

Agronomy Notes

Volume 32:11

November 2008

Features . . .

Cotton

Cotton Defoliation Page 2

Forage

*Tillage for Cool Season Winter Annuals and Small Grains; and
Wheat Planting* Page 2

*Summer Sod Stubble and Winter Forages; and
Forages of Florida Website: a New Resource*..... Page 3

Weed Control

Wild Radish Control Page 4
Special Local Needs 24(c) Pesticide Registrations ...Pages 4-5

Miscellaneous

Calendar, Web Links, & Field Days Page 6



The Institute of Food and Agricultural Sciences (IFAS) is an Equal Employment Opportunity-Affirmative Action Employer authorized to provide research , educational information and other services only to individuals and institutions that function without regard to race, color, sex, age, handicap or national origin. For information on obtaining other extension publications, contact your county Cooperative Extension Office. Florida Cooperative Extension Service/Institute of Food and Agricultural Sciences/University of Florida/Larry Arrington, Dean.

“Agronomy Notes” is prepared by: J.M. Bennett, Chairman and Yoana Newman, Extension Forage Specialist (ynew@ufl.edu); R. Barnett, Professor Emeritus of Ag (rdbarnet@ufl.edu); J. Ferrell, Extension Weed Specialist (jferrell@ufl.edu); F.M. Fishel, Pesticide Coordinator (weeddr@ifas.ufl.edu); and D. Wright, Extension Agronomist (wright@ufl.edu). Designed by Cynthia Hight (chight@ufl.edu). Photos, except where designated otherwise, by Tyler Jones (tylerjones@ufl.edu) in the UF/IFAS photo department. 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.

Cotton Defoliation

Cotton is defoliated to prevent staining the lint during the picking operation. It should be defoliated before November in most cases. When cotton is defoliated in November temperatures are usually cooler and the defoliant does not work well and higher rates have to be used.



Defoliated and non defoliated cotton has not been picked.

Photo: D. Wright

Most of the cotton that is not opened would have been set in September and those bolls are usually smaller and contribute little to final yield if the crop was planted timely and set an early boll load. Cotton should be picked 2 weeks after defoliation since regrowth will occur with favorable environmental conditions. Defoliant normally contains ethylene which is a ripening agent that causes leaf drop and bolls to crack open and fluff out so that cotton can be picked in one operation instead of two.



Regrowth of cotton from the base after defoliation and picking.

Photo: D. Wright

Dr. David Wright, Extension Agronomist

Tillage for Cool Season Winter Annuals and Small Grains

Tillage for cool season winter annuals and small grains- Small grain may often respond to deep tillage (chisel plow, etc). In most cases responses will occur in cool, wet conditions when nitrogen and sulfur leaches below the root zone and a compaction layer prevents crop roots from growing through the layer. We have seen as much as 15 bu/a yield increases on wheat due to deep tillage. Wheat prices are predicted to remain high for several years due to the demand for grain for energy, feed, and food. No-till production of wheat can work in some years but is often limited by root restrictions and water and nutrient uptake.

Dr. David Wright, Extension Agronomist

Wheat Planting

Good wheat varieties were in short supply this past fall. However, there is a good supply of good varieties for planting this fall. Wheat for grain can be planted from early November through the middle of December. Some of the better performing varieties in Florida are AGS 2060, Pioneer 26R61, AGS 2000, and SS 8641 which should be planted early. Other varieties that have done well in the Deep South are Oglethorpe and AGS 2031 which both should be planted early, and AGS 2020. Some nitrogen should be applied at planting unless it is being planted after peanut and the hay was left in the field. Many of these varieties will yield best when planted in November instead of December. Seeding rate should be about 22 seed per foot of row in 7" rows. Many old and non recommended varieties were used last year since seed were in short supply. That is not the case this year.

Dr. David Wright, Extension Agronomist
North Florida REC, Quincy
wright@ufl.edu

Dr. Ron Barnett
Professor Emeritus
rdbarnet@ufl.edu

Summer Sod Stubble and Winter Forages

Too often overseeding of winter forages on bahiagrass or bermudagrass does not have a successful outcome as a consequence of too much summer grass still present at planting time that interferes with the soil to seed contact and establishment of the winter forage. Particularly susceptible to the tall stubble from the summer grass are the clovers because of the small size of their seed. To avoid this situation the summer sod needs to be cut or grazed short, usually to a 3 inch stubble.

Additional ‘scratching’ or very light disking (2 to 3 inches penetration of the sod) is recommended to break the sod and enhance seed to soil contact. Make sure you don’t overdo the light disking because, although the rhizome systems of bahiagrass can take it, it will promote the growth of winter weeds as the sod/soil is disturbed. Winter forages with large size seed, such as small grains (oats, wheat, and rye) and vetches can stand taller stubbles. Some times burning the summer grass residue is used but is the less preferred option if mowing or grazing can be done because of dry field conditions that prevail usually prior to overseeding time.

Dr. Yoana Newman

Forages of Florida Website: a New Resource

We have a new support tool for forage production! It is the [Forages of Florida](http://agronomy.ifas.ufl.edu/ForagesofFlorida) website:

<http://agronomy.ifas.ufl.edu/ForagesofFlorida>

There you will find information about:



Forage Plants - Grasses, Legumes, and Natives for Florida (with visual resources), including description, adaptation, and management information tailored to Florida conditions.

IFAS Extension

Publications (EDIS) related to forage production from different disciplines.

Links to Forage Events

and extension events, as well as to other forage related sites.

The site also features a map of Florida with access to the different county extension offices and agents. Be sure to add this link to your “Favorites.”

Dr. Yoana Newman
Extension Forage Specialist
ycnew@ufl.edu

Wild Radish Control



Wild Radish in the rosette growth stage.

Photo: J. Ferrell

With cooler temperatures approaching, it is time to start thinking about wild radish control. Wild radish seed germinates when soil temperatures reach approximately 65 degrees and forms a rosette on the soil surface (see photo). At this stage, 2,4-D is highly effective at rates as low as 1 pt/A.

Waiting to spray until yellow flowers appear make control much more difficult, require higher herbicides rates, and likely will cause injury to winter forages (ryegrass, oats, etc.) So start scouting fields every few weeks over the next month and be ready to spray for wild radish. Early intervention will provide better control, require less herbicide, lead to less injury, and allow more winter grazing.

Dr. Jason Ferrell, Extension Weed Specialist
jferrell@ufl.edu

Special Local Needs 24(c) Pesticide Registrations

Consider the two following scenarios:



A new pesticide application technology has been developed specifically for nursery producers; however, current pesticide labeling does not support its practice. The new technology could result in fewer pounds of pesticides introduced into the environment and less applicator exposure.



An insect pest introduced into Florida during the 1960s has shown continuous activity on vegetable crops. Producers recently discover that a pesticide already in use for other pests will also control this pest, but it or the crop aren't listed on the pesticide's label.



UF IFAS Photo: T. Jones

These scenarios have a common theme - pesticides that have been in use over the years could be adapted to fit unique production situations within the state. How can producers call attention to these situations and convince state and federal agencies to allow special use of pesticides? By applying for Special Local Need Registration, also known as a 24(c). Producers bring their situations to the attention of scientists at the University of Florida and their respective commodity associations. In turn, these groups provide supporting evidence to the Florida Department of Agriculture and Consumer Services (FDACS). FDACS forwards the supporting documents to the U.S. EPA for review and consideration of use approval. With these groups working cooperatively, special local needs labels are written specifically for Florida to address these unique situations.

A special local need means an existing or imminent pest problem has been identified by producers of a given agricultural commodity within Florida. Major pieces of supporting information required for such a use is that the 24(c) use:

Is covered by necessary tolerances or other clearances under the Federal Food, Drug, and Cosmetic Act. A tolerance is a term that is used legally to describe the amount of a pesticide's residue that may remain on or in a treated crop according to federal regulation.

Registration for the same use has not previously been denied, disapproved, suspended, or canceled by the Environmental Protection Agency (EPA), or voluntarily canceled by the pesticide's registrant. This can occur because of health or environmental concerns about an ingredient contained in the pesticide product. If new data become available that resolve the EPA's concerns, then a 24(c) may be considered.

The 24(c) registration is in accordance with the intent of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

If the proposed use or product falls into one of the following categories, FDACS must determine that it will not cause unreasonable adverse effects on humans or the environment:

- Use of a product which has a composition not similar to any current federally registered product.
- Use of a product involving a use pattern not similar to any federally registered use of the same product or a product of similar composition.
- Use of a product for which other uses of the same product, or uses of a product of similar composition, has had registration denied, disapproved, suspended, or canceled by the EPA.

FDACS can consider uses such as the following for 24(c) registrations:

- ◇ New method of application or timing of application.
- ◇ New pest.
- ◇ Altered rate.
- ◇ Application in particular soil type.
- ◇ New product/different formulation.
- ◇ Products useful in managing pesticide resistance in a particular crop.

A price differential between products is generally not viewed as a legitimate justification for a 24(c) registration.

FDACS can issue 24(c) registrations for the purpose of avoiding the buildup of pest resistance. Documenting this need is met if:

- ⇒ The pesticide with the 24(c) registration has a different mode of action from that already available; or if registering two pesticides under a 24(c), they must have different modes of action.
- ⇒ There are currently registered pesticides; however, there is only one effective mode of action remaining.
- ⇒ The pest has a history of developing resistance to existing or canceled pesticides and this resistance is documented through field studies or references to field studies.
- ⇒ The currently registered pesticide has a history of resistance which is documented through field studies or references to field studies.
- ⇒ Evidence must exist that the pest(s), use patterns, and climatic conditions for the proposed use under the 24(c) is the same or substantially similar to situations where resistance has been documented.
- ⇒ A brief description of the resistance management plan and how the pesticide's use under a 24(c) registration will fit into the plan.

Applicators who wish to use a product in a manner approved by the 24(c) registration are required to have in their possession a copy of the supplemental 24(c) label at the time of application as well as the Section 3 label. They are also required to fully follow all applicable directions, restrictions, Worker Protection Standard requirements, and precautions on the EPA-registered label.

For additional information, contact the FDACS Pesticide Registration Section. Telephone: (850) 488-3731. <http://www.flaes.org/pesticide/pesticideregistration.html>.

Calendar & Web Links

- Oct. 29** **Urban Farming Workshop - Building Sustainable Communities**
Seminole County Extension Auditorium, Sanford, FL.
Registration of \$10 includes lunch. 407-665-5554, rvt@ufl.edu
- Nov. 5** **2008 Florida Ag Expo**
Gulf Coast Research and Education Center in Balm, FL
Visit <http://flagexpo.ifas.ufl.edu> or contact Christine Cooley
(813) 634-0000 x 3101 ccooley@ufl.edu
- Nov. 11-14** **Methyl Bromide Alternatives Conference**
Orlando, FL, <http://mbao.org/>
- Dec. 3-4** **National Organic Standards Training**
Quincy, FL North Florida REC; contact: (352) 273-3508 jsefton@ufl.edu
- Feb. 1-3** **American Society of Agronomy** Southern Branch; Atlanta, GA

Check out these Resources on the Web!

Cellulosic Ethanol...Ethanol from Inedible Portions of Plants

By the 24th York Distinguished Lecturer, Dr. Lonnie Ingram

Now available at: <http://yorklecture.ifas.ufl.edu/>

The 24th York Distinguished Lecture is now available for viewing and the following equipment/software are recommended: Pentium 4 PC or higher; DSL Internet connection speed or faster; Windows Media Player 9 or higher installed; and Microsoft Internet Explorer browser.



Dr. Lonnie Ingram addressing attendees at the York Distinguished Lecture series.

UF/IFAS Photo: T. Jones



Ethanol demonstration at North Florida REC, Quincy Field Day.

Photo: T. Jones

[Berry Vegetable Times](#) newsletter from Hillsborough Co. Extension and Gulf Coast REC

[Chemically Speaking](#) newsletter.

[Entomology and Nematology](#) newsletter

Florida 4-H: A Century of Youth Success, [a new historical book](#) available for sale.

[Florida Master Naturalist Program](#) newsletter

[International FOCUS](#) newsletter

[Safety News & Notes](#) newsletter.

[Southwest Florida REC](#) newsletter.

[Sunbelt Ag-Expo](#) live webcams.