2015 SE Minnesota Regional Performance of Early Maturity Glyphosate Tolerant (GT) Roundup Ready® (RR) Soybean Varieties (1.3 to 1.8 maturities) at Rochester, MN.

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The objective of this study was to compare the performance of early maturity GT/RR® soybean (1.3 to 1.8 maturities) in southeastern Minnesota. The trial was located at Rochester, MN (Lawler site). Field history is reported in Table 1. The trial was planted with a 4-row John Deere 7000 planter equipped with cone units. The seeding rate was 150,000 seeds per acre with seed planted at a depth of 1.5 inches in 30 inch rows. Plots were four rows wide by 22 feet in length. A randomized complete block design was implemented and replicated four times. The center two rows of each plot were machine harvested on October 9, 2015. Table 2 provides the yield at 13% moisture. Table 3 lists soybean variety traits. Table 4 lists the 2014 early maturity GT/RR® trial results. (University of Minnesota Extension Regional Office, Rochester, and Southern Research and Outreach Center, Waseca, MN).

Table 1. Field history at Rochester (Lawler site), MN in 2015.

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	Rochester (Lawler site)					
Planting Date	May 22, 2015					
Harvest Date	October 9, 2015					
Soil Type	Port Byron Silt Loam					
Tillage	Conventional					
Previous Crop	Corn					

Table 2. Yield (at 13%) of early maturity soybeans (1.3 – 1.8) at Rochester, MN in 2015.					
Entry Name	Description	Rochester (Lawler site)			
1.3 to 1.8 maturity	Maturity	Yield (13%) (Bu/A)			
ASGROW AG1431	1.4	61.0	a-h		
ASGROW AG1733	1.7	62.4	abc		
CROPLAN R2C1400	1.4	59.0	e-i		
CROPLAN R2C1625	1.6	60.1	c-h		
DAHLMAN 5215NRR2Y	1.5	58.9	f-i		
DAIRYLAND DSR-1340	1.3	53.8	k		
DAIRYLAND DSR-1721	1.7	59.2	e-i		
DUPONT PIONEER P15T46R2	1.5	60.4	b-h		
DYNAGRO S18RY25	1.8	58.9	e-i		
GOLD COUNTRY 1715	1.7	54.6	jk		
GOLD COUNTRY 1814	1.8	63.3	ab		
LEGACY LS1335N RR2	1.3	60.0	c-h		
LEGACY LS1735 RR2	1.7	59.9	c-h		
LG SEEDS C1530R2	1.5	61.6	a-f		
LG SEEDS C1899R2	1.8	59.2	d-i		
MYCOGEN SEEDS 5N157 R2	1.5	57.0	ij		
MYCOGEN SEEDS 5N180R2	1.8	60.6	b-h		
MYCOGEN SEEDS 5N182R2	1.8	63.7	а		
NK BRAND S15-P1	1.5	60.5	b-h		
NK BRAND S17-B3	1.7	61.5	a-g		
PRAIRIE BRAND 1466	1.4	58.6	ghi		
PRAIRIE BRAND 1822	1.8	62.1	a-d		
PRODUCERS 1503NR2	1.5	60.1	c-h		
PRODUCERS 1804NR2	1.8	58.4	hi		
RENK RS153 NR2	1.5	61.8	а-е		
RENK RS175 NR2	1.7	60.1	c-h		
STINE 14RF62	1.4	62.3	abc		
STINE 17RF26	1.7	58.6	ghi		
LSD (P=0.20) 2.9					
Plot Average		59.9 bu/A			

Table 3. Traits of early maturity GT/RR® soybean varieties in 2015.

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	Maturity	Resistant	Hilum	Flower	Pubescence	Pod
Entry	Rating	Source	Color	Color	Color	Color
ASGROW AG1431	1.4		Black	Purple	Light Tawny	Brown
ASGROW AG1733	1.7		Imperfect Black	Purple	Gray	Brown
CROPLAN R2C1400	1.4		Black	Purple	Light Tawny	Brown
CROPLAN R2C1625	1.6					
DAHLMAN 5215NRR2Y	1.5		Black	Purple	Light Tawny	Brown
DAIRYLAND DSR-1340	1.3		Black	Purple	Light Tawny	Brown
DAIRYLAND DSR-1721	1.7		Imperfect Black	Purple	Gray	Tan
DUPONT PIONEER P15T46R2	1.5					
DYNAGRO S18RY25	1.8		Imperfect Black	Purple	Gray	Tan
GOLD COUNTRY 1715	1.7		Imperfect Black	Purple	Gray	Brown
GOLD COUNTRY 1814	1.8		Black	Purple	Light Tawny	Brown
LEGACY LS1335N RR2	1.3		Black	Purple	Light Tawny	Brown
LEGACY LS1735 RR2	1.7		Brown	Purple	Light Tawny	Tan
LG SEEDS C1530R2	1.5		Black	Purple	Light Tawny	Brown
LG SEEDS C1899R2	1.8		Imperfect Black	Purple	Gray	Tan
MYCOGEN SEEDS 5N157 R2	1.5					
MYCOGEN SEEDS 5N180R2	1.8		Imperfect Black	Purple	Gray	Brown
MYCOGEN SEEDS 5N182R2	1.8		Imperfect Black	Purple	Gray	Tan
NK BRAND S15-P1	1.5	PI88788	Black	Purple	Light Tawny	Tan
NK BRAND S17-B3	1.7	PI88788	Black	Purple	Light Tawny	Tan
PRAIRIE BRAND 1466	1.4	PI88788	Black	Purple	Light Tawny	Brown
PRAIRIE BRAND 1822	1.8	PI88788	Imperfect Black	Purple	Gray	Tan
PRODUCERS 1503NR2	1.5		Black	Purple	Light Tawny	Brown
PRODUCERS 1804NR2	1.8		Imperfect Black	Purple	Gray	Tan
RENK RS153 NR2	1.5		Black	Purple	Light Tawny	Brown
RENK RS175 NR2	1.7		Imperfect Black	Purple	Gray	Tan
STINE 14RF62	1.4		Imperfect Black	Purple	Gray	
STINE 17RF26	1.7		Black	Purple	Gray	

Table 4. Yield (at 13%) of early maturity soybeans (0.7 – 1.8) at Rochester (Lawler site) and Waseca, MN in 2014.

Entry Name	Description		nester er site)	Waseca	
0.7 to 1.8 maturity		Yield (bu/A)		Yield (bu/A)	
** Denotes committee selected	Maturity				
ASGROW AG0934	0.9	55.7	ijk	25.5	I
ASGROW AG1431	1.4	56.1	g-k	28.0	jkl
ASGROW AG1733	1.7	58.1	c-j	29.9	h-k
ASGROW AG1832	1.8	56.1	g-k	34.0	d-g
CROPLAN R2C1750	1.7	56.7	d-k	30.6	f-k
CROPLAN R2C1873	1.8	55.0	k	38.4	ab
DAHLMAN 5215NRR2Y	1.5	56.0	h-k	30.2	g-k
DAIRYLAND SEED DSR-1340R2Y	1.3	55.6	ijk	34.3	c-f
DAIRYLAND SEED DSR-1806R2Y	1.8	59.5	b-e	36.3	a-d
DUPONT PIONEER P15T83R	1.5	55.9	h-k	31.3	e-j
DUPONT PIONEER P16T04R	1.6	55.6	ijk	38.3	abc
DYNAGRO 34RY17	1.7	56.6	e-k	35.7	a-d
GOLD COUNTRY 1514	1.5	59.4	b-f	34.8	b-e
GOLD COUNTRY 1814	1.8	59.0	b-h	38.7	ab
LEGACY SEEDS LS-1533RR2	1.5	63.6	а	27.9	jkl
LEGACY SEEDS LS-1710RR2	1.7	61.2	abc	32.5	d-i
LG SEEDS C1530R2	1.5	58.6	b-i	33.9	d-h
LG SEEDS C1899R2	1.8	56.6	e-k	35.9	a-d
MYCOGEN SEEDS 5N156R2	1.5	56.1	g-k	38.9	а
MYCOGEN SEEDS 5N180R2	1.8	60.6	abc	33.8	d-h
NK BRAND S12-H2	1.2	59.4	b-e	27.2	kl
PRAIRIE BRAND PB1566 R2	1.5	61.3	ab	27.9	jkl
PRAIRIE BRAND PB1822 R2	1.8	59.6	b-e	38.8	ab
PRODUCERS HYBRIDS 1601 NR2	1.6	56.3	f-k	29.9	h-k
PRODUCERS HYBRIDS 1803 NRS	1.8	55.3	jk	36.3	a-d
RENK SEED RK153NR2	1.5	59.2	b-g	31.4	e-j
RENK SEED RK183NRS	1.8	54.6	k	33.9	d-h
STINE 13RF62**	1.3	55.6	ijk	29.0	i-l
STINE 14RD62	1.5	59.8	bcd	35.9	a-d
VIKING 1522R2N	1.5	58.5	b-i	29.2	i-l
VIKING 1707R2N	1.7	58.9	b-h	31.1	e-k
	LSD (P=0.20)	3.1		4.1	