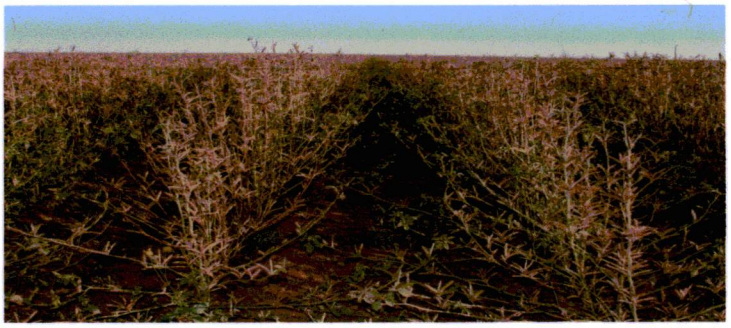
West Texas Guar

High Profitability • Excellent Legume • Soil Enhancer



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2013

GO TEXAN.

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Guar History:

Cyanmopsis tetragonoloba, or guar, is a drought tolerant legume that was brought to the United States in the early 1990's. Domestic production started at the end of WWII. It is grown mostly in Texas and southwestern Oklahoma. Most of the Guar in the world is grown in India and Pakistan, with only a few acres being grown in Australia, Africa, and South America. A majority of Guar is grown for its endosperm. Historically Guar is approximately 54% protein, with the endosperm being 26%, and the rest of the bean (Guar mill) being 28% hull.

Guar Uses:

In Asia, Guar pods are eaten like we eat green beans. It is grown for cattle forage. In the United States, basic use for Guar gum is used to add viscosity to a liquid, such as ice cream, whip cream, cream cheese, barbecue sauce, orange juice, cat and dog food. Guar is an excellent substitute for paper pulp, and is also used in oil well drilling mud (frac gel), explosives, and many other applications.

Crop Production:

Land preparations in a meaning of conventional till, minimum till, and or conservation till. Conventional till needs a minimum bed height of four inches, maximum height 8 inches, or somewhat peeked bed for easier harvest. Broadcast planting is the preferred choice in the upper rolling plains. Guar needs a firm seedbed with bed uniformity.

Deep broke ground must have firm soil, due to moisture loss during germination in loose soil.

Pre-Plant Herbicides:

Treflan/Prowl/Trifurlan, can be applied at ¾ recommended labels for your area. Be very careful not to incorporate Treflan deep into beds. More than 4" of Treflan in the soil profile will damage the Guar Crop.

Planting:

Planting should be on a peeked bed in ridge till operation. The planting depth should range like milo or cotton, 1 to 2 inches, and should be in wet soil. Seeding rate should be 65,000 to 130,000 seeds per acre. Optimum seeding rate of Guar is 8 pounds or 100,000 seeds per acre. A thick stand will produce an increased node setting length from the ground, thus producing a more harvestable bean. Research from TAEX (Texas Agricultural Extension Service), indicated no yield difference between a seeding rate of 2 pounds to 10 pounds seeding rate. Our research indicates 8 pounds is optimum, since a thin plant population produces beans at ground level. Thicker plant population provides approximately 2 inches of beans to ground clearance for harvesting.

Inoculants:

Since Guar is a legume, inoculant is necessary for proper nitrogen

fixation. Production will increase 20% to 40% if properly inoculated. WTG has conducted several inoculant tests using different products, and found only one inoculant that will properly inoculate Guar. This inoculant will be used on all acres contracted for West Texas Guar.

Growth:

Guar should emerge within 5 to 10 days, when soil temperatures reach about 70 degrees Fahrenheit, with adequate moisture. Guar growth is slow for the first three weeks. During the first growth period, the visible part of the plant seems dormant. At this time, the taproot is developing a strong root system. Guar is a summer annual legume, and known for drought resistance, most varieties have smooth leaves. The stem and pods are on a single stem, with fine or basal branching. Guar will range from 6 to 46 inches in height. Pods are generally 1 to 3 inches in length, and average 7 to 9 beans per pod. Seed color will be tan to dark black and have 13,000 to 17,000 seeds per pound. Guar prefers 105 degree days, but will tolerate 60 degree days. It is an indeterminate plant, and when there is low moisture, guar will stop growing, but will not die. Growing season is from 100 to 120 days depending upon timely rains and irrigation. Guar is more suited for arid regions than areas receiving more than 30 inches of rainfall annually. Guar grows well in many soils, but should not be grown in soil that stands in or collects water. Guar

responds positively to well-balanced soil. West Texas Guar, Inc. has measured an average minimum of 12% increase in crop production, following Guar.

Disease:

There are only two major diseases that affect Guar. Alternanria Blithe Spot Leaf and Bacterial blight. Alternanria Blithe Spot is a fungus that may appear on the plant after repeated days of cool, wet weather. Bacterial blight is obvious when the plant starts to pre-maturely defoliate. Primarily, impure or contaminated seed causes this disease. West Texas Guar strives to avoid contaminated seed, and keep the best possible seed in production.

Seed Variety:

There are five varieties of Guar seed available, Kinman, Matador, Lewis, Santa Cruz, and Monument.

Kinman Guar seed was released in 1975 by TAEX, USDA-ARS and the OAES. Kinman is highly resistant to Alternanria Blithe Spot, and, it grows about 18 inches in height with 7 to 9 seeds per pod. The leaves and stem are glabrous (smooth with no hair) and is a fine branching semi-coarse plant.

Matador Guar seed was released in 2005. It also has a high disease tolerance. Matador plants have a coarse branch, strong main stem, and many more lateral branches. Matador is a PPU variety that has

been released to WTG.

Lewis Guar seed was released by TAES and the USDA-ARS in 1986. It has a high resistance to disease. Leaves, stems, and pods are glabrous (smooth and no hair), and the main fruit is up the stem with a few lateral branches.

Santa Cruz Guar seed was released by University of Arizona in 1982. It is very drought tolerant variety that responds well to rain.

Monument guar seed was released by TTU and Halliburton in 2008. This variety is a single stalk with lateral branches, and has not shown high yield capability, but is a preferred for a 90 day crop.

2013 Seed Program

West Texas Guar Inc. will purchase 100% of the pounds on contracted Guar acreage. Producer will not be liable for a lack of production resulting from any act of God. (ex. Flood, hail, drought, etc.) All WTG unused planting seed, and unopened bags must be returned, within 60 days of first planting date, in order to receive credit on WTG invoices.

2013 Contract Information

Contract information must be properly filled out to receive payment.

Guar Yield

Guar yields range from 350 to 1725 lbs. per acre on dry land. Irrigated acres could yield from 55 to 2250 lbs. per acre. Under ideal conditions Guar can produce up to 4500 lbs., per acre.

Insects

Guar midge is the primary insect pest. It can cause up to 30% loss in production, and is usually concentrated in the sandier soils. Guar midge infestation could take 45 to 90 days for midge to become visible on the Guar plant. It could be reduced by a small amount of rainfall or sprinkler irrigation. Other insects could be gall midge, three corned alfalfa hoppers, white flies, white grubs, thrip, and or aphids. Contact WTG and/or a local IPM agent if the producer notices any insect activity.

Fertility:

Nitrogen fertility Trial determined nitrogen added had no or little effect on Guar production. This is because Guar is a legume. WTG observed where phosphate and potash were applied and they built up the soil, and responded with a higher Guar yield. WTG observed major improvement in crop health by applying humic acid (5 gallons per acre) and soluble gypsum (50 pounds per acre) thru the pivot. (Where there is low organic materials) WTG also observed where one foliar feed application improved Guar yield by approximately four hundred lbs per acre. Foliar feeding success is generally dependent on available moisture. On very dry years, foliar feeding may not be beneficial. Any foliar used should not be a chloride based material as chloride salts tend to burn Guar. WTG is continuing to work and run Trials on managing fertility techniques.

Consulting:

WTG will be as involved as you the producer would like for us to be.

Cultivation:

Use normal cultivation practices for row crop operations. Guar can be cultivated, knifed, or plowed. Since Guar is somewhat slow the first four weeks, like any crop it is somewhat susceptible to sand damage, sand fighting should be done as needed.

Harvesting:

Harvesting Guar over the past thirty years has been primarily done with a conventional grain harder, regardless of the planting and cultivating procedure. In 1998, WTG conducted an independent harvest Trial between a conventional platform header and a flex header. At that time we had no proven method of counting lost seed per acre, because of limited information. It appeared the flex header was slightly better than the platform header in bed planting operations. In 1999, after working with Dr. John Sie, and Calvin Trostle, a method was created for counting beans to determine yield and loss of beans. This trial was conducted on a farm located in Terry County area. WTG tried different methods of harvest using a pickup attachment, row crop header, a flex header, and a flex header with air. Every trial gave us improved yield.

A field book will be issued to each guar producer. This field book helps maintain accurate records from the field to our facility.

Our Company:

West Texas Guar, Inc. is a Texas Corporation, owned by Wade Cowan and Klint Forbes. Our goal is to increase profitably and sustainability of guar production in the U.S and to expand markets of all USA guar production. During the past several years, WTG has been involved in developing new products, that increased the use and profitability of all components of the guar bean to the grower. Our endosperm (split) is used in carpet dyes, hydro seeding, pet products, and food, and in the oil and gas industries. Guar hull is being used in hydro seeding, feed, pelleting and hydro feed stabilization. Protein is used in feeding, fertilizer and horticulture. We have agriculture and bean development study, to correlate bean quality with endosperm quality, in order to increase our effectiveness with our vertical integration concepts. Thank you for taking time to read through our brief description of Guar. If you have any questions, please feel free to contact us.

Dockage

CLEAN BEAN DETERMINATION: Beans go through 12/64" round hole screen over 5/64" x ¾" slotted screen. Less other crop seed not removed by screening.

FOREIGN MATERIAL: In addition to dockage, such material as wheat, milo, etc., will be subtracted to determine net Guar Beans.

0 – 7.5 Grams=	1%	77.6 – 82.5 Grams =	24%
7.6 – 12.5 Grams=	2%	82.6 – 87.5 Grams =	25.5%
12.6 – 17.5 Grams=	3%	87.6 -- 92.5 Grams=	27%
17.6 – 22.5 Grams=	4%	92.6 – 97.5 Grams=	28.5%
22.6—27.5 Grams=	5%	97.6—102.5 Grams=	30%
27.6—32.5 Grams=	6%	102.6—107.5 Grams=	31.5%
32.6—37.5 Grams=	7%	107.6—112.5 Grams =	33%
37.6—42.5 Grams=	8%	112.6—117.5 Grams=	34.5%
42.6—47.5 Grams=	9%	117.7—122.5 Grams=	36%
47.6—52.5 Grams=	10%	122.6—127.5 Grams=	50%
52.6—57.5 Grams=	16.5%	127.6—132.5 Grams=	52%
57.6—62.5 Grams=	18%	132.6—137.5 Grams=	54%
62.6—67.5 Grams=	19.5%	137.6—142.5 Grams=	56%
67.6—72.5 Grams=	21%	142.6—147.5 Grams=	58%
72.6—77.5 Grams=	22.5%	147.6—152.5 Grams=	60%

All information is based on an opinion of West Texas Guar, due to interviews of producers, dealers, and other contractors, custom harvesters and hauling services.

GRADING STANDARDS- 2013

MOISTURE	BUSHEL WEIGHT	COLOR	GRADE	PRICE PER #
Below 13.5	60	Light	1	$0.45
13.5	60	Dark	2	.35
13.6-14.0	59	Light	3	.28
13.6-14.0	59	Dark	4	.20
14.1-14.5	58	Light	5	.16
14.1-14.5	58	Dark	6	.15
14.6-15.0	57	No Spec.	7	.12
Above 15.0	Below 56	No Spec.	Sample	.10

Foreign Material – (any substance other than guar bean) the percent of material other than guar beans will be removed by the same percent from the load delivered. Above 12 percent Foreign Material will add an additional one half percent per point.

Load ticket - is classified by amount of product delivered per weight or scale.

Example: 100 lbs. delivered, with 3 percent foreign material is 97 lbs. guar purchased.

Grades and price will be assessed on a load by load basis.

The following definitions will be used to grade color:
A load will be graded as light if 50 or more beans from a 100 bean sample are of white, tan or grey color.
A load will be graded as dark if less than 50 beans from a 100 bean sample are black, brown or gray.

West Texas Guar Inc. will purchase 100% of the pounds on contracted guar acreage. Producer will not be liable for a lack of production resulting from any act of God. (ex. Flood, hail, drought, etc.)

All acres must be planted with seed purchased from West Texas Guar Inc., in order to comply with WTG contract or written consent to plant other seed.

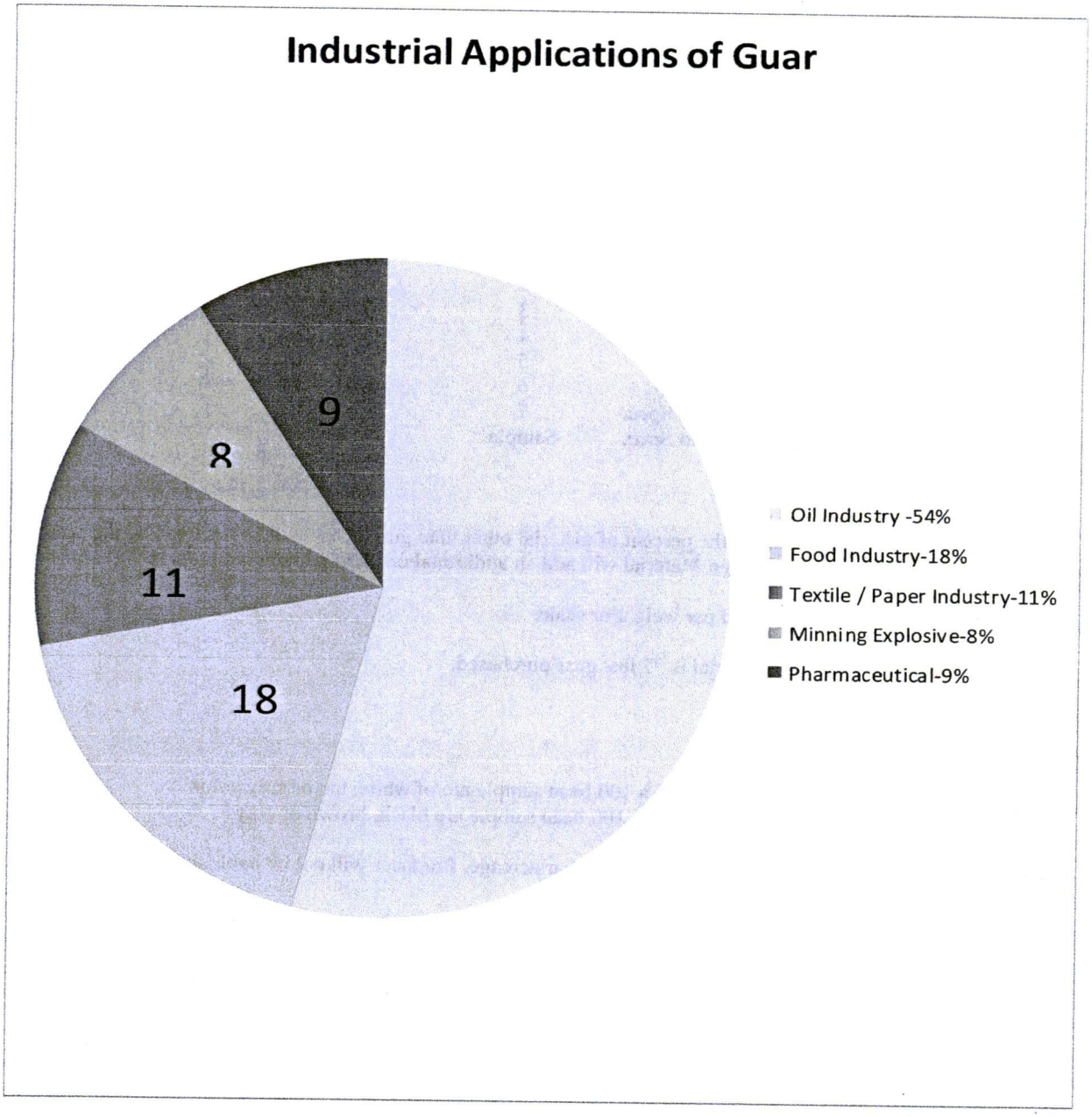
Any part of any WTG contract produced or not delivered will be charged at 110 times the value of the contract.

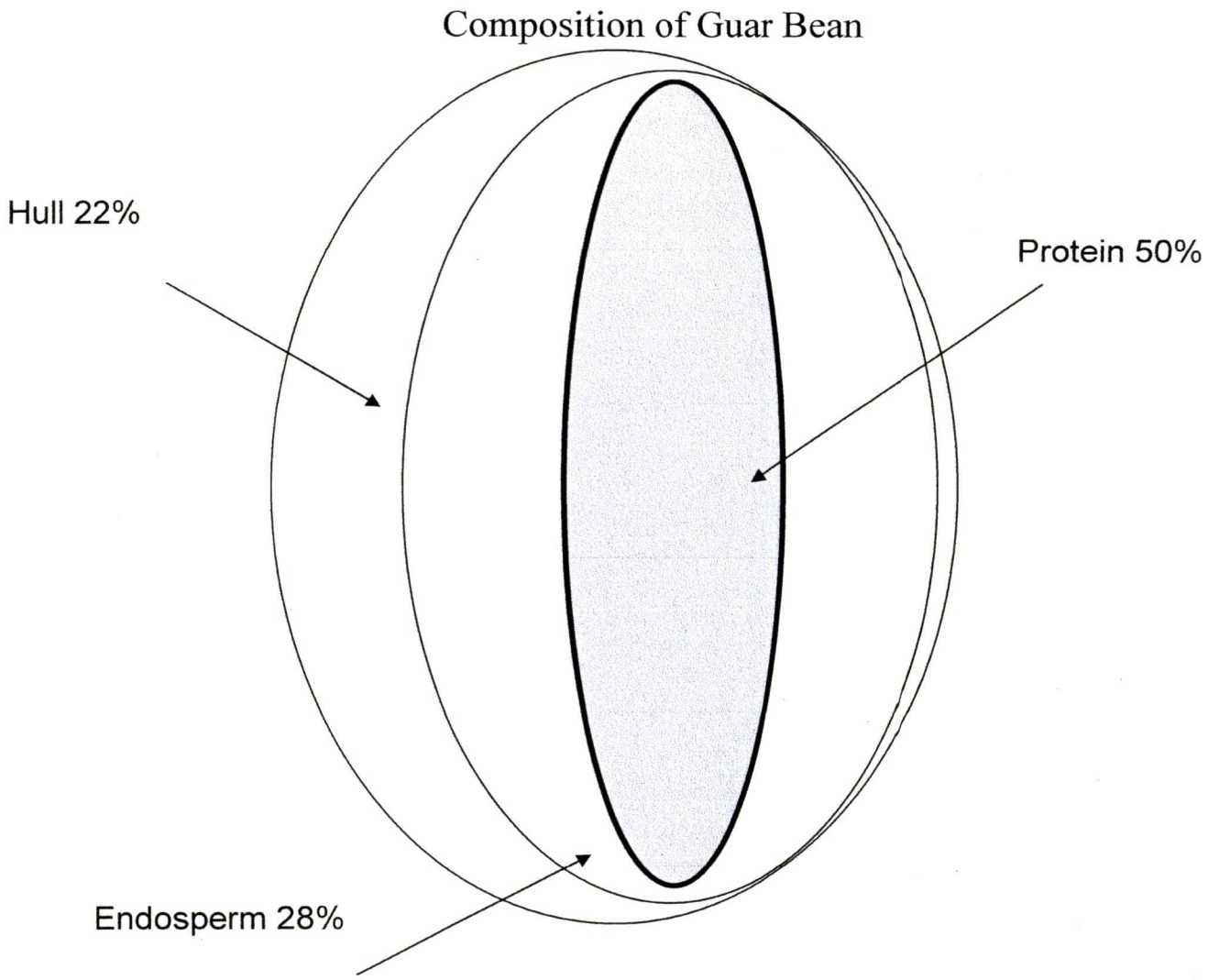
PRODUCER

DATE_____

WEST TEXAS GUAR, Inc.

DATE_____


Industrial Applications of Guar
9
8
11
18
Oil Industry -54%
Food Industry-18%
Textile / Paper Industry-11%
Minning Explosive-8%
Pharmaceutical-9%



Growing Areas
Texas
Arizona
California
New Mexico
Oklahoma

Agricultural
Planting Seed
Green Manure
Guar Bean
Production
Feed/Grazing

Process
Hull
Protein
Splits
Powder

Application
Oil & Gas
Hydro Seeding
Paint & Textile
Mining & Fire Retardant
Carpet Dyes