



# San Patricio Agriculture

“Agriculture Affects Everyone”

219 N. Vineyard, Sinton, TX 78387; Phone: 361-587-3400; Fax: 361-364-6237

SPECIAL POINTS OF INTEREST: September, 2023

- \* Southeast Region Row Crop Team Grain and Cotton Marketing update **3rd Wednesday** of month - Link - <https://agrilife.zoom.us/j/93705592814?pwd=WGFkTjErOVh4UFDCa2xLNGt1RlhiQT09>
- \* October 4 - Fall CEU Conference

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County Website:  
<http://sanpatricio.agrilife.org>

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Hello Again,

I have not talked to anyone who is not looking forward to fall and cooler weather. It has been a summer to remember. Going through this exceptionally hot dry summer, the recent rains have changed the complexions of most of the county. It is nice to see greener pastures and landscapes in general looking more healthy. The dry, cooked, blah looking pasture land has been a concern on several levels, but hopefully we can get some grass grown and some hay put up before winter gets here. It looks like at the moment that hay supplies will probably still be on the short side and pricey as well. I have inserted a recent article from Cary Sims, County Extension Agent in Angelina County that I felt was worth the read with regards to size and density of round hay bales. Reminder, now is a good time to test your hay, old and new. The benefit far outweighs the time, trouble and testing expense. We have a hay testing probe at the Extension Office that is available to check out. Call or stop by the office if need assistance with forms or procedures.

Our crop year started off good and for the corn and grain sorghum yields, they were exceptionally good. Cotton on the other hand had mixed yields. There was some good cotton but low yields as well. We will have to wait a little longer to get a more precise picture across the county as ginning is completed.

Please note that our Fall CEU Conference is scheduled for October 4th at the Texas A&M AgriLife Research and Extension Center, 10345 Hwy 44, Corpus Christi. As you can see on the attached flyer, this will be both in person and virtual. Needed information for pre-registering and topics is on the flyer. If you need more information please feel free to contact Jaime or myself.

Also included in this newsletter is our County Corn and Grain Sorghum Hybrid Trials results and the Texas A&M Crop Testing results for Corn and Grain Sorghum. I want to thank Ring Bros Farms, Andrew Miller Farms, and Joel Hoskinson Farms for their management and resources to complete these test.

As previously mentioned I think everyone is looking forward to fall and some more enjoyable weather than what we have been experiencing. I hope to see many of you at various activities that are going to take place in the coming weeks and as all ways if there is something we can help with please give us a call.

Till Next Time,



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The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.

So often in Agriculture, there is not a simple answer to a simple question.

## *Hay Considerations During These Difficult, Dry Times*

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*By:* Cary Sims, Angelina County, County Extension Agent-Ag/NR

At this writing, the weather forecasts that I reference show no real chance of rain in our part of the world. Hay buying to fill the shortfall has begun in earnest.

Let's take some time and put hay purchasing decisions on equal footing. We'll examine how to price hay equally by weight. When buying hay, I know too many producers that ask about the size of the bale without knowing anything about the weight or its quality.

It should be stated that folks that buy hay 'by the ton' are already where we should be. When you purchase hay by the ton then one really does not care what size the bale is. If you stack a flatbed trailer with 4X4's or 5X6's, purchasing by weight is the smartest way to go.

Thus, for the many cattlemen still buy hay by the bale, it seems a nearly impossible task to eyeball a bale of hay and determine the quantity and quality of hay that's within it. To make it more difficult, you must match the asking price to the other prices for hay that match loosely by bale size. It truly is a daunting task.

To help us get a better idea of the volume of hay in a bale, let us use some basic equations that we learned in geometry in high school. A round bale is nothing more than a cylinder. The volume of a cylinder is measured as 3.14 times the radius squared times the height of the cylinder ( $V = \pi R^2 \times H$ ). If we apply that to a 4X4 bale of hay, we come up with a volume of 50.27 cubic feet. If you take that same formula and apply it to a 5 by 5 bale of hay, then you come up to 98.18 cubic feet. Surprisingly, a 5X5 bale is indeed double the volume of a 4X4.

For those who are interested and the remainder of the common bale sizes, here are the basic bale sizes: 4X4 = 50.27

$$4X5 = 78.54$$

$$4X6 = 113.10$$

$$5X5 = 98.18$$

$$5X6 = 141.37$$

Research from several universities and commercial sites say that hay density can vary from 9 to 12 pounds per cubic foot. In the bales I have examined, I have seen a very loose bale of hay at just under 9 lbs. per cubic foot and others as high as 11 lbs. per cubic foot. But for simplicity, I'm going to assume a density of 10 lbs per cubic foot. At 10 lbs/cubic foot, a 4X4 would be about 500 lbs. and a 5X5 would be just under 1,000 lbs., coming in around 980 lbs.

Even with the assumptions above, using a good set of public scales would be an excellent choice. At a national gas station chain in our town, the first time across the scales to get the weight is \$13.50 and the next time is just \$4. So for less than a \$20, you can take a full load of hay and then an empty load of hay. Take the difference between the two weights and divide by the number of bales. You'll then know the average weight of the bales. Bonus tip, fill up your gas tank before each weight to eliminate any error caused by the fuel weight.

Not convinced? We'll take a hard look at a \$60 bale of hay. If it is a loosely wrapped 4X4, then you could be spending \$0.13 per pound. But if was a tightly baled, 5X5 round bale, you could end up with an investment of \$0.06 per pound of hay.

And finally, let's look at this another way. If you are confident that the \$60, loosely wrapped (at 9 lbs. per cubic foot), 4X4 was a good purchase, then you could also justify spending \$140 on a tightly wrapped (at 11 lbs. per cubic foot), 5X5 bale. Run the math for yourself.

Cattlemen run a business with incredibly tight margins. I tip my hat to those who do well year after year with increasing input costs and facing unpredictable weather. Let the numbers above prod you and encourage you to make wise decisions as we continue to wait for rain.

## San Patricio County Grain Sorghum Hybrids Trial

Texas A&M AgriLife Extension Service San Patricio County 2023

Cooperator: Andrew Miller Farms

CEA: Bobby R. McCool

Planted: February 27, 2023

Harvested: July 18, 2023

Row Spacing: 30:00:00

Plot Size: 0.4 acre

Brand	Hybrid	Moisture %	Test Weight lb/bu	Yield lb/A
Dekalb	DKS 44-07	16.7	59.7	6828 a
BH Genetics	BH 4220	15.5	58.7	6569 ab
BH Genetics	BH 5755	15.8	60.7	6271 bc
Dynagro	M71GR91	16.1	60.0	6079 cd
Dekalb	DKS 54-07	15.6	59.0	6059 cd
Dynagro	M67GB87	16.0	55.8	5937 d
	<b>Mean</b>	16.0	56.0	6291
	<b>P&gt;F</b>	0.7	0.0872	0.0008
	<b>LSD (0.05)</b>	NS	NS	325
	<b>CV (%)</b>	5.38	3.84	5.78

Yields standardized to 14% moisture content.

## San Patricio County Corn Hybrids Trial

Texas A&M AgriLife Extension Service San Patricio County 2023

Cooperator: Ring Brothers Farm

CEA: Bobby R. McCool

Planted: February 28, 2023

Harvested: August 8, 2023

Row Spacing: 40"

Plot Size: 0.36 acre

Brand	Hybrid	Moisture %	Test Weight lb/bu	Yield bu/A
Dekalb	DKC 66-06	12.4 ab	58.3 bc	128 a
Dekalb	DKC 68-35	12.7 a	58.3 bc	123 ab
LG Seed	LG65C14	11.9 c	57.0 e	119 ab
Stine	ST 9814-20	12.8 a	57.3 de	102 abc
LG Seed	LG66C06	12.0 bc	56.0 f	100 bc
DynaGro	D56TC44	12.7 a	59.0 b	98 bc
DynaGro	D54VC14	12.1 bc	58.0 cd	84 c
Stine	ST 9808E-20	12.6 a	60.0 a	81 c
	<b>Mean</b>	12.4	58.0	105
	<b>P&gt;F</b>	0.0025	<0.0001	0.013
	<b>LSD (0.05)</b>	0.4	0.8	26
	<b>CV (%)</b>	3.2	2.2	22.0

Yields standardized to 15.5% moisture content.

Hog damage a yield-limiting factor at this location

## 2023 Corn Performance Trial - Sinton

Brand	Hybrid	GE Trait(s)	Days to 50% Silk	Plant Height (in)	Ear Height (in)	Plants per Acre	Moisture %	Test Weight (lb/bu)	Yield (bu/acre)
Integra	6624	Genuity Trecepta	N/A	79	25	23,904	12.0	57.9	121
Dyna-Gro	D57TC29	Genuity Trecepta	N/A	80	24	23,522	11.3	57.1	118
Integra	6641SS	SmartStax	N/A	82	30	21,943	13.2	57.9	117
Dyna-Gro	D54VC14	Genuity VT Double PRO	N/A	75	26	22,107	11.5	57.8	117
Innvictis	A1542T	Genuity Trecepta	N/A	83	29	23,522	11.4	57.0	117
Dyna-Gro	D56TC44	Genuity Trecepta	N/A	80	29	22,869	12.0	58.1	116
DEKALB	DKC 68-35VT2	Genuity VT Double PRO	N/A	80	28	21,290	12.0	58.1	115
Integra	CX301119	Genuity VT Double PRO	N/A	88	42	23,087	11.5	57.5	115
Stine	9818-32	Agrisure Duracade Viptera	N/A	88	28	24,666	11.0	56.4	113
Integra	6493	Genuity Trecepta	N/A	76	23	20,854	11.8	57.1	112
Innvictis	A1551VT2P	Genuity VT Double PRO	N/A	80	28	23,958	10.5	56.5	111
Innvictis	A1689T	Genuity Trecepta	N/A	73	29	23,305	11.2	58.1	109
DEKALB	DKC 69-99TRE	Genuity Trecepta	N/A	77	26	22,433	12.5	58.7	109
Dyna-Gro	D57VCS1	Genuity VT Double PRO	N/A	77	26	22,325	12.0	58.2	109
Dyna-Gro	D58VC65	Genuity VT Double PRO	N/A	74	19	20,310	12.6	58.5	108
Integra	6533VT	Genuity VT Double PRO	N/A	73	26	21,943	11.9	58.3	106
LG Seeds	64C30TRC	Genuity Trecepta	N/A	81	28	21,726	11.5	57.3	105
Integra	6410	SmartStax	N/A	72	24	22,706	11.3	58.7	103
Innvictis	A1792T	Genuity Trecepta	N/A	83	30	22,542	13.1	59.5	101
Integra	6342	Genuity Trecepta	N/A	81	29	18,513	10.9	56.3	100
Stine	9752-32	Agrisure Duracade Viptera	N/A	81	28	18,241	10.0	54.0	85

\*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid

## 2023 Grain Sorghum Performance Trial - Gregory

Brand	Hybrid	Days to 50% Flower	Plant Height (in)	Head Ex (in)	Lodging (%)	Moisture (%)	Test Weight (lbs/bu)	Yield * (lbs/acre)
Dyna-Gro	GX22937	71	51	7	0	16.8	57.4	7,703
Dyna-Gro	M71GR91	71	52	6	0	16.9	58.5	7,427
Dyna-Gro	GX22932	70	52	6	0	17.1	58.1	7,407
DEKALB	DKS 50-07	70	50	7	0	17.3	59.3	7,404
Integra	G3711	70	52	7	0	17.3	58.6	7,396
DEKALB	DKS 44-07	70	50	10	0	17.3	58.5	7,258
Dyna-Gro	M72GB71	71	51	6	0	16.4	58.0	7,203
Golden Acres	4880R	71	53	6	0	16.9	58.1	7,195
DEKALB	DKS 54-07	72	53	8	0	17.1	58.0	7,100
Dyna-Gro	M67GB87	68	49	6	0	16.9	56.1	7,061
Integra	G3640	68	50	10	0	17.0	58.6	7,040
DEKALB	DKS 45-60	69	53	11	0	15.0	54.3	6,993
Dyna-Gro	GX22934	70	52	8	0	17.3	59.4	6,977
Dyna-Gro	GX22936	67	50	10	0	18.2	57.4	6,977
Scott Seed	S75N495	74	53	5	0	17.3	57.8	6,598
Integra	G3665	69	49	8	0	16.3	56.6	6,572
DEKALB	DKS 40-76	67	50	10	0	17.2	58.3	6,521
Scott Seed	S75A60	70	49	5	0	17.6	58.4	6,333
Dyna-Gro	M63GB78	68	49	10	0	17.3	58.0	6,043
Innvictis	X166R23	71	49	6	0	17.1	58.1	5,935
Dyna-Gro	M60GB31	68	44	6	0	17.1	58.1	5,925
Scott Seed	S78A30	69	49	5	0	17.2	57.1	5,668
Golden Acres	3070R	70	49	6	0	16.8	59.1	5,541
Scott Seed	S75N75	69	53	8	0	17.6	58.1	5,098

\*Yields highlighted in yellow are not significantly different (L.S.D., p=0.05) from the top ranked hybrid

## *Fall Armyworms (FAW)*

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One other issue that I want to visit is Fall Armyworms (FAW). We are looking at reduced forage and hay growth due to the dry period we have experienced this year and we sure don't want to have it consumed by FAW's. There is a good possibility where bermudagrasses of various types are green and growing there is going to be FAW's. There are other grass species that can be affected but, in our region, it tends to be bermudagrass that takes the biggest hit. Below is some information I extracted from a fact sheet **Fall Armyworm Control in Pastures**-Dalton C. Ludwick, Sonja L. Swiger, and David L. Kerns Extension Entomologists, Texas A&M AgriLife Extension Service, that could be a help if you think FAW's are present in your pastures, hay fields or lawns. Please give me a call if you want or need more information.

FAW caterpillars live for two to four weeks depending on the temperature. Freshly emerged caterpillars will begin to feed on the leaves and make small transparent areas (windowpanes) giving the grass a frosted appearance. As they grow and molt, the caterpillars will begin to consume the entire leaf. The larger the caterpillar, the more damage they cause. Smaller caterpillars are easier to control. During their last few days as a caterpillar, when they are 1-1.5" in length, they consume about 80% of all the leaf tissue they will consume in their lifetime.

Smaller caterpillars (<1/2 inch) are less damaging. Larger caterpillar (>1/2 inch) should be treated soon to prevent greater damage. If using a sweep net, then treat at 2 or more caterpillars 1/2 inch or larger per sweep. If making visual inspections, then treat if you have 2 or more FAW caterpillars per square foot. If you are picking up larger numbers of small caterpillars, then treatment is also justified. Most of the time fields are either well below or well above threshold.

Insecticide applications should be made early in the morning or late in the evening, if possible, to ensure caterpillars come into contact with insecticide.

Control options- Pyrethroids (short residual), Dimilin (10–12-day residual) both will wash off in wet weather. Vantacor and Besiege are absorbed by the leaf tissue and rain fast upon drying and have a residual up to 21 days depending on application rate.

*\*The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination and no endorsement by the Texas A&M AgriLife Extension Service is implied.\**



## Cut Stump Spray for Hardwood Species - Brush Busters

We are now into fall and it is the season for Huisache control. Normally this is the time to use over the top leaf sprays to control Huisache, however there has been reports that Huisache leaf conditions are not optimal for the best control. This is not to say that the Huisache on your place will not respond it is just a concern from industry professionals that conditions have not been optimal in a lot of areas. If you have plans to do some spraying, you might consider getting a second opinion before spraying.

I have included the Brush Busters recommendations for using the Cut Stump Method for Hardwood Control.

This is a method I like and you can do it most anytime. There is usually some sweat involved but it is a highly effective method if done correctly. The only piece I would add is I use a weed eater with a brush blade attachment, if the woody plants stem diameters are small enough to safely do so, which is roughly around an inch. Please contact me if you would like more information.

### Works Best:

On algerita (agarito), baccharis, blackbrush, bois d'arc, bumelia, catclaw acacia, catclaw mimosa, Chinese tallowtree, elm, hackberry, huisache, lotebush (bluethorn), mesquite, all oaks, pricklyash (Hercules'-club), saltcedar, Texas persimmon, winged elm and yaupon.

(Note: Although specific cut stump data is not available on all the species above, the plants all can be controlled with basal stem applications of Remedy™, which indicates that the stumps are also susceptible to this same herbicide.)

### When to Apply:

Any time of the year, although the best results occur during the spring-summer growing season.

### 1. Prepare Equipment

Remove the top growth using pruning shears, a sharp ax, chain saw, hydraulic shears, etc. Apply the herbicide spray with a pump-up garden sprayer, backpack sprayer or sprayer mounted on a four-wheel all-terrain vehicle (ATV) or hydraulic shears. To make sure that you cover the stump adequately when using a sprayer attached to hydraulic shears (skid/steer loader), use an adjustable cone nozzle with a relatively large orifice (such as a ConeJet™ 5500-X12 nozzle). For hand-held spray guns, an adjustable cone nozzle with a small orifice nozzle (such as a ConeJet™ 5500-X1 or X3) is recommended.

### 2. Mix the Herbicide with Diesel or Vegetable Oil

A mixture of Remedy™ herbicide and diesel fuel oil or vegetable oil is recommended. Diesel fuel oil or vegetable oil act as coating agents and penetrants to ensure good coverage and absorption of the herbicide. The recommended mixture is 15 percent Remedy™ and 85 percent diesel fuel oil or vegetable oil (see mixing table below). Using vegetable oil instead of diesel fuel oil increases the cost but may be desirable in some situations. One vegetable oil known to mix well with Remedy™ is JLB Oil Plus™.

Mixing Table - \*The herbicide is mixed with diesel fuel or vegetable oil.

Herbicide	% Herbicide	Amount of Remedy™/Gallon(s) Mixed*		
		1 gal.	5 gal.	10 gal.
Remedy™	15%	19 oz.	3 qt.	1.5 gal.

For those who wish to avoid the work or mess of mixing Remedy™ with diesel fuel oil or vegetable oil, a “pre-mix” of Remedy™ and vegetable oil is available. This “pre-mix” is called Remedy RTU™. To use this product, simply pour Remedy RTU™ from the container into the sprayer and apply to cut stumps following the Brush Busters directions. When mixing Remedy™ with diesel fuel oil or vegetable oil, pour the required quantity of Remedy™ into a mixing container or spray tank, then bring to the total volume desired with diesel fuel oil or vegetable oil. Vigorously shake or agitate to ensure thorough mixing. One ounce of Hi-Light™ blue spray-marking dye can be added for each gallon of spray mix or to each gallon of Remedy RTU™ to help identify treated plants.

### 3. Cut and Spray the Stump

Cut every stem of the plant as close as possible to the soil surface, but not below the soil surface. Avoid leaving soil on the cut surface. Spray the stump immediately after cutting it. Adjust the spray nozzle so that it delivers a coarse mist in a coneshaped pattern. Hold the spray wand so that the nozzle is within 1 or 2 inches of the stump and spray the entire cut surface until it is wet, especially the outer edges. Spray the sides of the stump and root collar also, almost to the point of runoff. If you use a spray system attached to hydraulic shears, position the spray nozzle directly over the cut stump high enough to ensure that all of the stump is within the spray pattern. Using the dye as an indicator, spray the entire cut surface of the stump almost to the point of runoff.

### Keep these points in mind:

- Follow the directions on the herbicide label.
- The cost of treatment escalates rapidly as the number of woody plants and stems per acre increases.
- This method is best for plants with a single stem or a few basal (growing from the base) stems.
- Before spraying, brush any soil off the cut stump surfaces.
- Do not spray when the basal stems are wet.
- To reduce resprouting, thoroughly spray the cut surface as well as the bark from the cut to ground level.

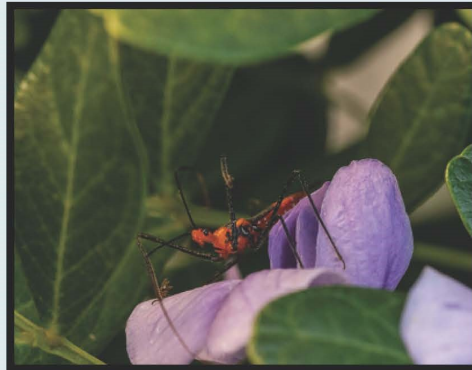
# Fall CEU Conference

Texas A&M Agrilife Research and Extension Center

10345 Hwy 44

Corpus Christi, TX

Wednesday, October 4, 2023 8:00am—3:30pm



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This year's conference will include sessions of interest to those involved in Range Management, Row Crop Production and Livestock Production.

Participation fee of \$35 for online participation or \$50 for in person with lunch. Seating limited.

Highlighted Topics include:

- Weed and Brush Management
- Pesticide Laws and Regulations
- Row Crop and Pasture Pest Management
- Internal and External Pest Management

5 CEU's will be offered.

4 CCA's have been requested.

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Please register at:

<https://www.eventbrite.com/e/2023-fall-ceu-conference-tickets-696645484397?aff=oddtcreator>

or by calling Josie at 361.767.5223 on or before October 2nd

Individuals with disabilities who require an auxiliary aid, service or accommodation in order to participate in any of the mentioned activities, are encouraged to contact the County Extension Office at 361.767.5223 eight days before all programs for assistance. The members of Texas A&M AgriLife will provide equal opportunities in programs and activities, education, and employment to all persons regardless of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation or gender identity and will strive to achieve full and equal employment opportunity throughout Texas A&M AgriLife.

# TEXAS A&M AGRI LIFE EXTENSION

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Individuals with disabilities who require an auxiliary aid, service, or accommodation in order to participate in any Extension event are encouraged to contact their County Extension Office at 361-587-3400 at least one week in advance of the program in order for proper arrangements to be made.

In the event of a name, address or phone number change please contact the office at:  
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*Bobby R. McCool  
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Texas A&M AgriLife Extension Service, San Patricio County  
So often in Agriculture, there is not a simple answer to a simple question.*

*Bobby R. McCool*

