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NOTES

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Nitrogen on Cotton

Now is the time to apply N on cotton. Cotton does not require as much N as many crops, but approximately 50-60 lbs/A is required to produce a bale of cotton. There may be as much as 20-50 lbs/A of soil residual nitrate N available to the plant over the season, so applications of 60-90 lbs/A may be adequate for 2-3 bale yields. Sandy soils do require greater N management than heavier soils, but it should not be applied later than the 3rd week of bloom. Late foliar applications of N can cause excessive vegetative growth and is not recommended unless boll set is poor.

DLW

Protecting Cotton Squares and Blooms

Much of the cotton that was planted in late April and early May should be blooming by early July and will continue to bloom through August. It is important to protect these early squares from insects and irrigation should be maintained to keep squares from shedding. Early boll set is very desirable since it helps slow vegetative growth and cuts the amount of growth regulators needed to control plant height. Plant bugs and stinkbugs need to be controlled in the July-August period since they may be leaving small grains or corn that was harvested for grain or silage and are looking for succulent plants to feed on. *Bt* cotton may not need to be sprayed for larvae, but it will be important to spray for stinkbugs in early July followed by additional applications every two weeks as determined by scouting. Recent research in Georgia reported a 50-500 lb/A yield increase by controlling stinkbugs in *Bt* cotton in July and August. Brown stinkbugs are already arriving this year so make sure

the material used will control both brown and green stinkbugs.

DLW

Yellowing of Peanuts

Peanuts may have a yellow cast to them at times during the growing season. There could be several causes for this including poor nodulation, micronutrient deficiencies, water logged soils, or herbicide damage. Water logging will result in poor nodulation and reduced nitrogen fixation, as well as limited iron and micronutrient availability. However, these situations are usually corrected as soils dry out and nodulation resumes.

Manganese deficiencies will also lead to leaf yellowing and may occur on soils that have been excessively limed to a pH above 6.3. Applications of manganese will be essential to recover from this deficiency. It is possible to correct manganese deficiency by lowering soil pH through acid forming fertilizers, but micronutrient applications may be more cost effective and the crop will respond faster than if changing the pH.

DLW

Asian Soybean Rust

There has been a lot of interest in Florida with regard to the spread of Asian Soybean Rust (ASR). There is a web site devoted to the disease and its spread (<http://www.usda.gov/soybeanrust/>). The disease has not spread as rapidly as predicted from early models and the kudzu sites that were found to contain ASR have not had a high incidence of infection. Currently, only Georgia has identified ASR on soybean and it was found in volunteer

stands where it may have overwintered on nearby foliage. A system is currently in place to notify counties as the disease appears and will allow the information to be passed on to growers.

Fungicides are not being recommended at this time and will not be until we know that the disease will be a problem. It is still early in the season, but if ASR spread becomes severe a fungicide will be recommended for control. If fungicides are required, applications will be made at bloom which generally occurs in July and August depending on planting date and maturity group.

DLW

Common Pokeweed Biology and Control

Common pokeweed (*Phytolacca americana*) is a perennial weed often found in pastures as well as fence-rows, rights-of-ways, and wooded areas. Pokeweed usually has a red trunk-like stem, which becomes hollow as the plant matures. Leaves tend to be quite large, alternate, ovate-shaped, dark green, and attached to the stem by a reddish fleshy petiole. When mature, the fruits are dark purple which contain dark, red-staining, sap. After fruiting, the whole plant dies back to the soil surface and a new shoot will regenerate from the crown of the perennial, producing a fleshy taproot at the start of the new growing season. Other names for common pokeweed include: poke berry, pigeon berry, inkberry coakun, pocan bush, soko, poke salad, and American nightshade.

While pokeweed is rarely considered a noxious weed, it can cause harm in certain situations. All parts of the plant contain saponins, oxalates, and phytolacine (an

alkaloid). However, the roots and the seeds contain the highest concentrations of these toxins. Depending on the quantity of plant consumed, livestock may exhibit mild to severe colic and diarrhea. Hogs are most commonly affected by eating the root. Additionally, sheep, cattle, horses, and poultry are susceptible to pokeweed poisoning, but the affect is often low as the plant is not very palatable. Birds can eat the fruits without much harm and are usually the means for seed dispersal along fence rows and wooded areas.

Control of common pokeweed is typically not easy because of the large fleshy crown and associated taproot. Additionally, pokeweed rarely infests large areas and is usually found in isolated instances. Removal of individual plants is accomplished by wholly removing the crown and a major portion of the associated taproot. Alternatively, spot applications of glyphosate (3% volume/volume) or products containing 2,4-D or dicamba can severely injure or kill the plant.

BAS

Controlling Large Pigweeds in Peanuts

Pigweeds (redroot, smooth, or Palmer amaranth) can be controlled by many herbicides with preemergence or postemergence applications. However, these weeds produce millions of seeds per acre and grow extremely fast during warm weather. Regardless of which herbicides were used, these factors often conspire to make pigweeds a common and serious weed problem.

Preemergence herbicides (Prowl, Dual, Sonalan, Strongarm, and Valor) will often provide effective control early, but full-

season control is rarely observed. This means that postemergence herbicides are frequently needed to control escapes when preemergence herbicides begin to fail. Cadre, Cobra, Pursuit, and Ultra Blazer all provide excellent control of pigweeds. However, timing is everything – particularly with Cobra and Ultra Blazer. Although Cobra and Ultra Blazer are often viewed as “rescue” herbicides, they were not designed to control 12” tall pigweeds. For example, Ultra Blazer and Cobra will control 99% of pigweeds that are 3 to 4 inches in height, but control decreases to 50% as pigweeds reach 7 to 9 inches. On large pigweeds, Cobra and Ultra Blazer will often kill the terminal bud and allow the pigweed to “sucker out” and resume growth within one week of application. Cadre and Pursuit are a bit more forgiving, but after pigweeds reach 6 inches, control will be inconsistent and failure is more common.

So what do you do with a field containing 12 inch pigweeds? One solution is to do nothing. After a pigweed reaches this size, it has already caused serious yield losses and control with herbicides may or may not occur. Another solution is to cultivate or attempt hand removal to improve harvest efficiency. However, if you feel that the field must be sprayed, the only possible option is to use Cadre (at the full labeled rate), plus 1 pint of 2,4-DB, plus crop oil. Yes, this combination will be injurious to the peanut crop, but it is the only herbicide combination that will potentially control large pigweeds.

It must be noted that Palmer amaranth is more difficult to control than other pigweeds. However, all pigweed species can be controlled with timely herbicide applications. In areas where pigweeds have been problematic in the past, it is essential

to use one or more preemergence herbicides to reduce the weed population and ensure a timely postemergence application.

JAF

Late Planting Dates for Soybean, Peanuts and Corn

Soybeans may be planted in July if drilled and irrigated. Yields can be satisfactory if maturity group VI-VIII can be used. The latest planting date for soybean may be as late as the first week of August if irrigated. Peanuts will probably not yield sufficiently to make July planting dates profitable. A major issue with this practice is damage from late frosts when dug in November. Therefore, late planting for peanuts it is not recommended. Corn may be planted as a second crop for grain or silage if a tropical variety is used that has good disease resistance and insect resistance from *Bt*. July 15-20 is the latest planting date for corn to achieve satisfactory yields.

DLW

Licensing of Pesticide Dealers in Florida

All persons (including individuals, businesses and other entities) who sell, hold for sale, or offer for sale restricted use pesticides in the state of Florida must have a pesticide dealer license issued by the Florida Department of Agriculture and Consumer Services (FDACS). A license is required regardless to whom restricted use pesticides are sold. Additionally, if a company has more than one business location, each location must have a separate license and licenses are not transferable from one company to another. However, transport of pesticides from one location to another without change in ownership of the products

is not considered distribution and does not require a license. For the sale or distribution of general use or unclassified pesticides, no pesticide dealer license is required in Florida.

Unlike applicator licenses, there is no certification or exam requirement for a Florida pesticide dealer license. The only requirement for the license is to submit a license application form and pay a license fee of \$175/year to FDACS. License applications may be downloaded from: <http://www.doacs.state.fl.us/onestop/forms/13337.pdf> or by calling FDACS at (850) 488-3314.

The pesticide dealer license is valid for 12 months and generally expires at the end of the month one year from issue date. License renewal notices are generally mailed 60 days prior to the expiration date. If pesticide dealer licenses are not renewed before they expire, a new license must be obtained to continue sale and distribution of restricted use pesticides in Florida.

Licensed pesticide dealers maintain the following records relating to the sale or exchange of restricted use pesticides:

- a. Date of sale.
- b. Name and license number of licensed applicator making or authorizing the purchase.
- c. Name of authorized agent purchasing the pesticide product, if applicable.
- d. Brand name and EPA registration number of each product sold or exchanged.

- e. Size and number of containers of each product sold or exchanged.
- f. Date and location where delivery was made if the pesticide dealer delivered the product.

The information listed in items “a” through “e” shall be recorded immediately at the time of sale or exchange and may be incorporated into billing invoices or other business transaction records. The information required in item “f” shall be recorded immediately after product delivery, when applicable, and may be incorporated into billing invoices or other business transaction records.

Pesticide dealers are required to retain all of the recorded information for a period of 2 years from the date of the sale or exchange in a manner that is accessible by authorized FDACS representatives. Upon written request by an authorized FDACS representative, a licensed dealer shall make available the records required to be maintained under this rule and shall permit the authorized representative to copy or photograph any of the records. The original records shall be maintained by the licensed dealer.

Additional information concerning licensing may be obtained from the Florida Department of Agriculture and Consumer Services at (850) 488-3314 or <http://www.flaes.org>. A listing of restricted use pesticides is available in UF/IFAS EDIS Document PI-36 at <http://edis.ifas.ufl.edu/PI073>.

FMF

Operation Cleansweep for Pesticides

Operation Cleansweep is a mobile collection program that provides agricultural producers a safe and economical method of disposing of cancelled, suspended and unusable pesticides. Proper disposal can be expensive and place a regulatory burden on small agricultural producers and dealers.

Operation Cleansweep offers an opportunity to avoid these barriers and to promote safe and environmentally sound pesticide use, handling and disposal. Operation Cleansweep was initiated in 1995 with the major objective of collecting lead arsenate, a widely used pesticide in Florida citrus production, but banned for use by the EPA in 1978. During 1995, Operation Cleansweep collected more than 70,000 **pounds** of lead arsenate.

Statewide surveys have identified substantial quantities of cancelled, suspended and unusable pesticides stored throughout Florida. Some of these materials have been

in confinement for many years and are in containers unsuitable for proper storage. Some, such as chlordane and DDT, are no longer allowed to be used.

Operation Cleansweep provides for a contractor to come directly to a farm or business for pickup and disposal of pesticides when there is a sufficient quantity in a defined area. There is no cost charged to those who participate in the program. For more information, contact Kim Hainge (haingek@doacs.state.fl.us) or Keith Myhre (myhrek@doacs.state.fl.us) at the Florida Department of Agriculture and Consumer Services by calling toll-free 877-851-5285.

Cleansweep Website:
www.dep.state.fl.us/waste/categories/cleansweep-pesticides/

FMF

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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