

David Dugan  
OSU Extension Educator, Agriculture and Natural Resources  
Adams/Brown/Highland Counties  
Ohio Valley Extension Education Research Area

## **Spiny Amaranth Trial**

Maybe you know what a Spiny Amaranth is. Maybe you have seen it, but did not know what it was. You probably don't have any of them of any size at this point, but if you feed hay outside, you probably will be able to find some of them in a few weeks. They are the prickly pigweeds that seem to grow where ever you fed hay the previous year. Now they seem to have spread even more into pasture fields.

We are currently conducting some research trials to reduce this problem. Last week we put down some different herbicides in an area that mostly likely will have pressure from this troublesome weed. We will take a look at these trials at the OARDC Branch in Jackson on August 28 in the evening at the Beef and Forage Field Night. This will be one of several things that we will cover that evening. This event has been an annual event for a few years now. Last year there were well over 100 producers in attendance. Plan to attend.

More information will be in the article in the coming weeks. If you would like a direct e-mail I can add you to my beef cattle mailing list. Simply send me a request to be added to [Dugan.46@osu.edu](mailto:Dugan.46@osu.edu)

## **Tomato Problems**

There are several tomato diseases that show up in home gardens. Unfortunately these diseases show up way too often for most of us. Identifying the problem is the first thing that needs to be done. If you know what you are dealing with your chances are much better for reducing the problem.

In some cases varieties can be used that have resistance, fungicides can be used, and crop rotation for some things, but these are not the only management strategies. There are several factsheets available through the local OSU Extension office or you can go to <http://ohioline.osu.edu> to download them. There is an 11 page factsheet on Growing Tomatoes in the Home Garden. You need to also look at the factsheets that are specific for different diseases like early blight, late blight, blossom end rot and so on.

## **The Challenge of Controlling Flies**

The fly populations have exploded recently on some cow herds. This can be a real costly problem, as there are several things that can happen as a result of the flies, and none of them are good. Keep in mind to follow the label for specifics, but also remember to change chemistry, not just brands. Pay close attention to the active ingredients in each product so you reduce the chances for fly resistance to insecticides.

The following information appeared in the most recent Beef Cattle Letter that comes out weekly from the OSU Beef Team. The information is from the OSU Extension Educator from Wayne County, Rory Lewandowski and titled Cattle Fly Control Options.

Fly control in cattle is about reducing fly populations, not elimination. The goal is to limit the negative economic impact that flies can cause. There are three main fly species that can economically impact pastured cattle and those are the horn fly, the face fly and the stable fly. Horn flies are responsible for significant economic losses. According to Dave Boxler of the University of Nebraska, economic losses associated with the horn fly are estimated at more than 800 million per year in the U.S. Those losses are due to decreased grazing efficiency, blood loss, reduced weight gains, and declines in milk production. University of Nebraska studies have shown calf weaning weights to be 10 to 20 pounds heavier when horn flies were controlled on the mother cows. Horn flies are

small, about half the size of a housefly and they are blood feeders. Each fly will bite the animal and feed on blood 20 to 30 times per day. The economic injury or threshold level of horn flies is 200 flies per animal.

Horn flies spend most of their time on the animal. The female fly will leave the animal for a short period of time to deposit eggs in fresh manure and then will return to resume feeding. The most common and often the most convenient method of horn fly control is insecticide impregnated ear tags. The disadvantage of ear tag control is that there are horn fly populations resistant to the pyrethroid insecticides commonly used in the tags. In order to minimize and slow down resistance problems ear tags should not be put in until horn flies reach that economic threshold level of 200 flies/animal. Those horn fly ear tags should be cut out of the animal's ear in the fall of the year when fly levels decrease. Other control measures include backrubbers and dust bags, especially if they can be located in areas where cattle can have daily and consistent access to them. There are insecticide sprays and pour-ons that can provide between 7 to 21 days of control, but to be effective they must be applied on a regular basis throughout the fly season. There are also oral larvacides that prevent fly larvae from developing into adults. Although effective, the challenge is getting consistent, daily consumption. These products can work well for cattle in confinement situations or that are supplemented regularly on pasture, but are more difficult to use in rotational grazing systems.

In contrast to the horn fly, the face fly is a non-biting fly that spends significant time off the animal. This fly feeds on secretions, nectar and manure liquids. Face flies cluster around the animal's eyes, mouth and muzzle. Feeding around the eyes can cause tissue damage which opens a pathway for pathogens. The female face fly can vector the *Moraxella bovis* bacteria which is a primary pathogen for contagious pinkeye. Control of face flies can be difficult because of all the time that the fly actually spends away from the animal. As with horn flies, insecticide impregnated ear tags are a common form of control. Dust bags and oilers can provide effective control if, once again, animals can have consistent daily access to use of these options.

The stable fly is a biting fly that will spend considerable time apart from the animal. This is a pest that will travel up to several miles to bite. These flies and their painful, biting attacks are associated with lowered milk production, reduced feed efficiency and lowered weight gains. Agricultural Research Service entomologist David Taylor says that a model developed to look at the economic impact of stable flies on dairy cattle, cow/calf, pastured and range stocker animals and feedlot cattle showed that stable flies cost the U.S. cattle industry more than 2.4 billion dollars each year.

Stable flies are generally associated with sites where waste hay/feed, manure, and urine accumulate because this is the ideal site for larval development. Control is dependent upon sanitation, cleaning up those breeding and larval development sites. Entomologists with the Agricultural Research Service (ARS) have found that insect growth regulators can be effective at reducing stable fly populations. Those entomologists used a commercial product called cyromazine to control immature stable flies by preventing those immature flies from developing into adults. According to information released by the ARS, in one study, the application of granular cyromazine sprinkled on a hay feeding site reduced the number of emerging adult stable flies by 97 percent. Other ARS researchers are looking at the use of repellents to keep stable flies away from animals. Catnip oil has been found to be effective. On the horizon, other ARS scientists are experimenting with a biological control agent, a salivary gland virus that has shown some promise in providing stable fly control in initial trials.

### **Dates to Remember**

July 13-19 Adams County Fair

July 15 Blueberries, Brambles and Wine Grapes Field Night at OSU South Centers in Piketon. Pre-registration is required by July 11. Call or email at 740-289-2071 Ext. 132 or [mcglothlin.4@osu.edu](mailto:mcglothlin.4@osu.edu)