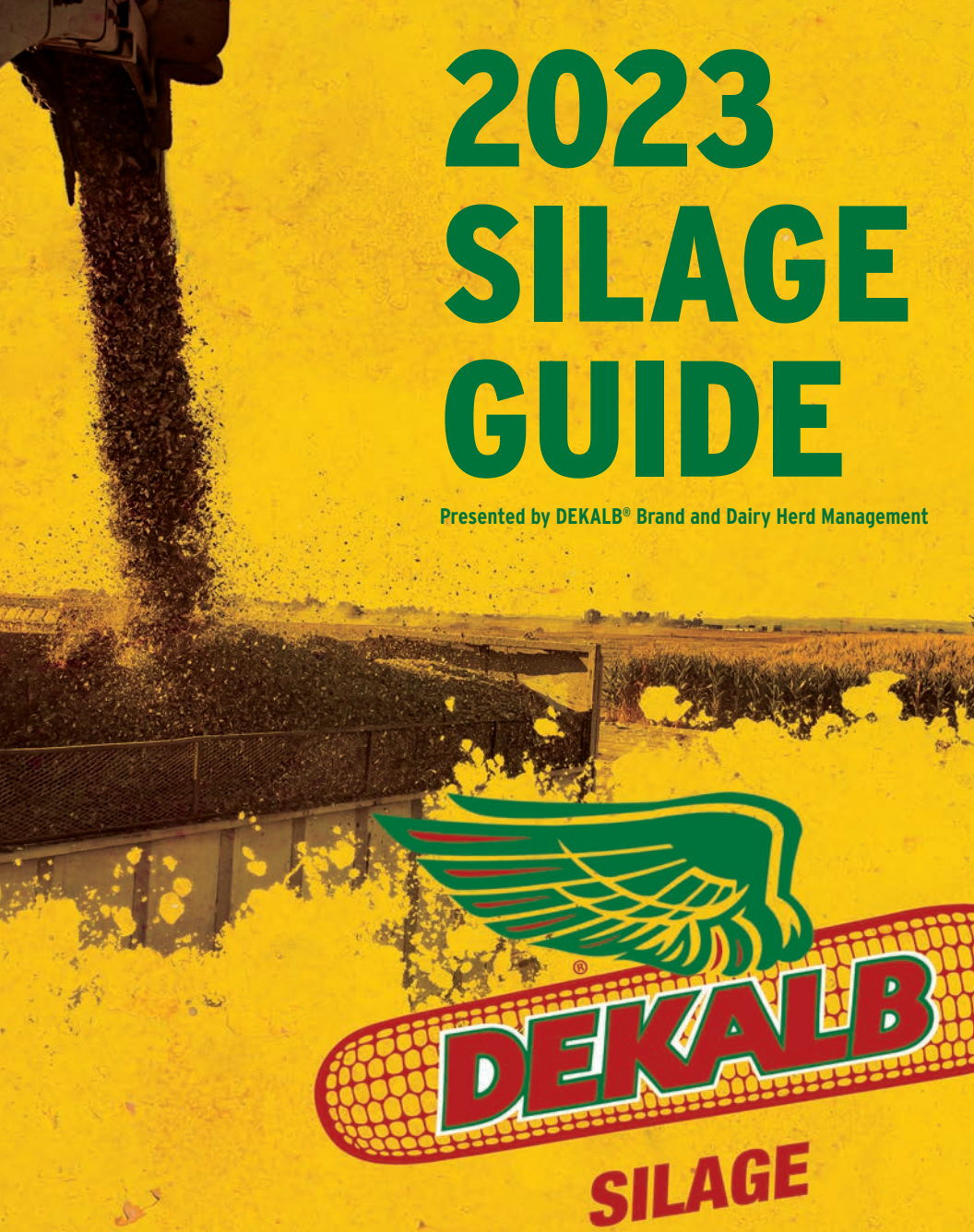
2023 SILAGE GUIDE

Presented by DEKALB® Brand and Dairy Herd Management



Quality Corn Silage Starts with the Right Genetics

Navigate Through Disease Challenges with Timely Fungicide Application

Soil fertility is the foundation for growing quality corn silage, but third-generation Michigan farmer Ben Chaffin knows you must also have the right genetics and a valued industry partner to navigate challenges and harvest a successful crop. He's found that with DEKALB® brand corn.

"You have to have the right genetics to grow a good crop," Chaffin says. "And from there, it's how the dealer helps you make prescriptions, scout fields and spray for diseases."

For Chaffin, who raises and markets corn silage to dairies, DEKALB brand offers a wide range of genetics in a variety of day lengths as well as an attractive chemical program that helps complete his crop management plan.

With DEKALB brand, silage growers can maneuver through variables like costly diseases growers might face throughout the growing season.

PLAN TO PLANT

Variety Selection Can Help Mitigate Diseases

Quality corn silage begins with fertile soil as its foundation. Monitoring nutrients by completing soil tests and following up with nitrogen application when needed helps Chaffin establish a baseline for planting.

Then, it's all about product selection.

Matching corn hybrid to soil type is key to growing a quality crop, Chaffin says.

Hybrid selection can also help farmers put their best foot forward when it comes to managing diseases like tar spot, which is becoming more common throughout the Midwest and eastern United States.

According to Dr. Lon Whitlow, North Carolina State University professor emeritus, tar spot is a fungus that results in rapid senescence, or the maturing and drying process of the plant. He says infection levels can reach as high as 50% severity in just a few weeks after the initial infection. Plants start to dry when the infection reaches 30% infection.

While the fungus that causes tar spot is not known to produce mycotoxins, Whitlow says crops stressed by water loss or disease are more susceptible to fungal infections. Fungi like fusarium can produce mycotoxins, which are known to negatively affect dairy cattle, he adds.

Hybrid selection is the first step growers can take to help head off potential disease issues like tar spot, Whitlow notes.

"There are some hybrids or products that show better tolerance," Whitlow explains. "No hybrid is currently immune to the disease, but you can select hybrids that have better tolerance than others."

PLAN TO GROW

Management Strategies Help Combat Disease

Incidence of diseases like tar spot can be mitigated during the growing season by employing field management practices and timely applying fungicide.

Whitlow says irrigation management is one strategy that can help reduce tar spot.

"You want to reduce the extended periods of wetness of the leaf," he notes. "Research has shown that if the leaf is wet more than seven hours per day, there is a greater incidence of disease."

Increased tillage might also help alleviate disease issues, but Whitlow says if neighboring fields have problems with tar spot, wind can spread the spores from farm to farm.

"Increased tillage reduces plant residue on the soil surface and, therefore, the overall number of spores available in a region," Whitlow says.

Fungicide use in corn also offers an effective means for reducing the incidence of tar spot. Research data can be helpful to farmers for selecting the best product to help manage the disease, Whitlow says. Detailed test results can be found at https://cropprotectionnetwork.org/.

"Proper management is important because tar spot overwinters in the soil residue, so you need to reduce residue on the soil surface," Whitlow explains. "Also, consider crop rotation because corn after corn on the same land will have more fungal disease problems."

"We can't control Mother Nature, so we try to control the variables."

— Ben Chaffin, Michigan silage grower

PLAN TO HARVEST

Fungicide Application: Work to Preserve Plant Moisture

Because tar spot can develop as early as the third or fourth leaf stage, Whitlow says field scouting is especially important in determining when the corn crop should be harvested.

"One caveat is if we plant really later-maturity hybrids for that area and fungicide is applied, it will push you out of the harvest window," explains Mark Hockel, Eagle Ag Consulting forage agronomist. "We're not doing it to the later hybrids but to the early-maturity hybrids so that they match up better. This has produced our best-yielding silage the last two years on hybrids that are very early maturity."

Overall, applying a fungicide allows corn to stay at optimal moisture levels for a longer time, helping to protect against lost yield at the same time it increases the digestibility of the crop, Hockel says.

In 2012, a drought year, University of Minnesota Extension researchers studied the effects of fungicide application on corn. Hockel says researchers found a huge response in terms of moisture use efficiency (or water use efficiency—WUE) to fungicide-applied corn.

"In silage production, we're looking to keep that whole plant healthy, which adds value and allows it to be more efficient with the water it contains."

— Mark Hockel, forage agronomist, Eagle Ag Consulting

"We've found that if we put fungicide on a little earlier, moisture use efficiency increases," he explains. "In silage production, we're looking to keep that whole plant healthy, which adds value and allows it to be more efficient with the water it contains."

As farmers continue to push for higher yields, applying fungicide to corn increases its WUE. And on dry land, Hockel says that's where fungicide application has some real benefits.

PLAN TO FEED OUT

A Healthy Crop Means Stepped-Up Palatability

Hockel says the decision to apply fungicide to corn is a win-win when it comes to feedout. While needs are different for every farmer, the win comes in both tons and quality, he notes.

A healthier corn plant not only is better able to fight off diseases like tar spot and produce more desirable yields but also delivers a more palatable crop at feedout.

"Higher quality is going to be seen in milk production for dairies or in rate of gain on the beef side," he says.

Corn harvested too dry can lead to poor silage fermentation and lower feeding value of the silage, Whitlow explains.

"Poorly fermented silage is usually less palatable, less digestible," he says. "Field observations by producers suggest that tar spot reduces the feeding value of silage."

Growing quality silage is all about good management. For Chaffin, that starts by working with DEKALB brand.

Selecting the right traits helps him alleviate a lot of potential problems that other farmers might face.

"We can't control Mother Nature, so we try to control the variables," Chaffin says. "We do a good job on things we can control, like spray programs, soil testing, nutrients, planting the right hybrid and then harvesting at the right time. A lot of companies have corn. You've got to find the corn that works for you."

"Poorly fermented silage is usually less palatable, less digestible. Field observations by producers suggest that tar spot reduces the feeding value of silage."

— Dr. Lon Whitlow, professor emeritus, North Carolina State University

TOP DEKALB® CORN SILAGE PRODUCTS FOR 2023

Silage Proven: Products classified as Silage Proven meet a high standard of nutritional value of milk per ton and milk per acre and percentage starch.

Rating scale: 1 = Excellent, 9 = Poor

Value Added Traits:
VT2PRIB = VT Double PRO® RIB Complete® corn blend;
SSRIB = SmartStax® RIB Complete® corn blend

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ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Bt products may not yet be registered in all states. Check with your seed brand representative for the registration status in your state.

IMPORTANT IRM INFORMATION: RIB Complete® corn blend products do not require the planting of a structured refuge **except** in the Cotton-Growing Area where corn earworm is a significant pest. **See the IRM/Grower Guide for additional information. Always read and follow IRM requirements.**

Performance may vary, from location to location and from year to year, as local growing, soil and weather conditions may vary. Growers should evaluate data from multiple locations and years whenever possible and should consider the impacts of these conditions on the grower's fields.

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Before opening a bag of seed, be sure to read, understand and accept the stewardship requirements, including applicable refuge requirements for insect resistance management, for the biotechnology traits expressed in the seed as set forth in the Bayer Technology Stewardship Agreement that you sign. By opening and using a bag of seed, you are reaffirming your obligation to comply with the most recent stewardship requirements.

DEKALB® Corn Silage Products	Value Added Trait	Silage Yield @ 65% Moisture	NDFd 30 hr	% of Starch	Milk Per Ton	Milk Per Acre	GDUs to Mid-pollination	Emergence	Seedling Growth	Root Strength	Stalk Strength	Plant Height	Staygreen
DKC26-40RIB BRAND BLEND	VT2PRIB	3	2	2	1	2	1045	3	2	2	2	Med Tall	2
DKC31-10RIB BRAND BLEND	VT2PRIB	3	3	2	2	2	1061	1	1	3	3	Med Tall	3
DKC43-75RIB BRAND BLEND	VT2PRIB	3	2	2	2	3	1215	2	3	2	2	Medium	3
DKC44-80RIB BRAND BLEND	VT2PRIB	2	2	2	2	2	1240	2	2	4	3	Med Tall	3
DKC45-07RIB BRAND BLEND	SSRIB	2	1	3	2	2	1195	3	3	3	3	Med Tall	2
DKC48-56RIB BRAND BLEND	SSRIB	2	2	3	2	2	1200	2	3	3	2	Med Tall	2
DKC51-25RIB BRAND BLEND	VT2PRIB	1	4	3	2	3	1300	3	3	3	3	Medium	3
DKC51-91RIB BRAND BLEND	SSRIB	2	1	2	2	2	1275	3	3	2	4	Medium	4
DKC52-18RIB BRAND BLEND	SSRIB	1	4	3	2	3	1285	3	3	3	2	Medium	2
DKC53-45RIB BRAND BLEND	SSRIB	2	1	2	2	2	1265	3	3	3	5	Medium	4
DKC53-94RIB BRAND BLEND NEW	SSRIB	2	1	2	2	1	1300	3	3	2	3	Med Tall	3
DKC54-38RIB BRAND BLEND	SSRIB	2	3	1	2	2	1300	1	2	2	2	Medium	3
DKC55-37RIB BRAND BLEND	SSRIB	3	3	3	2	2	1300	3	3	2	3	Med Tall	3
DKC55-53RIB BRAND BLEND	SSRIB	3	1	3	2	2	1330	3	2	3	3	Medium	2
DKC57-97RIB BRAND BLEND	SSRIB	2	3	2	3	2	1305	3	3	2	3	Tall	2
DKC58-34RIB BRAND BLEND	SSRIB	3	3	3	2	3	1330	4	3	2	2	Med Tall	2
DKC59-07RIB BRAND BLEND	SSRIB	2	1	2	2	1	1320	2	2	2	2	Med Tall	2
DKC61-80RIB BRAND BLEND	SSRIB	1	3	2	2	2	1365	2	2	3	3	Tall	3
DKC62-08RIB BRAND BLEND	SSRIB	3	3	3	3	3	1365	3	3	3	3	Medium	3
DKC63-57RIB BRAND BLEND	VT2PRIB	2	3	1	2	2	1330	3	2	3	3	Medium	2
DKC64-34RIB BRAND BLEND	SSRIB	2	2	2	2	2	1377	5	3	1	1	Med Tall	1
DKC64-44RIB BRAND BLEND	SSRIB	2	2	2	2	1	1350	3	3	3	3	Medium	2
DKC67-42RIB BRAND BLEND	SSRIB	2	3	3	3	2	1372	3	2	5	4	Med Tall	3
DKC67-66RIB BRAND BLEND	SSRIB	1	3	3	2	3	1370	2	2	3	2	Tall	2
DKC69-16RIB BRAND BLEND	SSRIB	3	3	3	2	3	1380	2	2	3	2	Med Tall	2
DKC69-98RIB BRAND BLEND	SSRIB	2	3	2	2	2	1400	3	3	3	3	Tall	2
DKC70-64RIB BRAND BLEND	SSRIB	1	3	3	3	2	1410	3	3	5	2	Tall	2
DKC70-94RIB BRAND BLEND NEW	SSRIB	2	3	2	2	2	1420	2	2	2	2	Med Tall	2

YIELD.
FEED.
SUCCEED.

A history of success starts with the strong fundamentals of DEKALB brand silage. Featuring outstanding digestibility, nutritional quality and high tonnage potential to help maximize your herd's productivity and realize a future of performance.

SILAGE

DEKALB.COM/SILAGE