Grain Highlights

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STAY ON TOP OF SMALL GRAIN HARVEST

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Small grain harvest is about underway and there are a few tips that we can share with growers to help them maintain a quality crop to sell.

1) Harvesting at a higher moisture percentage though it requires drying avoids the drying and re-wetting caused by heavy dews or rainfall that can occur when they wait for the crop to reach 11-12% moisture. This will maintain a much higher test weight and possibly avoid sprout damage. Test weight is lost when the grain dries and swells again from the re-wetting. The grain does not dry to its original density and the starch fractures, losing weight.

2) Seed will be small to average in size this year so adjust the combine accordingly to prevent excessive loss.

3) Harvest around heavy infestations of ryegrass and/or wild radish. Harvest those areas last and together. Then clean the combine thoroughly to avoid contaminating other areas. A high pressure water hose should be used to wash some of the hard to reach portions of the combine.

4) Clean the bins thoroughly and treat the bins with an approved insecticide. If the grower plans to hold the grain during the summer make sure the bin can be sealed tightly in order to fumigate later. We have a video that growers can get to learn how to put together a closed-loop fumigation system on their bins if they plan to hold grain for sell later in the year.

CHOOSING A GRAIN FOR LATE SEASON PRODUCTION

Dr. Dewey Lee
UGA Extension Agronomist - Grains

Choosing a grain for planting behind small grains is not always an easy choice. Since the price of corn is holding above $5.00 per bushel locally, many growers naturally think of trying to grow a late corn crop. However, that may not be the best choice. Let's look at the merits of corn vs grain sorghum.

Planted in late May and early June, under irrigation corn can yield between 100-150 bushels per acre, grain sorghum: 80-120+ bushels per acre. Corn's cost of production will be higher but its returns per acre will be better. Grain sorghum is generally prices at 90% of corn.

Under dryland conditions, you should reduce the yield expectations of grain by 50%. In general, the crop least effected by drought would be grain sorghum because it can adjusts the osmotic potential of its leaves and maintain a cooler temperature and lose less water. In addition, the cash at risk is less than corn.

Disease pressure can also be quite severe and limit the potential of either crop but particularly corn. Typically, May or June planted corn is at greater risk to southern leaf blight and/or southern rust infection. Growers who choose corn should choose a hybrid that has proven resistance to southern leaf blight and southern leaf rust. Do not choose and try to grow a temperate hybrid that does not have good resistance. The grower will likely harvest no grain. In previous years, tropical corn has been the better choice for late planting. Unfortunately, very few tropical corn hybrids are available and even fewer have a Bt gene in them. Grain sorghum is more suited for later season production but anthracnose and fusarium head blight can be a problem. While the market favors the cream types, they seem to have poorer disease resistance. Check with the seed company representative before buying the hybrid. If may be that the grower is better off with a bronze or red type.

Insects will be more of a problem in late season production than early. Bt temperate corn hybrids are available for planting and are worth the additional cost. Unfortunately, growers are limited to 50% of the production in Bt hybrids. But due to disease problems associated with the late production, choices are more limited. At-plant insecticides can be helpful in maintaining a good stand. Whorl feeders can be severe in all the grain crops so scouting is very important. Sorghum midge can be controlled in grain sorghum but the grower must scout during anthesis. Chinch bugs can SEVERELY damage pearl millet and sorghum. Mustang Max and other pyrethroids are registered for use and are excellent choices for controlling chinch bugs. I believe a preventative application is warranted. Check the Pest Control Handbook for more information.

Good weed control is a must. I suggest for sorghum that growers use a stale seed bed. In either strip till or conventional, growers should allow grasses to emerge and then use a burn-down in order to reduce the competition from grasses. An application of Dual or Lasso can be applied pre-emerge if safened treated seed is used.

Narrow rows (<30 inches) are preferable to wide rows (36 inch) since it helps shade the ground quickly and reduces weed competition and water loss to evaporation. Sorghum and corn respond well to narrow row production. The prefer row width is around 20 inches. Do not drill sorghum unless every other metering cup is covered. The openings over the metering cups can be blocked to closely match 21 inch rows.

Plant populations should be as follows:
Irrigation: corn-22,000-28,000; grain sorghum 75,000-90,000
Dryland: corn-16,000-20,000, grain sorghum-45,000-60,000

Apply fertilizer according to soil test values and the lower yield goal.

FUEL VS. FOOD
(An Excellent Article from Kansas State University)

Dr. Dewey Lee

Are grain prices too "High" depends on the side of the desk you sit! Farmers producing grain who are faced with higher fertilizer prices, diesel fuel prices, chemical prices, higher cash rents, etc., the current grain prices do not seem too "high". However, a cattle feeder or a dairy farmer faced with higher feed costs probably considers corn prices to be too "high". Flour millers and other grain buyers are also complaining about "high" grain prices, but many grain farmers would respond that historical grain prices were too "low" and grain could only be produced with subsides.

The real question is will a change in ethanol policy cause a major reduction in grain prices that many buyers are demanding? An Iowa State study suggests the answer is no!

Any suggestion by ethanol critics that an elimination of ethanol mandates and tax credits would return the corn market to $2.50 is not likely based on a new Iowa State University study by Doctors Bruce Babcock and Lihong Lu McPhail. The link to the paper is:
http://www.card.iastate.edu/iowa_ag_review/spring_08/article2.aspx

Iowa State's forecasted an annual average price of $5.60. It is unclear if this is the average for futures prices or cash prices. NASS reports a Marketing Year Average (MYA) price that is cash sales weighted by bushel volume sold. Because ISU is working with futures and options, one would assume their $5.60 price is an annual average futures price for corn and not a cash price. ISU then estimates the probability of price ranges, i.e. the standard error of the mean.

ISU then estimated the average price if public policy were to remove the ethanol mandate. The result was a reduction in annual average price from $5.60 to $5.34.

If public policy were to remove the mandate and the 51 cent tax credit, the result was a reduction in annual average price from $5.60 to $4.83. The decline from $5.34 (after the mandate elimination) to $4.83 is 51 cents, i.e. the same as the tax credit. This would suggest that all of the tax credit is being transferred to farmers. This is unlikely because the blenders would surely try to hang on to some of the credit by reducing the price they were willing to pay for ethanol.

Kansas State University thinks the initial price reduction caused by elimination of mandates and tax credits would be more than the 77 cent estimate in this study. The psychological impact on the market by such a large change in public policy would cause the long speculators to dump their contracts. So it is likely the market would over react to the downside, but remember, the Iowa study is an estimate of the annual average price not a spot price.

But there are good reasons to believe the Iowa estimates may be close and the fall in corn prices may not be as severe as many analysts would forecasts.

The cost of fertilizer has doubled as have many other input costs that are petroleum based. Those higher input costs would have happened without regard to the corn price. Over the long run one can not drive price below the cost of production, so in the long run average corn price would have increased even without ethanol.

The weak dollar has made USA corn less expensive in international markets, and this has contributed to heavy export demand. The export market has supported higher grain prices independent of ethanol.

Poor growing conditions for wheat are largely responsible for higher wheat prices. New crop wheat prices have declined about $5 from their highs, so improved weather has eliminated "high" wheat prices. However, the corn price will put a "floor" under wheat prices.

Demand for feed has remained strong with distillers' grain providing more feed than originally anticipated.

Higher gasoline prices increases the demand for ethanol without the subsidies. If gasoline prices were to increase above $4 that would drag ethanol prices higher too.

With only 17 cents worth of wheat in a loaf of bread and 10 cents of corn in a box of corn flakes, it is difficult to buy the argument that ethanol is driving food prices. The argument that

higher corn prices will cause meat prices to increase is a stronger argument because feed is a major cost of meat production. But even then ethanol is only one of the factors causing higher food prices.

So grain farmers should support elimination of the current ethanol policy?

Clearly this would not be to their benefit because ISU is forecasting a 77 cent decline. KSU considers that to be a very conservative estimate. Grain farmers' highest priority should be to retain the mandate because this makes it clear bio-fuels will be a part of the fuel supply irregardless of the crude oil market. This will cause continued demand for corn in the short run, but more importunately it will create economic incentives to find more efficient methods for producing bio-fuels and those fuels many not come from corn. However, that only means current crop acres will shift to the "energy" crop so it is still good news for farmers. Current ethanol policy creates an economic incentive to develop new engine technology that will more efficiently utilize bio-fuels or create some other technology that currently is not even under consideration.

ISU also estimated the impact on corn prices if a Corn Belt crop disaster were to occur similar to 1988 drought or a 1993 flood. Under current policy the corn price would increase dramatically. ISU estimates a price of $8.62, but prices over $10 would not be a big surprise. This scenario would really put pressure on Congress to eliminate the development of bio-fuels, at least until the next disruption in crude oil supplies similar to what occurred in 1973.

Source: Kansas State Ag Extension

DISEASE AND NEMATODE ISSUES

Dr. Bob Kemerait
UGA Extension Plant Pathologist

Many corn growers have observed areas in their fields this season that show poor growth, yellowing foliage, stunted plants, and poorly-developed root systems. In many instances, these areas of poor growth are the result of damage to the root systems by nematodes. The most important nematodes affecting corn in Georgia include the southern root-knot nematode, the sting nematode, and the stubby-root nematode.

Symptoms similar to those described above have been observed in nematicide trials that are being conducted in several locations across the state (e.g. Seminole, Mitchell, Tift, and Berrien Counties). In these trials, soil fumigation with Telone II + seed treated with either Poncho or Cruiser has often produced dramatic growth responses compared to seed treated only with Poncho or Cruiser. The plants (both shoots and roots) in the fumigated plots are larger than in the untreated plots; it will be interesting to see if the improved growth translates into increased value at the end of the season.

Growers can work to determine whether or not nematodes may be causing the symptoms in their field by taking soil samples and roots samples and submitting them to a nematology laboratory for analysis. Economic threshold values are poorly developed for corn in Georgia and it is likely that fewer nematodes, especially the stubby-root nematode, can cause more serious damage than earlier believed.

Fungicide concerns for 2008: According to representatives from the agrichemical industry, it is quite likely that growers will be faced with higher fungicide prices and reduced availability of fungicides this coming season. While there are a number of reasons for higher prices and reduced stocks, the bottom line for corn growers is that they should begin planning NOW to ensure that they have the fungicides that they need to protect their crop. It is recommended that growers protect their corn crop with fungicides if southern rust threatens. It is unclear if fungicides will be beneficial to the grower if the crop is infected by common rust or southern corn leaf blight, or not affected by disease at all.

WHEAT EFFICIENCY CONTEST

Dr. Dewey Lee
UGA Extension Agronomist - Grains

Just a reminder to encourage growers to enter the high yield wheat production efficiency program...Email or contact me for forms (phone: 229-386-3006 or deweylee@uga.edu). This will be a good year for lots of growers to share success stories. Talk to those growers that you know have good production and encourage them to enter this year's program.

LATE SEASON INSECT CONTROL IN WHEAT

Dr. David Buntin
UGA Grain Crop Entomologist

Stink Bugs. Stink bug infest winter wheat during grain development in the spring and are a concern for two reasons. First they may directly damage wheat grain. More importantly, stink bugs may move as wheat matures to adjacent crops such as corn and vegetables where they may cause damage to seedling plants. Surveys in Georgia have found that three species, rice stink bug, southern green stink bug, and brown stink bug.

Wheat is most sensitive to stink bug feeding injury during the milk stage. Threshold is 1 bug per square foot at milk stage. Despite being very visible on maturing heads, stink bugs

number almost always are much below this threshold. Control during medium to hard dough stage is not justified.

Therefore, control would only be justified to prevent stink bug movement to adjacent sensitive crops or possibly to reduced contamination of harvested grain by stink bugs. However, I normally suggest waiting for stink bugs to move into another crop and treat the summer crop if needed. Warrior/Karate, Mustang MAX and Baythroid are all labeled for stink bugs in wheat. Warrior/Karate and Baythroid have a 30 day harvest internal, while Mustang has a 14 day harvest interval.

Aphids on Wheat Heads. I have had calls about treating aphids on wheat grain heads during late grain fill. These are English grain aphids. Feeding injury by large numbers during milk and early soft dough stage can reduce kernel weight. The threshold is 10 aphids per head and flag leaf. Their presence from medium dough to maturity will not reduce seed yield. In most cases lady beetles and other predators will move in and reduce aphid infestations during grain fill. If you are within 30 days of harvest, aphid control most likely is not going to be useful. If control is needed, use dimethoate or the pyrethroid Warrior/Karate or similar products at the 0.02 lb ai/acre rate. Dimethoate has a 35 day harvest interval and Warrior/Karate has a 30 day harvest interval.

Consult the Georgia Pesticide Handbook (Commercial Edition) for specific spray recommendations and restrictions. Always read and follow pesticide label directions.