

THE TAPA QUARTERLY

The Newsletter of the Tennessee Agricultural Production Association

Fall Buttercup Control in Grass Pastures and Hay Fields

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Tired of looking out across your pastures and hay fields and seeing that “sea of yellow” every spring? Unfortunately, many producers in Tennessee are all too familiar with buttercups. Most of these members of the genus *Ranunculus* are winter annuals that are easily controlled with a timely application of 2,4-D, and interest in fall applications has increased in Tennessee over the past few years.

Why spray in the fall?

Historically, the vast majority of applications for control of buttercups have been in March to early-April. However, University of Tennessee research and producer experience has continued to show that fall (November to December) is actually a better time to spray for them. Why is that? Buttercups emerge in the fall and they are small and actively growing then. As we have discussed numerous times, one of the most important keys to getting good results is to spray buttercups before they bloom. This is an automatic with fall applications, given that buttercups generally do not bloom until spring. Also, oftentimes in the late-winter to spring it is very wet and windy, making it difficult to spray before they are in bloom. Another reason for fall spraying is that many producers may have more available time then, compared to the spring. Time consuming late-winter to early-spring activities such as calving, spreading fertilizer and getting ground ready for row crop planting often make it difficult to get pastures and hay fields sprayed on a timely basis. Last, but certainly not least, fewer vegetable crops, gardens and active greenhouses are present then; this means the risk of off-target damage to sensitive plants is lower.

In most cases, 2,4-D ester at 1 qt/a provides excellent control of annual buttercups in the fall. The same rules apply as with spring applications. Favorable weather (3 days of day time highs of 60 F); plenty of water (at least 20 gallons per acre spray volume); and the addition of a good, nonionic surfactant (1 qt/100 gallons of spray mix) are all important ingredients in success. An added bonus for the fall spray program is that it is also a very good time of the year to control musk thistle, buckhorn plantain and wild turnip. These are controlled by 2,4-D and are often present in the same fields alongside buttercups. If buckhorn plantain is severe, consider increasing the rate of 2,4-D. Keep in mind that 2,4-D, unlike some of our newer pasture herbicides (ForeFront HL, GrazonNext HL, etc.), breaks down relatively quickly in soil. A benefit of this is that with fall applications of 2,4-D, clovers can be planted the following February.

Are buttercups becoming resistant to 2,4-D?

This is a startling question we have received from a number of producers over the past couple of years. Our answer for now is “We don’t think so, and we sure hope not!”. What has prompted this question is that a number of 2,4-D failures on buttercup have occurred in our area over the past few years. These were not cases of late sprays, low rates, not enough water volume, or bad weather.

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December 2013

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New Date!

In the September issue of *The TAPA Quarterly* we reported that the date of the CCA Agronomic workshop in Jackson, TN was February 19, 2014. Please take note of the new date below:

**CCA Agronomic
Workshop
WTREC
Jackson, Tennessee
Wednesday,
February 12, 2014
8:00 a.m.—5:00 p.m.**

Registration details
will be coming soon!

(Fall Buttercup Control, continued from page 1)

These were timely applications where everything was apparently done correctly. We are keeping a close watch on this situation and are conducting research to address it. Late this winter we scouted a number of pastures in Blount County where 2,4-D had failed the previous year. Upon close inspection, we found that the predominant species present was not hairy buttercup (a winter annual and our most common species), but rather bulbous buttercup, a perennial that is not effectively controlled by 2,4-D. While the leaf and flower structures of these two species are somewhat different, the most reliable way to identify bulbous buttercup is to dig up some plants and look for the swollen corm at the base of the stem. We conducted a replicated research trial at one of the locations this past spring. Ratings taken at 2 months after application revealed that 2,4-D ester (1 qt/A) gave only 42 percent control. However, Grazon-Next HL (1.6 pt/A) gave 90% control. What we believe is happening in a number of area fields is not the development of resistance, but rather a species shift from the more easily controlled hairy buttercup to a predominance of the more difficult-to-control bulbous buttercup. We will keep you posted on this issue.



Always remember to thoroughly read the herbicide label before application and follow all directions and precautions.

The Eighth Day

And on the eighth day, **God** looked down on his planned paradise and said, "I need a caretaker." So **God** made a farmer.

God said, "I need somebody willing to get up before dawn, milk cows, work all day in the field, milk cows again, eat supper, then go to town and stay past midnight at a meeting of the township board." So **God** made a farmer.

"I need somebody with arms strong enough to wrestle a calf and yet gentle enough to cradle his own grandchild. Somebody to call hogs, tame cantankerous machinery, come home hungry, have to wait for lunch until his wife's done feeding visiting ladies, then tell the ladies to be sure to come back real soon and mean it." So **God** made a farmer.

God said, "I need somebody willing to sit up all night with a

newborn colt and watch it die, then dry his eyes and say, ' Maybe next year.' I need somebody who can shape an ax handle from an ash tree, shoe a horse, who can fix a harness

"Who, during planting time and harvest season will finish his 40-hour week by Tuesday noon and then, paining from tractor back, up in another 72 hours."

with hay wire, feed sacks and shoe scraps. Who, during planting time and harvest season will finish his 40-hour week by Tuesday noon and then, paining from tractor back, up in another 72 hours." So **God** made the farmer.

God had to have somebody willing to ride the ruts at double speed to get the hay in ahead of the rain clouds and yet stop in mid-field and race to help when he sees the first smoke from a neighbor's place. So **God** made a farmer.

God said, "I need somebody strong enough to clear trees and heave bales, yet gentle enough to help a newborn calf begin to suckle and tend the pink-comb pullets, who will stop his mower in an instant to avoid the nest of meadowlarks." So **God** made a farmer.

"It had to be somebody who'd plow deep and straight and not cut corners. Somebody to seed, weed, feed, breed, brake, disk, plow, plant, strain the milk, replenish the self-feeder and finish a hard week's work with an eight mile drive to church. Somebody who'd bale a family together with the soft, strong bonds of sharing, who would laugh, and then sigh and then reply with smiling eyes when his family says that they are proud of what Dad does." So **God** made a farmer.

Author UnKnown

News from *The Hill*



EU Science Advisor: Opposition to GMO Crops ‘A Form of Madness’

Professor Anne Glover, chief scientific advisor to EU President Jose Manuel Barroso said at a September conference of leading European soil scientists that opposition to production of genetically modified crops is “a form of

madness.” She said there is “not a single piece of scientific evidence” to support critics’ claims that food containing GMOs is unsafe. I am 99.99% certain, from the scientific evidence, that there are no health issues with

food produced from GM crops. Just about every scientist I know supports this view. Opposition to GM, and the benefits it can bring, is a form of madness I don’t understand.”

*Southeast Farm Press
Nov. 6, 2013*

Syngenta Resists EPA Plan to Strengthen Biotech Resistance Monitoring

Syngenta is opposing EPA's proposal to strengthen monitoring programs to track resistance of corn root worm to the company's corn that is genetically engineered (GE) to resist the pests, telling EPA advisors that current monitoring is effective and they should instead back early mitigation requirements.

But environmentalists say the company's proposed mitigation methods do not prevent resistance, with one source adding that the company's call to mitigate resistance by "suppressing adult rootworm populations," presumably through increased use of insecticides, is undermining one of the purported benefits of biotech corn: reduced use of insecticides. Syngenta Seeds, Inc. [in recent comments](#) to a Federal Insecticide Fungicide and Rodenticide Act (FIFRA) Science Advisory Panel (SAP) scheduled to convene Dec. 4-6, suggests mitigation steps that growers may take to combat resistance. It says current monitoring is effective in detecting changes in susceptibility of corn root worm to products containing Plant Incorporated Protectants (PIPs) -- plants that are genetically modified with the bacteria *Bacillus thuringiensis* (Bt) to incorporate resistant traits and limit use of insecticides.

Insideepa.com, Nov. 18, 2013

Heritage Experts Force Obama Administration to Reconsider Flawed Environment Policy

The Heritage Foundation reported some good news on environmental policy: “The White House has stated that it will open its estimate of the social cost of carbon (SCC) for public comment. Administration officials who are responsible for this decision should be commended for recognizing the need to revisit this issue. We at Heritage are proud to

say that we contributed to this discussion. In particular, we closely examined the EPA statistical models for estimating SCC by rigorously examining their underlying assumptions as well as identifying a fundamental misspecification.”

There are fundamental flaws with the “social cost of carbon” concept,

which is based on flawed models and lends itself to harmful solutions. The EPA analysts were very open to discussing the flaws in their models which is good news for those interested in factual analysis of environmental issues.

*The Heritage Foundation
Nov. 13, 2013*

AP, Ethanol Industry Clash Over Piece

The AP released both its long investigative piece on corn ethanol as well as a second story defending the reporting from a remarkable preemptive attack by the ethanol trade industry. The clash comes as the EPA is

about to release the proposed fuel usage targets for 2014. A public relations firm began distributing talking points against the AP investigation last week and the industry held a conference call for reporters. It is detailed

rebuttal, the news service disputes the claim by a Wayne County farmer that he wasn’t aware the story would focus on ethanol’s impact on land use.

Executive Briefing, Nov. 12, 2013

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Add these important events to your 2014 calendar. It's never too early!

Tennessee Agricultural Production Association

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Annual Meeting & Agronomic Workshop

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Murfreesboro, TN

July 29-31, 2014

**COTTON FOCUS MEETING
WTREC
JACKSON, TENNESSEE
FEBRUARY 13, 2014**

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CERTIFIED CROP ADVISOR NEWS

There's still time to register for the CCA Exam!

Join fellow agronomy professionals by becoming a certified crop advisor! Registration for the February 7, 2014 CCA exam will be open until **December 6, 2013**. Register online on the [Exam Registration page](#) of the CCA website. Click this link certifiedcropadviser.org/exams to register. The Tennessee exam is administered in Nashville.

TAPA CCA Agronomic Workshop
West Tennessee Recreation & Education Center
Jackson, Tennessee
Wednesday, February 12, 2014
Registration Details Soon

Other Planned CCA Training Events in Tennessee

<u>Event</u>	<u>Registration Deadline*</u>
One-day CCA Agronomic Seminar December 13, 2013, Nashville, TN	December 6, 2013
CCA Preparatory Training Workshop (for prospective CCA candidates) December 10-12, 2013, Nashville, TN	December 3, 2013
CCA Agronomic Workshop January 30-31, 2014, Nashville, TN	January 22, 2014

**Certain restrictions apply. For additional information contact Conrad Lavender by email: clavender@southernagribusiness.com or by calling (706) 367-5465*

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