

A close-up photograph of a mixture of flour and grain, likely cornmeal, with a central text box. The background is a warm, golden-brown color with a textured, slightly grainy appearance. A white dashed line with arrowheads at the top and bottom points towards the central text box. The text box is a white rectangle with a double-line border. Inside the box, the text "MASTERS CHOICE" is written in a bold, white, sans-serif font. Below it, the word "is" is written in a smaller, white, cursive font with a small underline. To the right of "is", the words "FLOURY GRAIN" are written in the same bold, white, sans-serif font as "MASTERS CHOICE".

MASTERS CHOICE
is **FLOURY GRAIN**

MASTERS CHOICE 101

- Proprietary genetics established in 1978
- Independently owned and operated
- Livestock focused
- Consistently Breeding for:
 - high yielding
 - nutritionally superior plants
 - Sugars
 - Floury Texture

MASTERS CHOICE is FLOURY GRAIN!



Masters Choice - Floury Grain



Competitor - Vitreous Grain

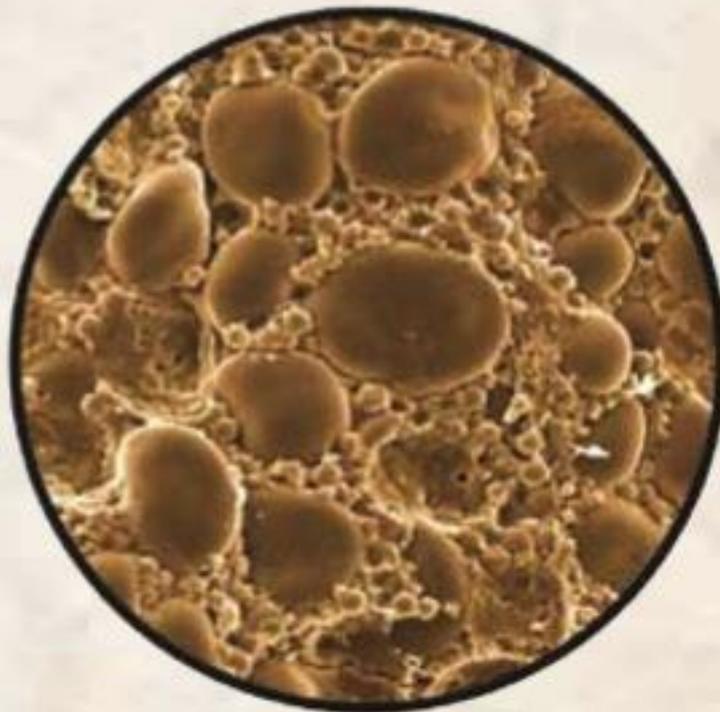




This light spectrometry picture indicating vitreous v. floury corn. Vitreous means "glassy" in Latin and can be seen through when light comes from behind. Floury starch does not allow light to shine through; the Masters Choice corn is seen on the bottom row.

REDUCED PROLAMIN

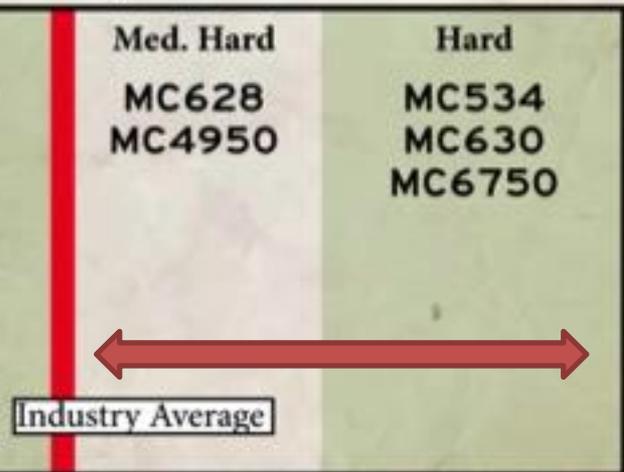
Starch molecules are held in place by an indigestible low quality matrix called prolamin. The reduction of prolamin in Masters Choice floury hybrids allows the starch to be freed and absorbed faster.



**ELECTRON MICROSCOPE IMAGE
OF STARCH MOLECULES**

Floury Grain and Kernel Digestibility

Floury	Semi-Floury		Medium	Med. Hard	Hard
MC5250	MC4050	MC6150	MC3220	MC628	MC534
MC527	MC4210	MC5370	MC468	MC4950	MC630
MC5300	MC5660	MC530	MC480		MC6750
MC6890	MC6580	MC4280	MC583		
MC6060	MC590	MC493	MC463		
	MC4880	MC4430	MC4560		
	MC5090	MC4590	MC6271		
	MC535	MC5800	MC6470		
			MC6054		



Mechanical tests were used to determine the texture of the kernel

- Stenvert Grind Test
- Horneous Endosperm
- Kernel Density

- 82% of MC hybrids had a lower horneous endo % than industry avg of 86%
- 86% of US samples were greater than 80% horneous endosperm
- There is no industry standard for “floury” grain

MORE ENERGY AVAILABLE

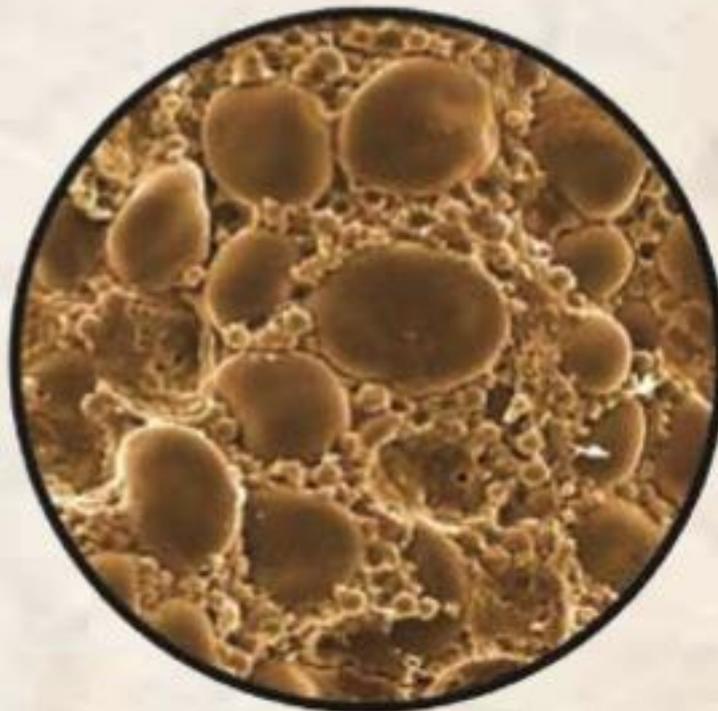
in each kernel!

Masters Choice floury corns have up to **15%** more energy available than standard industry corn. Starch in floury grain is easier for digestive enzymes to access making it available for absorption quicker.



REDUCED PROLAMIN

Starch molecules are held in place by an indigestible low quality matrix called prolamin. The reduction of prolamin in Masters Choice floury hybrids allows the starch to be freed and absorbed faster.



**ELECTRON MICROSCOPE IMAGE
OF STARCH MOLECULES**

SLOWER RATE OF PASSAGE

Floury starch particles stick to the rumen mat and stay in the rumen longer while heavier vitreous particles fall to the bottom and pass out more than twice as fast.



COMPETITOR: 23% PER HOUR
(THEIR COWS AREN'T SO HAPPY)

ALMOST 1/4 OF THE TOTAL STARCH IS PASSED OUT OF THE RUMEN

EFFECTS OF CORN TYPE ON PASSAGE RATE (KP) OF STARCH FROM THE RUMEN

Ying & Allen, 2005 kp%/hr

- High-moisture corn 7.1
- Dry ground corn 16.3
- Vitreous endosperm 16.0
- Floury endosperm 7.5

Taylor & Allen, 2005

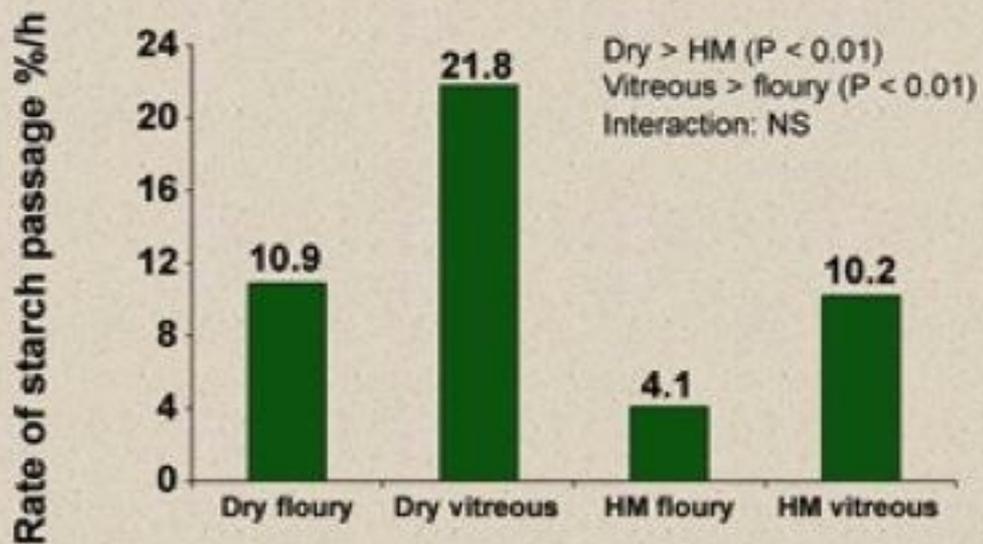
- Vitreous endosperm 21.2
- Floury endosperm 16.2

Allen et al., 2008

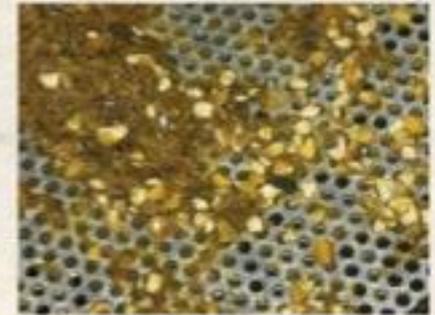
- Vitreous endosperm 25.7
- Floury endosperm 16.0

Rate of passage: starch

Ying and Allen, 2005 J. Dairy Sci. 88S:393



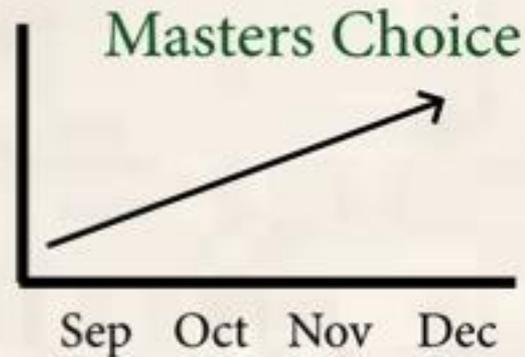
mat
in the ke
hybrids.



Heavy, hard vitreous kernels don't stick to the forage mat in the rumen, they sink to the bottom quickly passing through the digestive tract.

AVOID THE FALL SLUMP

Masters Choice hybrids with “floury” kernels keep milk production up through the early fall. With floury kernels, starch is more available right away without extensive long term ensiling.



CVAS 3 WEEK ROLLING AVERAGES

Hybrid	7-hr Starch	Days From Harvest
All CVAS Samples	65.89%	21
All CVAS Samples	70.57%	42
All CVAS Samples	72.42%	63
All CVAS Samples	74.41%	84
All CVAS Samples	75.22%	105

Hybrid	7-hr Starch	Days From Harvest
MC Lineup Average	75.66%	28
MC4050	75.79%	28
MC5250	76.03%	28
MC535	77.97%	28
MC590	75.10%	28
MC4560	81.00%	270
MC527	83.10%	240
All CVAS Samples	65.89%	21
All CVAS Samples	70.57%	42
All CVAS Samples	72.42%	63
All CVAS Samples	74.41%	84
All CVAS Samples	75.22%	105

Ensiling Effects of Starch Digestibility

Newbold, et al., JDS, 2006 abstr.



Extended Harvest Window

MC 2011/2012 450+ samples

DM %	7hr Starch%
28	78.34
32	79.09
36	77.03
42	74.88
46	73.16

CVAS 10/1/13-11/20/13

DM%	7hr Starch%
28	69.8
32	71.1
36	71.4
42	67.5
45	66.3

DON'T SACRIFICE YIELD

Unlike other nutritionally enhanced corn silages; Masters Choice floury hybrids have no associated yield drag.



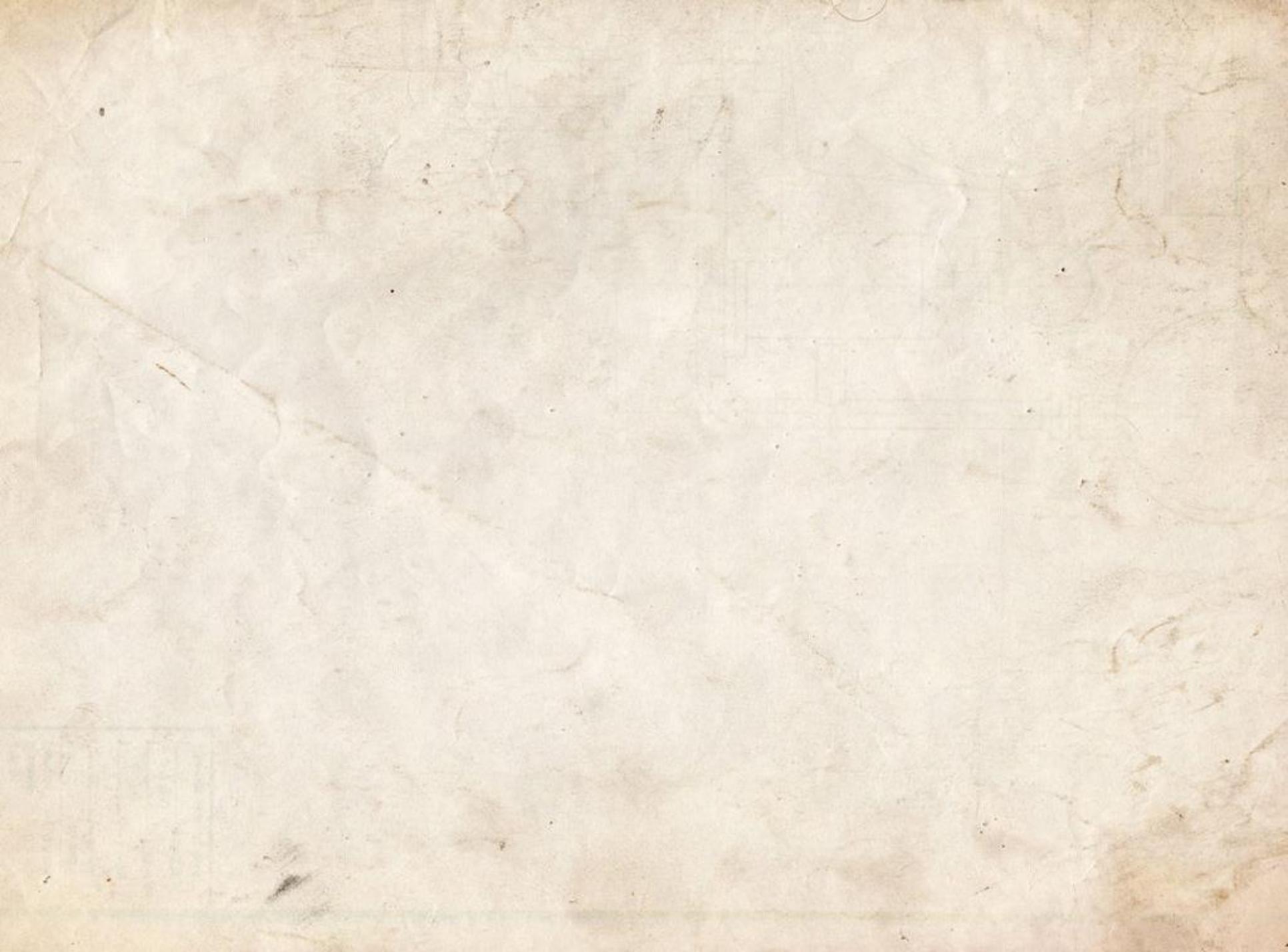
In over 100 head to head trials across all hybrids, locations, and regions

Silage yields tons/acre @65%

- MC average 26.5 tons
- Competitor avg. 22.7 tons
- 3.8 ton advantage

Grain yields bushels/acre

- MC average 193.8 bu.
- Competitor avg. 180.9 bu.
- 12.9 bushel/acre advantage



MC head to head with BMR

NH farm

- MC out yielded the BMR by at least 4 ton/acre
- The starch digestibility is drastically different
- The fiber digestibility is equal (Kd)



CUMBERLAND VALLEY ANALYTICAL SERVICES

Laboratory services for agriculture ... from the field to the feed bunk.

CARBOHYDRATES	% Starch	% NFC	% DM
Silage Acids		5.5	2.7
Ethanol Soluble CHO (Sugar)		1.4	0.7
Water soluble CHO (Sugar)			
Starch		71.3	35.3
Soluble Fiber		15.2	7.52
OM Digestibility (2 hr)			
Starch Digestibility (7 hr)	61		
Fatty Acids, Total (%DM)			2.23
Crude Fat			2.71
Acid Hydrolysis Fat			

ENERGY & INDEX CALCULATIONS

TDN (%DM)	75.8
Net Energy Lactation (mcal/lb)	0.79
Net Energy Maintenance (mcal/lb)	0.82
Net Energy Gain (mcal/lb)	0.54
NDF Dig. Rate (Kd, %HR, Van Amburgh)	3.95
NDF Dig. Rate (Kd, %HR, Mertens)	
Starch Dig. Rate (KD, %HR, Mertens)	
Relative Feed Value (RFV)	
Relative Feed Quality (RFQ)	
Milk per Ton (lbs/ton)	3272
Dig. Organic Matter Index (lbs/ton)	
Non Fiber Carbohydrates (%DM)	49.5
Non Structural Carbohydrates (%DM)	36.0
DCAD (meq/100gdm)	

BMR



CUMBERLAND VALLEY ANALYTICAL SERVICES

Laboratory services for agriculture ... from the field to the feed bunk.

CARBOHYDRATES	% Starch	% NFC	% DM
Silage Acids		14.6	7.3
Ethanol Soluble CHO (Sugar)		1.2	0.6
Water soluble CHO (Sugar)			
Starch		73.3	36.5
Soluble Fiber		13.8	6.86
OM Digestibility (2 hr)			
Starch Digestibility (7 hr)	77		
Fatty Acids, Total (%DM)			2.45
Crude Fat			2.77
Acid Hydrolysis Fat			

ENERGY & INDEX CALCULATIONS

TDN (%DM)	72.9
Net Energy Lactation (mcal/lb)	0.76
Net Energy Maintenance (mcal/lb)	0.78
Net Energy Gain (mcal/lb)	0.50
NDF Dig. Rate (Kd, %HR, Van Amburgh)	3.99
NDF Dig. Rate (Kd, %HR, Mertens)	
Starch Dig. Rate (KD, %HR, Mertens)	
Relative Feed Value (RFV)	
Relative Feed Quality (RFQ)	
Milk per Ton (lbs/ton)	3530
Dig. Organic Matter Index (lbs/ton)	
Non Fiber Carbohydrates (%DM)	49.8
Non Structural Carbohydrates (%DM)	37.1
DCAD (meq/100gdm)	

Masters Choice



Masters choice has had many great showings at the World Dairy Forage Super Bowl

- 12 of the top ten placings in last 4 years
- 35% of all top 5 placings in last 4 years with only 10% of the entries

TOP 5 PLACES

				Milk/Ton
2009	Grand Champion 1st Time Entrant	MC-550	1st Place	3795
2009	Quality Counts Grand Champion	MC-550	1st Place	3795
2009	Standard Dairy Silage	MC-590	2nd Place	3718
2009	Standard Dairy Silage	MC-590	3rd Place	3627
2010	Standard Dairy Silage	MC-530	5th Place	3585
2012	Standard Dairy Silage	MC-535	3rd Place	3509
2012	Standard Dairy Silage	MC-535	5th Place	3542

Even when we don't win the judges overall score at the silage super bowl, we always excel where it counts, and that's making milk.

- Top two scores for Milk Per Ton at World Dairy Forage Super Bowl 3 out of 4 years
- Masters Choice had the highest average MP/T for any standard corn silage company in 2011
- In 2012 MC-535 had the highest average MP/T of any competing hybrid at the Super Bowl

	Milk/Ton Rank at Super Bowl	Hybrid	MP/T
2009	1st	MC-550	3795
2009	2nd	MC-590	3718
2009	1st	MC-550	3678
2009	2nd	MC-590	3614
2010	1st	MC-530	3681
2012	2nd	MC-590	3650

Masters Choice Hybrids provides great nutritional value without sacrificing yield. Here is the average yield of our hybrids that placed at the World Dairy Forage Super Bowl.

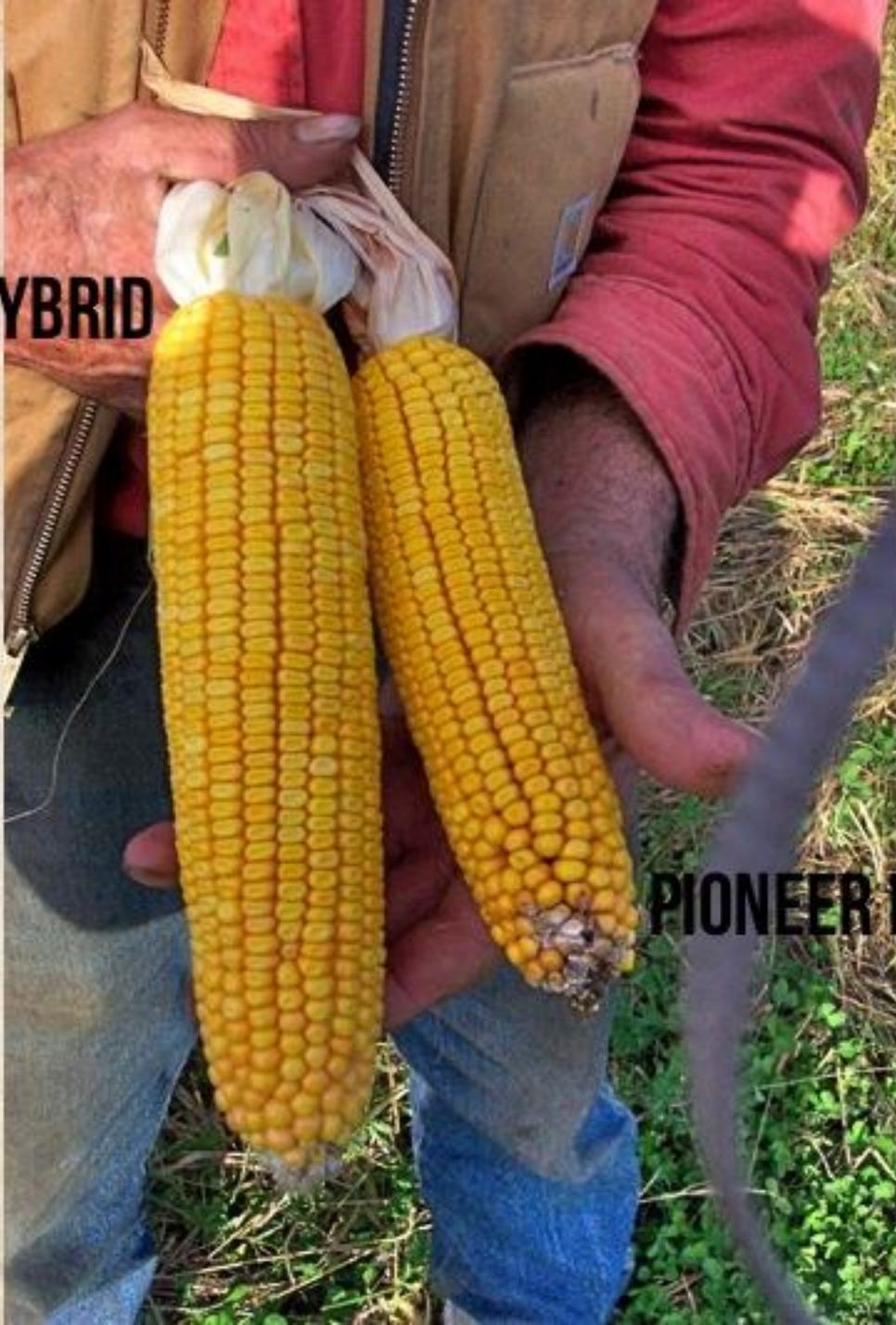
	MP/T	Avg. Yield	Silage Yield
MC-550	3795	169	22.91
MC-590	3718	198.58	28.6
MC-530	3585	208.05	27.45
MC-535	3509	197.7	28.57

FULL FLEX HYBRIDS

Masters Choice full flex hybrids express deep rich kernels on ears that flex in both girth and length. Flex hybrids can be planted at lower populations allowing them to out yield determinate ear hybrids at the same population.



MC FLEX HYBRID



PIONEER FIXED HYBRID



A background image showing a bright sun setting over a dark green field, with a gradient from yellow to blue in the sky.

2013-14
Hybrid Options



MASTERSCHOICE
SEEDCORN.COM

HYBRID OFFERINGS

- 82-118 day RM
- Organic
- Conventional Non-GMO (70-75% of sales)
- Traited (Agrisure)



	MC3220	MC468	MC463	MC480	MC4050
Options	Conv., GT	Conv., OG	OG	Conv., GT	Conv., Vip 3111
Relative Maturity	82	83	87	87	90
Populations	28k-34k	28k-32k	27k-32k	28k-32k	28k-34k
Plant Height	Med-Tall	Medium	Medium	Med-Tall	Tall
Ear Height	Medium	Medium	Med-Low	Medium	Med-High
Ear Flex	Semi-Flex	Flex	Semi-Flex	Semi-Flex	Semi-Flex
Test Weight	Average	Average	Average	Average	Above Avg
Cob Color	Red	Red	Red	Lt. Red	Lt. Red
Kernel Texture	Medium	Medium	Medium	Medium	Semi-Floury
Emergence/Early Growth	9	8	8	8	9
Stalk Strength	8	8	7	8	9
Root Strength	9	7	7	8	8
Dry Down	7	9	8	8	9
Drought Tolerance	8	6	6	7	6
Disease Tolerance	8	8	6	8	7
Grain Yield	8	7	7	8	9
Silage Yield	8	7	7	8	9
Fiber Digestibility	8	9	7	8	7
Starch Digestibility	8	8	7	8	9
Milk Per Ton	7	8	7	9	8
Comments	Handles Variable Soils	Full Flex Hybrid	Likes Management and Fertility	Consistent Yield and Quality	Most Floury



Relative Maturity: 82 Days

Available As:

Conventional MC3220
GT MCT3221

Plant Characteristics And Agronomics

50% Silking GDU's.....	1180
Black Layer GDU's.....	2085
Plant Populations.....	28-34K
Emergence.....	9
Seedling Vigor.....	7
Root Strength.....	9
Stalk Strength.....	8
Plant Height.....	Med. Tall
Leaf Angle.....	Semi- Erect
Ear Height.....	Med.
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Avg.
Kernel Texture.....	Med.
Test Weight.....	Med.
Continous Corn.....	Very Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	8

Strengths:

- Strong emergence and very good seedling vigor
- Fast growing hybrid, early flowering for quick finish
- Excellent roots and very good stalks for good drought tolerance
- Outstanding yield potential with good northern movement

Weaknesses:

- Monitor quick corn growth for proper silage harvest moistures

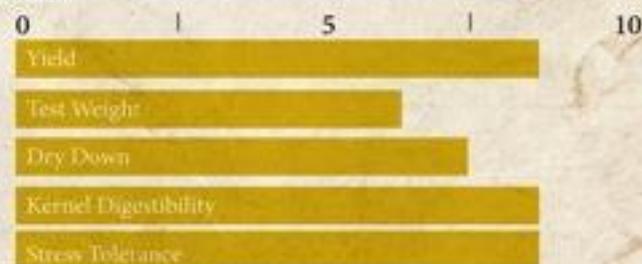
Management:

- Early maturing hybrid allows for late summer forage seedings
- Strong performance for varying soil types and productivity levels
- First choice for early spring plantings and no-till operations
- A good choice for corn on corn operations

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM

TRAIT PACKAGES



MCT5375 E-Z REFUGE™ featuring Agrisure® 3122

- Features 2 modes of action against corn borer and western corn rootworm
- Intended for use in areas where both corn rootworm and lepidopteran pest management are primary concerns, including corn-on-corn acres
- Provides tolerance to in-crop applications of glyphosate-based herbicides
- Offers the convenience of pre-mixed refuge
-Varieties MCT5375 with MCT5371 as a refuge
- Must be sprayed with glyphosate only as an E-Z Refuge
-Do not spray with glufosinate

Trait Packages

from Agrisure®



The Agrisure GT trait provides tolerance to in-crop applications and proven performance of glyphosate-based herbicides with the freedom for growers to choose their preferred glyphosate brand.



The Agrisure 3000GT triple stack helps growers guard against both corn borer and corn rootworm in addition to tolerance of in-season applications of both glyphosate and glufosinate herbicides.



The Agrisure Viptera trait combines with the Agrisure 3000GT trait stack to form the Agrisure Viptera 3111 trait stack. The Agrisure Viptera 3111 trait stack delivers the broadest available spectrum of multi-pest control of over 14 yield and quality robbing insects, both above and below ground, as well as tolerance to glyphosate and glufosinate herbicide.

Trait Group/Name	Type of Bt	Insect(s) Controlled or Suppressed	Herbicide Tolerant?	Refuge % & Location
Agrisure® Products				
Agrisure® 3000GT	Cry1Ab mCry3A	CRW ECB CEW, FAW, SB	GT LL	20%* - adjacent
Agrisure® Viptera 3111	Vip3A Cry1Ab mCry3A	BCW CEW CRW ECB FAW WBC SB	GT LL	20%* - adjacent



468

Relative Maturity: 83 Days

Available As:

Conventional MC468
Organic MC468

Strengths:

- Good silage tonnage and high yielding grain
- Strong agronomics and stress tolerance
- Excellent dry down for marketable grain

Weaknesses:

- Rapid maturing, important to monitor silage harvest interval

Management:

- Responds best to medium high to high populations and good fertility
- Great northern and western movement

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1170
Black Layer GDU's.....	2030
Plant Populations.....	28-32K
Emergence.....	8
Seedling Vigor.....	7
Root Strength.....	7
Stalk Strength.....	8
Plant Height.....	Med.
Leaf Angle.....	Semi-Erect
Ear Height.....	Med.
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Avg.
Kernel Texture.....	Med.
Test Weight.....	Avg.
Continuous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	6

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



463

Relative Maturity: 87 Days

Available As:

Organic

MC463

Strengths:

- Excellent emergence and seedling vigor for a quick canopy effect
- Dark green, healthy hybrid
- Maintains yield under stress conditions

Weaknesses:

- Requires good fertility for optimal yield

Management:

- Responds well to relatively high plant populations
- Good eastern movement

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1180
Black Layer GDU's.....	2040
Plant Populations.....	27-32K
Emergence.....	8
Seedling Vigor.....	7
Root Strength.....	8
Stalk Strength.....	7
Plant Height.....	Med.
Leaf Angle.....	Semi-Erect
Ear Height.....	Med. Low
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Semi-Loose
Kernel Texture.....	Med.
Test Weight.....	Avg.
Continuous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	6
Drought Tolerance.....	6

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



Relative Maturity: 87 Days

Available As:

Conventional	MC480
Agrisure GT	MCT480GT

Plant Characteristics And Agronomics

50% Silking GDU's.....	1170
Black Layer GDU's.....	2140
Plant Populations.....	28-32K
Emergence.....	8
Seedling Vigor.....	9
Root Strength.....	7
Stalk Strength.....	8
Plant Height.....	Med. Tall
Leaf Angle.....	Semi-Erect
Ear Height.....	Med.
Ear Flex.....	Semi-Flex
Cob Color.....	Lt. Red
Husk Tightness.....	Avg.
Kernel Texture.....	Med.
Test Weight.....	Avg.
Continuous Corn.....	Very Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	7

Strengths:

- Excellent emergence and early seedling vigor
- Outstanding yield potential, excellent grain dry down
- Digestible grain with good silage quality
- Superior yield to moisture ratio for sub 90 day

Weaknesses:

- Monitor silage harvest interval for best silage results

Management:

- Responds favorably to various production systems
- Excellent choice for early planting and northern movement

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



4050

Relative Maturity: 90 Days

Available As:

Conventional	MC4050
Viptera 3111	MCT4054

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1200
Black Layer GDU's.....	2200
Plant Populations.....	28-34K
Emergence.....	8
Seedling Vigor.....	7
Root Strength.....	8
Stalk Strength.....	9
Plant Height.....	Tall
Leaf Angle.....	Semi-Erect
Ear Height.....	Med. Hard
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Avg.
Kernel Texture.....	Semi-Floury
Test Weight.....	Above Avg.
Continuous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	7
Drought Tolerance.....	6

Strengths:

- Yield punch for silage and grain
- Outstanding emergence and seedling vigor
- Impressive late season staygreen and eye appeal
- Good choice for less productive to very productive fields

Weaknesses:

- Not recommended for heavy sand soils

Management:

- Excellent choice for movement north and south
- Best suited for crop rotation systems

Silage



Grain



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SEEDCORNS.COM

TRAIT PACKAGES



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- Provides tolerance to in-crop applications of glyphosate-based herbicides
- Offers the convenience of pre-mixed refuge
-Varieties MCT5375 with MCT5371 as a refuge
- Must be sprayed with glyphosate only as an E-Z Refuge
-Do not spray with glufosinate

Trait Packages

from Agrisure®



The Agrisure GT trait provides tolerance to in-crop applications and proven performance of glyphosate-based herbicides with the freedom for growers to choose their preferred glyphosate brand.



The Agrisure 3000GT triple stack helps growers guard against both corn borer and corn rootworm in addition to tolerance of in-season applications of both glyphosate and glufosinate herbicides.



The Agrisure Viptera trait combines with the Agrisure 3000GT trait stack to form the Agrisure Viptera 3111 trait stack. The Agrisure Viptera 3111 trait stack delivers the broadest available spectrum of multi-pest control of over 14 yield and quality robbing insects, both above and below ground, as well as tolerance to glyphosate and glufosinate herbicide.

Trait Group/Name	Type of Bt	Insect(s) Controlled or Suppressed	Herbicide Tolerant?	Refuge % & Location
Agrisure® Products				
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Agrisure® Viptera 3111	Vip3A Cry1Ab mCry3A	BCW CEW CRW ECB FAW WBC SB	GT LL	20%* - adjacent

The Best Above-Ground Insect Control in the Industry



Competitive
Trait Stack

Competitive
Trait Stack



Trial observations taken from one trial in Crawford County, Kansas in August 2012.

- Breakthrough control of multi-pest complex
 - 14 above- and below-ground pests including
 - Corn earworm
 - Black cutworm
 - Western bean cutworm
- 7.3 bu/A yield increase*
- Reduce aflatoxin occurrence associated with insect feeding and reduced risk of dockage or rejected loads at the grain elevator

*Under ear-feeding pressure



	MC4210	MC4280	MCT493	MC4430	MC4560	MC4590
Options	Conv., GT	Conv., GT	3000GT	OG	Conv., Vip 3111	OG
Relative Maturity	92	92	93	94	95	95
Populations	28k-34k	28k-34k	26k-32k	26k-36k	28k-34k	26k-32k
Plant Height	Med-Tall	Medium	Medium	Medium	Med-Tall	Med-Tall
Ear Height	Medium	Med-Low	Med-Low	Med-Low	Medium	Medium
Ear Flex	Flex	Semi-Flex	Semi-Flex	Semi-Flex	Semi-Flex	Semi-Flex
Test Weight	Average	Average	Average	Average	Above Avg	Average
Cob Color	Red	Lt. Red	Red	Red	Lt. Red	Red
Kernel Texture	Semi-Floury	Semi-Floury	Semi-Floury	Semi-Floury	Medium	Semi-Floury
Emergence/Early Growth	8	7	8	8	8	8
Stalk Strength	7	7	9	7	9	6
Root Strength	7	7	8	7	8	7
Dry Down	9	7	7	8	8	8
Drought Tolerance	8	7	7	7	6	7
Disease Tolerance	8	7	8	7	8	7
Grain Yield	8	7	8	6	7	8
Silage Yield	8	7	7	6	8	7
Fiber Digestibility	9	7	8	9	9	8
Starch Digestibility	9	7	7	7	7	7
Milk Per Ton	9	7	8	8	8	9
Comments	Only Full Flex in Range	Keep on Good Fertility	Good on Marginal Soils	Likes High Pops	Top End Nutritional Qualities	Good Grain Yields



4210

Relative Maturity: 92 Days

Available As:

Conventional MC4210
GT MCT4211

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1200
Black Layer GDU's.....	2190
Plant Populations.....	28-34K
Emergence.....	8
Seedling Vigor.....	8
Root Strength.....	7
Stalk Strength.....	7
Plant Height.....	Med.
Leaf Angle.....	Semi- Erect
Ear Height.....	Med.
Ear Flex.....	Flex
Cob Color.....	Red
Husk Tightness.....	Avg.
Kernel Texture.....	Semi-Floury
Test Weight.....	Avg.
Continous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	8

Strengths:

- Outstanding yield punch for silage and grain fed
- Early flowering, fast grain fill, early finishing hybrid
- Robust plant with good stalks and roots
- Performance stability with highly flexible ear type

Weaknesses:

- Limited movement south as it is a quick setup style hybrid

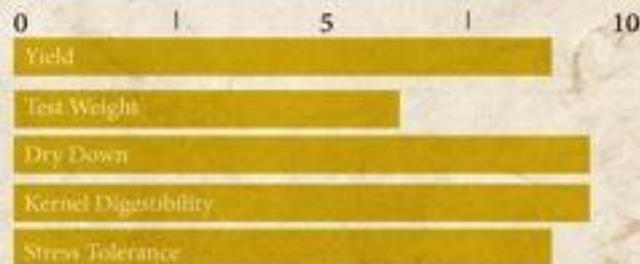
Management:

- Best suited for early planting operations
- Plant at medium populations levels and fertilize well for peak performance
- Adapted to wide array of soil types, caution on wetter soils
- Best utilization in zone and north of zone

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



4280

Relative Maturity: 92 Days

Available As:

Conventional	MC4280
Agrisure GT	MCT4281

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1220
Black Layer GDU's.....	2260
Plant Populations.....	28-34K
Emergence.....	8
Seedling Vigor.....	8
Root Strength.....	7
Stalk Strength.....	7
Plant Height.....	Med.
Leaf Angle.....	Semi- Erect
Ear Height.....	Med. Low
Ear Flex.....	Semi-Flex
Cob Color.....	Lt. Red
Husk Tightness.....	Semi-Loose
Kernel Texture.....	Semi-Floury
Test Weight.....	Avg.
Continuous Corn.....	Fair
Herbicide Sensitivity.....	None
Disease Tolerance.....	7
Drought Tolerance.....	7

Strengths:

- First rate agronomics with strong roots
- Very good tip fill and grain quality
- Superior nutrition testing and milk production potential
- Good stress tolerance, suited to most soil types

Weaknesses:

- Limited movement out of maturity zone

Management:

- Maximize performance with medium high to high populations
- Responds best with good fertility

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



493

Relative Maturity: 93 Days

Available As:

3000GT

MCT4933000GT

Strengths:

- Strong agronomic package for stress conditions
- Workhorse delivering tonnage and solid grain yield
- Excellent east to west movement with good dry down
- Solid stalks, very good roots, and early flowering

Weaknesses:

- Average test weight

Management:

- Rugged hybrid that can be used in no-till and continuous corn
- Strong choice for marginal soil conditions*

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1220
Black Layer GDU's.....	2220
Plant Populations.....	26-32K
Emergence.....	8
Seedling Vigor.....	9
Root Strength.....	8
Stalk Strength.....	9
Plant Height.....	Med.
Leaf Angle.....	Semi- Erect
Ear Height.....	Med.Low
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Semi-Loose
Kernel Texture.....	Semi-Floury
Test Weight.....	Avg.
Continuous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	7

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM

TRAIT PACKAGES



MCT5375 E-Z REFUGE™ featuring Agrisure® 3122

- Features 2 modes of action against corn borer and western corn rootworm
- Intended for use in areas where both corn rootworm and lepidopteran pest management are primary concerns, including corn-on-corn acres
- Provides tolerance to in-crop applications of glyphosate-based herbicides
- Offers the convenience of pre-mixed refuge
-Varieties MCT5375 with MCT5371 as a refuge
- Must be sprayed with glyphosate only as an E-Z Refuge
-Do not spray with glufosinate

Trait Packages

from Agrisure®



The Agrisure GT trait provides tolerance to in-crop applications and proven performance of glyphosate-based herbicides with the freedom for growers to choose their preferred glyphosate brand.



The Agrisure 3000GT triple stack helps growers guard against both corn borer and corn rootworm in addition to tolerance of in-season applications of both glyphosate and glufosinate herbicides.



The Agrisure Viptera trait combines with the Agrisure 3000GT trait stack to form the Agrisure Viptera 3111 trait stack. The Agrisure Viptera 3111 trait stack delivers the broadest available spectrum of multi-pest control of over 14 yield and quality robbing insects, both above and below ground, as well as tolerance to glyphosate and glufosinate herbicide.

Trait Group/Name	Type of Bt	Insect(s) Controlled or Suppressed	Herbicide Tolerant?	Refuge % & Location
Agrisure® Products				
Agrisure® 3000GT	Cry1Ab mCry3A	CRW ECB CEW, FAW, SB	GT LL	20%* - adjacent
Agrisure® Viptera 3111	Vip3A Cry1Ab mCry3A	BCW CEW CRW ECB FAW WBC SB	GT LL	20%* - adjacent



4430

Relative Maturity: 94 Days

Available As:

Organic

MC4430

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1210
Black Layer GDU's.....	2200
Plant Populations.....	26-36K
Emergence.....	8
Seedling Vigor.....	7
Root Strength.....	7
Stalk Strength.....	7
Plant Height.....	Med.
Leaf Angle.....	Semi- Erect
Ear Height.....	Med. Low
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Semi-Loose
Kernel Texture.....	Semi-Floury
Test Weight.....	Avg.
Continuous Corn.....	Fair
Herbicide Sensitivity.....	None
Disease Tolerance.....	7
Drought Tolerance.....	7

Strengths:

- Excellent emergence and early growth
- Wide leaf contributes to quick canopy closure
- Good ear flex contributes to yield stability

Weaknesses:

- Requires moderate to high populations for maximum yield

Management:

- Durable, consistent performance across all soil types

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



4560

Relative Maturity: 95 Days

Available As:

Conventional MC4560
 Viptera 3111 MCT4564

Strengths:

- Excellent yield potential and great eye appeal
- Outstanding disease package
- Excellent harvestability both for silage and grain
- Very good grain feeding and silage qualities

Weaknesses:

- Not best suited for corn on corn

Management:

- Great emergence allows for early planting
- Best performance in a crop rotation system

**Plant Characteristics
 And Agronomics**

50% Silking GDU's.....	1230
Black Layer GDU's.....	2240
Plant Populations.....	28-34K
Emergence.....	8
Seedling Vigor.....	7
Root Strength.....	8
Stalk Strength.....	9
Plant Height.....	Med. Tall
Leaf Angle.....	Semi- Erect
Ear Height.....	Med.
Ear Flex.....	Semi-Flex
Cob Color.....	Lt. Red
Husk Tightness.....	Avg.
Kernel Texture.....	Med.
Test Weight.....	Above Avg.
Continuous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	6

Silage



Grain



EXPECT MORE FROM YOUR BRAND
 SEEDCORN.COM



Relative Maturity: 95 Days

Available As:

Organic

MC4590

Plant Characteristics And Agronomics

50% Silking GDU's.....	1200
Black Layer GDU's.....	2210
Plant Populations.....	26-32K
Emergence.....	8
Seedling Vigor.....	7
Root Strength.....	7
Stalk Strength.....	6
Plant Height.....	Med. Tall
Leaf Angle.....	Semi- Erect
Ear Height.....	Med.
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Avg.
Kernel Texture.....	Semi-Floury
Test Weight.....	Avg.
Continuous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	7
Drought Tolerance.....	7

Strengths:

- High yielding silage capabilities
- Very good seedling vigor and root growth
- Long ears, deep kernels allow for impressive grain yields

Weaknesses:

- Limited movement south of maturity zone

Management:

- A good choice for first planting organic corn
- Adapted to planting on marginal and less productive ground
- Plant at recommended planting populations

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM

	MC4880	MC4950	MC5090	MC5250	MC5300	MC5370
Options	Conv., GT, Vip 3111	Conv., GT, Vip 3111	OG	Conventional	OG	Conv., GT, 3122
Relative Maturity	98	99	100	102	103	103
Populations	28k-34k	28k-34k	26k-32k	26k-32k	26k-34k	26k-34k
Plant Height	Med-Tall	Tall	Med-Tall	Med-Tall	Med-Tall	Tall
Ear Height	Medium	Med-High	Medium	Medium	Medium	Med-High
Ear Flex	Semi-Flex	Semi-Flex	Flex	Flex	Flex	Semi-Flex
Test Weight	Above Avg	Above Avg	Average	Average	Average	Average
Cob Color	Red	Red	Red	White	Lt. Red	Lt. Red
Kernel Texture	Semi-Floury	Med-Hard	Semi-Floury	Floury	Floury	Semi-Floury
Emergence/Early Growth	9	8	8	7	8	9
Stalk Strength	8	7	7	8	8	9
Root Strength	9	7	7	9	7	8
Dry Down	9	7	7	8	7	7
Drought Tolerance	8	8	8	8	7	9
Disease Tolerance	9	8	7	8	7	8
Grain Yield	8	9	7	8	7	9
Silage Yield	8	8	8	9	8	9
Fiber Digestibility	8	8	7	9	8	7
Starch Digestibility	8	7	8	9	8	8
Milk Per Ton	9	7	8	9	8	8
Comments	Top End Quality and Consistency	Grain Hybrid	Dual Purpose Grain and Silage	Best Nutritional Quality and Yield	Replacement for 5250 Organic	Take Anywhere Hybrid



4880

Relative Maturity: 98 Days

Available As:

Conventional	MC4880
Agrisure® GT	MCT4881
Viptera 3111	MCT4884

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1280
Black Layer GDU's.....	2350
Plant Populations.....	28-34K
Emergence.....	9
Seedling Vigor.....	8
Root Strength.....	9
Stalk Strength.....	8
Plant Height.....	Med. Tall
Leaf Angle.....	Semi-Erect
Ear Height.....	Med.
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Avg.
Kernel Texture.....	Semi-Floury
Test Weight.....	Avg.
Continuous Corn.....	Very Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	9
Drought Tolerance.....	8

Strengths

- Excellent silage yield potential
- Semi-flex ears allow for various planting populations
- Well adapted to most soil types and grower management
- Good emergence and seedling vigor

Weaknesses

- Harvest promptly for silage when moved south of maturity zone

Management

- Positive yield response to higher populations
- Position as a plant first hybrid to take advantage of emergence

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



4950

Relative Maturity: 99 Days

Available As:

Conventional	MC4950
Agrisure GT	MCT4951
Viptera 3111	MCT4954

Strengths:

- Very good yield potential with ear flex and tip fill
- Good drought tolerance for lighter soils
- Very good emergence and seedling vigor

Weaknesses:

- Does not respond well to high populations

Management:

- Excellent choice for continuous corn
- Yields respond favorably to increased management
- Good choice for moderately productive soils

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1260
Black Layer GDU's.....	2290
Plant Populations.....	28-34K
Emergence.....	8
Seedling Vigor.....	9
Root Strength.....	7
Stalk Strength.....	7
Plant Height.....	Tall
Leaf Angle.....	Semi-Erect
Ear Height.....	Med. High
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Avg.
Kernel Texture.....	Med-Hard
Test Weight.....	Above Avg.
Continuous Corn.....	Excellent
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	8

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



5090

Relative Maturity: 100 Days

Available As:

Organic

MC5090

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1250
Black Layer GDU's.....	2310
Plant Populations.....	26-32K
Emergence.....	8
Seedling Vigor.....	7
Root Strength.....	7
Stalk Strength.....	7
Plant Height.....	Med. Tall
Leaf Angle.....	Semi-Erect
Ear Height.....	Med.
Ear Flex.....	Flex
Cob Color.....	Red
Husk Tightness.....	Avg.
Kernel Texture.....	Semi-Floury
Test Weight.....	Avg.
Continuous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	7
Drought Tolerance.....	8

Strengths:

- Very good yield potential with ear flex and tip fill
- Good drought tolerance for lighter soils
- Very good emergence and seedling vigor

Weaknesses:

- Does not respond well to high populations

Management:

- Excellent choice for continuous corn
- Yields respond favorably to increased management
- Good choice for moderately productive soils

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



5250

Relative Maturity: 102 Days

Available As:

Conventional MC5250

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1280
Black Layer GDU's.....	2375
Plant Populations.....	26-32K
Emergence.....	7
Seedling Vigor.....	9
Root Strength.....	8
Stalk Strength.....	7
Plant Height.....	Med. Tall
Leaf Angle.....	Semi- Erect
Ear Height.....	Med.
Ear Flex.....	Flex
Cob Color.....	White
Husk Tightness.....	Loose
Kernel Texture.....	Floury
Test Weight.....	Avg.
Continuous Corn.....	Very Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	8

Strengths:

- Consistent top end yield punch on full flex white cob ears
- Enhanced silage and nutritional grain quality
- Excellent choice for varying soil carrying capacity
- Outstanding health and agronomics

Weaknesses:

- Average choice for high test weight grain

Management:

- Fertilize well at all planting populations for peak yields
- Responds well to corn after corn programs
- Adapted to all tillage systems

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



Relative Maturity: 103 Days

Available As:

Organic MC5300

Plant Characteristics And Agronomics

50% Silking GDU's.....	1275
Black Layer GDU's.....	2445
Plant Populations.....	26-34K
Emergence.....	8
Seedling Vigor.....	9
Root Strength.....	7
Stalk Strength.....	8
Plant Height.....	Med. Tall
Leaf Angle.....	Horizontal
Ear Height.....	Med.
Ear Flex.....	Flex
Cob Color.....	White
Husk Tightness.....	Avg.
Kernel Texture.....	Floury
Test Weight.....	Avg.
Continous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	7
Drought Tolerance.....	7

Strengths:

- Strong emergence and seedling vigor for organic production and reduced tillage operation
- Very good tonnage and bushels per acre with excellent nutrition
- Wide leaf, showy robust plant that drives performance
- Good choice for grower risk management in combination with other varieties

Weaknesses:

- Harvest promptly when ready for dry grain

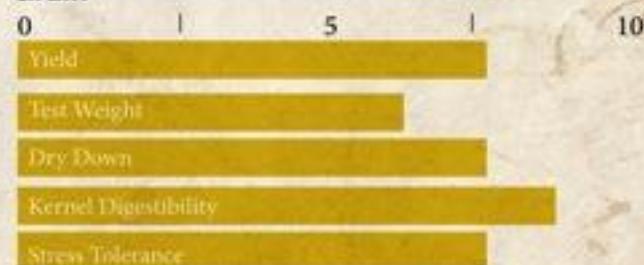
Management:

- Plant at medium populations and fertilize well for maximum yield
- Works best following a cropping rotation, especially after an alfalfa or sod plow down
- Excellent dual purpose white cob variety for livestock feed

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



Relative Maturity: 103 Days

Available As:

Organic MC5300

Plant Characteristics And Agronomics

50% Silking GDU's.....	1275
Black Layer GDU's.....	2445
Plant Populations.....	26-34K
Emergence.....	8
Seedling Vigor.....	9
Root Strength.....	7
Stalk Strength.....	8
Plant Height.....	Med. Tall
Leaf Angle.....	Horizontal
Ear Height.....	Med.
Ear Flex.....	Flex
Cob Color.....	White
Husk Tightness.....	Avg.
Kernel Texture.....	Floury
Test Weight.....	Avg.
Continous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	7
Drought Tolerance.....	7

Strengths:

- Strong emergence and seedling vigor for organic production and reduced tillage operation
- Very good tonnage and bushels per acre with excellent nutrition
- Wide leaf, showy robust plant that drives performance
- Good choice for grower risk management in combination with other varieties

Weaknesses:

- Harvest promptly when ready for dry grain

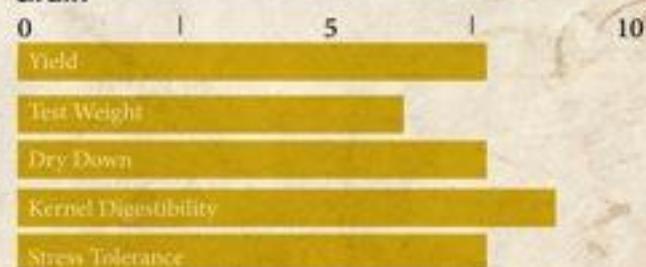
Management:

- Plant at medium populations and fertilize well for maximum yield
- Works best following a cropping rotation, especially after an alfalfa or sod plow down
- Excellent dual purpose white cob variety for livestock feed

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM

TRAIT PACKAGES



MCT5375 E-Z REFUGE™ featuring Agrisure® 3122

- Features 2 modes of action against corn borer and western corn rootworm
- Intended for use in areas where both corn rootworm and lepidopteran pest management are primary concerns, including corn-on-corn acres
- Provides tolerance to in-crop applications of glyphosate-based herbicides
- Offers the convenience of pre-mixed refuge
-Varieties MCT5375 with MCT5371 as a refuge
- Must be sprayed with glyphosate only as an E-Z Refuge
-Do not spray with glufosinate

Trait Packages

from Agrisure®



The Agrisure GT trait provides tolerance to in-crop applications and proven performance of glyphosate-based herbicides with the freedom for growers to choose their preferred glyphosate brand.



The Agrisure 3000GT triple stack helps growers guard against both corn borer and corn rootworm in addition to tolerance of in-season applications of both glyphosate and glufosinate herbicides.



The Agrisure Viptera trait combines with the Agrisure 3000GT trait stack to form the Agrisure Viptera 3111 trait stack. The Agrisure Viptera 3111 trait stack delivers the broadest available spectrum of multi-pest control of over 14 yield and quality robbing insects, both above and below ground, as well as tolerance to glyphosate and glufosinate herbicide.

Trait Group/Name	Type of Bt	Insect(s) Controlled or Suppressed	Herbicide Tolerant?	Refuge % & Location
Agrisure® Products				
Agrisure® 3000GT	Cry1Ab mCry3A	CRW ECB CEW, FAW, SB	GT LL	20%* - adjacent
Agrisure® Viptera 3111	Vip3A Cry1Ab mCry3A	BCW CEW CRW ECB FAW WBC SB	GT LL	20%* - adjacent

Agrisure[®]3122

E-Z Refuge[™]

- Integrated, single bag refuge for above-and below-ground pests:
 - Dual modes of action for both corn borer (CB) and corn rootworm (CRW)
 - A 5% integrated CB and CRW refuge in the Midwest
 - A convenient way to help farmers grow more corn
- Stack Contents:
 - Agrisure[®] CB/LL trait (CB control)
 - Agrisure GT trait (glyphosate tolerance)
 - Agrisure RW trait (CRW control)
 - Herculex[®] I trait (second mode of action on CB)
 - Herculex RW trait (second mode of action on CRW)



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 **Agrisure**
Traits

syngenta

	MC527	MC530	MC5660	MC534	MC535	MC5800
Options	Conv., GT, Vip 3111	Conv., GT	Conv., Gt, 3000GT	Conv.	Conv., OG, GT	OG
Relative Maturity	105	105	106	107	107	108
Populations	26k-32k	26k-32k	28k-34k	26k-36k	26k-32k	26k-32k
Plant Height	Med-Tall	Med-Tall	Tall	Medium	Med-Tall	Tall
Ear Height	Medium	Medium	Medium	Medium	Medium	Med-High
Ear Flex	Flex	Flex	Flex	Semi-Flex	Flex	Flex
Test Weight	Average	Average	Average	High	Average	Above Avg
Cob Color	White	White	Lt. Red	Lt. Red	White	Red
Kernel Texture	Floury	Semi-Floury	Semi-Floury	Hard	Semi-Floury	Semi-Floury
Emergence/Early Growth	8	7	9	9	7	9
Stalk Strength	7	7	9	8	9	7
Root Strength	8	9	7	8	9	8
Dry Down	7	7	8	9	8	7
Drought Tolerance	8	7	9	8	8	8
Disease Tolerance	6	6	8	9	7	8
Grain Yield	8	8	9	9	8	9
Silage Yield	8	9	9	8	9	8
Fiber Digestibility	9	8	8	7	9	7
Starch Digestibility	9	8	9	6	8	7
Milk Per Ton	9	8	8	7	9	7
Comments	Caution in High Disease Area	Consistent High Quality Silage	Top of the Line Silage Hybrid, More Floury Than 535	Solid Grain Yielding Hybrid	Good on Tight Low Organic Soils	First Choice for Hand Harvest



527

Relative Maturity: 105 Days

Available As:

Conventional	MC527
Agrisure GT	MCT527GT
Viptera 3111	MCT527Viptera3111

Strengths:

- First rate recommendation for silage and nutritional grain
- Strong agronomics and good stay green
- High yielding tons/bushel on a firm white cob with deep kernels
- M.E.A.T. recognition for grain digestibility in feed

Weaknesses:

- Does not respond to excessively high populations

Management:

- Good choice for continuous corn
- Exceptional ear flex allows for low to moderate planting populations

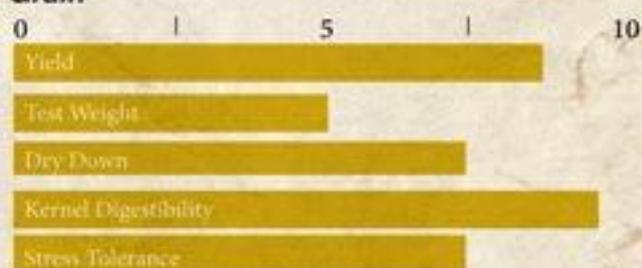
**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1285
Black Layer GDU's.....	2450
Plant Populations.....	26-32K
Emergence.....	8
Seedling Vigor.....	8
Root Strength.....	8
Stalk Strength.....	7
Plant Height.....	Med. Tall
Leaf Angle.....	Horizontal
Ear Height.....	Med.
Ear Flex.....	Flex
Cob Color.....	White
Husk Tightness.....	Loose
Kernel Texture.....	Semi-Floury
Test Weight.....	Average
Continous Corn.....	Very Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	6
Drought Tolerance.....	8

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



530

Relative Maturity: 105 Days

Available As:

Conventional MC530
Agrisure GT MCT530GT

Strengths:

- Great quality, dense silage with large tonnage
- High MPG recognition
- High yielding nutritious grain on a solid root foundation
- Excellent northern movement

Weaknesses:

- Do not move south of maturity zone

Management:

- Avoid late planting as stalk lodging may occur
- Responds favorably to foliar fungicides in high disease environments

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1280
Black Layer GDU's.....	2485
Plant Populations.....	26-32K
Emergence.....	7
Seedling Vigor.....	6
Root Strength.....	9
Stalk Strength.....	7
Plant Height.....	Med. Tall
Leaf Angle.....	Horizontal
Ear Height.....	Med.
Ear Flex.....	Flex
Cob Color.....	White
Husk Tightness.....	Loose
Kernel Texture.....	Semi-Floury
Test Weight.....	Average
Continous Corn.....	Fair
Herbicide Sensitivity.....	None
Disease Tolerance.....	6
Drought Tolerance.....	7

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



Relative Maturity: 106 Days

Available As:

Conventional MC5660
Agrisure GT MCT5661
Agrisure 3000GT MCT5663

Strengths:

- Massive flex leads to outstanding yield potential
- Excellent stalk strength
- Very good stress, heat, and drought tolerance
- Excels in wide array of planting populations

Weaknesses:

- Average test weight

Management:

- Favorable to early planting
- Great emergence tolerates no-till and corn after corn
- Use this hybrid both north and south of optimal zone of utilization

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1310
Black Layer GDU's.....	2550
Plant Populations.....	28-34K
Emergence.....	9
Seedling Vigor.....	8
Root Strength.....	9
Stalk Strength.....	7
Plant Height.....	Tall
Leaf Angle.....	Semi- Erect
Ear Height.....	Med.
Ear Flex.....	Flex
Cob Color.....	Lt. Red
Husk Tightness.....	Avg.
Kernel Texture.....	Semi-Floury
Test Weight.....	AVG.
Continous Corn.....	Very Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	9

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



534

Relative Maturity: 107 Days

Available As:

Conventional MC534

Strengths:

- Superior hybrid with outstanding yield punch
- Adapted to a wide array of planting populations
- Excellent disease and stress package
- High test weight, fast dry down

Weaknesses:

- Flexible ears still prefer medium to high populations

Management:

- Keep grain segregated for possible market premiums
- Performs well on tight, low organic matter soils
- Good choice for corn after corn

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1260
Black Layer GDU's.....	22575
Plant Populations.....	26-36K
Emergence.....	9
Seedling Vigor.....	8
Root Strength.....	8
Stalk Strength.....	8
Plant Height.....	Med.
Leaf Angle.....	Semi-Erect
Ear Height.....	Med.
Ear Flex.....	Semi-Flex
Cob Color.....	Lt. Red
Husk Tightness.....	Semi-Loose
Kernel Texture.....	Hard
Test Weight.....	High
Continous Corn.....	Excellent
Herbicide Sensitivity.....	None
Disease Tolerance.....	9
Drought Tolerance.....	8

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



Relative Maturity: 107 Days

Available As:

Conventional MC535
 Organic MC535
 Agrisure GT MCT535GT

Strengths:

- Consistent quality and performance earned our MPG recognition
- M.E.A.T. recognition for grain digestibility
- High sugar silage quality is top in industry
- Better southern movement and performance than 530

Weaknesses:

- Variable performance when planted late

Management:

- Plant first and harvest first to maximize performance and yield
- Responds favorably to foliar fungicide in high disease environments

**Plant Characteristics
 And Agronomics**

50% Silking GDU's.....	1320
Black Layer GDU's.....	2575
Plant Populations.....	26-36K
Emergence.....	7
Seedling Vigor.....	7
Root Strength.....	9
Stalk Strength.....	9
Plant Height.....	Med. Tall
Leaf Angle.....	Horizontal
Ear Height.....	Med.
Ear Flex.....	Flex
Cob Color.....	White
Husk Tightness.....	Loose
Kernel Texture.....	Semi-Floury
Test Weight.....	Avg.
Continous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	7
Drought Tolerance.....	8

Silage



Grain



EXPECT MORE FROM YOUR BRAND
 SEEDCORN.COM



Relative Maturity: 108 Days

Available As:

Organic

MC5800

Plant Characteristics And Agronomics

50% Silking GDU's.....	1255
Black Layer GDU's.....	2600
Plant Populations.....	26-32K
Emergence.....	9
Seedling Vigor.....	8
Root Strength.....	8
Stalk Strength.....	7
Plant Height.....	Tall
Leaf Angle.....	Semi-Erect
Ear Height.....	Med.High
Ear Flex.....	Flex
Cob Color.....	Red
Husk Tightness.....	Loose
Kernel Texture.....	Semi-Floury
Test Weight.....	Med.
Continous Corn.....	Very Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	8

Strengths:

- Widely adapted for strong performing top end silage and grain yields
- Solid stalks and excellent roots contribute to excellent late season standability
- Deep kernels, open husk on large girthy ears
- Rugged drought and stress tolerance for consistent performance

Weaknesses:

- Does not respond well to excessive population above 32,000

Management:

- #1 choice for early planting in organic systems
- Excellent option if applying cover crops in season with corn
- Very good option for hand picked ear corn

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM

	MC6054	MC6060	MC583	MC6150	MCT6271	MC6470
Options	Vip 3111	Conv., OG	Conv., Vip 3111	Conv., GT, 3000GT	GT, Vip 3111	Conv.
Relative Maturity	110	110	111	111	112	114
Populations	28k-36k	28k-34k	26k-34k	26k-34k	28k-36k	28k-34k
Plant Height	Med-Tall	Med-Tall	Med-Tall	Med-Tall	Medium	Med-Short
Ear Height	Med-High	Med-High	Med-High	Med-Low	Medium	Medium
Ear Flex	Semi-Fixed	Flex	Semi-Flex	Semi-Flex	Semi-Flex	Semi-Flex
Test Weight	Above Avg	Average	Average	Above Avg.	Above Avg	Average
Cob Color	Red	Lt. Red	Red	Lt. Red	Red	Lt. Red
Kernel Texture	Medium	Floury	Medium	Semi-Floury	Medium	Medium
Emergence/Early Growth	8	7	9	8	7	9
Stalk Strength	8	8	7	9	8	8
Root Strength	7	8	7	8	8	8
Dry Down	9	7	8	8	9	7
Drought Tolerance	6	7	8	8	8	8
Disease Tolerance	8	8	8	9	8	8
Grain Yield	7	8	8	8	8	9
Silage Yield	7	8	7	8	7	8
Fiber Digestibility	8	7	7	7	7	9
Starch Digestibility	6	7	8	8	7	7
Milk Per Ton	7	8	7	8	7	8
Comments	Handles High Populations	Full Floury Hybrid	Dependable Workhorse	First Choice For Continuous Corn	High Yielding Grain Hybrid	Heavy Thick Stalks, Top Silage Hybrid



Relative Maturity: 110 Days

Available As:

Viptera 3111 MCT6054

Strengths:

- Excellent seedling vigor and agronomics
- Exceptional plant health
- Outstanding yield punch
- Root and stalk structure suited for delayed harvest

Weaknesses:

- Performs average at lower populations

Management:

- Good option for narrow row systems
- Good choice for reduced tillage systems and early planting
- Plant at high pops to maximize yield potential for corn on corn

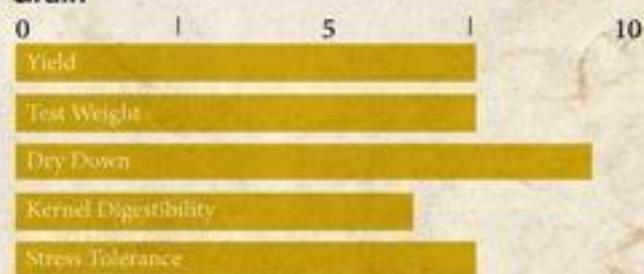
**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1310
Black Layer GDU's.....	2650
Plant Populations.....	28-36K
Emergence.....	8
Seedling Vigor.....	9
Root Strength.....	8
Stalk Strength.....	8
Plant Height.....	Med. Tall
Leaf Angle.....	Semi-Erect
Ear Height.....	Med. High
Ear Flex.....	Semi-Fixed
Cob Color.....	Red
Husk Tightness.....	Avg.
Kernel Texture.....	Med.
Test Weight.....	Above Avg.
Continous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	6

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



Relative Maturity: 110 Days

Available As:

Conventional	MC6060
Organic	MC6060

Plant Characteristics And Agronomics

50% Silking GDU's.....	1300
Black Layer GDU's.....	2640
Plant Populations.....	28-34K
Emergence.....	7
Seedling Vigor.....	7
Root Strength.....	8
Stalk Strength.....	8
Plant Height.....	Med. Tall
Leaf Angle.....	Semi-Erect
Ear Height.....	Med. High
Ear Flex.....	Flex
Cob Color.....	Lt. Red
Husk Tightness.....	Avg.
Kernel Texture.....	Floury
Test Weight.....	Avg.
Continuous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	7

Strengths

- Consistent performance under varying soil types and management
- Widely adapted with good southern movement
- Great ear flex and girth at moderate populations
- Excellent agronomics and health

Weaknesses

- Limited movement north of maturity zone

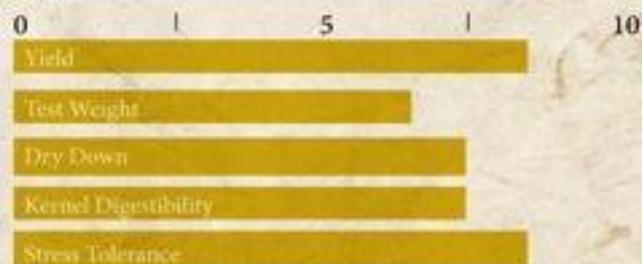
Management

- Best suited for moderated populations
- Performs well in stress situations as well as high yielding environments.

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



583

Relative Maturity: 111 Days

Available As:

Conventional MC583

Agrisure 3111 MCT583Viptera3111

Strengths:

- Outstanding yield and agronomic package
- Good grain quality and thick stalks for good tonnage
- Excellent seedling vigor and stress tolerance
- Workhorse with dependable yields
- Good roots, good drought and heat tolerance

Weaknesses:

- Average-to-good test weight and quality silage

Management:

- Consistent performance in all cropping systems and environments
- Fast emergence and vigor, can plant in cool wet soils
- Excellent choice for refuge acres

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1305
Black Layer GDU's.....	2670
Plant Populations.....	26-34K
Emergence.....	9
Seedling Vigor.....	9
Root Strength.....	7
Stalk Strength.....	7
Plant Height.....	Med. Tall
Leaf Angle.....	Semi-Erect
Ear Height.....	Med. High
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Semi-Loose
Kernel Texture.....	Med.
Test Weight.....	Avg.
Continous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	8

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



6150

Relative Maturity: 111 Days

Available As:

Conventional MC6150
 Agrisure GT MCT6151
 Agrisure 3000GT MCT6153

**Plant Characteristics
 And Agronomics**

50% Silking GDU's.....	1310
Black Layer GDU's.....	2685
Plant Populations.....	26-34K
Emergence.....	8
Seedling Vigor.....	8
Root Strength.....	8
Stalk Strength.....	9
Plant Height.....	Med. Tall
Leaf Angle.....	Semi-Erect
Ear Height.....	Med. Low
Ear Flex.....	Semi-Flex
Cob Color.....	Lt. Red
Husk Tightness.....	Avg.
Kernel Texture.....	Semi-Floury
Test Weight.....	Med.
Continous Corn.....	Very Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	9
Drought Tolerance.....	8

Strengths:

- High Yielding Performance Grain and Silage
- Very good combination of agronomics, plant health, dark green color, and ear flex
- Hybrid package adapted to varying soil types and grower management
- First rate nutrition package, good north and south utilization

Weaknesses:

- Adequate weed control necessary on rows 36" or wider

Management:

- #1 choice for delayed harvest and continuous corn options
- Ear flex and kernel depth allows for various population dynamics

Silage



Grain



EXPECT MORE FROM YOUR BRAND
 SEEDCORN.COM



6271

Relative Maturity: 112 Days

Available As:

Agrisure GT MCT6271
3000GT MCT6273

Strengths:

- Exceptional yield potential on all soil types
- Very good emergence and seedling vigor
- Good disease tolerance, especially against Goss's Wilt
- Excellent late season plant intactness and grain drydown

Weaknesses:

- Average silage quality hybrid

Management:

- First choice for early planting corn, and corn after corn production
- Responds favorably to fungicide applications

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1300
Black Layer GDU's.....	2690
Plant Populations.....	28-36K
Emergence.....	7
Seedling Vigor.....	8
Root Strength.....	8
Stalk Strength.....	8
Plant Height.....	Med.
Leaf Angle.....	Horizontal
Ear Height.....	Med.
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Avg.
Kernel Texture.....	Med.
Test Weight.....	Above Avg.
Continous Corn.....	Very Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	8

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



Relative Maturity: 114 Days

Available As:

Conventional MC6470

Plant Characteristics And Agronomics

50% Silking GDU's.....	1300
Black Layer GDU's.....	2740
Plant Populations.....	28-34K
Emergence.....	9
Seedling Vigor.....	8
Root Strength.....	8
Stalk Strength.....	8
Plant Height.....	Med. Short
Leaf Angle.....	Semi-Erect
Ear Height.....	Med.
Ear Flex.....	Semi-Flex
Cob Color.....	Lt. Red
Husk Tightness.....	Avg.
Kernel Texture.....	Semi-Floury
Test Weight.....	Avg.
Continous Corn.....	Excellent
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	8

Strengths:

- Excellent late season plant health and intactness
- High yield punch capabilities across various yield environments
- Above average emergence and seedling vigor

Weaknesses:

- Limited movement north of zone

Management:

- Semi-erect leaf canopy makes hybrid adaptable to narrow row systems
- Plant in low to high production soils
- Great emergence tolerates no-till and corn after corn

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM

	MC628	MC630	MC6580	MC590	MC6750	MC6890
Options	Conv., GT, 3000GT	Conv., GT	Conv., Gt, 3000GT	Conv.	Conv., GT, 3000GT	Conv., GT, Vip 3111
Relative Maturity	115	115	115	116	117	118
Populations	26k-34k	28k-34k	28k-34k	26k-32k	28k-34k	26k-32k
Plant Height	Tall	Tall	Med-Tall	Tall	Tall	Tall
Ear Height	Med-High	Med-High	Med-High	Med-High	Med-High	Med-High
Ear Flex	Semi-Flex	Semi-Flex	Semi-Flex	Flex	Semi-Flex	Flex
Test Weight	Above Avg.	High	Average	Average	High	Average
Cob Color	Red	Red	Lt. Red	Lt. Red	Red	White
Kernel Texture	Semi-Hard	Hard	Semi-Floury	Semi-Floury	Hard	Floury
Emergence/Early Growth	8	9	8	8	9	8
Stalk Strength	8	9	8	8	8	9
Root Strength	9	9	9	9	8	9
Dry Down	8	9	9	7	7	7
Drought Tolerance	7	9	8	9	8	7
Disease Tolerance	9	8	8	7	8	7
Grain Yield	7	9	8	8	7	8
Silage Yield	7	9	9	8	8	9
Fiber Digestibility	7	7	8	8	8	9
Starch Digestibility	8	6	9	9	6	8
Milk Per Ton	8	7	9	9	8	8
Comments	Good for High Stress Environments	High Yielding Grain Hybrid, Hard Grain	Traited Top Quality Silage Hybrid	Consistent Performance and Yield	Solid Agronomic Grain Hybrid	Top End Silage Quality and Yield



628

Relative Maturity: 115 Days

Available As:

Conventional MC628
 Agrisure GT MCT628GT
 3000GT MCT628300GT

Strengths:

- Very strong agronomic package with elevated disease tolerance
- Excellent tonnage and grain yield potential
- Good grain quality produces abover average silage
- Great late season plant intactness

Weaknesses:

- Not suited for south of Kentucky

Management:

- Well suited for higher populations and narrow rows
- Excellent choice for continuous corn

**Plant Characteristics
 And Agronomics**

50% Silking GDU's.....	1310
Black Layer GDU's.....	2780
Plant Populations.....	26-34K
Emergence.....	8
Seedling Vigor.....	7
Root Strength.....	9
Stalk Strength.....	8
Plant Height.....	Tall
Leaf Angle.....	Erect
Ear Height.....	Med. High
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Tight
Kernel Texture.....	Med. Hard
Test Weight.....	Above Avg.
Continous Corn.....	Excellent
Herbicide Sensitivity.....	None
Disease Tolerance.....	9
Drought Tolerance.....	7

Silage



Grain



EXPECT MORE FROM YOUR BRAND
 SEEDCORN.COM



630

Relative Maturity: 115 Days

Available As:

Conventional MC630
Agrisure GT MCT630GT

Strengths:

- Industry leading yield performance
- Large kernel, high test weight grain
- Excellent agronomic package

Weaknesses:

- Performs average on less productive fields

Management:

- Keep grain segregated for possible market premiums
- Plant in high yield environments at higher pops
- Responds well to corn on corn situations and delayed harvest

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1350
Black Layer GDU's.....	2800
Plant Populations.....	28-34K
Emergence.....	9
Seedling Vigor.....	8
Root Strength.....	9
Stalk Strength.....	9
Plant Height.....	Tall
Leaf Angle.....	Erect
Ear Height.....	Med. High
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Semi-Loose
Kernel Texture.....	Hard
Test Weight.....	High
Continous Corn.....	Excellent
Herbicide Sensitivity.....	None
Disease Tolerance.....	9
Drought Tolerance.....	9

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



6580

Relative Maturity: 115 Days

Available As:

Conventional	MC6580
Agrisure GT	MCT6581
3000GT	MCT6583

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1330
Black Layer GDU's.....	2810
Plant Populations.....	28-34K
Emergence.....	8
Seedling Vigor.....	8
Root Strength.....	9
Stalk Strength.....	8
Plant Height.....	Med. Tall
Leaf Angle.....	Semi- Erect
Ear Height.....	Med. High
Ear Flex.....	Semi-Flex
Cob Color.....	Lt. Red
Husk Tightness.....	Avg.
Kernel Texture.....	Semi-Floury
Test Weight.....	Med.
Continous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	8

Strengths:

- Wide area of adaptation, especially in the deep south
- Maintains yield and stature in the most stressed environments
- Performs well across varying soils and conditions
- Excellent silage yield potential
- Very good silage quality and starch availability

Weaknesses:

- Average grain dry down if utilizing north of optimum area

Management:

- Suited for a wide population range and positioning flexibility
- Excellent choice for high moisture grain or dry grain feeding

Silage



Grain



EVERY MORE FROM YOUR BRAND
SEEDCORN.COM



Relative Maturity: 116 Days

Available As:

Conventional MC590

Plant Characteristics And Agronomics

50% Silking GDU's.....	1355
Black Layer GDU's.....	2840
Plant Populations.....	26-32K
Emergence.....	8
Seedling Vigor.....	8
Root Strength.....	9
Stalk Strength.....	8
Plant Height.....	Tall
Leaf Angle.....	Semi-Erect
Ear Height.....	Med. High
Ear Flex.....	Flex
Cob Color.....	Lt. Red
Husk Tightness.....	Semi-Loose
Kernel Texture.....	Semi-Floury
Test Weight.....	Avg.
Continous Corn.....	Good
Herbicide Sensitivity.....	None
Disease Tolerance.....	7
Drought Tolerance.....	9

Strengths:

- Robust, high sugar with great tonnage and grain yield
- Scored in top 3 of World Forage Analysis Superbowl
- Large root system aids heat and drought tolerance
- Widely adapted across cropping systems
- Very digestible grain quality earned M.E.A.T. recognition

Weaknesses:

- Lower test weight, but makes up for it in raw yield

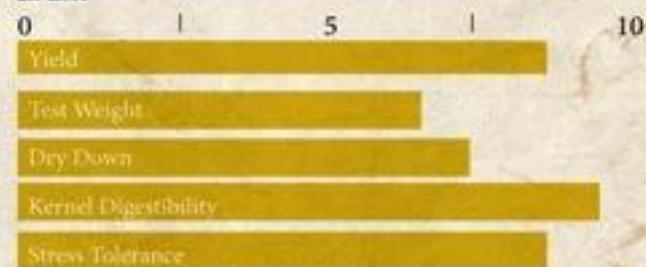
Management:

- High starch availability levels may require ration adjustment
- Responds favorably to late season fungicide treatments
- Great silage and grain choice for average to top-end environments
- Maximum performance on well drained soils

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



Relative Maturity: 117 Days

Available As:

Conventional MC6750
Agrisure GT MCT6751
3000GT MCT6753

Plant Characteristics And Agronomics

50% Silking GDU's.....	1345
Black Layer GDU's.....	2850
Plant Populations.....	28-34K
Emergence.....	9
Seedling Vigor.....	8
Root Strength.....	8
Stalk Strength.....	8
Plant Height.....	Tall
Leaf Angle.....	Erect
Ear Height.....	Med. High
Ear Flex.....	Semi-Flex
Cob Color.....	Red
Husk Tightness.....	Avg.
Kernel Texture.....	Hard
Test Weight.....	High
Continous Corn.....	Excellent
Herbicide Sensitivity.....	None
Disease Tolerance.....	8
Drought Tolerance.....	8

Strengths:

- Top of the line plant health, agronomics, and stress tolerance
- Excellent yield punch and great test weight
- Great adaptability to low and high yielding environments
- Excellent performance from the central corn belt to the deep south

Weaknesses:

- Average dry down in northern area of adaptation

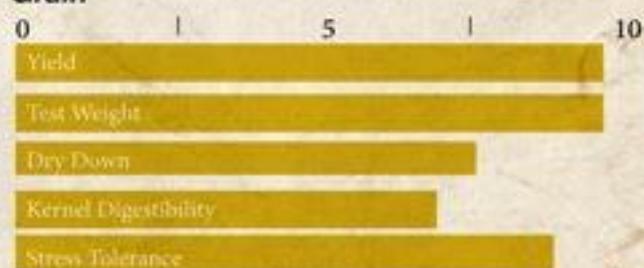
Management:

- Keep grain segregated for possible market premiums
- Very good choice for a variety of soil types and management situations

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



6890

Relative Maturity: 118 Days

Available As:

Conventional	MC6890
Agrisure GT	MCT6891
Agrisure 3122	MCT6894

**Plant Characteristics
And Agronomics**

50% Silking GDU's.....	1355
Black Layer GDU's.....	2865
Plant Populations.....	26-32K
Emergence.....	8
Seedling Vigor.....	9
Root Strength.....	9
Stalk Strength.....	9
Plant Height.....	Tall
Leaf Angle.....	Semi- Erect
Ear Height.....	Med.High
Ear Flex.....	Flex
Cob Color.....	Light Red
Husk Tightness.....	Avg.
Kernel Texture.....	Floury
Test Weight.....	Med
Continous Corn.....	Fair
Herbicide Sensitivity.....	None
Disease Tolerance.....	7
Drought Tolerance.....	7

Strengths:

- Excellent feeding grain on flexible ears
- Consistent top end quality silage yields
- Excellent roots and stalks for dependable harvest window
- White cob hybrid with floury grain quality

Weaknesses:

- Limited movement north of zone for dry grain production

Management:

- Yield response increase when positioned on irrigated acres in the south
- Best suited for top end performance on average to highly productive fields maturity hybrid

Silage



Grain



EXPECT MORE FROM YOUR BRAND
SEEDCORN.COM



MASTERGRAZE...

- BMR (3)
- Tillering
- Management Guide
(available)

SEED TREATMENTS

- Untreated
- Conventional
 - Maxium, Dynasty, Apron, Actellic
(early season fungicide)
- Some carryover with Poncho
- Cruiser Maxx Corn 250
- Cruiser Maxx Corn 1250

Seed Treatments

*50% Refuge Required in Cotton Growing States



CruiserMaxx[®] Corn 250 insecticide/fungicide seed treatment protects corn seed and seedlings against early-season insects and seed- and soil-borne diseases leading to increased plant stand, uniformity, vigor and yield potential. CruiserMaxx Corn 250, a combination of separately registered products containing Cruiser[®] 5FS seed treatment insecticide and Maxim[®] Quattro seed-applied fungicide, offers all the benefits of Cruiser Extreme[®] 250 insecticide/fungicide, plus enhanced protection against Fusarium.

Cruiser Extreme 250 is a seed company-applied combination of separately registered products that deliver 0.25 mg a.i./seed of Cruiser 5FS insecticide plus three fungicides: Apron XL, Maxim XL and Dynasty.

CruiserMaxx Corn 250 is a combination of separately registered products containing Cruiser 5FS seed treatment insecticide and Maxim Quattro seed applied fungicide.

Apron XL[®], Cruiser[®], Cruiser Extreme[®], CruiserMaxx[®], Dynasty[®] and Maxim[®] are registered trademarks of a Syngenta Group Company.



CruiserMaxx[®] Corn 1250 insecticide/fungicide seed treatment protects corn seed and seedlings against early-season insects and seed- and soil-borne diseases leading to increased plant stand, uniformity, vigor and yield potential. CruiserMaxx Corn 1250, a combination of separately registered products containing Cruiser[®] 5FS seed treatment insecticide and Maxim[®] Quattro seed-applied fungicide, offers all the benefits of Cruiser Extreme[®] 1250 insecticide/fungicide, plus enhanced protection against Fusarium.

Cruiser Extreme 1250 is a seed company-applied combination separately registered products that deliver 1.25 mg a.i./seed of Cruiser 5FS insecticide plus three fungicides: Apron XL, Maxim XL and Dynasty.

CruiserMaxx Corn 1250 is a combination of separately registered products containing Cruiser 5FS seed treatment insecticide and Maxim Quattro seed applied fungicide.

Apron XL[®], Cruiser[®], Cruiser Extreme[®], CruiserMaxx[®], Dynasty[®] and Maxim[®] are registered trademarks of a Syngenta Group Company.

Early-Season Insects and Disease



Wireworm on corn root

- Threaten corn in vulnerable stage
- Inhibit emergence, stand and plant health
- Lost yield potential is irreversible

Seed- and Soil-borne Pathogens



- Seed- and soil-borne diseases stunt seedling growth
- *Fusarium verticillioides* can cause the plant to wilt and decay
- *Fusarium verticillioides* can produce mycotoxins, which can cause significant grain quality issues

Proven Early-Season Insect and Disease Protection



- Combination of Cruiser[®] insecticide and Maxim[®] Quattro fungicide
- Protects against early-season insects and disease
- Increases plant stand, uniformity, vigor and yield potential

Four-way Formulation Against Disease

 Maxim[®] Quattro



- Unmatched broad-spectrum disease protection
- Four modes of action
- Best-in-class *Fusarium* protection



+



Insect Protection

- Wireworm
- Seedcorn maggot
- White grub*
- Grape colaspis
- Corn flea beetle
- Southern corn leaf beetle
- Black cutworm
- Chinch bug
- Sugarcane beetle
- Billbug**
- Corn rootworm**
- Thrips
- Southern green stinkbug
- Seedcorn beetle
- Corn leaf aphid

Disease Protection

- Seed-borne
- Fusarium*
- Cladosporium*
- Helminthosporium*
- Diplodia (Stenocarpella)*
- Aspergillus*
- Penicillium*
- Sporisorium*
- (Sphacelotheca)*
- Mucor*
- Rhizopus*
- Soil-borne
- Rhizoctonia*
- Pythium*
- Fusarium*
- Macrophomina*
- Colletotrichum*
- Diplodia (Stenocarpella)*
- Penicillium*

*Including Japanese beetle larvae, European Chafer larvae, true white grub, annual white grub and May/June beetle larvae.

**Requires the higher application rate of Cruiser (1.25 mg ai/seed). Corn rootworm protection includes Mexican, Northern, Southern and Western varieties.

Cruiser Maxx Corn 250/500/1250 are on-seed applications of Cruiser SFS seed treatment insecticide delivered at 1.25 mg ai/seed rate and Maxim Quattro fungicide. Cruiser, CruiserMaxx and Maxim are trademarks of a Syngenta Group Company.

EUROPEAN CORN BORER



Injury Description: Damage to ear and stalk
Chews tunnels which can cause plant to fall over

Insect Description: Tan or black head on beige body
Two dark spots on each side of abdominal segments
Roughly 1" in length
Adults are light yellow or brown moths
They have wavy, dark lines on their wings

EAR WORM



Injury Description: Feed on ear tip kernels
Feed in whorl causing shredded leaves

Insect Description: Various colors, from green to brown or pink
Light and dark stripes running down body
Up to 1 ½" long
Adults are light yellow or tan with dark marks on forewing
Rear wings are paler with darker border

ROOT WORM



Northern



Southern



Western

Injury Description: Larvae feed on/ tunnel into roots
Potential Lodging or Goose-necking
Adults feed on leaf tissue and clip corn silks

Insect Description: Larvae have a white body with a brown head
Larvae have a dark plate on the tail end
They grow to $\frac{1}{2}$ " in length
Adults Vary in color and patterns as shown
Adults grow to roughly $\frac{1}{4}$ " in length

ARMYWORM



Injury Description: Feeding on leaves, can cause sever defoliation
Leaves can rang from ragged to complete defoliation
Typically starts on the lower leaves and moves up

Insect Description: Larvae grow from 1½-2"
Their bodies are light yellow to gray with stripes down the body
Adults are pale brown moths
Adults have dots in the middle of their wings

CUTWORM



Injury Description: Irregular wholes in leaves
Notched and cut plants
Dead plants

Insect Description: Grow up to 1¾" in length
They vary in color from yellow and green to brown or dark gray

GOSS'S WILT



Occurrence Time: Any time during growing season

Injury Description: Light gray to dark tan, shiny lesions on leaf surface
Freckling along with lesions, which can grow together
Some plants may see wilting and stalk degradation

Favorable Conditions: Fields with existing corn residue
Bacteria enters through wounds caused by hail, insects, etc..

GRAY LEAF SPOT



Occurrence Time: Initial infection- mid to late June
Rapid Spread occurs July or August

Injury Description: Light tan lesions that turn gray
Can have light halo around lesions when held to light
Lesions can grow together killing leaves

Favorable Conditions: Warm temperatures with high humidity/long dew periods
More prevalent in previously infected fields

NORTHERN LEAF BLIGHT



Occurrence Time: During or after silking

Injury Description: Long cigar shaped lesions
Lesions first appear on lower leaves
Lesions are initially greenish gray but turn gray or tan

Favorable Conditions: Moderate temperatures and heavy dew

SOUTHERN LEAF BLIGHT



UGA5076079

Occurrence Time: Mid-Whorl to maturity

Injury Description: Tan lesions with brown border that vary in shape and size
Lesions are elongated and between $\frac{1}{4}$ - $\frac{1}{2}$ " wide x 1" long

Favorable Conditions: Warm, wet weather
Continuous corn with previous years residue present

SOUTHERN RUST



Occurrence Time: After Silking

Injury Description: Numerous orange pustules on leaf surface in dense clusters
Area around pustules starts green but yellows, then browns
Heavily infected leaves can wither and die

Favorable Conditions: Favors Warm Temperatures with Relatively High Humidity

COMMON RUST

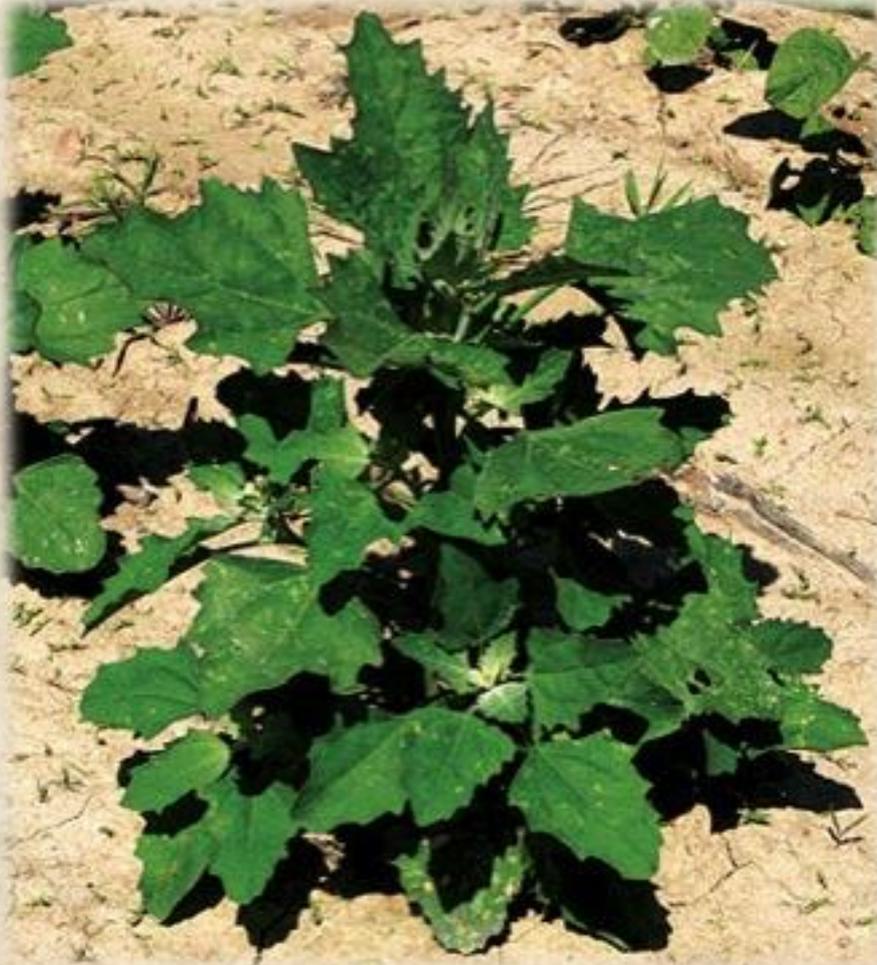


Occurrence Time: Usually after silking, sometimes earlier

Injury Description: Brick-red pustules appear on upper and lower leaf surfaces
Leaf surface around pustules can become yellowed
Severe cases can cause leaves to die

Favorable Conditions: Favors moderate temperatures and heavy dews

LAMBSQUARTER



- Can reach 3 ft in height
- Seedling leaves are in triangular shape with a grey cast
- Pre-emergent herbicides reduce early-season competition from lambsquarters
- Pre-emergence suggestions- Atrazine, Lumax, Radius, SureStart
- Post-emergence applications of glyphosate can be inconsistent for control of lambsquarters
- Post-emergence suggestions- 2,4-d, Callisto, NorthStar, Status
- Apply POST treatments when lambsquarters are less than 6"

KOCHIA



- Early-emerging summer annual species commonly found in the western United States.
- Dicot weed in the Chenopodiaceae family
- In Idaho this weed first evolved resistance to Group B/2 herbicides in 1989 and infests roadsides, and wheat.
- ALS inhibitors (**B/2**)
- Most effective form of control is tillage

NIGHTSHADE



- Broadleaf weed
- Early controls is critical because this weed becomes very difficult to control late post emergence
- PRE herbicides: Products containing acetochlor, Atrazine, Balance, Pro, Hornet, Lumax, Outlook, and Python.
- POST herbicides: Aim, Accent Gold, Basis Gold, Callisto, dicamba, Distinct, Hornet, bromoxynil,

MALLOW



- Most common in livestock situations and not as often in fields but slowly increasing
- Most effective herbicide with corn is (Status)
- Good canopy will generally choke this weed out so early control is vital.

REDROOT PIGWEED



- Redroot pigweed seed germination is favored by warm temperatures and high light conditions
- Row shading is huge help in reducing pigweed
- Common herbicides are (Clarity, Pursuit, Pinnacle, Linuron, Valant)

ANY QUESTIONS?