Jan. 18, 2010

Volume 5, Issue 1





Inside this issue:

Latest in BioTechnology	1
Genuity Corn Traits	2
Latest in Bio-Tech (cont.)	3
150 -?-?	4
Health Track from MFA	5
Grain Quality Issues	6
Grain Quality Issues (cont.)	7
Heath Track (cont.)	8
Cruisin' with MFA Feed	9
Precision Planting by MFA	10
Precision Planting (cont.)	11
Scholarship Information	12

Special points of interest:

- Latest in BioTechnology Traits
- Cruisin' by MFA
- Grain Quality Checklist
- Precision Planting
- Health Track Benefits

MFA Lamar





The Latest in BioTechnology Traits By: Jason Worthington - Agronomist for WCAS

Ever since the first bags of Round-Up Ready soybeans and Bt corn were planted genetically modified crops have not only increased American corn and soybean producers productivity and profitability, but they have provided an increasing number of options for growers as well. This trend is showing no signs of letting up anytime soon. In the future growers will not only see biotech traits for further herbicide resistance and insect control available in the seed they purchase, but also traits for weather protection, nitrogen efficiency, yield enhancement, and who knows what else.

This coming season is going to be marked by the increased availability of four new traits released by Monsanto under the Genuity label seen only on a very limited basis in this area. Among these new technologies are Genuity Round-



Up Ready 2 Yield Soybeans and three corn traits that include Genuity VT DoublePro, Genuity VT TriplePro, and Genuity SmartStax. While these increased choices are most definitely a good thing for growers it is important that growers educate themselves on how to best use them to enhance their productivity and profitability. Hopefully this article will help clarify where these traits are best used.

Round-Up Ready 2 Yield

Genuity Round-Up Ready 2 Yield soybeans have been used on farms in the Midwest for a couple of years now, but growers in Western Missouri and Eastern KS are going to get their first look and some Group IV RR2Y beans this year. This new trait will be the platform for further soybean traits to be released from Monsanto. (Cont. on page 2)

All of us at MFA Lamar would like to take this opportunity to thank all of our patrons for your business during 2009. We would also like to wish you all the best in 2010.

Happy New Year to All!



The Latest in BioTechnology Traits (cont.)

The excitement around this trait does not come from any new herbicide program; it will offer the same resistance to glyphosate as the first glyphosate resistant event. The difference comes from how the gene is inserted in the plant. The RR2Y gene is inserted by using agrobacterium to place the gene in a specific spot on a soybean's chromosome. This is in contrast to the old gene gun method that blasted the gene into the plant hoping it would stick somewhere. Breeders and geneticists have discovered spots on the chromosome that the RR2Y gene can be placed that not only reduce negative yield impacts of an introduced gene, but also create positive yield impacts. As a result, yield trials of the Genuity RR2Y beans have consistently shown an increase in yield over near iso-line varieties without the new trait. The benefit to growers from this kind of yield increase is obvious, but growers should take caution when adapting any new soybean technology. Unlike corn breeding, soybean breeding is a slower process and it will take time to have as wide a range of varieties with this new trait as are present with the first generation Round-Up Ready trait. Trial use of this new trait is very highly recommended, but wide scale adoption is not advisable until a grower knows that the variety carrying the trait is well suited to his ground.

Genuity Corn Traits

Among the new corn traits to be released this year is Genuity VT Double Pro. This new trait still allows use of glyphosate herbicides and contains the Bt protein that provides control of corn borer. The major differences are that an additional gene that will cause production of an additional Bt protein to defend against corn borer. The synergy of these two proteins not only provides corn borer control, but will also control corn earworm, and fall armyworm as well. Besides the benefit of additional pest control two proteins make for fewer resistance concerns and have prompted the EPA to call for a refuge of only 5% when planting VT DoublePro corn. The short comings of the DoublePro are that unlike the VT3 corn many growers are using today it has no below ground pest control. It would not be a good idea to place corn with this trait anywhere rootworms are a concern. Also, this corn with this trait will not have the secondary benefits of larger root systems and increased uptake of water, nutrients, and oxygen. However, anyone who is still using strictly a hybrid with above ground insect protection only will see a huge benefit from incorporating the VT DoublePro into their program.

(Cont. on page 3)

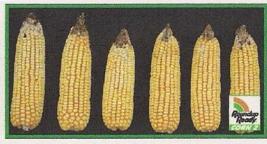




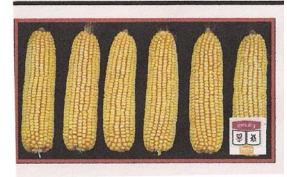
The Latest in BioTechnology Traits (cont.)

The second Genuity trait available this year is the VT TriplePro. TriplePro is a combination of the same traits found in Genuity VT DoublePro that offer multiple protein control of corn borer as well as protection against earworm and fall armyworm. The main advantage of TriplePro over DoublePro is that it contains a third Bt protein protecting against rootworm. This is the same trait in found in VT3 corns that have provided secondary benefits of larger stronger roots more adept at taking up nutrients, water, and oxygen in less than ideal growing conditions. A 20% refuge is still required, but anyone used to the advantages of VT3 could easily adopt Triple Pro and expect the benefit of earworm protection.









Last, but in no way least is the Genuity SmartStax Trait that has been released on a limited basis this year. While DoublePro and TriplePro are exciting new options for a grower they are bound to be short lived due to the flexibility of SmartStax. SmartStax uses three proteins for protection against above ground insect pests, three proteins for protection against below ground pests, RoundUp Ready technology, and Liberty Link Technology. On top of the advantages of VT3 corn these eight traits will provide the widest spectrum of insect control, the most flexible herbicide program seen in corn hybrids to date, and a refuge requirement of only 5%. Insects controlled will include rootworm, corn borer, corn earworm, fall armyworm, western bean cutworm, and black cutworm. Broad spectrum post applied weed control can come from either glyphosate (RoundUp), or glufosinate (Liberty, Ignite). With multiple proteins at work the need for a 20% refuge to fight insect resistance is no longer needed and the EPA will now only require a 5% refuge containing no Bt proteins.

Although these new corn and bean traits are just the start of things to come the benefits and advantages of this next step forward can already be seen. For more information on DoublePro, TriplePro, SmartStax, or RoundUp Ready 2 Yield contact your local MFA, West Central AgriService, or AgChoice representatives.

You can contact

Jason Worthington at

660-200-5115 or by e-mail at
jworthington@mfa-inc.com

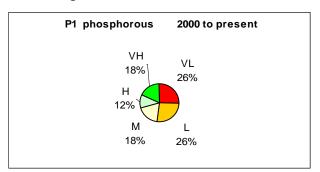
150 - ? -? By: Dale Guss—Location Manager, Adrian, MO

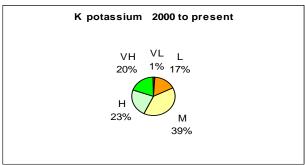
How about a short quiz. How are you going to fertilize your crop this spring, and why?

I often get asked to make a recommendation about what to put on a crop. After I ask a couple of questions, we settle on a blend that is acceptable, but is it right? Now would be a good time to get your yield maps or scale tickets and get an accurate idea of what your yields are from each farm. A realistic yield goal is a must for an accurate fertility program and should be evaluated yearly. Now that you know what your yields are, did you put on that amount of Phosphate and Potash this spring? A 150 bushel of corn will remove 53 lbs of P and 38 lbs of K. This is generally an easy target to achieve when fertilizing the corn crop. However a 40 bushel soybean crop removes 36 lbs of P and 60 lbs of K. Most growers don't fertilize their bean crop separate of the corn crop, so combined you would have to apply 89 lbs of P and 98 lbs of K to maintain your fields as they are now.

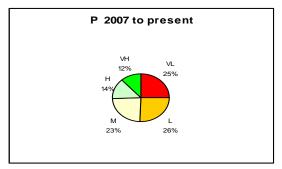
The question becomes, where are your fields at right now? Did your fields accept the opportunity this last year that the weather offe or were your yields lagging behind?

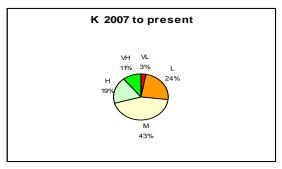
The following is taken from soil test results run thru the Adrian office.





For data from 2000 to present, shown in the above charts, soils testing in the low and very low range were 52 % for P. K was much better at 18%.





The data from 2007 to present shows P at 50% and K is 27%. Using the levels Midwest labs recommends as optimum includes the medium range and puts 57% of P and 70% of K below the grade. The data from 2007 to present shows 74 % for P, and 85 % for K were below these levels. This data shows a long history that over half of all soils are testing low in phosphorous and we are quickly depleting our potash levels. The exact soil test level can vary some according to soil type but the trend is very clear. You already know I'm going to say get your soils tested, but be sure that it is done right. You are going to base your future on this information.

When you were in the combine this year, think of the fields that had a lot of variation in yield and look into having an intensive soil sampling and variable rate fertilizer applied. You spend a lot of time and money investing in a crop, let's do everything we can to be sure we are putting the right resources in the right places. Call your local MFA or West Central Ag service to start a fertility plan that is right for each of your farms.

Health Track Benefits

By: Jon Roberts - Area Sales Manager - Livestock Products

Dwight Yoakam wrote a song several years ago called "Things Change" and in the chorus he says "there ain't no need in laying any blame 'cause...baby things change." I kind of like the strategy of not pointing fingers, making accusations and laying blame. Better to just "roll with it, baby." Let me tell you what I see changing in the feeder cattle market today. The gap between the highest price per pound and the bottom has narrowed considerably with relation to weight brackets. This gap narrows even more profoundly when comparing 600 wt. cattle and 800 wt. cattle. Bigger cattle don't see the price discount that we saw in years past. Un-weaned, non-vaccinated cattle sell at a significant discount to weaned, value-added, preconditioned cattle. Bulls sell farther behind steers than previously ob-



served. Buyers are more accepting of condition on cattle, as they equate increased condition with an increased health status of the animal. The increased emphasis on health status has been brought about by a lot of changes in the industry, and here's a little laundry list of them.

- Most cattle are sold on a grid basis as opposed to live on the hoof. Health affects quality grade and quality grade affects carcass value.
- Labor is more expensive, as is rescue treatment costs—with new generation antibiotics being close to \$30 for a single dose.
- Preconditioned cattle require less step-up period and perform better, turn around faster and are easier to manage.
- Animal agriculture is coming under increased scrutiny by regulatory agencies that push to decrease use of oral or injectable antibiotics in the finishing process. Preconditioned cattle require less of both.



With these explanations in mind, some producers still ask me, "What's the big deal about Health Track cattle? Why are they better than commodity cattle?" So, let's peel away the outer layer and get to the meat of the nut: A common scenario could play out like this. A farmer wants to sell cattle at a Thursday auction. He takes them to the sale barn Wednesday afternoon to get in the early part of the run when the buyer activity seems to be the best. The barn had a large run, which

is good because nobody wants to be in a sale with few cattle. It wraps up late Thursday with the buyer filling his card with

a hundred 500# steers— a load going to a yard in western Kansas. Those cattle leave early Friday and get to the yard late Friday. If they have a Saturday processing crew, they will get vaccinated at that time. If they don't process on Saturdays, the calves will get vaccinated on the following Monday.

(Cont. on page 8)



Check Grain Bins to Prevent Quality Issues

By: Diana DeHart - Grain Coordinator

Harvest this past fall proved challenging once again for producers and grain elevators alike. Mother nature caused crops to be planted late and then made for a long, difficult harvest. Much like last year corn and soybeans were slow to dry in the field, leaving most producers to harvest crops wetter than they wanted. Most producers experienced harvesting corn well above the 18 percent moisture range for much of the harvest season. Storing corn at these higher moisture levels takes extra care and management to insure a quality crop for future sale.



Corn in bins that are aerated and monitored to stay below 30° F and that have the center cores removed during the winter months will generally stay in good condition, while un-aerated bins and piles will quickly loose quality once the temperature starts to climb. According to North Dakota State University Extension Service agricultural engineer Ken Hellevang, the estimated allowable storage time (AST) decreases rapidly at warmer grain temperatures. For 22 percent moisture corn, the AST is about 190 days at 30 degrees, 60 days at 40 degrees and only 30 days at 50 degrees. For 20 percent moisture corn, the AST is about 90 days at 40 degrees, and 50 days at 50 degrees.

Charles Ellis, University of Missouri Extension ag engineer, warns that temperature differences in a bin of stored grain causes moisture to migrate from warmer to colder areas. Warm air rising in the center of the bin cools when it reaches the cold grain near the surface. Ellis says this results in moisture

condensation near the surface and leads to rapid spoilage when the weather turns warm. Hellevang stated in a news release, "Warming of the grain will normally be limited to a couple feet near the bin wall and a few feet at the top of the bin. Monitor grain temperatures in these locations to determine when to operate the aeration fan. Bin temperature cables help monitor grain temperatures, but they only detect the temperature of the grain next to the cable. Grain has an insulation value of about R1 per inch, so

grain insulates the cable from hot spots just a few feet from the cable." He urges producers not to rely on air temperatures to determine when to aerate corn. The daily total solar energy heating the south side of a grain bin on Feb. 21 is more than twice as much as on June 21. Also, the amount of solar energy heating the bin roof is about equal. Therefore, corn next to the bin wall may be much warmer than the outdoor air temperature.

Bottom line, CHECK YOUR BINS and take temperature readings on a regular basis. (Cont. on page 7)



Check Grain Bins to Prevent Quality Issues (Cont.)

Here are some tips on aerating corn by North Dakota State University:

- Do not operate the fans during rain, fog or snow to minimize blowing moisture into the bin.
- Bin vents may frost or ice over at temperatures near or below freezing, so leave the fill hole or manhole open or unlatched while operating the fan to prevent damage to the bin roof.
- Cover aeration fans when they are not operating to prevent wind from warming the corn. Wind blowing into an uncovered aeration fan or duct will aerate the corn, warming it to temperatures near the daily maximum. This occurs because more wind tends to blow during daylight hours than at night.
- Corn at moisture levels exceeding 21 percent should be dried in a high-temperature dryer during February or early March to minimize the potential for grain deterioration. Natural air drying is not efficient until the average outdoor temperature reaches about 40 degrees. The moisture-holding capacity, and therefore the drying capacity, of colder air is so limited that drying at colder temperatures is extremely slow.

The active period for grain spoilage begins in mid to late February. Use every opportunity to keep the grain cold. Core storage bins by taking some grain out in the near future. Coring bins will indicate if there are problems starting, such as wet corn bridging over the unloading slide. Once the grain temperature cannot be maintained below 30 degrees, wet corn over 17 percent will have to be dried or sold to prevent spoilage. Natural air will work if the bin has 0.5 cfm/bu or more of airflow and the moisture is less than 20 percent, according to Ken Hellevang. Moisture over 20 percent will require heated air.

Below: Iowa State University research indicates that even 15 percent moisture corn can only be success-

Corn	Moisture Content Corn (top %), Soybean (bottom%)						
° F	1.3%	14%, 12%	15%, 13%	16%, 14%	17%, 15%	18%, 16%	24% N/A
40	150	61	29.0	15.0	9.4	6.1	1.3
50	84	34	16.0	8.9	5.3	3.4	0.5
60	47	19	9.2	5.0	3.0	1.9	0.3
70	26	11	5.2	2.8	1.7	1.1	0.2
80	15	6	2.9	1.6	0.9	0.9	0.06

*Based on 0.5% maximum dry matter loss—calculated on the basis of USDA research at lowa State University. Corresponds to one grade number loss; 2-3% points in damaged seeds. Soybean approximated at 2% lower moisture than com.

fully stored without damage for less than 2 months if the temperature of the corn is 80 degrees.

Act NOW to check, move, or dry any wet grain you have stored on the farm. The higher moisture of this crop will make it more difficult to manage than normal and the longer we wait the more difficult it will be to manage. Damaged corn will be harder to market and the damage will quickly get worse if not properly handled. Many end users bought grain last year with higher than expected damage levels. They realize this years crop came

out of the field wet, much like last years crop. End users will be on the lookout for damaged grain this year and they will be much less willing to accept it than they were last year. Check your bins now to prevent issues and hassles later in the year and to insure you get the most value for your grain.

Health Track (Cont. from page 5)

The clock started ticking on these immunologically naïve calves Wednesday at 1 p.m. and their immune system has a vaccine introduced 72 or 120 hours later—depending on the Saturday crew. It takes the calf's immune system several days to mount an effective response enough to create resistance. All this time the incubation period of the organism had a major head start.

Couple that with the fact that the calf might have only known his mother's milk, pasture and pond water as familiar groceries. It now sees a strange environment, strange pen mates, unfamiliar feed and a black box with blue balls poking out the top as the only, and yet undiscovered, source of water. Had that calf been afforded the opportunity to experience some of these changes over a gradual time frame and not when it was exposed to pathogens with no acquired immunity from vaccination, it would definitely fare better.

How much better you ask? Morbidity rates drop from 10% to 2%; mortality rates will drop from 5% to 1%. Remember, a vaccine's performance is better when stress load is reduced and the nutritional plane is high. This group of calves were gathered up Wednesday morning, sorted off the cow, loaded on a truck, transported to a sale, sorted again for size, sex, color, weight, then sold, resorted to a buyer's pen, reloaded, hauled, unloaded, processed, and turned out Saturday afternoon to run up to the bunk and chow down. Do you think they could use a cigarette about now to calm their nerves?

Health Track cattle in contrast were at the very minimum eating 10# per head, per day of a nutrient-dense, vitamin-fortified ration during the vaccination process. Some of them even had the process initiated while they were still on the cow under minimum stress. They are exposed to the stress of marketing only after 45 days—when blood titers are at their peak performance for resistance to pathogens. That, my friends—in a nutshell—is why Health Track cattle are more highly sought after than commodity cattle.

Another tasty nugget for a cattle buyer to salivate over is the fact that US Premium Beef has committed to a \$35 per head premium for source- and age-verified cattle through May 2010. With today's pricing on MFA branded products and your home-grown inputs, feed costs for that calf gain should be in the \$.60 range. Getting back to the feeder cattle market strategy, you probably want to cash out under 850# to leave a little for the next guy. If he cant' make money on your calf, he doesn't want it.

If you have an interest in making your feeder cattle more attractive to buyers and increasing your profit margin while improving the beef industry at the same time, then stop by any MFA, WCAS, or AgChoice location or give me a call any time. We'll have you whistling a happy tune all the way to the bank!



Greetings From Our Outfit To Yours

By: Jon Roberts - Area Sales Manager - Livestock Products

A new year—and a new decade for that matter—brings a unique opportunity. Feed, fertilizer, fuel, and most notably, hay prices have moderated since late last decade. Now the question becomes: How do I capitalize on this price correction to my greatest economic advantage? Of the above list, the biggest bargain appears to be in the hay market. In our trade territory \$10-\$25 will catch 90% of the bales for sale. Abundant rainfall for consecutive years, coupled with falling cow numbers brought us this set of circumstances. Don't ask me about the production cost of that hay. That's for the agronomy team to pencil out, thank goodness!

Probing deeper into the situation, we begin to uncover the challenges that accompany this new price opportunity. Item #1: Most cattlemen are not doing much lying around on the couch wishing there was something to do to occupy their time. On the contrary, there are just enough hours in the day to clear

what's on their plate now. Time is one of our most limiting reagents in any bovine equation. The second challenge is that the very factors that led to an abundance of hay—like lots of rain—also delayed harvest, lengthened maturity, and compromised quality because hay was put up wet or rained on before and after baling. I said there was a great quantity, not great quality of hay. Well, no fear because West Central Agri Services is here!

MFA has recently released a new self-limiting feed product called Cruisin'. This limiter feed targets a ½ of 1% body weight intake. In other words, a 1,000-pound animal should eat about 5 pounds per head per day. Crusin' boasts a 16% crude protein spec. with not more than 1% coming from NPN. It comes standard with 56g. of Rumensin and is vitamin and



mineral fortified. Of course our trace minerals are chelated and Cruisin' has other performance goodies that enhance rumen function that I can't tell you about...unless I shoot you afterward.

So lets lay this out, we have some dirt-cheap hay put out in rings or however you decide to feed it. And we have this self-fed limiter, Cruisin', that balances the ration for deficiencies in protein energy, vitamin, mineral, and rumen fermentation and function to increase rate of passage on the suspect hay. You go by and check cows 2 or 3 times a week and wait to collect your check. This program should work well on "turn out" cows, gestating cows, developing heifers, backgrounding cattle, fall calving cows under lactation and trying to rebreed. In fact, this product should work well in any situation where your forage program alone will not meet the needs of the animal with regards to maintenance and production in this winter environment.

If you would like to learn more about Cruisin' and how it might fit into your individual operation, stop by your local MFA, WCAS, or AgChoice location or give me a jingle anytime.

One thing I have observed over the years as they pass by is that not much positive happens by accident. If something positive happens in my life it's because I make it happen. Give us a call and we will help you make something positive happen!

Jon Roberts

Happy New Year!

660-641-1333 Mobile 660-647-2403 Home

iroberts@mfa-inc.com

MFA

Put More Money In Your Pocket With Products by Precision Planting By: Brian Davidson - Regional Account Manager

MFA is proud to announce we are now a Certified Precision Planting Dealer offering the complete line of Precision Planting products such as the 20/20 Seed Sense, 20/20 AirForce, and the eSet system to name a few. We also offer meter calibration services by a certified technician to help your planter's meters achieve maximum accuracy. Our technician will pre-test your meters, make adjustments and suggest techniques to improve accuracy. A major seed company proved in 100 side-by-side trials over three years that annual meter calibration adds an average of 5.7 bushels (nearly \$15) per acre.

You should be getting 98% or better accuracy from your meters, but typical meters run at only 92%-97%. When every percent more is worth \$5 per acre, there's plenty of room for improvement. That's why your meters – finger, vac, Precision, Deere, Kinze, White, CaseIH – need to be calibrated to your spacing, your speed, your seeds minimizing skips and doubles thus restoring ears, yields and profit.

Any one part in a meter – the backing plate, the finger set, the singulator, the belt – can defeat the whole mechanism. One thing leads to another, and one mistake in singulation leads to another skip or double therefore shrinking yields.

You have to be able to count on your fingers. Without absolutely consistent materials, shape and behavior, fingers can't load and hold a single seed every time, leading to skips and doubles. Precision Fingers, though, are designed and engineered to hold the tightest tolerances. The shape, pitch, angle, tension and release are always the same, so they grab, hold and release a single seed – small, large, flat, round – every time. That leads to the "Picket Fence" stands you desire.

Metal backing plates can warp, which leads to inconsistent tension, which leads to skips. The molded poly design of the PopulationMax plate stays flat, giving the fingers and adjustable brush the stable surface needed for precise singulation. Added support comes from a smaller exit hole that discourages seeds from bouncing back into the meter. PopMax is as durable as metal plates and, because the metal wear strips and inserts are interchangeable, you can renew it for a fraction of the cost of a complete replacement plate.

The adjustable brush, which is standard on the Population Max, lets you easily and instantly fine-tune your meters every time you change seed types during the season. Nine settings let you match the aggressiveness of the brush to the size and shape of the seed for pinpoint accuracy in singulation. The energy-absorbing cushion on SkipStop deadens the impact of seeds as the finger flings them into the belt housing. So they don't ricochet, as they too often do with standard covers. They don't bounce back into the meter. They drop into the seed tube like clockwork. Replace your existing back cover – SkipStop bolts right on – and watch the skips go away. To really repower your planter – or optimize your new one – choose complete Precision Meters. All of these components are designed and tested to work together for maximum precision.

Don't have a finger pick up system? The eSet system sets the standard for singulation in vac planters. No other system, cell or flat disk, can match its success. No guesswork. No adjustments. No settings. No disk changes. Judging from side-by-side tests using 21 different kinds of seeds – large, small, flat, round, treated, untreated – it typically will produce \$5 per acre more than your original manufacturer's disk. The cells in the standard disk are very sensitive to seed size and shape. It takes just the right seed and vac pressure to singulate successfully. eSet has no cells so it handles any seed, typically without changing pressure, disk or singulator setting. Its raised platform aligns with the centerline of the tube for a perfect drop. The eSet kit takes just minutes to install into any John Deere vac housing – standard or Pro SeriesTM – made after 1991.

Once installed, all you need to do is swap disks when you move from corn to soybeans or specialty seeds. With the eSet system, plant every seed, every time, right where it belongs. And that leads to higher yields, every time.

(Cont. on page 11)

Precision Planting (Continued from page 10)

Speak to your local fieldman, MFA retail location, or contact Brian Davidson (816-585-6844) and arrange to have your meters calibrated and prepare your planter for success this season.

10 Planter Tips to Apply Before Planting System

- 1. Level the planter. Check hitch height. Make sure the planter's toolbar is level (vertically) or running slightly uphill. When planters tip down, coulters run too deep and closing wheels run too shallow.
- 2. Check bushings and parallel linkage. Worn bushings increase row bounce which increases seed bounce. Stand behind the row unit and wiggle it up and down and back and forth checking to make sure bushings are tight.
- **3. Drive System. Check every chain.** Kinked chains cause shock and vibration in the meter. Start with fresh, lubricated chains and check them daily. Include transmission chains, meter drive chains and insecticide box chains.
- **4. Calibrate corn meters.** Calibrate meters can add six or more bushels per acre. Take your meters and samples of your seed to a certified MeterMax representative to gain an additional 2, 4 or more percent accuracy.
- **5. Double disk openers.** Test to make sure there is good contact between the double disks. Slide a business card from the top down along the front of the disk until the card won't lower any further. Mark that spot with chalk. Then, take the card from the back and slide it further until it stops. Mark that spot and measure the distance between the two marks. If it is less than two inches, reship or replace the disks. In general, the disks must be more than 14.5" in diameter.
- **6. Seed tubes.** Inspect the seed tubes for wear at the bottom. Frequently the tubes will have a small dog ear flap on the left side of the seed tube. Replace them.
- **7. Closing wheel system.** Consider an alternative to rubber closing wheels. For cool, moist planting conditions, take a look at running one spike wheel (15") and one rubber wheel (13'). The spike wheel can help chop the sidewall, improving fracturing and sealing in the tough soil conditions. For no-till, an even more aggressive approach may improve trench closing. Two 13" spike wheels with a drag chain provide the most aggressive action.
- **8. Closing wheel alignment.** With your planter sitting on concrete, pull ahead about five feet. Look at the mark left behind the planter by the double disk openers. The mark should run right down the centerline between the closing wheels. If a closing wheel is running too close to the mark, adjust the closing wheels to bring it back to center.
- 9. Row cleaner. With higher levels of residue and more corn on corn, almost any planter can benefit from well-adjusted row cleaners. Row cleaners sweep residue from the row, warming the soil around the seed trench, reducing wicking and seedling blight. Make sure row cleaners gently sweep residue you don't want to remove soil, just residue. Watch the row cleaners running. They shouldn't turn constantly. They should turn sporadically, especially through areas of thick residue.
- 10. Improve germination with Seed Firmers. Uniform germination adds, on average, six bushels per acre. Keeton Seed Firmers promote uniform germination by improving depth control and seed-to-soil contact. By using Keeton Seed Firmers to set seeds to the bottom of the seed trench, you increase the odds that seeds absorb moisture uniformly and emerge evenly.



MFA Lamar

1801 KK Hwy. Lamar, MO 64759

Grain Office: 417-682-5593

Feed Store: 417-682-5300

Iantha Bulk Plant: 417-682-2037 Irwin Bulk Plant: 417-884-2474 First Class Pre-Sort

U.S. POSTAGE PAID
COLUMBIA. MO

Permit #286



We're on the Web: www.lamamfa.com

Scholarships Available to Local High School Seniors

It's that time of year again, time for area high school seniors to decide what they want to do with the rest of their lives. If they decide to attend college scholarships are extremely helpful in providing the financial means in order to achieve their aspirations of a higher education. MFA, West Central AgriServices and AgChoice all offer scholarships to graduating seniors of local high schools. Each



MFA and MFA affiliated location gives at least one local high school senior a one-time \$2,000 scholarship. Monsanto also offers a scholarship available to high school seniors. Monsanto has teamed up with the National Association of Farm Broadcasting to provide \$150,000 in scholarships. One-time awards of \$1,500 will be made to 100 high school seniors who come from a farm family and plan to pursue a career in the field of agriculture.

Have your high school seniors ask their counselor about the MFA and Monsanto scholarships. If the counselor does not have information on these scholarships please contact your local MFA, West Central Ag, or AgChoice store for more information.

To receive nightly grain bids and comments via e-mail, send your e-mail address to ddehart@mfa-inc.com and request bids be sent either nightly or once a week.

The MFA Lamar newsletter is coordinated by Diana DeHart and printed through the Adrian Journal. If you have any agronomy, feed, seed, animal health, or grain topics you would like us to address, please call Diana at 816-297-2118 or send an e-mail to ddehart@mfa-inc.com.