minnesota Corn Evaluation Program was conducted by the University of Minnesota Agricultural Experiment Station to provide unbiased information for use by corn growers when they choose which brand of corn to buy and grow. The program was financed in part by entry fees from private seed companies that chose to place their entries for testing.

## Test Locations

Test zones, locations and maturities are as follows:

### Southern Zone:

Lamberton, Rochester and Waseca  
*Early Maturity Trial* - 102 Relative Maturity (RM) and earlier entries.  
*Late Maturity Trial* - 103 RM and later entries.

### Central Zone:

Hutchinson, Morris and Rosemount  
*Early Maturity Trial* - 97 RM and earlier entries.  
*Late Maturity Trial* - 98 RM and later entries.

### Northern Zone:

Crookston, Rothsay and Staples

## Testing Procedure

Seed corn companies choose their entries for each zone. Entries in each trial were based on the relative maturity (RM) provided by the company. The University of Minnesota Corn Testing Committee could also choose entries in each test. All locations tested three replications for each entry.

## Presentation of Data

Yields are given for individual locations along with yields and harvest moisture contents averaged across locations for 2021.

Reported yields are adjusted to 15.5% grain moisture. Entries are ranked within a maturity group by moisture content averaged across locations for 2021. The site at Rosemount suffered substantial wind damage late in the season and the corn could not be harvested. Therefore, yields from the Rosemount site are not reported this year.

## Identification of Traits

Genetic modifications of entries will be identified using generic terms to describe the trait without identifying the specific event for genetic modification.

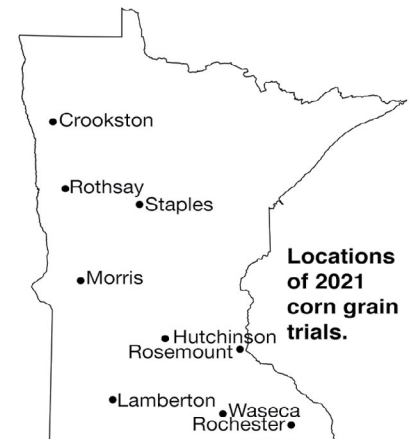
For example, Bt will identify genetic modification for corn borer resistance but will not differentiate between the Bt 11 event, the YieldGuard corn borer event or the Herculex corn borer event.

Identifiers will be:

Bt = European corn borer resistance  
CRW = Corn rootworm resistance  
Gly = Glyphosate herbicide resistance  
LL = Liberty herbicide resistance

## Least Significant Difference

The LSD (Least Significant Difference) figures at the bottom of the yield columns in the tables are statistical measures of variability in



the trials. These values may be used to determine whether the difference between any two entries is likely to be a real difference or just natural variation.

If the yield difference between two entries is equal to or greater than the LSD, then one can be confident that the two entries probably differ in yield potential. We show LSD values with a 0.2 alpha level, which means that when two entries differ in yield by the LSD value or more one can be 80% confident that the two entries differ in yield potential. The higher-yielding one is the better entry from the yield standpoint. If the yield difference between two entries is less than the LSD, the two entries probably do not differ significantly in yield potential.

## Authors and Researchers

Tom Hoverstad, Wade Ihlenfeld, Jeff Coulter, Curt Reese, Steve Quiring and Mike Leiseth.

**Table 1. Companies participating in the 2021 corn grain trials.**

Company	Website
AgriGold Hybrids	<a href="http://www.agrigold.com">www.agrigold.com</a>
Anderson Seeds	<a href="http://www.andersonseedsmn.com">www.andersonseedsmn.com</a>
Bayer Crop Science	<a href="http://www.dekalbasgrowdeltapine.com">www.dekalbasgrowdeltapine.com</a>
BH Genetics	<a href="http://www.bhgenetics.com">www.bhgenetics.com</a>
Dairyland Seed	<a href="http://www.dairylandseed.com">www.dairylandseed.com</a>
DenBesten Brand	<a href="http://www.dakotasbestseedllc.com">www.dakotasbestseedllc.com</a>
Enestvedt Seed Company	<a href="http://www.enestvedtseeds.com">www.enestvedtseeds.com</a>
Federal Hybrids	<a href="http://www.federalhybrids.com">www.federalhybrids.com</a>
Hi Fidelity Genetics:	<a href="http://hifidelitygenetics.com">hifidelitygenetics.com</a>
Legacy Seeds	<a href="http://www.legacyseeds.com">www.legacyseeds.com</a>
Peterson Farms Seed	<a href="http://www.petersonfarmsseed.com">www.petersonfarmsseed.com</a>
REA Hybrids	<a href="http://www.rea-hybrids.com">www.rea-hybrids.com</a>
Titan Pro SCI	<a href="http://www.titanprosci.com">www.titanprosci.com</a>
Viking Seed	<a href="http://www.alseed.com">www.alseed.com</a>

**Corn Grain****Planting Rate and Date**

Bushel Weight, Pounds.....56

Planting Rate, Seeds/Acre....35,000

Planting Date.....April 26-May 10

**Table 2. Individual Trial Information, 2021.**

Location	Cooperators	Previous Crop	Planting Date	Harvest Date
Lamberton	Steve Quiring	Soybeans	April 28	Oct 8
Rochester	Ryan Miller	Soybeans	May 5	Nov 3
Waseca	Tom Hoverstad	Soybeans	April 26	Oct 8 (early maturities) Oct 15 (late maturities)
Hutchinson	School Dist # 423	Corn	May 7	Oct 19
Morris	Curt Reese	Soybeans	May 6	Nov 8
Rosemount	Gerry Holz	Soybeans	April 30	Abandoned
Crookston	Mike Leiseth	Wheat	May 10	Oct 6
Rothsay	Troy Larson	Soybeans	May 6	Sept 28
Staples	Ron Nelson	Soybeans	May 4	Nov 4

Table 3. Early maturity entries, southern locations, 2021.

Source	Entry	Traits	Relative Maturity	Yield, Bushels/Acre at:			Average Across Locations	
				Lamberton	Rochester	Waseca	Bu/Acre	% Moisture
<b>98 and earlier RM entries</b>								
Federal Hybrids	4680 VT2P RIB	Bt, GLY	96	145	253	229	209	15.8
Anderson Seeds	6909		98	140	259	230	209	16.1
Anderson Seeds	786R	GLY	95	140	267	239	216	16.1
Titan Pro	11-98 2P	Bt, GLY	98	154	287	224	222	16.2
Federal Hybrids	4820 VT2P	Bt, GLY	98	152	256	235	214	16.2
Anderson Seeds	726VT2P	Bt, GLY	98	168	292	259	240	16.2
Viking	52-96		96	149	274	231	218	16.3
Viking	44-98		98	156	268	234	220	16.4
Legacy Seeds	LC474-20	Bt, GLY	97	185	300	277	254	16.7
Legacy Seeds	LC484-20	Bt, GLY	98	145	280	231	219	16.9
Dairyland Seed	DS-3550AM	Bt, GLY, LL	95	159	263	233	219	16.9
Dekalb	DKC48-68	Bt, CRW, GLY, LL	98	152	267	238	219	17.0
Dairyland Seed	DS-3727AM	Bt, GLY, LL	97	184	279	246	236	17.1
Federal Hybrids	4800 SS RIB	Bt, CRW, GLY, LL	98	152	265	239	219	17.7
AgriGold	A628-16VT2RIB	Bt, GLY	98	187	299	270	252	18.1
<b>98 and earlier RM averages:</b>				<b>158</b>	<b>274</b>	<b>241</b>	<b>224</b>	<b>16.7</b>
<b>99 to 102 RM entries</b>								
Titan Pro	92-99 2P	Bt, GLY	99	129	291	212	210	15.5
Enestvedt Seed Co	E670		100	164	294	241	233	16.0
Anderson Seeds	681VT2P	Bt, GLY	100	165	304	254	241	16.6
Viking	52-00		100	174	270	245	230	16.7
Titan Pro	26-00		100	170	284	205	220	16.8
AgriGold	A630-10STXRIB	Bt, CRW, GLY, LL	100	162	301	258	240	17.0
Anderson Seeds	681SRC	Bt, CRW, GLY, LL	100	158	298	260	239	17.0
Viking	99-00		100	175	272	231	226	17.1
Dekalb	DKC51-98	Bt, CRW, GLY, LL	101	154	252	219	209	17.1
Dekalb	DKC50-87	Bt, CRW, GLY, LL	100	169	281	230	226	17.3
Titan Pro	22-00 2P	Bt, GLY	100	169	273	227	223	17.4
Legacy Seeds	LC5217	Bt, CRW	102	173	277	253	234	17.4
Federal Hybrids	5280 CONV		102	146	295	252	231	17.4
Viking	46-02		102	171	279	257	235	17.5
Dekalb	DKC52-99	Bt, GLY	102	170	291	275	246	17.7
Dairyland Seed	DS-4014Q	Bt, CRW, GLY, LL	100	181	269	241	230	17.7
Federal Hybrids	5120 SS	Bt, CRW, GLY, LL	101	185	269	253	235	17.9
Dekalb	DKC52-18	Bt, CRW, GLY, LL	102	170	282	256	236	18.0
Dairyland Seed	DS-3959Q	Bt, CRW, GLY, LL	99	175	284	259	239	18.1
AgriGold	A630-04		100	163	284	270	239	18.2
AgriGold	A631-90		101	165	261	269	232	19.7
AgriGold	A632-35-5222EZ	Bt, CRW, GLY, LL	102	161	271	252	228	19.9
<b>99 to 103 RM averages:</b>				<b>166</b>	<b>281</b>	<b>246</b>	<b>231</b>	<b>17.5</b>
<b>Southern locations, early maturity averages:</b>				<b>163</b>	<b>278</b>	<b>244</b>	<b>228</b>	<b>17.1</b>
<b>LSD (0.20)</b>				<b>15</b>	<b>14</b>	<b>19</b>	<b>9</b>	<b>0.4</b>

**Table 4. Late maturity entries, southern locations, 2021.**

Source	Entry	Traits	Relative Maturity	Yield, Bushels/Acre at:			Average Across Locations	
				Lamberton	Rochester	Waseca	Bu/Acre	% Moisture
<b>103 to 105 RM entries</b>								
Enestvedt Seed Co	E539		103	180	265	259	234	17.6
Viking	84-05		105	187	287	278	251	17.8
Titan Pro	82-04	Bt, Gly	104	173	292	245	237	18.0
Dairyland Seed	DS-4310Q	Bt, CRW, GLY, LL	103	168	253	256	225	18.2
Hi Fidelity Genetics	HFG1071		105	171	285	275	244	18.2
Federal Hybrids	5510 SS RIB	Bt, CRW, GLY, LL	105	150	274	256	227	18.3
Legacy Seeds	LC-5319	Bt, CRW, GLY, LL	104	169	281	251	234	18.4
Titan Pro	24-04		104	194	306	255	252	18.5
Titan Pro	84-03 2P	Bt, Gly	103	180	271	240	230	18.6
Federal Hybrids	5510 VT2P RIB	Bt, Gly	105	173	273	245	230	18.6
Dairyland Seed	DS-4510Q	Bt, CRW, GLY, LL	105	170	267	266	234	18.9
Titan Pro	26-03 5222	Bt, CRW, GLY, LL	103	163	274	228	222	19.3
AgriGold	A635-54VT2RIB	Bt, Gly	105	165	287	266	239	19.6
AgriGold	A633-14STX	Bt, CRW, GLY, LL	103	167	273	274	238	20.6
<b>104 to 105 RM averages:</b>				<b>172</b>	<b>278</b>	<b>257</b>	<b>236</b>	<b>18.6</b>
<b>Later than 105 RM entries</b>								
Titan Pro	23-06 SS	Bt, CRW, GLY, LL	106	155	277	192	208	17.7
Enestvedt Seed Co	E598		106	174	276	294	248	18.2
Viking	72-06		106	175	297	251	241	18.5
Anderson Seeds	472SRC	Bt, CRW, GLY, LL	106	175	278	281	245	18.7
DenBesten Brand	DB38-06		106	199	281	267	249	19.1
AgriGold	A638-74VT2RIB	Bt, Gly	108	177	281	264	241	19.2
AgriGold	A636-16		106	192	295	289	259	19.3
Dairyland Seed	DS-4878Q	Bt, CRW, GLY, LL	108	183	267	289	246	19.5
AgriGold	A636-11VT2RIB	Bt, Gly	106	191	286	278	252	19.6
Dairyland Seed	DS-4917AM	Bt, GLY, LL	109	177	303	272	250	19.8
Dekalb	DKC56-65	Bt, CRW, GLY, LL	106	183	302	259	248	19.8
Federal Hybrids	5700 SS RIB	Bt, CRW, GLY, LL	107	157	284	254	232	20.1
Dekalb	DKC59-81	Bt, CRW, GLY, LL	109	179	290	263	244	20.2
Legacy Seeds	LC564-20	Bt, GLY, LL	106	156	265	273	231	20.2
Dairyland Seed	DS-4910AML	Bt, GLY, LL	109	172	280	284	245	20.4
DenBesten Brand	DB31-11		111	144	289	278	237	20.7
Dekalb	DKC58-64	Bt, CRW, GLY, LL	108	171	298	309	259	20.9
AgriGold	A638-58STX	Bt, CRW, GLY, LL	108	138	290	262	230	21.5
DenBesten Brand	DB31-10		110	151	266	267	228	21.5
<b>Later than 105 RM averages:</b>				<b>171</b>	<b>284</b>	<b>270</b>	<b>242</b>	<b>19.7</b>
<b>Southern locations, late maturity averages:</b>				<b>166</b>	<b>273</b>	<b>256</b>	<b>232</b>	<b>18.7</b>
<b>LSD (0.20)</b>				<b>15</b>	<b>16</b>	<b>18</b>	<b>9</b>	<b>0.8</b>

Table 5. Early maturity entries, central locations, 2021.

Source	Entry	Traits	Relative Maturity	Yield, Bushels/Acre at:		Average Across Locations	
				Hutchinson	Morris	Bu/Acre	% Moisture
<b>94 and earlier RM entries</b>							
Federal Hybrids	4300 VT2P RIB	Bt, GLY	93	193	214	203	13.6
AgriGold	A620-82VT2RIB	Bt, GLY	90	207	224	215	13.8
Enestvedt Seed Co	E646		94	217	229	223	13.9
Peterson Farms Seed	88K93	Bt, CRW, GLY, LL	93	194	211	202	14.0
Legacy Seeds	LC451-21	Bt, GLY	94	206	245	226	14.0
Dairyland Seed	DS-3366AM	Bt, GLY, LL	93	185	235	210	14.0
Dairyland Seed	DS-3022AM	Bt, GLY, LL	90	175	209	192	14.1
BH Genetics	6218VT2PRIB	Bt, GLY	92	205	231	218	14.1
Anderson Seeds	742VT2P	Bt, GLY	92	201	227	214	14.1
AgriGold	A622-65		92	217	235	226	14.2
Dekalb	DKC44-97	Bt, CRW, GLY, LL	94	183	225	204	14.2
Legacy Seeds	LC431-20	Bt, CRW, GLY, LL	93	197	223	210	14.3
Peterson Farms Seed	72Q94	Bt, GLY	94	220	256	238	14.3
Dekalb	DKC42-64	Bt, CRW, GLY, LL	92	214	214	214	14.5
<b>94 RM and earlier averages:</b>				<b>201</b>	<b>227</b>	<b>214</b>	<b>14.1</b>
<b>95 to 97 RM entries</b>							
Enestvedt Seed Co	E658		96	178	227	203	13.8
Federal Hybrids	4680 VT2P RIB	Bt, GLY	96	200	227	213	13.9
Dairyland Seed	DS-3550AM	Bt, GLY, LL	95	182	231	207	14.1
Viking	O.45-97		97	216	225	220	14.1
AgriGold	A627-83VT2RIB	Bt, GLY	97	212	204	208	14.2
Titan Pro	86-96 2 P	Bt, GLY	96	214	220	217	14.2
Viking	52-96		96	186	217	201	14.3
Legacy Seeds	LC461-21	Bt, GLY	96	193	237	215	14.3
Dairyland Seed	DS-3727AM	Bt, GLY, LL	97	207	259	233	14.3
Titan Pro	82-95 2P	Bt, GLY	95	198	235	216	14.4
Legacy Seeds	LC474-20	Bt, GLY	97	228	255	241	14.5
Anderson Seeds	745SRC	Bt, CRW, GLY, LL	97	217	243	230	14.6
Anderson Seeds	786VT2P	Bt, GLY	95	211	196	204	14.6
AgriGold	A626-20-5122EZ	Bt, CRW, GLY, LL	96	201	215	208	14.8
DenBesten Brand	DB30-97		97	211	215	213	14.8
<b>95 to 97 RM averages:</b>				<b>204</b>	<b>227</b>	<b>215</b>	<b>14.3</b>
<b>Central locations, early maturity averages:</b>				<b>202</b>	<b>227</b>	<b>215</b>	<b>14.2</b>
<b>LSD (0.20)</b>				<b>20</b>	<b>21</b>	<b>14</b>	<b>0.4</b>



**Table 6. Late maturity entries, central locations, 2021.**

Source	Entry	Traits	Relative Maturity	Yield, Bushels/Acre		Average Across Locations	
				at: Hutchinson	Morris	Bu/Acre	% Moisture
<b>98 to 100 RM entries</b>							
AgriGold	A630-95-5222EZ	Bt, CRW, GLY, LL	100	173	192	183	14.6
Anderson Seeds	609R	GLY	98	218	214	216	14.8
Hi Fidelity Genetics	HFG1002		100	212	266	239	14.9
Viking	44-98		98	230	237	233	14.9
Titan Pro	11-98 2P	Bt, GLY	98	237	238	238	15.0
Legacy Seeds	LC-4248	Bt, GLY	100	204	227	215	15.1
DenBesten Brand	DB32-00		100	220	206	213	15.1
Dekalb	DKC48-68	Bt, CRW, GLY, LL	98	204	215	209	15.2
Dekalb	DKC48-95	Bt, GLY	98	215	203	209	15.2
AgriGold	A630-10STXRIB	Bt, CRW, GLY, LL	100	193	218	205	15.4
Dairyland Seed	DS-4014Q	Bt, CRW, GLY, LL	100	217	238	227	15.5
Dekalb	DKC50-87	Bt, CRW, GLY, LL	100	168	216	192	15.6
Peterson Farms Seed	78P98	Bt, GLY	98	227	251	239	15.6
Anderson Seeds	6811		100	190	235	212	15.7
Peterson Farms Seed	85X98	Bt, CRW, GLY, LL	98	193	213	203	15.8
Legacy Seeds	LC484-20	Bt, GLY	98	210	238	224	15.8
AgriGold	A628-16VT2RIB	Bt, GLY	98	219	244	232	15.9
Dairyland Seed	DS-3959Q	Bt, CRW, GLY, LL	99	204	218	211	16.2
AgriGold	A630-04		100	226	215	220	16.8
<b>98 to 100 RM and earlier averages:</b>				<b>208</b>	<b>226</b>	<b>217</b>	<b>15.4</b>
<b>Later than 100 RM entries</b>							
Dekalb	DKC51-98	Bt, CRW, GLY, LL	101	202	214	208	15.2
Peterson Farms Seed	73P01	Bt, GLY	101	195	215	205	15.4
Dekalb	DKC52-18	Bt, CRW, GLY, LL	102	201	197	199	15.6
Dekalb	DKC52-99	Bt, GLY	102	248	229	238	16.0
Federal Hybrids	5120 SS	Bt, CRW, GLY, LL	101	221	220	221	16.0
Legacy Seeds	LC5217	Bt, CRW	102	231	250	241	16.1
Legacy Seeds	LC-5319	Bt, CRW, GLY, LL	104	202	222	212	16.1
Anderson Seeds	507R	GLY	102	241	277	259	16.3
Dairyland Seed	DS-4310Q	Bt, CRW, GLY, LL	103	206	202	204	16.3
Anderson Seeds	5072		102	221	246	234	16.3
Anderson Seeds	507SRC	Bt, CRW, GLY, LL	102	203	245	224	16.5
Dairyland Seed	DS-4510Q	Bt, CRW, GLY, LL	105	248	244	246	16.6
Hi Fidelity Genetics	HFG1071		105	227	247	237	16.7
DenBesten Brand	DB41-01-OR		101	177	167	172	16.8
Hi Fidelity Genetics	HFG1051		105	209	244	226	17.1
AgriGold	A633-14STX	Bt, CRW, GLY, LL	103	230	256	243	17.2
AgriGold	A631-90		101	180	224	202	17.4
Dekalb	DKC56-65	Bt, CRW, GLY, LL	106	226	252	239	17.6
<b>Later than 100 RM averages:</b>				<b>215</b>	<b>231</b>	<b>223</b>	<b>16.4</b>
<b>Central locations, late maturity averages:</b>				<b>212</b>	<b>228</b>	<b>220</b>	<b>15.9</b>
<b>LSD (0.20)</b>				<b>21</b>	<b>26</b>	<b>17</b>	<b>0.5</b>

Table 7. Northern locations, 2021.

Source	Entry	Traits	Relative Maturity	Yield, Bushels/Acre at:			Average Across Locations	
				Crookston	Rothsay	Staples	Bu/Acre	% Moisture
<b>86 and earlier RM entries</b>								
REA Hybrids	2B851	Bt, GLY	85	102	231	179	171	14.9
REA Hybrids	2B862	Bt, GLY	86	111	266	194	190	15.1
Peterson Farms Seed	75G85	Bt, GLY	85	98	229	193	173	15.2
Peterson Farms Seed	73S84	Bt, GLY	84	119	240	197	185	15.2
AgriGold	A615-35		85	123	232	189	181	15.4
REA Hybrids	2B863	Bt, GLY	86	115	290	198	201	15.5
Legacy Seeds	LC354-20	Bt, GLY, LL	85	116	261	161	180	16.5
Enestvedt Seed Co	E859		86	110	231	196	179	16.8
<b>86 and earlier RM entry averages:</b>								
<b>87 to 91 RM entries</b>								
AgriGold	A617-78VT2RIB	Bt, GLY	87	105	251	191	182	14.8
Peterson Farms Seed	73K90	Bt, GLY	90	106	236	151	164	15.1
Anderson Seeds	8289		89	131	251	175	186	15.2
Viking	80-89		89	117	244	240	200	15.5
REA Hybrids	3B903	Bt, GLY	90	123	266	180	189	15.5
Dairyland Seed	DS-3162Q	Bt, CRW, GLY, LL	91	114	305	185	201	15.6
Legacy Seeds	LC391-20	Bt, GLY	89	108	291	198	199	15.7
REA Hybrids	3B912	Bt, GLY	91	146	309	201	219	15.9
Legacy Seeds	LC-3048	Bt, CRW, GLY, LL	90	130	247	212	197	16.0
Dairyland Seed	DS-3022AM	Bt, GLY, LL	90	128	233	177	179	16.1
AgriGold	A620-82VT2RIB	Bt, GLY	90	136	266	134	179	16.3
DenBesten Brand	DB31-88		88	105	238	219	187	16.3
DenBesten Brand	DB41-87-OR		87	106	216	188	170	16.4
<b>87 to 91 RM entry averages:</b>				<b>120</b>	<b>258</b>	<b>189</b>	<b>189</b>	<b>15.7</b>
<b>92 and later RM entries</b>								
REA Hybrids	4B933	Bt, GLY	93	141	277	189	202	15.8
AgriGold	A625-78VT2RIB	Bt, GLY	95	147	291	203	214	16.2
Enestvedt Seed Co	E612		92	147	280	175	201	16.4
BH Genetics	6218VT2PRIB	Bt, GLY	92	151	286	197	211	16.6
AgriGold	A622-65		92	119	255	227	200	16.7
Anderson Seeds	742R	GLY	92	139	265	199	201	16.8
Dekalb	DKC42-64	Bt, CRW, GLY, LL	92	105	245	212	187	17.1
Dairyland Seed	DS-3550AM	Bt, GLY, LL	95	142	302	173	206	17.3
Dairyland Seed	DS-3366AM	Bt, GLY, LL	93	131	269	177	193	17.3
Hi Fidelity Genetics	HFG0921		92	124	269	204	199	17.5
REA Hybrids	4B958	Bt, GLY	95	134	285	187	202	18.7
DenBesten Brand	DB41-95-OR		95	110	221	186	172	18.9
Hi Fidelity Genetics	HFG0951		95	122	241	188	184	19.1
REA Hybrids	4B944	Bt, GLY	94	115	259	182	185	19.2
Hi Fidelity Genetics	EXP2013		94	122	258	203	194	20.9
Dekalb	DKC44-97	Bt, CRW, GLY, LL	94	133	259	222	205	21.5
Anderson Seeds	7865		95	107	320	189	205	21.6
<b>92 and Later RM entry averages:</b>				<b>129</b>	<b>270</b>	<b>195</b>	<b>198</b>	<b>18.1</b>
<b>Northern locations averages:</b>				<b>122</b>	<b>261</b>	<b>191</b>	<b>191</b>	<b>16.7</b>
<b>LSD (0.20)</b>				<b>16</b>	<b>24</b>	<b>20</b>	<b>11</b>	<b>1.4</b>