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# Corn Grain Harvest

Growers, who grow corn for grain, need to harvest as soon as the grain is dried enough. Most corn should be taken out at 20% moisture and dried down to 12-13% while plants are standing. Tropical storms have been playing havoc with dried down fields. Most of these fields need to be harvested to prevent further loss from falling plants. High winds at this stage will cause great damage in many of these fields. As corn dries weeds continue to grow resulting in more problems during the harvest operation, including the severe weed problems in crops the following year.

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## Fall Forage Worms - Early Show up



If drought conditions earlier in the year were not bad enough, the recent change to wetter conditions seems to be favoring build up of fall forage worms. These worms often are referred to as ‘armyworms’ but usually include both grass loopers and the fall armyworm. The worms making their debut earlier this season in pastures and hayfields are about 90% loopers (*Moscis* spp.). If scouting during the day, both loopers and army worms tend to fall off the plants to the ground. Each looper pupates (stage the insect undergoes in becoming a moth) by folding blades of grass to form a cocoon, whereas armyworms pupate in the soil. You can see the tips of the leaves turned over where the looper caterpillars pupate. The following is a refresher on the most common insecticide treatments for pasture and hayfield caterpillars:

<b>Product*</b>	<b>Rate</b>	<b>Restrictions (waiting time prior to utilization)</b>	<b>Maximum number of applications</b>
<b>Malathion 57% EC</b>	2 pints per acre	None	No restrictions
<b>Sevin XLR</b>	1 to 1.5 quarts/acre	14 days for hay or grazing	Two (2) or less per year
<b>Lannate LV</b>	¾ to 3 pints per acre	7 days for grazing 3 days for haying	No more than 4 applications per year
<b>Dimilin 2L</b>	2 fl oz per acre/cutting	No restrictions for grazing 1 day for hay	No more than 6 fl oz per year. Cannot apply more than 2 fl oz per acre/cutting
<b>Tracer</b>	1-3 fl oz/acre	3 days for hay or until it has dried if grazing	

\*Thanks to the UF/Pesticide Information Office for their assistance on product update.

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# 2008 Cotton Crop Conditions

The Florida cotton crop is varied but has a good chance of averaging over 700 lbs/A for the first time in the last few years. Good rainfall since late June has resulted in good growth on most of the cotton fields. The tropical storm that hit in late August twisted some of the cotton in the eastern part of the panhandle which will make it more difficult to harvest. Overall, this has been a good year except for early planting when moisture was limited. Florida growers are looking at varieties past DP&L 555 and are having some very good yields and quality. Cotton defoliation is underway on some of the early planted fields and harvest will begin by mid September on these fields.

## The Art of Cotton Defoliation Timing and Material Selection

Defoliation timing is often based on percent open bolls, nodes above cracked boll (NACB) or heat unit accumulation after cutout. Generally, once the NACB reaches 4, or the field is greater than 60 to 70 when open, cotton should be defoliated to prevent quality loss from weathering or twisted stalks that may occur with tropical storms. Which defoliant to use is difficult to determine. What works in one year may not be as successful in another year due to weather conditions or crop conditions, or both. Harvest aids can be classified as having one of two modes of action. These modes of action are herbicidal and hormonal. A tank mix of the two has a better chance of success from year to year. Herbicidal defoliants include materials such as Def, Folex, and Aim. Hormonal types include Dropp, Leafless, Finish, Harvade and Ginstar. Other hormonal types are classified as boll openers and contain ethephon and include materials such as Prep and Cotton Quik. Many growers will use herbicide defoliants along with a boll opener if they are going to harvest in 10-14 days. *For more information on defoliation see article on page 4.*

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## Winter Legumes this Season?

With the increase in fuel prices, and the more favorable soil moisture conditions for most of Florida, forage growers might look at winter legumes to cope with the costs of fertilizers and to extend the grazing season.

### Winter legumes will:

- ⇒ Help lower your need for stored forages,
- ⇒ Provide a higher forage nutritive value to the diet of your animals (compared to warm-season hay)
- ⇒ Add nitrogen back to your pastures



One way of looking at the excess rain that Florida has received is not to focus on the down side but to look at the possibilities that the extra moisture opened. The last two years were unfavorable for winter legumes because of the lack of soil moisture. If you are planning on using winter legumes, there are a couple of items that need attention now. Check the soil pH, as winter legumes require a minimum soil pH of 6.0 - 6.5. If your soil pH is on the low side you will need to lime. Select legume species and cultivars adapted to Florida: crimson clover (on sandier soils), red and white clover where you have more clay and moisture conditions. Check with your county agent to select Florida adapted cultivars for each of these species. When overseeding, you need to reduce the warm-season grass competition in the fall. Warm-season grasses like Bahia or Bermuda have tufted rhizomes that makes them very tough companions. To reduce this competition, a light disking to 1 or 2 inches deep of the warm-season grass can be done since the perennial grass will recover in the spring. If not disking or using desiccants, the time for overseeding needs to be postponed until your night temperatures are consistently below 50°F to slow the growth of the perennial summer grass.

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# Cotton Defoliation

Properly defoliating cotton can be difficult. Weather conditions, cotton variety, and many other factors can play a large role in the effectiveness of a given product.

For years, the standard for cotton defoliation has been Def + Dropp + Prep. However, new products such as *Resource* and *FirstPick* and have been shown to be excellent defoliant. But limited research has been conducted in Florida with these products and more information is needed before recommendations can be made.

Experiments were conducted on cotton planted in April (defoliated in August) and cotton planted in late June (defoliated in October). In this experiment we found that most all of these products provided excellent levels of defoliation. But for unknown reasons, the Def + Dropp combination desiccated and stuck the leaves rather than properly defoliating. Additionally, none of these products adversely affected boll opening. But the greatest differences can be seen in the amount of regrowth after the application. In the August application, regrowth ranged from 11 to 32%. But in October, regrowth ranged from 25 to 58%. This was likely due to the fact that in October the cotton plant was not growing as actively, thus decreasing the efficacy of the defoliant.

*FirstPick* and *Resource* are excellent defoliant, but were shown to consistently be the weakest for controlling regrowth. On the other hand, the addition of Dropp consistently reduced regrowth. So what is the perfect combination for all times? It is difficult to say. In hot weather, Def or Resource may be your best choices. But in cooler weather, the addition of Dropp may be necessary.

	August Application			October Application		
	% defol.	% boll open	% regrowth ‡	% defol.	% boll open	% regrowth ‡
Def (24 oz)†	85	90	20	93	90	45
Dropp (3.2 oz)	78	87	18	88	88	25
Def (16 oz) + Dropp (3.2 oz)	40*	85	11	90	85	27
FirstPick (48 oz)	85	87	32	91	88	58
Resource (8 oz)	85	87	25	92	87	50

†All defoliant applications contained the equivalent of 24 oz of Prep.

\*Def + Dropp caused 100% desiccation, but a majority of the leaves remained on the plant.

‡Regrowth was measured 21 days after application.

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# Soybean Rust Spread

Soybean rust was widespread in late August on kudzu. Tropical storm Fay probably moved spores from down state across the panhandle with its slow move from south to west. High humidity and rainfall hastens the spread and spore buildup. It is expected that soybean rust will show up in many soybean fields by the first week of September and growers should scout and be prepared to make a fungicide application if needed. Fungicides may be applied with insecticides such as Dimilin in early September along with boron. If weather turns dry, the disease progress will slow. Several fungicide studies have been conducted on soybean rust in Florida. Most of the fungicides labeled are effective against Asian soybean rust. Rust is usually not a problem on soybeans until they get into the reproductive stage. Fungicides applied during R2-R3 growth stage utilizing flat fan nozzles at 30 psi appeared to do a very good job of controlling the disease. Yield increases of 30% or more were noted on heavily infested fields and two applications of fungicides may be needed if heavy infection is noted early, or on late planted or late maturing soybeans. This is the first year since we have had the disease that we have had an extended rainy period so the disease may progress more rapidly.

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## Applicator and Dealer License Fees to Increase

As of July 9, 2008, Rule 5E-9.028 of the Florida Administrative Code was amended to increase the amount charged for restricted use pesticide applicator and dealer license fees to the maximum amount allowed by law. The fee increase will go into effect on September 1, 2008. The amended amounts for new licenses and the renewal of licenses are:

Private Applicators: from \$60.00 to \$100.00 for a 4-year licensure period;  
Public Applicators: from \$60.00 to \$100.00 for a 4-year licensure period.  
Commercial Applicators: from \$160.00 to \$250.00 for a 4-year licensure period.  
Dealers: from \$175.00 to \$250.00 for a 1-year licensure period.

A history of restricted use pesticide license fees is shown in the table.

License fee history.

Effective date	Private app.*	Public app.*	Commercial app.*	Dealer**
1975	No charge	No charge	\$25 1 <sup>st</sup> category; \$10 per added category	No charge
1979				
1983	\$5 per category	\$5 per category	\$5 per category	
1990	\$30	\$30	\$75	
1994	\$35	\$35	\$90	\$150
2002	\$60	\$60	\$160	\$175
2008	\$100	\$100	\$250	\$250

\*Private, Public, and Commercial license period is 4 years, effective 1983.

\*\*Dealer license period is 1 year, effective 1979.

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## *Calendar Dates*

- Sept. 8**                      **Florida Dairy Business Conference**  
Marion County Extension Service, Ocala, FL  
(352) 793-2728 (Russ Giesy or for dinner reservations: Jeanne)
- Sept. 12**                      **Soil and Water Science Research Forum**  
Gainesville, FL <http://soils.ifas.ufl.edu/forum/>
- Sept. 16-19**                      **International Citrus & Beverage Conference**  
Clearwater Beach, FL  
Visit: [www.conference.ifas.ufl.edu/citrus](http://www.conference.ifas.ufl.edu/citrus)
- Sept. 18**                      **Perennial Peanut Field Day**  
North FL Research and Education Center, Marianna, FL
- Sept. 19**                      **NW Florida Bioenergy Conference & Expo**  
UF/IFAS Pensacola Junior College Milton Campus, Milton, FL  
Contact: Robin Vickers (850) 983-5216 ext. 113  
Email: rvickers@ufl.edu or visit: [www.MiltonGators.com](http://www.MiltonGators.com)
- Sept. 23-24**                      **Forage Workers Field Tour**  
Marion County Extension office. Ocala, FL
- Sept. 25**                      **2008 Fall Field Day**  
North FL Research and Education Center, Quincy, FL.  
<http://nfrec.ifas.ufl.edu> (850) 875-7100 ext. 0
- Sept. 26**                      **11th Annual Hay and Farm Field Day**  
UF/IFAS NE Florida Beef and Forage Group  
WW Ranch near Jacksonville, FL  
Contact: Elena Toro (386) 362-2771
- Oct. 14**                      **Sunbelt Ag Expo**  
Moultrie, GA
- Oct. 15**                      **Pasture Weed Day**  
UF/IFAS Ona Range Cattle Research Center, Ona, FL  
Pre-registration \$20 by Sept. 30. Onsite registration \$50.  
Contact: Toni Wood flstroll@ufl.edu or call \*863) 735-1314.