

AGRONOMY

UNIVERSITY OF
FLORIDA
IFAS EXTENSION

NOTES

March 2005

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Row Spacing and Plant Populations for Corn

Corn is more susceptible to stress than many crops since it has such a short pollination period and that period should be as free of water stress as possible. Many growers are interested in looking at different row spacing and plant population, but should consider what other factors are limiting if irrigated corn is producing only 140-160 bu/A. When yields get into the 190-220 bu/A range on a consistent basis fine tuning the plant population and row spacing can help boost yield. The higher the plant population and the more narrow the row, the more stress that will be encountered for water and nutrients and standability.

DLW

Cotton Variety Selection

A high percentage of the Florida cotton crop will be planted to a single variety in 2005. This variety, DP&L 555 is susceptible to root knot nematode and caution should be taken if cotton is to be grown in fields where serious nematode levels are known to exist. Rotation, recommended nematicides, proper fertilization and water, and more resistant varieties are a way to overcome the effects of high nematode levels in these fields.

DLW

Fertilizing Pastures and Hay Fields

The six soil-supplied nutrients required by plants in the largest quantities are nitrogen (N), phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg), and sulfur (S). Micronutrients, iron, copper, zinc, manganese, boron, molybdenum, and chlorine, are also essential but are used by the plant in very small amounts. The soil can supply the plant with most, if not all of these nutrients, but often the supply of one or more of the nutrients is insufficient for optimum growth.

Nitrogen is the most important fertilizer nutrient used on grass pastures and hay fields. It is the nutrient that is most likely to be deficient and

therefore the one that most often results in increased forage production. Phosphorus may be deficient in some areas, but some Florida soils are high in native P. Also, some pasture grasses (such as bahiagrass) may extract sufficient P from the subsoil, even when the P level in the surface soil is low. Potassium may need to be added to some pastures, but in South Fl., bahiagrass pastures on flatwoods that receive 50 pounds of nitrogen or less per year have shown little if any response to potassium fertilization. Under intensive hay or silage production, where nutrients are removed from the land, annual applications of P and K are needed. Where nutrients are being removed in harvested forage (hay) potassium may reach critically low levels, where not only plant growth is reduced, but plants may die. This is usually indicated by a thinning stand in bermudagrass hay fields. Potassium can very quickly become deficient; also calcium, magnesium, sulfur, and some micronutrients may eventually become deficient after several years of cropping. Calcium, magnesium, sulfur, and the micronutrients are seldom a problem in pastures where considerable recycling of nutrients occurs. (Source: Fl.Forage Handbook-modified).

CGC

Little Yellow Flowered Legumes

At this time of year, small yellow flowered legume plants can be seen growing along sidewalks, ditches or in spots in open ungrazed fields. They will volunteer in these areas year after year. They are reseeding winter annuals and are known as 1. Black Medic (*Medicago lupulina*), 2. Large Hop Clover (*Trifolium campestre*), 3. Small Hop Clover (*Trifolium dubium*), and 4. Spotted or Southern Burclover. They are all characterized by relatively low yields and a short growing season. Therefore, they are not usually intentionally planted in pastures. If they appear, graze them quickly before they disappear.

CGC

Warm Season Annual Grasses and Pasture Renovation

The two most popular warm season annual grasses are pearl millet and sorghum x sudangrass. Both should be planted on sites that have good drainage, but sorghum x sudangrass will tolerate wet, saturated soil conditions better than pearl millet. Therefore, it may be the better choice on some flatwoods sites. These grasses should not be planted until the soil is warm. The earliest planting date is usually mid March to mid April.

When or where should these crops be used?

These crops can be useful in a pasture renovation program. For instance, if you desire to convert an old rundown bahiagrass pasture to an improved more productive grass such as Tifton-9 bahiagrass, it might be desirable to till and plant the land to a summer annual grass or some other crop for one or more seasons before planting the Tifton-9. The summer annual grass can be followed in the fall with a cool season annual such as ryegrass or a small grain. The Tifton-9 would then be planted in June following the ryegrass. This process would involve soil tillage and seedbed preparation before each crop is planted. The multiple tillage operations should eliminate most of the old pasture grass and grass seed. This process involves considerable expense; therefore, the producer must make good use of the forage produced from the annuals.

The summer annuals will grow rapidly during hot weather and may be ready to graze in 35 to 40 days after planting. They are very productive if fertilized properly and can provide high quality grazing. The most efficient use of these pastures can be had by grazing young animals such as developing heifers or stockers that require a higher quality forage than that required by mature animals. Also, be prepared to graze rotationally. Remember, do not graze sorghum x sudangrass until it is 24 inches tall or taller. This is due to the prussic acid (HCN) poisoning problem that can occur in very young plants. Prussic acid is not a problem in pearl millet.

One complaint about summer annuals is that they can produce too much growth and will “get away from you.” They do require a high stocking rate. When excess growth occurs, move young animals to a fresh pasture and let the mature cow herd clean up behind them. Stems may need to be mowed after grazing.

CGC

Peanut Drying

Although it is several months until peanut harvest, growers and particularly new growers, should plan to have adequate facilities available when they are needed. Buying points usually have drying facilities and will dry the peanuts for a charge. There are on-farm dryers available in some locations. No matter where the drying facilities are located, plan to get the peanuts on the dryer as soon as possible after they are combined. If drying is not started soon after combining, the peanuts may start to heat up, especially if the moisture content is high, and could result in off flavors and undesirable grades. The air capacity of the dryer should be about 12 to 15 cubic feet per minute of air flow per cubic foot of peanuts (cfm/ft³). If the dryer was designed for 14-foot trailers, it would probably be marginal or inadequate if 21-foot or 28-foot trailers are substituted. Be sure that the dryers are adequate for your needs.

EBW

Peanut Seed Handling

Peanut seed are more fragile than many other seed, which requires extra care during handling to prevent loss of germination. When handling the seed, do not drop or throw bags of seed into the bed of trucks or storage bins, but rather lay the bags down gently when loading or unloading. For most growers, it would probably be preferable to pick up the seed on the date they are to be planted so that there would be reduced handling and risk of damage. In addition, most seed dealers can provide storage that protects more against temperature and moisture extremes than can be provided on the farm. Also be gentle when pouring seed into the hoppers on

the planter, and be sure that the seed are not injured during planting. Seed costs are a major input in the expenses of growing peanuts, and poor stands and replanting should be avoided if at all possible.

EBW

Price Outlook for Peanuts

Both peanut production and consumption have increased in recent years in the United States. Unfortunately 2004 production has exceeded consumption, resulting in estimates of lower prices in 2005. Production estimates throughout the 2005 season will influence prices.

EBW

Assessments for Tobacco Buyout

The USDA published a rule on February 10 relating to assessments that will be used to make buyout payments to quota holders and producers. Domestic manufacturers and importers of tobacco and tobacco products will fund payments through assessments of approximately \$10 billion over the next ten years. Those companies that are assessed are those that are required to have a Department of the Treasury permit to manufacture or import tobacco products. Information on the volume of tobacco and excise taxes paid, beginning in October 2004 and continuing through December 2004, must be sent to the USDA's Commodity Credit Corporation, which will then compute each company's share of the first assessment, which will be due by March 31, 2005. Subsequent assessments will be adjusted quarterly according to the market share volume, and payments will be due at the end of each quarter. Disbursements to quota owners and growers, or designated financial institution will be made annually over a ten-year period.

EBW

Lump-Sum Payments of Tobacco Buyout

The tobacco buyout legislation provided for financial institutions to help carry out the

provisions of the buyout by allowing payments to be assigned to them. The financial institution would provide a lump-sum payment to the grower and in exchange receive the annual payments. The USDA entered into a contract with Wachovia Corporation to conduct an information campaign so that all potential beneficiaries would be aware of the provisions of this program. Letters will be sent to all quota holders and producers, and there will be magazine and newspaper ads, radio spots, and television ads in rural and agricultural media, and brochures will be made available. Town hall meetings will be held in key locations. A National Tobacco Call Center at 1-866-887-0140 will be in place beginning on March 1, and the Farm Service Agency web site at www.fsa.usda.gov/tobacco will be available as a source of information.

EBW

Tax Implications of the Tobacco Buyout

Tobacco buyout funds will be paid to owners of quota as of October 22, 2004, and to farmers that grew tobacco in the years 2002, 2003, and 2004. In many cases the Florida quota owner and the farmer are the same person and would be entitled to both payments. Both are to be paid over a ten-year period. The payment to the producer amounts to a total of \$3 per pound and this payment is considered to be ordinary income. The payment for quota is considered to be taxable as capital gains, which requires that the recipient provide the cost basis for the quota. Canceled checks that indicate the price paid and amount of quota purchased would be highly desirable. If such records are not available, the quota owner will have to provide some verifiable evidence of the value of quota when it was obtained. The Farm Service Agency has information as to when and how much quota was transferred, but would not have any record as to how much was paid for the quota. Quota obtained through gift or inheritance would have to be priced according to tax laws applicable to gifts and inheritance. If land was purchased and quota was obtained with the purchase, then an examination of records of land sales, with and without quota being included may provide an

acceptable estimate of the value of the quota when it was obtained. Keep in mind that the value of quota varied among counties and years, so any estimates must take these variations into account.

EBW

Tobacco Quota Buyout Payments

The USDA has announced that the sign-up for Tobacco Transition Payment Program will begin March 14 and extend through June 17, 2005. These payments will be made to quota owners as of October 22, 2004. The payment rate will be \$7 per pound of the basic quota level. Producers that shared in the risk of producing tobacco in the 2002, 2003, and 2004 will be eligible to share in payments at the rate of \$3 per pound of the basic quota level. Prior to the sign-up, all known quota holders and/or producers will receive a letter providing information on the records of the basic quota levels. If there are errors, verifiable information should be provided at sign-up. The regulations concerning payments will be made available in March. Growers with interests in farms in more than one county would need to contact the appropriate USDA Service Centers. Florida residents that have interests in tobacco quota in other states would need to contact the appropriate Service Center for the county and state. A recent USDA fact sheet on the Tobacco Transition Payment program is available at <http://www.fsa.usda.gov/pas/publications/facts/html/ttpp05.htm> and provides additional information.

EBW

Control of Wild Radish at Burndown

Wild radish, cutleafevening primrose, and horseweed are three commonly occurring weeds in cotton and peanut production. One reason that these weeds are problematic is that glyphosate (Roundup, Touchdown, and others) is not highly effective on these species. Therefore, other herbicides need to be added to the burndown program for broad-spectrum control.

Generally, 1 pt of 2,4-D applied in February or March will provide excellent control of these weeds at a very low cost. Late winter applications of 2,4-D is attractive for two reasons: 1) greater levels of control will be obtained if weeds are small (not blooming), and 2) this allows sufficient time for the herbicide to dissipate from the soil prior to planting cotton. However, the warm winter we have experienced has allowed wild radish to grow extremely large and begin flowering much earlier than usual. Considering that glyphosate alone will not provide adequate control of wild radish, other steps should be taken.

Considering the size and growth stage of wild radish this season, application rates of 1.5 to 2 pt/A may be required. 2,4-D applied at 2 pt/A will likely provide 75% control of blooming wild radish. Although the plants may not completely die, seed production will be greatly reduced (or eliminated) and the plants will be weakened to the point that glyphosate applied at planting should totally control the remaining plants.

It must be noted that cotton is extremely sensitive to 2,4-D. The 2,4-D label states that planting of cotton must be delayed for 90 days after 2,4-D application, or until the herbicide has dissipated from the soil. It has been our experience that delaying planting for 21 to 30 days after application is sufficient to allow dissipation of 1 pt of 2,4-D. Therefore, a 2 pt/A rate will likely require waiting to plant for close to 45 to 60 days after application. The longer you wait, the less likely cotton will be injured by the 2,4-D. Therefore, 2,4-D should be applied as soon as possible in order to achieve maximum control of wild radish and the least amount of risk of cotton injury.

JAF

Thistle Control in Pastures

The number of thistle species in Florida is astounding and includes those such as tall thistle, Leconte's thistle, swamp thistle, Nuttall's thistle, Virginia thistle, and purple thistle, among others. According to the USDA plants

database, purple thistle is the most widespread thistle in Florida, being present in nearly all counties of the state. Thankfully, all of these thistles are biennials and not perennials.

Biennial thistles emerge and grow as a whorl of leaves (“rosette”) near the soil surface during the first year. During the second year, the stem bolts, or elongates, and the plant reproduces by seed. In rare instances, biennial thistles have been observed to germinate and flower during the same year.

Optimum control of most biennial thistle species is obtained by treating the plant with herbicides prior to bolting in late fall or early spring. Once rosettes begin to bolt, control with herbicides is greatly reduced. Any herbicide product containing 2,4-D and/or dicamba usually provides excellent control of thistles when they are in the rosette growth stage. Weedmaster at 1.0 to 2.0 quarts per acre when temperatures are greater than 50F is a good option for thistle control. Control of small rosettes (< 6 inches in diameter) can be obtained using 1.0 quart per acre of Weedmaster, but increase the rate to at least 1.5 quarts per acre if rosettes are large. Growing conditions should also be considered as actively growing rosettes will be easier to control than those that are stressed from dry weather. Consider adding crop oil concentrate to Weedmaster as it will enhance thistle control. Currently, we are in the time of year where control options for biennial thistles should be implemented.

BAS

Cover Crops for Strip Tillage

Early February is a good time to apply nitrogen fertilizer to cover crops along with 2,4-D to kill winter broadleaf weeds and stimulate small grain or ryegrass cover crops. About 30-40 lbs/A of nitrogen will stimulate grass growth and shade further development of weeds. Grasses without weeds are easier to kill with materials like Roundup 3-4 weeks ahead of planting and result in covers that are 2-3 feet tall to strip till into.

DLW

Lime Applications to Row Crop Land

If lime has not been applied to row crop land prior to this time of the year, apply in needed amounts to allow it to start reacting with the soil for crops to be planted later in the spring. Many other nutrients have better uptake by the crop when the pH is in the 5.8 to 6.2 range.

DLW

Nitrogen Supplies

From all indications, nitrogen may be in short supply and cost more than in previous seasons. High natural gas prices and competition have resulted in higher nitrogen prices and hauling costs are higher too. Many fertilizer suppliers have waited for nitrogen prices to come down before filling tanks and warehouses. It would be a good idea to ensure that you have adequate nitrogen supplies for your crops early this year.

DLW

Field Crop Production

The USDA's National Agricultural Statistics Service recently released the following estimates of the value of field crops produced in Florida and the United States for 2004:

Crop	Average Price (\$ per unit)		Value of Production (x1000 dollars)	
	Florida	United States	Florida	United States
Corn for grain	2.25 bu	1.95 bu	6,480	23,032,795
Wheat, all	3.40 bu	3.38 bu	2,295	7,191,798
Soybeans	5.30 bu	5.10 bu	3,063	16,098,170
Peanuts	.187 lb	.196 lb	68,068	834,380
Cottonseed	86 ton	105 ton	2,666	874,280
Cotton, all	.432 lb	.480 lb	19,699	5,299,559
Hay, all	90 ton	89.70 ton	58,500	12,197,354
Tobacco, all	1.849 lb	1.984 lb	18,120	1,752,201
Sugarcane, sugar and seed (2003)	31.90 ton	29.50 ton	544,669	998,269

EBW

The use of trade names does not constitute a guarantee or warrant of products named and does not signify approval to the exclusion of similar products.
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