

AGRONOMY

UNIVERSITY OF
FLORIDA
IFAS EXTENSION

NOTES

May, 2003

DATES TO REMEMBER

May 8	Forage Field Day - Jay Research Farm
May 15	Range Cattle Field Day - Ona
May 19-22	Aquatic Weed Control Short Course 2003 - Ft. Lauderdale
May 21-23	Soil and Crop Science Society of Florida Meeting - Daytona Beach
July 7	Perennial Peanut Field Day - Moultrie, GA
July 8	Agronomy Weed Science Field Day (Deep South Weed Tour) - Jay Research Farm
Sept. 5	Row Crop Field Day - Jay Research Farm

IN THIS ISSUE

PAGE

CORN

Conservation Tillage for Cotton	2
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FORAGE

Keeping an Eye on Tropical Soda Apple Infestation on Your Pasture	2
Tolerance for Dual Herbicide on Forages	3

PEANUTS

Peanut Acreage for 2003	3
Use of Boron on Peanuts	3
Virginia Peanuts	3

SOYBEAN

Corn/Soybean Rotation	3
Exemption for Tolerance on Soybean Seed Treatment	4

TOBACCO

Blue Mold of Tobacco	4
Records Needed to Determine Fertilizer Replacement for Tobacco	4
Slow Growth of Tobacco	4
Virus Diseases of Tobacco	4

MISCELLANEOUS

Glyphosate Market	5
Prospective 2003 Field Crop Acreage	5

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Conservation Tillage for Cotton

A Cotton Foundation study reports that 78 percent of growers who have moved to conservation tillage since 1997 credit the change to Roundup® Ready technology. Also, about 59 percent of U.S. cotton acres are being farmed using some form of conservation tillage (no-till or reduced till). Growers who have adopted conservation tillage indicated on the survey that they believe it saves an average of \$20.13 an acre over conventional production methods. The director of the National Cotton Council's technical services says this study confirms what most in the industry suspected. (*Progressive Farmer*, March 2003, via Agnet).

MAM

Keeping an Eye on Tropical Soda Apple Infestation on Your Pasture

Tropical soda apple (TSA) has invaded pastures in south Florida since 1990. Serious efforts were made to control TSA in Florida in the mid 1990s but the enthusiasm eventually waned. Currently, there are more than 500,000 acres of TSA infestation in Florida.

Tropical soda apple is spread to new locations by cattle movement, wildlife, contaminated hay, grass seed and sod. It is on the list of Florida State's Noxious Weed according to Florida Law (Fla Admin. Code 5B-57-007) and as such it is unlawful to introduce, possess, or move TSA plants deliberately except under permit issued by Florida DACS or the USDA. Recently, some southern states including Georgia, Mississippi, and Alabama have considered passing legislation to regulate the movement of cattle from Florida to their states in order to stop the spread of TSA in southeastern USA. Such legislation, if adopted, would require the quarantine of Florida cattle at specified locations for up to one week during/prior to shipment. The expense of such confinement will be charged to the cattle owner and will tend to increase cattle production costs in Florida.

Therefore, South Florida cattlemen need to pay greater attention to TSA infestation on their pastures and engage in renewed efforts at preventing, monitoring and controlling TSA as follows:

Sparse Stand:

For sparse stands in south Florida, spot spray individual TSA plants in November with a 0.5% solution of Remedy (tricyclopyr) + 0.1% non ionic surfactant. Wet foliage completely to the point of dripping with solution and use a color maker in the spray mix to ensure all plants are treated. Monitor the weed problem through winter and spot-spray new/regrowth of TSA plants on that pasture again in February of the following year. Monitor plants through spring and if there are still some live TSA plants on the pasture, spot-spray a third time in May followed by continued monitoring through summer. Monitoring and repeated spot-spraying at about 60 d intervals over 2 years will prevent TSA fruits from maturing seed and help clean up a sparse stand of TSA on a pasture unless pasture is re-infested with seed introduced from outside.

Dense Stand:

Dense stands of TSA on pasture in south Florida must be mowed repeatedly to a 3-inch stubble in November, February and April to prevent fruit setting/seed maturation. Repeated mowing every 50-60 days can in itself cause 50-60 % mortality in mature TSA plants. After the April mowing, allow the TSA plants to regrow for about 60 days and broadcast spray 1 qt /A of Remedy + 0.1% non-ionic surfactant in June. Next, monitor TSA plants through September and spot-spray remaining plants in October with a 0.5% Remedy solution + the non-ionic surfactant and the color marker. Continue monitoring TSA for at least another year and spot spray emerging plants every 60 days as described for sparse stands until pasture is completely cleaned up.

There are hopeful signs that a variety of biological agents (insects, virus) for TSA control

will soon become available to increase our arsenals on this noxious pasture weed. But for the meantime, **prevention, monitoring and repeated spraying with Remedy** provide the key to successful tropical soda apple control in south Florida.

MBA

Tolerance for Dual Herbicide on Forages

Based on work by IR-4, tolerances have been obtained for the use of the herbicide Dual Magnum® (S-metolachlor) in or on grass forage (10 ppm), grass hay (0.2 ppm), spinach (0.5 ppm), and tomato (0.1 ppm). (*Federal Register*, 4/2/03).

MAM

Peanut Acreage for 2003

Estimates for an increased acreage (15%) of Florida peanuts in 2003 indicate that increased importance should be given to using practices that help insure good yields and quality. One is the need for rotation of peanuts behind crops that do not support the same diseases or pests that attack peanuts. Grass crops and cotton are generally desirable rotation crops. Peanuts should not be planted on the same field more than once every three to four years. If disease or nematode problems were severe in the peanuts, it would be advisable to allow five to six years between peanut crops and being sure that desirable rotation crops are planted each year of that rotation. If the peanuts are to be planted in a field that has never grown peanuts, be sure that nitrogen-fixing bacteria are present in the soil. An indication of the presence of the desirable bacteria would be the growth of cowpeas, alyce clover, Florida beggarweed, and certain other legumes in the field. If there is doubt that the bacteria is present, then an inoculant could be applied at planting.

EBW

Use of Boron on Peanuts

In general peanuts grown on the sandy soils of Florida require some boron fertilization to insure

good yields and quality. Boron also prevents 'hollow-heart' which is a lack of internal development of the kernels and results in a lower grade and price for the peanuts. Boron can be a part of the fertilizer applied before planting, or it may be included in the first or second fungicide spray for leaf spot control. The general recommendation is to apply ½ to ¾ pound of elemental boron per acre. Since boron leaches readily, it may be advisable to replace any that may have been leached by heavy rains that occurred before flowering. Excessive rates of boron are toxic to the peanut plant and should be avoided.

EBW

Virginia Peanuts

The prospective planting report by NASS-USDA indicates a considerable decrease in peanut acreage in North Carolina and Virginia, states that grow mostly the virginia market-type peanut. The virginia market type peanut is larger than the runner market type, grown mostly in Florida, Georgia, and Alabama, and is generally used for roasting, either shelled or unshelled. There are reports that the decline in acreage in the traditional states is due to the combination of low loan prices and the high cost of production making profits less likely. Some of the virginia market-type peanut production may shift to South Carolina, Georgia, and Florida. They may be grown under contract, but other marketing alternatives are available. Production costs are higher for virginia peanuts because of seed costs, the desirability of irrigation, extra gypsum to help insure a bright hull, and the greater care needed to prevent harvest losses.

EBW

Corn/Soybean Rotation

The days of the venerable corn/soybean rotation appear to be numbered. The reasons include declining soybean yields, federal commodity policy, soybean competition from Brazil, developing local corn markets and the advent of rootworm-resistant hybrids. With soybean yields falling by nearly twenty percent over the last eight years, growers who are experimenting with

two years of corn followed by one year of soybean are seeing increased soybean yield. When Bt rootworm-resistant corn hybrids become available, they should let growers plant a second year of corn without losing yield, while picking up higher soybean yields in the third year of the rotation. (*Top Producer*, March 2003, via Agnet).

MAM

Exemption for Tolerance on Soybean Seed Treatment

Based on a request by Gustafson LLC, an exemption from the requirement of tolerance has been granted for residues of *Bacillus pumilus* GB 34 when used as a seed treatment in or on soybean and soybean after harvest. (*Federal Register*, 4/2/03).

MAM

Blue Mold of Tobacco

The blue mold fungus has been found on several farms in Florida, but has yet to become a serious problem. However as the tobacco grows and becomes more succulent, blue mold can become very damaging, especially during periods of rainy weather. Acrobat and Actigard are labeled for blue mold prevention and control, and should be used as needed.

EBW

Records Needed to Determine Fertilizer Replacement for Tobacco

If rains become heavy or frequent enough to leach nitrogen and other nutrients that have been applied for tobacco, replacement may be needed. The amount of replacement will depend on the age of the plants, how much and when fertilizer was applied, and when and how much rainfall the tobacco received. Irrigation records are also needed. Keep these records to help determine how much replacement fertilizer will be needed.

EBW

Slow Growth of Tobacco

Cool weather in April added to those conditions that slowed the recovery of tobacco plants from transplanting. Among the other conditions that could have contributed to the slow growth included stunting by certain herbicides, such as Prowl. Greenhouse-grown transplants are often slower to resume growth than bare root plants. Diseases, such as blue mold or stem and leaf lesions caused by the *Rhizoctonia* fungus, may have also slowed recovery from transplanting. In many cases plants that have become woody after numerous clippings, do not resume growth as fast as younger and more succulent plants. A new factor was added in 2003 with the use of Actigard to reduce tomato spotted wilt virus infection. Actigard-treated plants have been reported to be slow to resume growth when stress conditions exist. In general these conditions only slow recovery and do not cause permanent stunting. While side-dress applications of fertilizer may speed recovery to some extent, response will be slower than it will be as the temperatures rise and also time allows the plants to recover from other stunting causes. There are reports that experimental chemicals are being tested for possible use in reducing some of the stresses that cause slow recovery from transplanting.

EBW

Virus Diseases of Tobacco

There are reports of outbreaks of the cucumber mosaic virus (CMV) in tobacco. This virus can cause severe stunting of plants, with the young leaves being yellow or having a mosaic pattern in them. The leaves are more narrow than normal and may be closer together on the stalk. Early suckering has also been noted. If other virus diseases are present in the same plant, it appears that even more loss can be expected. The CMV virus is spread by aphids and there are many other plant hosts for the virus, including numerous weeds and crops. Potato virus-Y (PVY) and tobacco etch virus (TEV) are also spread by aphids, while tomato spotted wilt virus (TSWV) is spread by thrips. Tobacco mosaic virus (TMV) is normally spread by human, machine, or other means of direct contact. It is

often difficult to identify a virus by the visual symptoms alone, so laboratory confirmation is often needed. Thus far CMV is the only virus that has been reported to be in Florida tobacco, but it is likely that the others are or will be present.

EBW

Glyphosate Market

Carl Casale, vice president of North American operations for Monsanto, was cited as telling a group of investors that the company's practices in the glyphosate herbicide industry, which is being investigated by the Justice Department, is in preliminary stages and could last "some period of

months." Monsanto said last week that it and other glyphosate makers are cooperating with the investigation into "possible anticompetitive conduct." Casale said the glyphosate industry is very competitive. Although Monsanto's Roundup® brand products are dominant, the company expects its market share to fall to about 71 percent this year from 77 percent in 2002. (Knight-Ridder Tribune, March 20, 2003 via Agnet).

MAM

Prospective 2003 Field Crop Acreage

The USDA's National Statistics Service has released the report of expected acreage of field crops for 2003. These estimates are based on surveys of farmers and the report was released on March 31.

Crop	Florida		United States
	2003 Acres (x1000)	2003/2002 Acres (x100)	2003/2002 Acres (x100)
Corn, all	85	113	100
Wheat, all	20	222	102
Hay, all	280	100	99
Soybeans	11	110	99
Peanuts	110	115	92
Cotton	100	83	102
Tobacco, all	4	87	97

The same report included expected United States percentages of biotech varieties of corn, cotton, and soybeans, which were 38, 70, and 80, respectively.

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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