AGChoice Newsletter

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The Price of Cheap

Bill Garner, Weir AGChoice General Manager

It is the end of 2013 as I write this article and talk to customers about prepay. I have heard a lot of the old sayings like, "Look at what I did last year and just do the opposite," or "If I had any luck, it is bad luck" or "I am looking for cheap because I can't afford anything else." These are just a few of the comments that I have been told this last week. After hearing these comments, I decided to write about "What is the price of cheap?" and what it can actually cost you in the long run.

Like I said earlier, I am writing this in the middle of prepay season, so I am getting a lot of calls on cheap priced chemical, and like the old saying goes, "If it sounds too good to be true, it probably is." This has been the case with some of the broker priced chemicals that customers are being called about. I have a word of caution so you know what you are getting: Brokers are not always completely truthful about their products, or more likely they don't understand what they are selling. There was a broker trying to sell a generic glyphosate product that he was saying "was fully loaded," and it did not have any surfactant in it at all. Another broker was selling a generic pre-product at a cheap price and comparing it to the newer version that has a different usage rate. In both of these cases, once the broker's products were compared to the regular products, they were not so cheap after all. Knowledge is key when it comes to buying cheap. It is always a sound practice to ask for a label of the product to see what you are actually getting just so you can compare apples to apples.

The same goes for feed, I have customers that come in and want a cheap feed to feed out their calves. The first thing I ask them is, "What are you trying to do? Are you trying to get your calves to market as cheap as possible, or are you trying to make the most profit that you can?" Most of them want to make as much profit as they can, so we go over to the computer and use the feed calculator to show how much the cheap feed actually costs them to reach their desired goal compared to the premium feed and how much less they spend getting to that goal. Again knowledge is the key, and all of our locations can help with these types of questions and solutions.

The other big thing that I hear a lot is that, "I can't afford ***Continued On Page 2...***

...Continued from Front Page that program." But what are you leaving on the table? The big example of this happened last year with the wheat fungicide. The customers that put fungicide on their wheat spent about $14-$20 per acre, but had a 20-25 bushel increase in yield and at $6.00 wheat, that is about $100- $130 per acreleft on the table if you did not spray fungicide. I do not know many investments that pay back that good in that short of time.

Another example is seed. There are many choices for seed and a wide range in cost, but is cheap seed really cheap when you harvest the crop and your yield is 7-10 bushel less on beans? A seven bushel bean yield loss at $12.00 is $84.00 per acre that is left on the table. I do not know of any soybean seed cost that is $84.00 more than the cheap priced seed.

There is something to be said for quality and service. The AGChoice/MFA personnel have the knowledge and tools to help with all of your decision making questions. MFA has not been around for 100 years by not having the best trained employees to help you with all of your farm-related decision making. Again knowledge is the key, and questions are always welcome here.

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Roundup Ready 2 Xtend

Robert Birney, Seed Sales Hepler

We have received a lot of questions lately about "Banvel beans." Hopefully we can help shed some light on what we can expect moving forward with some new products coming down the pipeline.

Roundup Ready 2 Xtend soybeans will have stacked trait tolerance to both glyphosate and Dicamba herbicides. The strategy aims to help deliver higher yield potential and peace of mind to farmers through advanced genetics and traits, combined with comprehensive weed management solutions. Anticipated availability pending regulatory approvals will be sometime this year. Farmers in Kansas should have access to these products for the 2015 growing season.

Alongside the new Dicamba resistant bean seed, Monsanto will have an in-crop herbicide Called Roundup Xtend. Roundup Xtend will be a pre-mix of Roundup with a low volatility Dicamba.

Monsanto claims that they have reduced volatility of the Dicamba by up to 90%, so we won't have to be as worried about the wind shifting direction directly after application and killing something off target like the neighbor's non-Dicamba tolerant soybeans or their garden. This will be another tool in our arsenal when combatting glyphosate resistance across the area. Use rates have yet to be released.

This stacked soybean product was built on the high yield potential of Genuity Roundup Ready 2 Yield soybean trait. It will also allow us the opportunity to incorporate Dicamba into our soybean weed management program, introducing an additional herbicide mode-of-action for improved control of resistant and other tough broadleaf weeds.

Farmers began using Roundup in their fields in the 1970s, and in 1996 farmers got the ability to use Roundup over the top of their soybeans. This was a big help. It allowed a non-selective herbicide to be used in crops and not harm the farmer's precious investment. With the broad use of Roundup as a "cure all," resistance to this mode of action inevitably started popping up.

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...Continued from Page 2 The Roundup Ready 2 Xtend technology will help farmers control this problem by adding one more tool to their weed management practices. This technology is intended to provide farmers with more consistent, flexible control of weeds, especially tough-to-manage and glyphosate-resistant weeds, and to help maximize crop yield potential.

Dicamba will help with our weed management solutions moving forward. This however is not the "cure all" like Roundup was in the beginning. A proactive plan of action is always the best method. A complete weed management program from pre-plant to harvest using multiple modes of action is the best resistance management practice.

Think of it like having a party. Think of it as a soybean party. If we don't want undesirable guests at our soybean party, don't invite them to it from the beginning. We accomplish this by applying a pre-plant application with some residual to help keep the ground weed free until the beans have a chance to canopy and block the sunshine to the ground below. If heavy weed pressure is present and another flush of weeds emerges, another post emerge application may be necessary, and this technology now gives us the option to use the Banvel technology as an aid to tough Roundup resistant broadleaf weeds. Once they show up, it is often difficult to get rid of them. If we have a complete program in place that keeps the weeds out of our soybean party at pre-plant, we won't have to pull out the big guns in season to get them when they are tough to kill.

Using multiple modes of action is going to be the key to handling resistance problems moving forward, and with the Banvel resistant beans, we will have one more tool available. Our goal is to help farmers capitalize on yield potential and profitability all while mitigating risk. We want to thank all the Kansas farmers for all they do. If anyone has any questions feel free to contact us anytime.

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Making Cents of Corn Plant Meter Performance

Jason Sutterby, Precision Specialist, Hepler & Moran

In the summer of 2012, AGChoice made the investment in a Precision Planting 20/20 MeterMax planter test stand at the Hepler location. It became part of my job responsibilities to provide that service to our customers. I quickly learned just how important testing and maintaining your corn meters is to your final population count in the field, and ultimately to the yield coming out of your field. Singulation, spacing, skips and doubles are all key ingredients in the yield potential of your corn crop.

The Process

The MeterMax test stand is set up to run most row units, including Deere finger and vacuum units, Kinze finger units, Case IH vac units, Great Plains and White among others. The meter is mounted on the stand and filled with your specific type of corn seed (rounds, flats, etc). I enter the parameters specific to the way you like to plant: ground speed, population drop, meter type, and vac pressure if needed. Then a 1,000 seed test run is started. The seed drops through a seed tube with middle and bottom sensors. Sensor data is immediately calculated and displayed on the 20/20 monitor including population, singulation, spacing, skips, doubles, and potential loss per acre. At the end of the run, a final tally is displayed to determine if the meter met standards or failed.

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The Results

Precision Planting's benchmark for finger meters is no less than 98.5% singulation; vacuum meters no less than 99.5%. A quick tally of my pre-test numbers last year (run meters as they come in with no adjustments) shows a singulation average of 96.1%. Pretty close, you might say, but when you get into the numbers, you can see how much potential is left on the table. For rough estimation, let's figure a drop of 26,000 seeds/ac with a final field population of 24,000 plants/acre. Let's also say this field yielded 150 bu/acre. That means about 160 ears made a bushel of corn. So, the math says that 1% change in population (240 ears) would mean about 1.5 bushels of potential yield.

With most meters coming in at around 96%, a 2.5% increase in singulation to the 98.5% benchmark could mean an additional 3-4 bushels/acre. The little things can make a difference.

The Solution

After pre-testing the meters, I can make a recommendation to you regarding the meters. If sub-standard, Precision Planting has created options to optimize planter performance.

- Finger Meters: May be rebuilt with Precision parts; this includes replacing the fingerset, backing plate, rear housing, seed belt and brush with upgraded components. Precision components are very different from OEM parts and will not leave the shop without meeting the 98.5% benchmark.

- Finger Meters: For the *ultimate* in performance, we can convert your finger pickup planter into a state of the art vacuum planter with Precision Planting vSets. This will take your singulation to 99.5% and seed type makes no difference (any seed, any speed). This will completely replace your existing meters and install a simple vacuum system on the planter. This is usually a one day job.

- Vacuum Meters: John Deere vacuum meters may be rebuilt with Precision's eSets, which includes new components such as a five lobe singulator, brushes and seed plate. I have heard nothing but good things about the entire Precision Planting meter rebuild line. Case IH meters can be tested, but the only possible upgrade is to replace the cell plate with a new OEM plate (they become very grooved over time and lose performance).

Meter testing is very reasonable at $20/row. Rebuild costs vary but are economical and quickly recoup your initial investment.

Tips

- Bring meters in for calibration every 100 acres per row planted (i.e. 16 row planter every 1600 acres planted)
- Pull meters after planting season, dump and spin meter to remove all corn seed. Seed left in the meter can stretch springs, bend brushes, warp seals, etc.
- Store meters in a clean dry location, plastic bins or tubs work well. I have had meters come in full of rotten seed, dirt, and rust where the barn had leaked on them. Spin finger meters until belt cups are not protruding from drop point so they don't get warped.
- Bring meters to your local AGChoice for delivery to the Hepler service location. The sooner the better, as March gets pretty busy, and it is better to get them done early.

Happy planting! I am always glad to visit with you any time!

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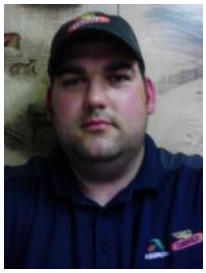
Benefits of Soybean Seed Treatments

Matt Jones, Blue Mound/Moran Field Representative



Soybean producers who treat their soybean seed with fungicide and insecticide help ensure protection against fungal diseases and insect pests. Protection against disease and early season insects results in stand improvement, soybean vigor and overall plant health, which in return helps maximize yield potential and leads to higher profits. Therefore, it is very important to take steps to protect your investment and help prevent diseases and insect damage.

Moisture in soil is very common during spring planting season, which is a favorable environment for the fungal pathogens that cause soybean seedling diseases. The key fungal diseases are:

Pythium, Phytophthora, Fusarium and Rhizoctonia

Fungal diseases can attack the seed and seedling before emergence causing rot, seed decay, seedling blights, root rot and damping off even after emergence. Damage to the seed or seedling causes long term effects in your soybean plant such as wilt, stunted plants or even death of established seedlings.

Pythium

Phytophthora

Fusarium

Rhizoctonia

Early season insects also damage soybean seeds and seedlings affecting the plant growth. Insecticides aid in controlling both above and below ground insect pests. Protecting against above ground insects helps prevent viruses such as bean pod mottle virus caused by the bean leaf beetle and soybean mosaic virus caused by the soybean aphid. Below ground insects can feed and burrow into seed which can kill the germ. If the germ dies, the seed does not emerge, and stand counts and yield are decreased. The key insects are:

Above Ground: Bean Leaf Beetle and Soybean Aphid
Below Ground: White Grub, Seedcorn Maggots and Wireworms

Bean Leaf Beetle

Soybean Aphid

White Grub

Seedcorn Maggots

Wireworms

Length of protection for seed treatments can last up to 30 days, which is an adequate window of protection. In normal conditions, a soybean plant will emerge in 7 to 14 days. However, factors such as soil compaction, soil moisture, and air and soil temperatures can increase the time needed for soybeans to emerge.

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...Continued from Page 5 Using seed treatments will give you extra insurance to help protect your investment. By protecting against disease and insects, your crops will be healthier, your stands will be thicker, yields will be higher and profits larger. We want to help you make the most of your investment. We are here as a partner and resource for you and your farm. Do not hesitate to contact us for any problems or questions you may have for this planting season.

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Aspire and Mesz

Alex Bolack, Crop Scout

When I'm advising producers on fertility, I usually start by correcting soil pH and then move on to the macronutrients: nitrogen, phosphorus and potassium. This is a great start, but once macronutrients are at appropriate levels, it becomes necessary to manage micronutrients. Micronutrients are not needed in vast quantities by the plant, but deficiencies in micros can reduce yields just like deficiencies in N, P and K. The three most important micronutrients that need to be applied to crops in our area are sulfur, zinc and boron.

Sulfur:
Sulfur, often referred to as the fourth macronutrient, is a part of every living plant cell. Sulfur is an important part of the proteins used in photosynthesis. When sulfur levels are deficient, photosynthesis rates decline and yields are reduced. Sulfur deficiency looks similar to nitrogen deficiency; however, sulfur is an immobile nutrient so deficiency shows up in the newer leaves instead of the older leaves.

Sulfur is usually applied as elemental sulfur or as sulfate. Sulfate is the only form of sulfur that plants can readily absorb. Elemental sulfur is not immediately available and must be oxidized by soil microbes into sulfate. This process is largely dependent on environmental conditions. In warm moist soil, over half of the sulfur will be converted to sulfate in just two weeks. In cool wet soil, the process can take up to six months. Like nitrogen, sulfur can be released from organic matter. Breakdown is dependent on microbial activity, though. Much like nitrogen, sulfur is unstable in the soil. It is advisable that sulfur be applied annually to meet crop needs.

Zinc:
Zinc is vital in protein synthesis and the production of a class of plant growth hormones known as auxins. Growth hormones are vital to a plant's ability to stimulate and regulate growth. Since zinc is related to growth, and because it is immobile in the plant deficiency, symptoms will show up near the growing point.

Zinc deficiencies are very common in Southeast Kansas and Southwest Missouri, especially in corn due to higher use rates of corn and low soil levels of Zinc.

Boron:
Boron is immobile in the plant, so deficiency symptoms will show in the new growth. When deficient, the growing point of the plant will stop developing and eventually die. The growing point dies off because boron is involved in cell wall synthesis and cell division. It is also important in pollen tube elongation, which is an essential part of seed production.

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...Continued from Page 6 The range between deficient and toxic levels is quite small. Due to the potential for toxicity, accurate application of fertilizers containing boron is essential. Another thing to watch out for with boron is direct contact with the seed. Boron should not be placed in furrow as concentrated levels will hinder seedling development.

Boron is commonly applied to alfalfa, although it can be beneficial to all crops when soil tests are low. High removal rates by alfalfa create more of a demand for the nutrient, and alfalfa yield response to boron is very evident most years.

MicroEssentials SZ and Aspire:

MicroEssentials SZ, also known as MESZ, is a 12-40-0 fertilizer that also contains 10% sulfur and 1% zinc. Each granule contains the same amount of nitrogen, phosphorus, sulfur and zinc. Since each granule has the same amount of fertilizer, it ensures even distribution when spreading. Compared to a DAP blend where the sulfur and zinc may settle out and end up unevenly spread across the field, the use of MESZ provides the benefit of even nutrient distribution. Sulfur is present in two separate forms in MESZ: half as sulfate and half as elemental sulfur. This allows for some of the fertilizer to be immediately available and for some to become available as the elemental sulfur is broken down by microbial activity.

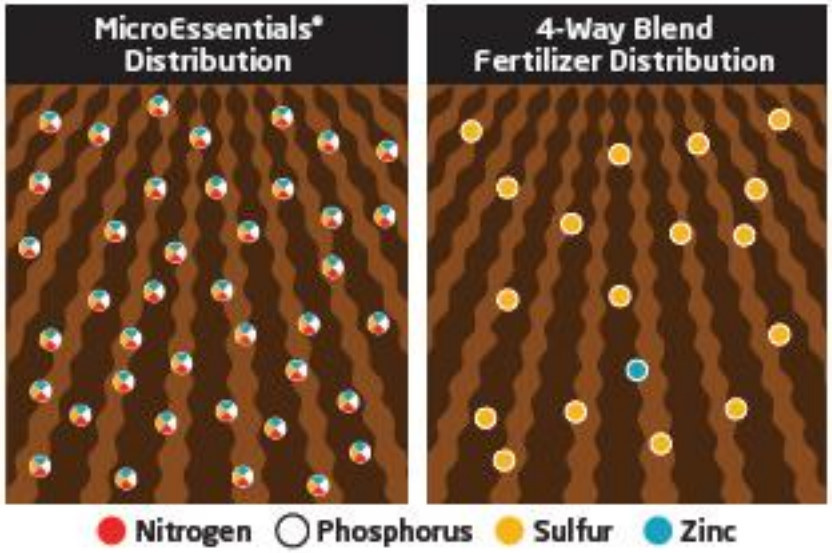

Image courtesy of the Mosaic Company.

Another one of AGChoice's new products is Aspire fertilizer. Aspire is a potassium and boron fertilizer with an analysis of 0-0-58 and 0.5% boron. Like MESZ, the potassium and boron are fused into a single granule for even spread across the field. The consolidated granule reduces the risk of causing boron toxicity because of a more even distribution within the spread pattern. Spreading Aspire reduces the risk of having spots that are reaching toxic levels while other areas could remain deficient.

If you have any questions about micronutrients or the products that AGChoice offers, just stop by any of our locations, or give me a call.

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ATTENTION!

It has come to our attention that a non-profit organization, Mercy For Animals, has been using the MFA initials to promote their group and their cause.

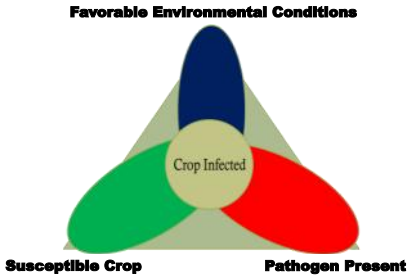
MFA stands for Made For Agriculture, and MFA Incorporated is in NO way affiliated with this group or its cause!

Using Foliar Fungicide on Wheat

Kaleb Nickell, Crop Scout/Seed Sales Weir, Parsons & Chelsea

A practice that is becoming more common with area wheat producers is the use of a foliar fungicide. This is a great practice with proven results, but I think it is important to ask a few questions when planning fungicide applications.

What disease pressure will be present in my wheat?



Plant pathologists use a disease triangle to understand how a particular crop disease will develop. Each point of the triangle represents one of three factors: susceptibility of host, environmental conditions, and presence of a pathogen. In order for an infection to occur, a susceptible host and the corresponding pathogen must be present in an environment favorable for the pathogen. This concept can help decide which fungicide to use, when to apply it, and the potential for yield gain. For this to help, we must know what diseases our wheat is susceptible to, have a good idea what the weather is going to do, and take the time to scout fields for disease pressure.

Wheat at Green-up

When is the best time to apply a fungicide on my wheat?

Fungicides are meant to be mainly preventative measures. With that in mind, there are three major timings for application:

At Greenup: This application prevents early season disease development, but any yield increase will be dependent on the weather. Profit increase from a fungicide application at green-up will generally not be as great as other applications.

Wheat Flag Leaf

Flag Leaf: This application timing is the "biggest bang for your buck." The flag leaf is responsible for producing around 75% of the energy for grain fill. Keeping the flag leaf healthy is a great way to protect your wheat's yield potential.

Wheat Flowering

Flowering: The idea behind this application is to control head scab and, if no diseases have developed, it will help with the health of the flag leaf. There is a lot of research showing positive results with this application timing, but there are a couple of considerations to make. First, the window for application is small, generally less than 5 days. Second, not all fungicides are labeled for scab control (see chart on Page 9). In order to be successful at controlling scab, a fungicide labeled for head scab suppression must be applied during flowering. It is important to check your wheat, so as soon as anthers begin emerging from the head an application can be made. If the anthers are desiccated, it is probably too late to be successful with this application.

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The AGChoice newsletter is coordinated by Linda Heady, Tammy Peak, and MacKenzie Oswald. It is printed through MFA in Columbia, MO. If you have any agronomy, feed, seed, animal health, or grain topics you would like us to address, please call Linda at (620) 421-5110 or Tammy at (620) 396-8554 or send an e-mail to lheady@mfa-inc.com or tpeak@mfa-inc.com.

	Rate	Powdery Mildew	Glume Blotch	Septoria Leaf Blotch	Tan Spot	Stripe Rust	Leaf Rust	Stem Rust	Head Scab
Caramba	10-14	**VG**	**VG**	**Labeled**	**VG**	**E**	**E**	**E**	**G**
Headline	6-9	**G**	**VG**	**VG**	**E**	**E**	**E**	**G**	**NL**
Proline 480SC	4.3-5.7	**Labeled**	**VG**	**VG**	**VG**	**Labeled**	**VG**	**VG**	**G**
Quilt	14	**VG**	**VG**	**VG**	**VG**	**E**	**E**	**VG**	**NL**
Tilt	4	**VG**	**VG**	**VG**	**VG**	**VG**	**VG**	**VG**	**P**
Twinline	7-9	**G**	**VG**	**VG**	**E**	**E**	**E**	**VG**	**NL**
Stratego	4	**G**	**VG**	**VG**	**VG**	**VG**	**VG**	**VG**	**NL**
Prosaro	6.5-8.2	**G**	**VG**	**VG**	**VG**	**E**	**E**	**E**	**G**
Approach	6-12	**G**	**Labeled**	**Labeled**	**Labeled**	**Labeled**	**E**	**VG**	**Labeled**

Ratings E- Excellent VG- Very Good G- Good F- Fair P- Poor NL- Not Labeled
Some fungicides (marked labeled) did not have sufficient data to determine performance
Ratings from: Erick D. De Wolf, *Foliar Fungicide Efficacy Ratings for Wheat Disease Management 2013*, Kansas State University, April 2013.

In summary, when timed correctly and used responsibly, a foliar fungicide application is a great way to protect yield potential. With the wheat acres cut back this year, we should maximize yield from every acre. Remember to check fungicide labels, and if you're unsure if using a foliar fungicide is the correct management practice for your farm, stop by AGChoice and speak with one of our agronomists.

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The Silver Bullet of Spraying?

David Moore, CCA, Range and Pasture Specialist

It is my hope that by the time you read this, the birds are singing, and we can at least smell spring in the air! As I write this, winter has a pretty firm grip on us, and I look forward to the new beginnings offered in spring.

Most likely, the last article of mine that you read concerned killing thistles and winter annuals with an application of ForeFront HL during November or December. If you got this done, congratulations, you will likely have one less thing to do come spring. Unfortunately, Mother Nature didn't allow a lot of acres to be covered this past fall, so many of us will still have plenty of weed pressure as the weather warms up.

As weeds begin to emerge, my most frequently asked question is akin to the search for the Holy Grail. The question goes something like this: "I only want to spray once to kill all my weeds and brush. When should I spray, and what should I use?" I call this the quest for the Silver Bullet. The good news is that we've made giant strides in range and pasture herbicides over the past 20 years. The bad news is that there is no Silver Bullet.

I'll address the good news first. New chemistry and new combinations of chemistry have come to the market in recent years. Controlling some of the toughest weeds out there is now more than just a wish. The key to success is using the five R's: the Right product, on the Right weed, in the Right amount, at the Right time, with the Right adjuvant (surfactant). Your local MFA can help you with all five of these.

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...Continued from Page 9 Of these, weed identification can be the most difficult. Two websites that can help with this are: 1) RangeandPasture.com and 2) weedid.missouri.edu.

Now, why is there no Silver Bullet? The answer lies in classifying the weeds we try to eliminate. There are 3 basic classes: 1) winter annuals 2) summer annuals 3) perennials and brush. Each class has a time frame for ideal application.

Killing winter annuals is best accomplished in late fall or early spring. I prefer late fall, so I don't have to feed the weeds all winter. Remember, spraying early (before weeds are 4" tall) is much more successful.

Killing summer annuals is a bit more of moving target because it depends on when spring actually gets here. But, usually, late spring will be the best time for a satisfactory kill. Again, spraying before weeds get too tall will yield better results.

Something to think about with either of the annuals is what type of product to use. Products such as 2,4-D, Hi-Dep and WeedMaster are good and effective killers of emerged weeds, but they have no residual activity. They kill what's there the day you spray, but a weed that emerges 3 weeks later will not be harmed. Using products that do have residual activity, such as Grazon P+D, ForeFront HL, Chaparral, Surmount, Tordon and Cimarron will continue to suppress weeds for up to 90 days. This is especially important for weeds like ragweed, cocklebur and horse nettle because they have long periods of emergence. The seed will germinate, and as soon as it sends out roots, it picks up the herbicide. The end result is a dead weed before you ever see it.

I was on a farm this past September that had been sprayed the last week of June for locust sprouts with Chaparral and Remedy. The first thing I noticed was that the majority of the locust sprouts were dead. The second thing I noticed was that you could see everywhere the spray rig went around an obstruction. Where herbicide hit the ground the fescue was lush, weed free and almost knee deep. Where the sprayer couldn't reach there was A LOT of ragweed and a lot less grass. I wish I had taken a picture to include with this article.

Successfully controlling brush is generally accomplished from late June through September. July can be a very good time to spray IF there is enough moisture and the temperature isn't too high. Unfortunately, that rules out most July days in our area. So, in general, if we're not in a big drought and the temperature is under 90 degrees, I would spray. Mid-September can be a good time to spray, as the plant is getting itself ready for winter and will be moving nutrients down to the root zone. The herbicide will be pulled along with the nutrients and get deposited right where you want it – in the root zone.

There are no Silver Bullets, unfortunately. But, knowledge on timing for your predominant weed species can help you load your gun with a better bullet! Don't skimp on surfactant – that can be like shooting blanks…

*****Please Note: Oklahoma customers will use Grazon Next HL in place of ForeFront HL. Please check with your local AGChoice location for availability and pricing.**

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Manage Yield Potential

Greg Baird, Field Crops ASM

As I write this article, a challenging year has passed, while at the same time, we can look forward to a more productive growing year in 2014. What is important to focus on while gearing up for spring planting is how to manage the factors that are in your control so that yield potential can be maximized as long as possible into the growing season. Each corn hybrid and soybean variety you will plant this year has a high yield potential in the seeds' genetic makeup. Once it is in the topsoil is when the issues that limit yield begin. What is at the top of that list is soil fertility and nutrient removal from the previous crop. Far too often a blanket "one size fits all" approach to fertilizer application is used when the true nutrient requirements are unknown. What is applied is an educated guess based on past history of the field. With that in consideration, obtaining soil samples on any acres that are in question when it comes to health and fertility can be the best investment in crops you can make this year.

Here is a guide that can be followed by reviewing your records per field in regards to the previous crop and production in bushels.

Nutrient removal chart in pounds per bushel

	Yield	Nitrogen	Phosphorous	Potassium	Calcium	Magnesium	Sulfur
Corn	Total	1.5	0.6	1.3	0.21	0.2	0.16
	Stover	0.5	0.25	1.02	0.19	0.14	0.09
	Grain	1	0.35	0.25	0.02	0.06	0.07
Sorghum	Total	1.3	0.7	1.65	0.38	0.23	0.19
	Stover	0.45	0.3	1.4	0.31	0.15	0.1
	Grain	0.85	0.4	0.25	0.07	0.08	0.09
Sobeans	Total	5.5	1.2	2.4	1.7	0.45	0.45
	Stover	1.3	0.3	0.9	1.5	0.22	0.25
	Grain	4.2	0.9	1.5	0.2	0.23	0.2
Wheat	Total	1.75	0.72	1.6	0.26	0.24	0.23
	Stover	0.5	0.12	1.2	0.21	0.1	0.13
	Grain	1.25	0.6	0.4	0.05	0.14	0.1

After soil fertility, another key factor is the proper seed placement on the right piece of ground. I would now like share with you our Morbrands line-up for this upcoming year that will perform in our Southeast Kansas environment.

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MorCorn

3054: This is a true workhorse hybrid when compared to others with the 100 day relative maturity. It beat longer season hybrids under dry, stressful conditions in our test plots last year. Expect more of the same performance in 2014.

3544: A defensive hybrid that has a strong drought tolerance package with fast emergence and an excellent ability to stay green. Most importantly, it has plenty of flex to the ear.

3944: Consistent performance, high test weight . Drought resistant. Develops long, girthy ears.

3849: High yielding hybrid that can handle dry, hot weather. Has the broadest insect control of any hybrid we offer.

MorSoy

45x20: Great for an early season first crop of beans. Performs excellent in marginal ground.

47x12: Two terms best describe this bean are High Yielding and Consistent. Producers who had this on their farm last year have already bought and intend to plant more acres of it this year. To top it all off, the STS trait is included so it can be a first crop or it can be planted behind wheat

48x10: The standby in our region. Works good over a wide range of soils. STS bean that will simply perform.

51x31: Early 5 maturity with a high yield, full bush plant determinate first crop bean.

53x82: Consistent high yield in our plots last year. This line became popular last year the old fashioned way: it was earned through plot performance. Requested by the those who saw firsthand how this variety put on large clusters of pods narrowly spaced on the plant.

56x02: Indeterminate mid 5 maturity with STS traits.

With soil management and proper seed in the right environment, you will be taking the first two steps that are the most important for a successful growing season.

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Herd Maintenance

Rowdy Layton, Livestock Consultant Chelsea, OK

Spring cattle work is quickly approaching along with green grass and the winding down of calving season. With breeding just around the corner, it's time to evaluate cow body condition. If cows are less than a body condition score of 5, their plan of nutrition needs to be adjusted to get them ready for breeding. MFA Cattle Charge is an excellent choice to increase a thin cow's body condition score.

It is also time for pre-breeding cow herd vaccinations. Cows should be vaccinated with a 4-way viral plus lepto and vibrio. You can use a modified live or killed vaccine. A modified live vaccine will give you a longer immunity versus a killed vaccine and better protection against PI infections. BVD-PI stands for Bovine Viral Diarrhea-Persistent Infection. BVD-PI occurs when an animal is infected with BVD before birth (in utero). The animal will remain infected with BVD for life and will shed virus continuously. BVD-PI animals often are poor doers but can appear healthy and normal in size.

Cows should also be given a 7-way colstridial and be de-wormed. It is also a great time to replace lost or faded ID tags. Spring born calves should be vaccinated with a 4-way viral product and at least a 7-way colstridial vaccine. De-worm and castrate male calves.

Some may want to apply insecticide tags, but many tags could be losing effectiveness when fly pressure reaches maximum pressure. Breeding soundness exams should be done at this time as well to allow ample time to re-test or find replacement bulls if needed. Fall born calves should be given their pre-weaning vaccinations and be de-wormed. Pre-weaning vaccinations include a 4-way viral product, 7-way colstridial, pasturella, dewormed, dehorned and castrated if not done earlier.

Fall calving cows should be preg checked and removed at weaning. If you are planning on using a feed through fly control program, it is now time to start feeding it before the horn fly pressure appears. If you need any assistance in planning your cow herd vaccination program or developing a fly control program for your operation, feel free to contact any of our AGChoice locations, and we will be glad to assist you.

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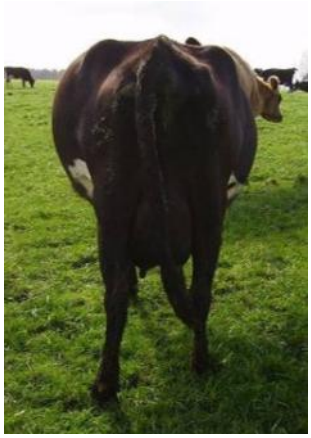
Bloat In Cattle

Jon Roberts, Areas Sales Manager Livestock Products

Bloat is one problem that can be encountered on cattle operations. The good news is that this potentially fatal disorder is easily diagnosed and easily treated if you identify it early and can lay hands on the animal. Bloat is essentially a build-up of gas in the rumen-reticulum. This gas production is a normal part of good rumen function, but if this gas is not relieved or does not dissipate, and continues to build, it will put extreme pressure on the diaphragm, reducing the animal's ability to expand the lungs and take in oxygen. The animal will suffocate, and it can happen within minutes after the onset.

The clinical signs that are the most obvious are a distended abdomen, with a full bloated appearance. The animal will likely be somewhat asymmetrical with the left side being more pronounced particularly up high, towards the back on the animal. You might also observe kicking at the stomach, grunting, or groaning, get up and lay down, frequent urination and defecation, hyper extended neck, and difficulty breathing. Bloat is most often seen in juvenile cattle but can occur in all ages.

The most common cause of bloat is an excessive buildup of gas in the rumen in conjunction with the presence of foam or froth which impedes the animal's ability to belch off the gas. This "frothy bloat" is usually associated with overconsumption of lush, growing legumes but can occur with rumen acidosis or overconsumption of a high starch diet. Another possible cause could be from the way the animal is positioned when it is laying down. If the feet and legs are uphill from the rest of the body, it would be in somewhat of an unnatural position that could cause even normal rumen contents to block the opening to the esophagus and the ability to belch off gas build-up. Prolonged laying in such a position would increase the risk of bloat. Yet another potential cause of bloat occurs if the animal would happen to have some sort of obstruction in the throat, like a hedge ball. Blockage of the esophagus could block the exit of the gas accumulating in the rumen. The two latter scenarios account for a small percentage of bloat cases.



Cow suffering from Bloat

If bloating is observed, a veterinarian should be summoned immediately. The most common remedy for bloated cattle is to insert a tube into the mouth and allow the animal to swallow it. As it is passed deeper through the esophagus, it should end up in the rumen where the gas is contained and allow it to exit the body through the hose. Once the gas has escaped, the animal can be drenched with an anti-foaming agent. The most commonly used drenches are Bloat Guard liquid (Poloxalene) or mineral oil.

A veterinarian treating bloat by drenching with a tube

What I want to focus on are risk factors that increase incidence of bloat, and management practices that you can implement to reduce that risk. To further break this down, we will look at a pasture scenario, and a scenario of cattle consuming concentrates. In a pasture setting, the type of forage that represents the greatest risk of bloat are young succulent legumes like alfalfa and clover. Grasses are less likely to be a problem unless they are young and vegetative like wheat pasture in the early stages. Dew, frost, or a recent rain has the tendency to increase the potential for a problem. Turning hungry cattle to a new pasture of young succulent legumes in the early morning would be when some producers could experience a problem. If you have pastures that could pose a risk you can:

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1. Give them hay prior to grazing legumes and make sure they are full and not hungry.
2. Move cattle later in the day after the dew is gone when it is warmer, and they will be less likely to graze for an extended period of time.
3. Consider using Bloat Guard containing Poloxalene in advance of and during periods when you will be grazing high-risk pastures. This product can be mixed in feed or offered in a block form and is available at your local MFA location.

When cattle are consuming concentrates, the most important factors to consider are to make sure the animals experience ration changes gradually, and feed intake variations are kept to a minimum.

Some guidelines to follow are when you are increasing intake in an animal eating concentrates is to elevate the intake of the concentrate by one half-pound/hd/day until you reach the desired intake. When switching rations, make sure the substitution is at the same rate of a half-pound/hd/day. There are several things to consider when monitoring intake:

1. Allow adequate bunk space, 18 inches for each animal in a hand feeding scenario, and if using a self-feeder with two 8 foot sides, no more than 40 cattle per feeder.
2. When hand feeding, make sure all cattle come to the bunk and have an equal opportunity to consume the feed.
3. Make sure the forage provided has ample space for all cattle to consume it to reduce competition for the concentrate.
4. Make sure good clean water is accessible to all cattle at all times.
5. Pay particular attention during periods of stress like adverse weather, weaning, changing environment due to relocating the cattle or feeding area, recent handling or processing.

The most common cause of bloat with cattle consuming concentrates is the occurrence of "out of feed events". These events occur when cattle are established on a diet in a full feed scenario. This can be as much as 3% of their body weight or more; and that intake is interrupted for a length of time by a feeder shutdown or running out of feed followed by an immediate return to access of unlimited feed. Feedstuffs with a high level of starch like corn are of particular concern. They can lower the pH of the rumen and this acidotic rumen environment is at greater risk of bloat. MFA Cattle Charge is recommended for cattle that experience stressors like weaning and a changing environment. The high fiber, low starch formulation along with additives to enhance rumen function, is the best way to start cattle on a concentrate.

Whether it is bunks, bale rings, Bloat Blocks, or feeders, MFA has the feed, the farm supply, and the technical support you need to keep your cattle operation at peak performance.

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