

LIMITED AVAILABILITY

Brand	Relative Maturity	Special/Unique Char.	Technology**		Pop. Range (in thousands)	Early Vigor	Staygreen	Heat Unit to Black Layer*	Stalk Strength
SB-778RR	76	Super early	RR		28-36,000	9	8	1739	8
SB-383RR	82	Strong early emergence	RR		28-36,000	9	9	1960	9
SB-383YRR	82	Superior drought tolerance	RR/YGCB		28-36,000	9	9	1970	9
SB-2983RR/YG Plus	83	Very good heat tolerance	RR/YGPL	HFC	26-34,000	9	9	1970	9
SB-782YRR	83	Ex. early season vigor	RR/YGCB	HFC	26-32,000	9	8	1950	9
SB-492RR/YG Plus	94	Very good heat & drought tol.	RR/YGPL	HFC/HES	26-34,000	8	9	2250	9
SB-5595RR	95	No-till hybrid	RR	HFC/HES	26-34,000	9	9	2251	9
GL-898 Quad	98	High yielding, white cob	GT/LL/CB/RW		26-36,000	9	8	2302	9
K-601Y	100	Very high yield potential	YGCB	HFC	26-34,000	9	9	2370	9
KX-80-02RRHXT	102	High yielding	RR/HXT		29-38,000	9	9	2350	8.5
SB-403YRR	103	Consistent ear size	RR/YGCB		29-38,000	8	8	2435	9
SB-503RR	103	Defensive hybrid for refuge	RR		28-36,000	9	8.5	2430	9
K-505Y	105	Very good drought tolerance	YGCB	HES	26-36,000	8	9	2450	8
KL-705LL	105	Excel. for corn-on-corn	LL		29-39,000	8.5	8.5	2440	8.5
SB-405RR	105	RR version of K-405	RR	HFC	24-34,000	9	9	2450	9
SB-707RR	107Sm	cob, high shellout, ex. grain quality	RR		26-34,000	9	8.5	2460	9
SB-HCRR	107	RR version of K-HC	RR		26-34,000	9	9	2540	8.5
SB-708RR	108	Excel. for corn-on-corn	RR		32-39,000	8.5	9	2538	9

Small Quantities of the following Hybrids are available:

SB-2977RR	SB-2982RR
SB-705YGT	K-600
K-HC+	SB-709YGPlus
SB-781RR	SB-787RR
SB-788RR/YGPlus	RFS-610RR

Terms & Conditions of Sales

Only authorized returns will be accepted by the company, and these returns will be subject to a 10% restocking charge. All returns must be in the original, unopened and resalable bags. All accounts not settled by the due date of March 15, except for prior arranged contracts, will have further legal action taken.

Kussmaul Seeds must be notified of any returns prior to June 30 of the planting year in order to tally up our yearly sales and pay all royalties and breeder fees on seed sold. We will not accept any returns from customers or dealers if they have not contacted the office about any returnable seed by June 30.

All seed ordered from Kussmaul Seeds for 2010 planting is due in full by March 15. Any seed ordered after March 15 is due in full 20 days from date of delivery. Interest charges will begin when any account is 15 days past due. Interest will begin accumulating at 15 days past due at the maximum percentage allowed by law. Kussmaul Seed Co. will not issue any cash refunds, but will apply any refunds earned towards the next years seed purchases.

All hybrids must pass industry standard germination test to be eligible for sale on this list.

Sold mostly as plateless

No Guarantee, No Replant, No Return

CORN 76 - 108 RM

Root Strength	Drought Tolerance	Corn-on-Corn	Harvest Method-Combine	Harvest Method-Ear Pick	Test Weight	Ear Type	Height	Soil Types	Leaf Canopy	Brand
8	8	8	9	7	9	FX	M	All	SE	SB-778RR
9	9	4	9	8	8	G	M/T	Well drained, high fertility	E	SB-383RR
9	9	4	9	8	8	G	M/T	Well drained, high fertility	E	SB-383YRR
9	9	7	9	7	9	SF	M/T	All	SE	SB-2983RR/YG Plus
9	7	9	9	8	8	F	T	All	E	SB-782YRR
8	8	7	9	8	8	G	M/T	Avoid sandy soils unless irrigated	E	SB-492RRYG Plus
9	9	7	9	9	8	F	M/T	All - high fertility	SE	SB-5595RR
9	8.5	7.5	9	7	8.5	F	M/T	Highly productive soils	SE	GL-898 Quad
8	8	8	9	9	9	G/SF	M	All	SE	K-601Y
8.5	8	9	9	9	8.5	F	T	All	SE	KX-80-02HXT
9	9	8	9	9	9	FX	M/T	All	E	SB-403YRR
9	8	8	9	7	8	SF	M	All	SE	SB-503RR
8	9	8	9	8	8	SF	M	Well drained	E	K-505Y
8	8.5	9	9	8.5	9	F	M/T	All	WD	KL-705
8.5	9	8	9	9	8.5	F	T	Keep off dry, sandy soils	SE	SB-405RR
9	8	8	9	7	9	SF	T	All	E	SB-707RR
8.5	9	7.5	9	8	9	B/G	M	Don't use in continuous corn on corn	E	SB-HCRR
8	9	9	9	7	8	SF	M/T	All rotations and soils	SE	SB-708RR



Corn Plant Nutrients Needed Average Soils

Soil pH 6.2-6.5

125 Bu. Per Acre

<u>Actual Nitrogen ("N")</u> 187 Lbs	<u>Potassium P2O5</u> 40-50 Lbs	<u>Potash K2O</u> 30-40 Lbs
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150 Bu. Per Acre

<u>Actual Nitrogen ("N")</u> 225 Lbs	<u>Potassium P2O5</u> 45-55 Lbs	<u>Potash K2O</u> 35-45 Lbs
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175 Bu. Per Acre

<u>Actual Nitrogen ("N")</u> 263 Lbs	<u>Potassium P2O5</u> 50-63 Lbs	<u>Potash K2O</u> 40-50 Lbs
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Credits should be taken for:

Manure	Tons Applied
Alfalfa	% of Stand
Residue	Stalks
Soybeans	60# Nitrogen

Average Per Bu. Corn For 150 Bu. Corn

<u>Actual Nitrogen ("N")</u> 1.5 Lbs	<u>Potassium P2O5</u> .33 Lbs	<u>Potash K2O</u> 26 Lbs
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Calculating Grain Weight Shrinkage in Corn Due to Mechanical Drying

One of the factors involved in mechanically drying grain is the "expense" of the weight lost during the drying process. Grain buyers use a number of procedures to determine how much "dry" corn they will pay for when "wet" corn is delivered for sale.

The majority of weight loss from mechanical drying comes from water that is removed from the grain. The number of "dry" bushels remaining from a given number of "wet" bushels dried to a given final moisture content can be determined by the equation provided below:

"Wet" bu. = lbs. of "wet" corn divided by 56

SF = Shrink factor from the following table based on final desired grain moisture content

PR = Points of moisture removed (original moisture minus final moisture content)

Example: 56,000 lbs. of grain at 26% moisture to be dried to 15% moisture.

$$\begin{aligned} \text{"Dry" bu.} &= 1,000 \text{ "Wet" bu.} - (1,000 \times 0.01176 \times 11) \\ &= 1,000 - 129.36 \\ &= 870.64 \end{aligned}$$

Water Shrink Factors for Drying Shelled Corn to Various Moisture Levels

Final Moisture (%)	Water Shrink Factor (shrink/point)
15.5	0.01183
15.0	0.01176
14.0	0.01163
13.0	0.01149
12.0	0.01136

Source: Adapted from Purdue Extension publication NCH-61, Calculation Grain Weight Shrinkage in Corn Due to Mechanical Drying.

How reliable is the information provided for new product release?

Tens of thousands of hybrids are tested at hundreds of locations each year. Preliminary tests by research personnel typically involve replicated plots in which up to 20 agronomic traits and up to eight disease and insect pests are measured each year. Strip tests, measuring plant population, root strength, stalk strength, yield, and test weights are used to more closely resemble actual field practices. The goal is to identify new, widely adapted hybrids that can increase farmers' net profit with consistent higher yield, lower kernel moisture at harvest, or easier harvest ability than current popular hybrids already being used.

Modern hybrids come from modern testing programs. Product performance is critical to increasing seed corn market share. Most seed corn companies are reputable, and well intentioned. Their future depends on repeat business. Decisions on new product releases are meant to please the customer. Poor products are only released by mistake. Kussmaul Seed Co. makes every attempt to bring more profit per acre to our customers by increasing our testing prior to release of any new product.

Farmers continue to want the most profit, but the strategy for achieving it changes continually. Our strategy is to provide hybrids that farmers want to buy!

Different Regions Require Different Hybrids

Hybrids Grown North of their Maturity Zone

– Late, full season hybrids characteristics:

- Flower relatively early
- Moderate plant height
- Adequate test weight due to shorter kernel filling period
- Good yield because higher yields are expected from late full season hybrids
- Adequate ear drydown because time between physiological kernel maturity and harvest is reduced
- Substantially higher moisture
- Greater risk to reaching yield potential because of early frost and fewer GDUs during the season

Hybrids Grown West of their Maturity Zone

- Require more heat and drought tolerance
- Can sacrifice ear and stalk rot tolerance due to drier conditions
- Have few test weight issues from lower kernel moisture at harvest due to drier and windier conditions
- Require better stalk strength, staygreen and root systems to tolerate windier conditions
- Require better ear retention and able to adapt to higher plant populations

Hybrids Grown East of their Maturity Zone

- Require more leaf, ear, root and stalk rot tolerance due to increased rainfall and higher humidity
- Require virus tolerance near Ohio River Valley and where Johnsongrass is present.