Agriculture Newsletter

COLORADO COUNTY

SEPTEMBER 2022

FALL ARMYWORMS

The recent rains we've received have been much welcomed in putting a dent in our drought! But forage producers beware...if you haven't already you should make sure you are scouting for Fall Armyworms (FAW). There are two different strains of FAW. The strain that infests hay fields and pastures usually shows up after significant rain events from mid-July through the fall.

FAW caterpillars live for two to four weeks depending on temperatures. The larger the caterpillar the more damage they cause. Smaller caterpillars are easier to control. FAW are identifiable by two features. The head will have white markings that form an upside down "Y". Additionally the last few segments of the body will have black bumps that form a square or rectangle.

Control Options

Insecticide applications should be made early in the morning or late in the evening to make sure it comes in contact with the caterpillars during their feeding time.

Products that are not rainfast

Pyrethroids - Can take 3 days to be effective.
Dimlin (diflubenzuron) - Residual period is 10-12 days.
Intrepid (methoxyfenozide) - Residual is about 7 days. Must be eaten by caterpillar to control.

Products that are rainfast

Chlorantraniliprole (sold as Prevathon, Vantacor, or Besiege) - Product is absorbed by leaf tissue and is rainfast upon drying.

Hunter Safety

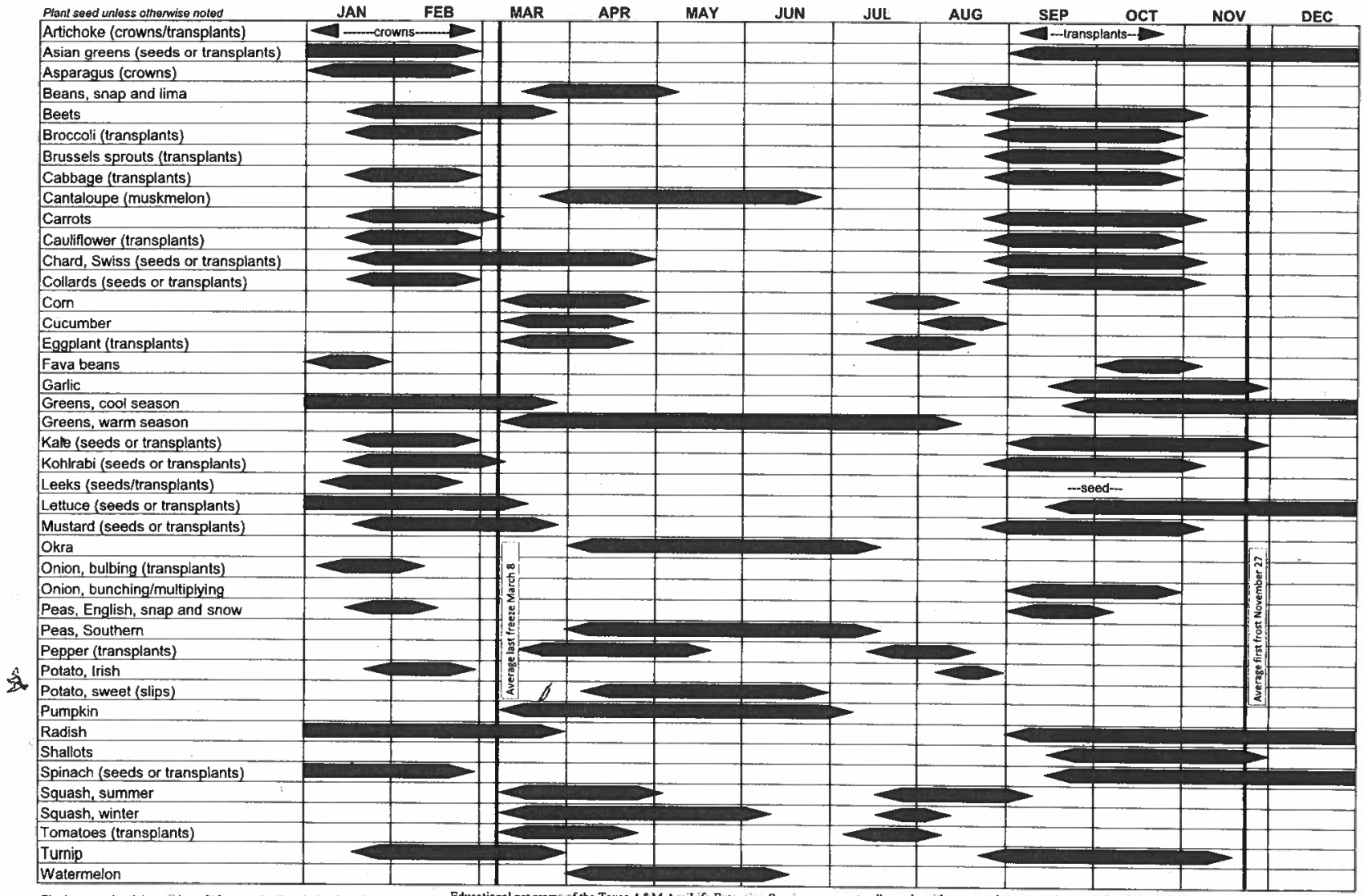
Friends of the Weimar Library will sponsor a second **Hunter Safety Certification Class** on **Saturday, September 17th** at the **Weimar High School Cafetorium**. Sign in is 8:45. Class begins at 9:00 a.m. A **fee of $15** is payable at the door (**cash or check**). Call the Weimar Public Library for registration information at 979-725-6608 or go online to **https//tpwd.elementlms.com/course/hunter-education-classroom-course-7730**

The hunter safety certification is for any person born after September 2, 1971 and 9 years or older, who wishes to hunt in the state of Texas.

TEXAS A&M AGRILIFE EXTENSION

Vegetable Garden Planting Guide

Daphne Richards, County Extension Agent - Horticulture
Texas AgriLife Extension Service, Travis County, 1600-B Smith Road, Austin, TX 78721 512-854-9600
Compiled by Patty G Leander, Master Gardener Vegetable Specialist travismg@ag.tamu.edu



Plants grown in winter will benefit from protection during freezing weather
Plants grown in late summer will benefit from shade cover during establishment

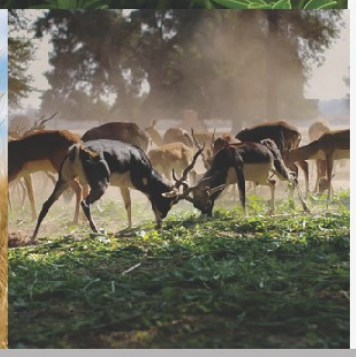
January 2012

1 CEU (1 GEN)

TEXAS A&M AGRILIFE EXTENSION

Forage & Livestock Production

2022 Multi-County New Landowner Educational Series



September 16, 2022

Columbus Livestock Auction

2000 Reese Lane
Columbus, TX 78934

Registration 1:00-1:30 pm
Program 1:30-5:00 pm
$20/Person/Session
$125/Person/Series - $200/Couple/Series

To register online visit:
https://washington.agrilife.org/nlo

Topics to be covered:

Livestock for Small Acreage Land Owners

Managing Central Texas Pastures

For more information please contact:

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Colorado County
Lunch - N - Learn Series

Bring your lunch and learn.
Light refreshments; coffee, tea and snacks will be provided.

It's Free!

Registration:
11:50am - 12:05pm
Program:
12:05pm - 12:55pm
No Pre-Registration Required

County Services Building
305 Radio Lane
Columbus, Texas 78934

July 20, 2022
Firewise Landscaping

August 17, 2022
Fall Vegetable Gardening

September 21, 2022
Berries Blue & Black

It's Free!

It's Free!

October 19, 2022
Tree Care

November 16, 2022
Soil Biology & Compost Tea

Questions?

Texas A&M Agrilife Extention Service of Colorado County
P: (979) 732-2082

TEXAS MASTER GARDENER
TEXAS A&M AGRILIFE EXTENSION

TEXAS A&M AGRILIFE EXTENSION

September 26 & 27, 8:30 am-5:00pm

Civic-Convention Center, 375 S. Castell Ave., New Braunfels, TX

TEXAS A&M AGRILIFE EXTENSION

11th Annual Texas Fruit Conference

Hybrid Program-Live & Remote Options

The Texas Fruit Conference is a Texas A&M AgriLife Extension event aimed at educating new and experienced fruit growers through classroom instruction and peer-to-peer networking.

What: Intro to Fruit Growing Workshop:

When: Monday morning, 8:30 am to Noon, Sept. 26th (lunch afterward)
How & How Much: In-person or Remote/On-Line; $55/person
Why: Considering an orchard for the first time? Never planted a fruit tree? We have you covered! Our mini-workshop is designed to get you started with a good foundation.
Program: *Site and resource evaluation for new fruit orchards*—Jim Kamas; *Fruit orchard establishment*—Larry Stein; *Budgeting time resources- what it takes to start and manage an orchard*—Jacy Lewis; *Disease & insect threats to successful fruit production*—Brianna Hoge; *Developing an orchard IPM philosophy*—Monte Nesbitt; *Deciding what to grow: major production & marketing considerations*—Tim Hartmann

What: Fruit Conference Main Program

When: Starts Monday afternoon with lunch onsite, adjourns 4:30 pm Monday and continues all day Tuesday 8:30-4:30.
How & How Much: In-Person or Remote/On-Line; $90/person.
Intro/Main Conference Package Pricing Available; $125-$135/person (with or without Monday reception ($10/person)).
Why: A broad slate of educational presentations that examine research on fruit in Texas and in-depth topical reviews. This year we are holding a series of breakout sessions planned for growers and fruit specialists to share ideas, challenges, & successes.
Program: Monday afternoon--*Comparative analysis of winter chill models in Texas*--Tim Hartmann; *Pruning: Science vs. Fiction* --Jim Kamas; *Success & failure with deer prevention*--Monte Nesbitt; *'Southern Sensation Seedless ' & other table grapes*-Larry Stein; *Growing raspberries in Texas*--Jacy Lewis; *Blackberry performance on the Gulf Coast*-Stephen Janak.
Tuesday Morning--Breakout Session Round 1-*Tree Fruit Commercial, Subtropical, Home/ Hobby Orchards*; Breakout Session Round 2-*Small Fruit Commercial, Subtropical, Grafting*; Breakout Session Round 3--*Subtropical, Grafting, Alternative-Protected & Container Culture*; General Session Review & Panel Discussion.
Tuesday Afternoon--*Emergence of Xylella in Texas fruit crops*--Dave Appel; *Fruit crop advances through gene editing*--Amit Dhingra; *Practical EIQ in fruit IPM*--Jacy Lewis; *Trap crops for stinkbug management*--Stephen Janak; *Battling borers: prevention and control*--Tim Hartmann. 4.0 Pesticide CEU's available for attendance.

What: Taste of Texas Fruit Reception: When: Monday, Sept. 26th, NB Civic Conv. Center, 5-7 pm, How & How Much: In-Person only; $10/person or included in package pricing Why: Meet fellow fruit growers, Texas A&M AgriLife personnel, eat great fruit-centered food, and sample Texas wines.

https://tamu.estore.flywire.com/products/texas-fruit-conference; (979) 862-1218 for more Info.

ASWeb - 144
September 2018

Stretching Limited Hay Supplies: Dry Cows Fed Low Quality Hay

Jason Banta, Extension Beef Cattle Specialist
Texas A&M AgriLife Extension

Many producers are facing low hay supplies and looking for alternative hay sources and ways to stretch limited supplies. This factsheet will provide some supplementation options and considerations when feeding varying amounts of hay similar in quality to the hay described below. These examples assume cattle will be in a sacrifice pasture or drylot type situation. They would apply to producers across the state as long as cattle are not experiencing extreme cold stress. They are designed to meet or slightly exceed the nutrient requirements of most beef breeds of cattle.

Assumptions used in these examples:

Cow description:

- Physiological status: dry, not nursing a calf
- Daily milk production: NA
- Days pregnant: 270
- Age: mature
- Weight: 1,350 lb
- Current Body Condition Score (BCS): 5

Hay description (dry-matter basis):

- Crude protein (CP): 5%
- Total digestible nutrients (TDN): 45%

Feeding goals:

- Cow condition: maintain current BCS
- Hay use: reduce hay from full consumption to either 10 or 20 pounds per day

Specific comments for this scenario:

- These supplementation guidelines should be appropriate for any hay that is similar in quality to the 5% CP, 45% TDN hay used in this example and the cow described above.
- A high-calcium (≥15%), low-phosphorus (≤7.5%) cow-calf mineral should be provided free choice. These examples assume a consumption of at least 0.20 lb/day. The supplements used in these examples provide added phosphorus to the diet, because of this a lower phosphorus mineral is desired. This helps balance the calcium:phosphorus ratio and reduce the cost of the free choice mineral supplement.
- Feed-grade limestone is included in some examples to help balance the calcium:phosphorus ratio. In some cases, the feed-grade limestone can be mixed or fed along with soybean or cottonseed meal. In other situations, a small amount of a sticking agent like molasses or liquid feed can used to help stick the limestone to one or more of the concentrate feeds. With some feeds the limestone can be put directly in the feed bunk on top of the other ingredients; if this is done check to make sure the cattle eat it.

- Cows consuming the examples with 10 lb of hay may act hungry. However, the supplements provided would be expected to meet their nutrient requirements and maintain body condition.
- Cows consuming the examples with 20 lb of hay will be close to their maximum daily intake and would be expected to appear full and satisfied.

Example 1: whole corn and soybean meal

	Example 1a	Example 1b
Feed Ingredient	lb/cow/day (as-fed)	lb/cow/day (as-fed)
Hay	10	20
Whole corn	10	6
Soybean meal (≥46% crude protein)	2.4	2.2
Feed-grade limestone	0.10	0.10

*It is important to use whole corn (88% TDN) and not cracked corn (90% TDN) or steam flaked corn (93% TDN). Whole corn is more desirable from a rumen health standpoint. In many situations it will also be cheaper per pound of TDN.

Example 2: soybean hulls and corn gluten feed

	Example 2a	Example 2b
Feed Ingredient	lb/cow/day (as-fed)	lb/cow/day (as-fed)
Hay	10	20
Soybean hull pellets	7	5
Corn gluten feed pellets	7	5
Feed-grade limestone	0.10	-

Example 3: cubes

	Example 3a	Example 3b
Feed Ingredient	lb/cow/day (as-fed)	lb/cow/day (as-fed)
Hay	10	20
12% crude protein cubes	14.5	-
20% crude protein cubes	-	9.5

*Make sure the cubes have a higher calcium content than phosphorus. If not, then add feed-grade limestone to balance the calcium:phosphorus ratio.

**Some feed companies make multiple versions of cubes with the same or similar crude protein content. For example, they may have 4 different 20% crude protein cubes. These cubes will vary in TDN content and type of crude protein (natural protein or equivalent crude protein from non-protein nitrogen). The TDN content is not on the feed tag, but some companies will provide TDN content of cubes on their website. Crude fiber is listed on the feed tag and can be an indicator of TDN content. In general, TDN content decreases as crude fiber content goes up. The cubes used in these examples would be representative of cubes with 10% or less crude fiber and no non-protein nitrogen. If cubes have more than 10% cube fiber the amount of cubes fed will need to be increased. Although they may cost more per bag, buying cubes with a higher TDN content (less crude fiber) will almost always result in lower total feed costs.

Example 4: whole cottonseed

	Example 4a	Example 4b
Feed Ingredient	lb/cow/day (as-fed)	lb/cow/day (as-fed)
Hay	10	20
Whole cottonseed	6	6
Corn	4.75	-
Cottonseed meal	1.25	1.5
Feed-grade limestone	0.10	-

*No more than 6 lb of whole cottonseed should be fed in this situation to prevent the dietary fat level from getting too high. Consequently, whole corn, cottonseed meal, or both were added to meet the nutrient requirements of the cow in this example.

General comments:

- These examples do not guarantee cattle performance. Actual performance may be higher or lower depending on the given situation; diets should be adjusted according to actual performance.
- To help avoid metabolic and digestive problems…
  - Gradually increase the amount of rapidly fermentable feeds in the diet (e.g. corn, soybean hull pellets, cubes, etc.) over 1 - 3 weeks depending on the amount.
  - If more than 0.75% of the cow's body weight in supplement is required, consider splitting the amount in half and feeding twice a day. For a 1,350 lb cow this would be 10.1 lb (1350 x 0.0075 = 10.1).
- Protein sources
  - Crude protein can be divided into 2 fractions. The fraction that is degraded in the rumen (ruminally degradable protein = RDP) and fraction that is degraded in the abomasum and small intestine (ruminally undegradable protein = RUP).
  - Rumen microbes need a supply of RDP to grow and help digest forage and other feedstuffs. The amount of RDP that rumen microbes require varies depending on the feed ingredients in the diet.
  - The protein sources in these examples were selected based on RDP and RUP needs for each example diet. Other sources of protein should not be substituted without visiting with a nutritionist.
- Hay testing considerations
  - A good hay test can help prevent over or under supplementing cattle.
  - Hay should be tested by a reputable forage lab that accounts for ash content and neutral detergent fiber (NDF) digestibility when calculating TDN content. The labs below are examples of labs that account for these variables when calculating TDN content.
    - Dairy One Forage Lab in Ithaca, NY; www.dairyone.com
    - Cumberland Valley Analytical Services in Waynesboro, PA; www.foragelab.com
  - Warning: Many forage labs greatly over estimate TDN values of corn stalks, sorghum stubble, and other crop residues because they don't account for the ash content when calculating TDN. Many of row crop residue samples are testing

between 12 and 20% ash. This is often due to soil contamination when fields are raked during hay production.
    - Nitrates: Corn stalks, sorghum stubble, and other forages known to accumulate nitrates should be tested to determine nitrate levels and safe feeding amounts.
- Vitamin A
    - Vitamin A requirements are generally met from green growing forages. During extended periods with no green grass it is important to make sure supplements provide adequate levels of vitamin A. For vitamin A requirements and strategies to increase levels see "Vitamin A Requirements and Considerations for Beef Cattle" which can be found at beef.tamu.edu.
- Aflatoxins
    - At times aflatoxins can be a problem in corn, distiller grains, whole cottonseed, and other grains infected by certain molds. If purchasing ingredients directly from a producer considering testing for aflatoxins prior to purchase and feeding. For current regulations on aflatoxins and feeding limits visit the Office Of The Texas State Chemist website: otscweb.tamu.edu.
- Weather stress
    - If cold stress is only expected to last for a few days, then provide free choice hay during these periods. Heat is produced during the digestion of hay that will help keep cows warmer. More heat is produced from the digestion of hay than the digestion of concentrate feeds. Do not suddenly increase the amount of rapidly fermentable feeds in the diet (e.g. corn, soybean hull pellets, cubes, etc.) because this can lead to subacute acidosis and other problems.
    - The diets in these examples do not account for cold stress that lasts for more than a few days or extreme cold stress. In these situations, the amount of feed would need to be increased based on expected conditions. Visit with a ruminant nutritionist about appropriate adjustments.
- This factsheet is meant to provide general guidelines and does not cover all factors that can impact the success or failure of a program designed to stretch limited hay supplies. For specific questions or unique situations visiting with a ruminant nutritionist is highly recommended.

Please feel free to contact me if you have any questions.

Sincerely,

Laramie Kettler

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