Agronomy Notes

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Winter Forage Grasses for 2013

The recommended varieties of winter forage grasses for 2013-2014 in Florida include the following:

**OAT**
It is the most palatable of small grains but it is also the least winter hardy option. Varieties for Florida include: Horizon 201, RAM LA99016 (mainly for wildlife use), Plotspike LA 9339, and SS76-40.

**RYE**
This small grain is the most winter hardy and drought tolerant. Varieties recommended include: Florida 401 (for early grazing or for use in blends, AGS 104 (seed availability may be limited), Wrens 96 (seed availability may be limited), Wrens Abruzzi, Bates RS4, and Oklon.

**TRITICALE**
This is a productive and disease resistant small grain mostly used for silage and grazing. Varieties recommended include: Trical 342 (for silage), and Monarch.

**WHEAT**
Produces mainly in spring, and is recommended to use Hessian Fly resistant varieties. For this season the following varieties are recommended: Coker 9553, Pioneer 26R61, SS8641, USG 3592, AGS 2038.

**ANNUAL RYEGRASS**
This cool-season forage is not a small grain, and has high soil moisture requirements. Recommended cultivars:


Late: Attain, Big Boss, Jumbo, Prine, Rio, TAMTBO, Verdure, Nelson, Earlyploid, Passerel Plus, Rio, Jackson and Marshall (Jackson and Marshall are susceptible to rust and gray leaf spot).

**Dallisgrass: A new one to watch**

Dallisgrass (*Paspalum dilatatum*) is a weedy perennial grass that is commonly observed across the southern coastal plain of Georgia and Alabama. Though our climate and soil types are similar, surprisingly, we have rarely encountered this plant in Florida. Until now.

Dallisgrass has a deep perennial root system, a wide leaf blade, and a branched seedhead (Picture 1). This plant usually forms in clumps and lies relatively flat (Picture 2). This growth habit means that dallisgrass is common in both grazed pastures as well as in home lawns.

In the last few weeks I have gotten calls from several counties surrounding Gainesville that dallisgrass has invaded both bahiagrass pastures and bermudagrass hay fields. Unfortunately, we have few if any herbicide options. We are currently working on potential methods for control.

It is important that we become familiar with this weed and watch for future invasions. If you see this plant, it is important to spot spray it with a 1% glyphosate solution before it has the chance to spread.

I will keep you informed in coming months if we have found any successful control options.

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Picture 1. Dallisgrass seedhead. Note the similarity to bahiagrass, but that it doesn’t form the characteristic “V”, rather forming a multiple-branched head. Credit: [http://www.biosurvey.ou.edu/okwild/dallis.html](http://www.biosurvey.ou.edu/okwild/dallis.html)

Picture 2. Dallisgrass is a clump-forming grass. [http://commodities.caes.uga.edu/turfgrass/georgiaturf/WeedMngt/images/PASDI1.jpg](http://commodities.caes.uga.edu/turfgrass/georgiaturf/WeedMngt/images/PASDI1.jpg)
Uncommon Pasture Weeds: Part 1

According to the 2012 Southern Weed Science Society Proceedings, the ten most common weeds in Florida are: Dogfennel, smutgrass, tropical soda apple, cogongrass, blackberry, wild radish, broomsedge, nutsedge species, thistle, and Mexican tea (Jerusalem oak). Since these weeds do occur so frequently across Florida, a great deal of research has been collected over the years and we can provide recommendations in almost any situation. However, these weeds are by no means the only ones you find in a pasture. There are many other weed species that can dominate certain pastures and be very difficult to control. Since these less frequent weeds are often seasonal, or regional, our knowledge of them is often much less. But since we constantly test products and look to expand our control recommendations, we will discuss some new insights about these weeds and their control.

Maypop passionflower (Passiflora incarnata). Maypop (Figure 1) is a climbing, deciduous perennial vine with tendrils. Vines grow to at least 6 feet in length. Reproduction occurs through both the creeping root system and seed. The large, oval to round fruits contain many seeds and can be consumed by both humans and wildlife. The flowers are purple and white. While previous greenhouse research has shown that 2,4-D or 2,4-D + dicamba (Weedmaster, others) is effective on maypop, our research in Osceola County has shown otherwise, providing 30 to 45% control at best. The best current treatment we have found includes GrazonNext HL + Pasturegard HL at 24 + 8 oz/A, with control around 90% at one month after treatment and 80% at two months after treatment. The decline in control from one to two months after treatment indicates that regrowth from the root system was occurring and that this level of control will likely be temporary. Therefore retreatment will likely be necessary. We have also seen some promising control with treatments containing aminocyclopyrachlor (new active ingredient from DuPont). The premixes of aminocyclopyrachlor with 2,4-D amine or triclopyr (Remedy Ultra, others) provided 80% control two months after treatment. The interesting thing about these aminocyclopyrachlor treatments was that we did not observe as much regrowth in these plots as in the GrazonNext + Pasturegard plots. We expect that at least one of aminocyclopyrachlor premixes will be available in 2014.

St. John’s wort (Hypericum sp.). There are at least 25 different species of St. John’s wort (Figure 2) in Florida. These species are either annual or perennial herbs or shrubs that can grow as tall as 13 ft in height. Most of the problematic species in this genus are typically the shrub type and are typically found in marshes, wet pinelands, swamps, and poorly drained flatwood soils. Except for three species where the bark is smooth and tight, the bark is usually loose. The flowers are yellow and contain either 4 or 5 petals, depending on the species. Although these species are not common throughout the state, they can form dense canopies once established. GrazonNext HL alone at 24 oz/A provided 100% control at one month after treatment and 95% control one year after treatment. Pasturegard HL at 24 oz/A and triclopyr (Remedy Ultra, others) at 2 pt/A provided 100% control one month after treatment, but control dropped to 78% one year after treatment. At this point in time, we have only investigated the control of Edison’s St. John’s wort, and we are assuming control will be similar among most of the St. John’s wort species.

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Milkpea (Galactia spp.). Milkpea (Figure 3) species are native to Florida and several are found throughout the state, with Elliott’s milkpea (Galactia elliottii) found in central and south Florida in and around range sites. A member of the legume family, this vining plant typically emerges in the late spring and begins flowering as early as June. The vines are hairy, with a somewhat woody base. Flowers are either white or pink to purple, depending on the species. Although no information can be found suggesting that the plant is toxic, we have observed that cattle do not readily graze these species. In fact, we have observed that they will graze around the plants when abundant in pastures. Typically, we do not observe these species in improved pastures, but we will find them in poorly managed bahiagrass pastures. Since it is a legume species, GrazonNext HL is very effective, providing nearly 100% control during the growing season of application, and greater than 95% control one year after treatment. Meanwhile 2,4-D and 2,4-D + dicamba also provided 80% control one year after treatment in our plots. Aminocyclopyrachlor premixes also provided control similar to that of GrazonNext HL. Interestingly, cattle had grazed the plots where milkpea had been removed by herbicide treatment, but grass was usually taller where milkpea plants were uncontrolled (Figure 4).

Paw Paw (Asimina spp). There are at least 10 species of paw paw (Figure 5) in the state. These perennial shrubs are usually not overly numerous in pastures, but have become problematic in areas within a pasture. These multi-stemmed plants typically lose their leaves in the fall and have large green to white flowers in the spring prior to new leaf formation. The taproot of these plants tends to be relatively large and extends several feet into the soil. Control of these plants can be difficult as triclopyr (Remedy Ultra, others) and PastureGard HL typically only results in defoliation, with regrowth from the large tap root within a couple of months, but regrowth from PastureGard HL treated plants is typically slower. The best treatment we have seen is the premix of aminocyclopyrachlor + chlorsulfuron (Telar), which provided 70 to 90% control one year after treatment. It is possible that the chlorsulfuron portion of this premix is the active component since aminocyclopyrachlor alone does not appear to be quite as good.

Since these plants are typically not widespread throughout a given pasture, spot-treatment is probably the best method for control. We suggest a 1-2% solution of PastureGard HL using methylated seed oil as a surfactant to help absorption into the waxy leaves. Since the taproot is rather large, retreatment will likely be necessary.

Sometimes it is the less common weed that is problematic in your pastures. Thankfully, with the exception of whitehead broom, we have options to at least begin managing some of these species. We expect that aminocyclopyrachlor premixes will also help in controlling these species in the future. However, we do not know exactly when the aminocyclopyrachlor products will be available for use in Florida pastures. We are expecting at least one of the premixes to be available for use in 2014. If you find that you have one of the seven weeds covered above and you have questions concerning their control, please feel free to contact us.
Rice grown early in the season in the Everglades Agricultural Area (EAA) is normally let to ratoon. Ratoon rice is a second crop from tillers which originate from the stubble after the harvest of the first rice crop. Advantages of rice ratooning include low production cost and shorter or reduced growth duration compared to the main crop. Successful rice ratoon crop depends on having a good first crop with good ratooning ability and limited rutting in the field from harvesting equipment. Fields intended for ratooning should ideally be harvested before mid-August in order to have at 90 day maturity period. Immediately following harvest, nitrogen fertilizer (AMS at 60 lb N/A or more) should be applied and rolled in order to have high ratoon yield. Many of the rice growers in the EAA do not use herbicides for weed control in the ratoon rice crop. They rely on flooding for weed management in the ratoon crop. In order to achieve efficacious weed control in ratoon rice using water, fields should be flooded immediately after rolling in the fertilizer (Figure 1). Therefore, it is imperative to prepare pumps and have clean ditches before harvesting the main crop so that flooding can be initiated immediately after harvesting and fertilization without any delay. However, to have successful weed control in ratoon rice, the main crop should have not been under heavy weed infestation (Figure 2).
Summer grass weed control in turfgrass

The banning of MSMA for use in turfgrass has changed the way grass weeds are controlled late in the spring and in the summer. Because of its efficacy, MSMA could be sprayed on established plants with several tillers and still obtained acceptable control levels. However, this type of late postemergence (POST) application is not adequate for control with alternative POST herbicides. This summer, multiple turfgrass managers have complained that they have seen partial control of goosegrass (Eleusine indica), crabgrass (Digitaria spp.) and tropical signalgrass (Urochloa subquadripara) with different POST herbicides. In most cases, their control strategy was to wait until most grass weeds that survived the preemergence herbicides (PRE) were easily visible before spraying POST herbicides. Turfgrass managers mentioned that this strategy was effective with MSMA, but the alternative herbicides are not killing those weeds, and frequently the weeds will turn chlorotic and necrotic, but new growth will be produced after three weeks. These results are a clear indication that the applications must be done earlier and that more emphasis must be given to ensure higher levels of PRE control.

There are several POST herbicides options for grass weed control, but herbicide selection depends on turfgrass species (see EDIS publications for specific details). Regardless of the herbicide, better control results will be obtained if intensive monitoring is conducting to identify when the grass weeds are established and are no bigger than 1-2 tillers (Fig. 1). If POST herbicide applications are done at this stage, weed control will be more effective than waiting until plants are bigger and more visible, which was the approach previously used when MSMA was the herbicide sprayed. Additionally, it is likely that for most POST herbicides that can be used, a second application might be necessary to obtain the desired results. If the application cannot be done early enough, in many cases spotted applications with non-selective herbicides such as glyphosate, and hand weeding might be the only options to remove those weeds.

Fig. 1. Goosegrass control in bermudagrass. POST herbicide applications were done at the 1-2 tiller stage (left) and at the 3-5 tiller stage (right). Photos by Ramon Leon.
New Pesticide Labels Will Better Protect Bees and Other Pollinators

In an ongoing effort to protect bees and other pollinators, the U.S. Environmental Protection Agency (EPA) has developed new pesticide labels that prohibit use of some neonicotinoid pesticide products where bees are present. “Multiple factors play a role in bee colony declines, including pesticides. The Environmental Protection Agency is taking action to protect bees from pesticide exposure and these label changes will further our efforts,” said Jim Jones, assistant administrator for the Office of Chemical Safety and Pollution Prevention.

The new labels will have a bee advisory box and icon with information on routes of exposure and spray drift precautions. Today’s announcement affects products containing the neonicotinoids imidacloprid, dinotefuran, clothianidin and thiamethoxam. The EPA will work with pesticide manufacturers to change labels so that they will meet the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) safety standard.

In May, the U.S. Department of Agriculture (USDA) and EPA released a comprehensive scientific report on honey bee health, showing scientific consensus that there are a complex set of stressors associated with honey bee declines, including loss of habitat, parasites and disease, genetics, poor nutrition and pesticide exposure.

The agency continues to work with beekeepers, growers, pesticide applicators, pesticide and seed companies, and federal and state agencies to reduce pesticide drift dust and advance best management practices. The EPA recently released new enforcement guidance to federal, state and tribal enforcement officials to enhance investigations of beekill incidents.


View the infographic on EPA’s new bee advisory box: [http://www.epa.gov/pesticides/ecosystem/pollinator/bee-label-info-graphic.pdf](http://www.epa.gov/pesticides/ecosystem/pollinator/bee-label-info-graphic.pdf)
Calendar of Events

To follow the link, press “Ctrl” and put cursor over link, and “click.”

Sep 19 2013 Florida Equine Institute & Trade Show. Ocala, FL

Sep 27 2013 Florida Grazing Dairy Conference. Grassy Bell Dairy. Bell, FL
To register contact peburke@ufl.edu

Oct 1 Ona REC, Cattle and Forage Field Day. Ona, FL
http://rcrec-ona.ifas.ufl.edu/events/FD102013_brochure.pdf

Oct 15-17 Sunbelt Ag Expo. Moultrie GA
http://sunbeltexpo.com/

Nov 3-6 ASA, CSSA, & SSA International Annual Meetings. Tampa, FL.
https://www.acsmeetings.org/

Nov 6 2013 Small Ruminant Conference. Ocala, FL
To register contact Marion County Extension Office 352-671-8400