



PRODUCER RESULTS · HAY & FORAGE

A First Season on Liquid: 3.19 Tons Per Acre on Hybrid Bermuda Grass

After 25+ years on a traditional dry fertility program, a hybrid Bermuda grass hay producer near Whitesboro, Texas put his first field on AgriTec liquid nutrition in 2026 — and harvested 59% more forage on the first cutting than his long-term average.

OPERATION
**Hybrid Bermuda hay
producer**

REGION
Whitesboro, Texas

SEASON
**2026 · first year on
liquid**

PREPARED
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AgriTec International · Producer Results Series · Prepared by Darrin Henderson

THE PRODUCER

Twenty-five years of dry fertility — and a healthy dose of skepticism

This producer has grown hybrid Bermuda grass hay in the Whitesboro, Texas area for more than 25 years, running the same traditional fertility program most of his neighbors run: dry fertilizer spread each season — urea and potash at roughly 150 lb/acre of each — with ag lime and the occasional poultry litter or manure application. On that program, his fields averaged **2 tons of forage per acre per cutting**, year in and year out.

EXPERIENCE

25+ yrs

growing hybrid Bermuda hay on a traditional dry program

LONG-TERM AVERAGE

2.0 tons/ac

per cutting on the traditional fertility program

LIQUID FERTILITY BEFORE 2026

0 gal

had never applied a liquid fertility product of any kind

SPRAY EXPERIENCE

High

years of herbicide & pesticide application — the equipment was already in the barn

He was not an easy sell. He'd heard the claims made for liquid fertilizers — from plenty of companies — and was openly skeptical that the production numbers were real. What he did have was a tremendous amount of spray experience, the equipment to apply liquids precisely, and a brand-new piece of ground to prove it on: a property acquired in late 2025 that had never been under his management.

That new field became the test. In spring 2026 he put it on a full AgriTec liquid program — his first season ever on liquid fertility. This booklet documents what happened, application by application, through the first cutting and into the second.

Inside this story: the soil test that set the program → the spring applications → a cold, wet start and the mid-May reset → the July 8 harvest → forage quality results → the producer's own assessment, and what's already down for the next cutting.

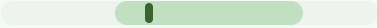


The test field at first-cutting harvest, July 2026 — Whitesboro, Texas.

WHERE EVERY PROGRAM STARTS

The soil test told us what the field needed

Before a drop of product went out, a soil test was pulled on the newly acquired property in late 2025. We build every program from the soil up — the test is the diagnosis; the products are just the treatment. Here's what the field showed:

Measure	Field value	Target range	Reading	Status
Soil pH	6.4	6.0 – 6.5		GOOD
Potassium (K)	278 lb/ac	300+ lb/ac		WATCH
CEC	12	10 – 20		OK
Ca base saturation	76%	60 – 75%		OK

Independent soil lab, sampled late 2025 on the newly acquired property. Shaded band = target range for high-production Bermuda grass hay.

WHAT THE NUMBERS MEAN

- **pH 6.4 is right where Bermuda wants it.** Nutrient availability — especially phosphorus — stays high in this range, so applied fertility actually reaches the plant instead of tying up in the soil.
- **Potassium is the number to watch on a hay field.** Every ton of Bermuda hay hauls roughly 50 lb of K₂O off the field with the bales. At 278 lb/ac, this field starts adequate — but high-production hay burns potassium down fast, which is why the program leans on 3-18-18+ to feed K back through the season.
- **CEC of 12 is a moderate, workable soil** — enough holding capacity to bank nutrients, light enough that spoon-feeding smaller liquid applications through the season fits it better than one big dump.
- **Calcium saturation at 76% is healthy.** The Advanced Cal application wasn't a rescue — it supplies soluble calcium to support root development and soil structure while the stand establishes under new management.

The program logic: a solid soil with good pH and calcium, moderate holding capacity, and potassium under constant removal pressure from hay. The plan: soluble calcium early, a P-K foundation ahead of green-up, then nitrogen timed to push growth — all liquid, all applied by the producer on his own schedule with his own sprayer, at the exact rates each pass called for.

THE PROGRAM GOES OUT

Three spring passes, all liquid, all through his own sprayer

The spring program went out in three passes in April 2026 — the producer's first liquid fertility applications ever. With his spray background, the transition was seamless: same tank, same booms, same acres-per-hour he was used to running with herbicides.

Date	Product	Rate (gpa)	Purpose in the program
April 6	Advanced Cal	4	Soluble calcium to support rooting and soil structure as the stand wakes up
April 8	3-18-18+	6	Phosphorus and potassium foundation ahead of green-up — feeding the K that hay removal takes
April 25	NitroMaxx+	7	Nitrogen to drive leaf growth and tillering into the first production window

Applied by the producer with his own ground rig. Rates as applied, per his application records.



The producer's pull-type sprayer making liquid fertility passes. Rates and field notes are written right on the tank — his schedule, his equipment, his exact rates per field.

Why this matters: with dry fertilizer, he waited on a spreader truck or custom applicator and took whatever blend the plant had. On liquid, he applied the day conditions were right, at the precise rate each field needed — a flexibility he singled out as one of the biggest advantages of the whole program.

AN HONEST ACCOUNT

Then the weather refused to cooperate

No fertility program overrides physiology, and Bermuda grass is a warm-season plant. Through late April and early May the weather stayed cool and very damp: night temperatures averaging in the mid-to-upper 50s, days only in the low-to-mid 80s, and **over 10 inches of rain** through the stretch. Bermuda doesn't build real growth until nights hold in the 60s — so the field sat there, fed and watered, waiting on heat that wouldn't come.

NIGHT TEMPS

55–59°F

Bermuda wants 60s+ at night to run

DAY TEMPS

80–85°F

mild for North Texas late spring

RAINFALL

10+ in

during the April–May window



Cool, grey, and wet — the field under the overcast pattern that held through late spring.

THE MID-MAY RESET

With the forage not producing what it should have been, the producer made an experienced grass man's call: on **May 15** he ran a rotary mower across the field and clipped it back to 4 inches — removing the stale, stalled growth so the stand would restart clean when sun and temperature returned. Then he re-fed it, heavier this time:

Date	Action	Rate (gpa)	Purpose
May 15	Rotary mow to 4"	—	Reset the stand — clear stalled growth, trigger fresh regrowth
May 19	3-18-18+	10	Rebuild the P-K foundation under the new flush of growth
May 21	NitroMaxx+	10	Push regrowth hard into the summer production window

The agronomy: clipping a stalled warm-season stand and feeding the regrowth puts every unit of fertility into new, productive leaf instead of maintaining tired growth. When the heat finally arrived, this field was loaded and ready — and it showed.

HARVEST • JULY 8, 2026

"The rake could only take half a swath"

The field was cut on **July 8**. The stand was so thick the equipment told the story before the scale did: the rake could only pull **half a swath** at a time — a full swath would plug trying to build windrows for the baler. The forage was heavy enough that the producer **broke the belt lacing** on one of the baler belts working through it. In 25 years of making hay, that's not a problem this field had ever given him.



Cutting into a dense, waist-tangling stand of hybrid Bermuda.



From the cab: heavy windrows laid across the field — pulled at half-swath so the rake could handle the volume.



Windrows across the test field ahead of baling, July 2026.

One honest note on timing: the field was actually ready **7–10 days earlier**, but rain events and scheduling pushed the cutting to July 8. That delay cost some forage quality — covered on page 9 — and it's the one thing the producer is set on correcting for the next cutting.

THE NUMBERS

6,375 pounds of forage per acre — 59% over his long-term average

FIRST-CUTTING YIELD

6,375 lb/ac

weighed off the field, July 8, 2026

IN TONS

3.19 t/ac

vs. his 2.0 ton/ac average on dry fertility

INCREASE

+59%

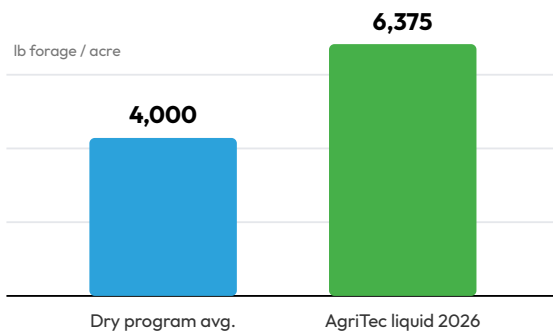
over the 25-year traditional-program baseline

BALES

22

4×5 round bales at ~850 lb each

First cutting: liquid program vs. 25-year dry-program average



Basis: producer's stated 2 ton/ac-per-cutting long-term average on the traditional dry program vs. weighed first-cutting yield, 7/8/26. One field, one season — results shown as harvested.



Rolling the first cutting: 22 four-by-five rounds off the test field.



Raking at half-swath, and the baler that paid for the tonnage with a broken belt lacing.



THE ECONOMICS

2.7 cents of fertility per pound of forage — \$22.69 per bale

Tonnage is only half the story; what it cost to grow is the other half. Here are the liquid fertility inputs behind the 6,375 lb/ac cutting, exactly as applied and priced:

Fertility input	Cost (\$/ac)
NitroMaxx+ applications	\$104.70
3-18-18+ applications	\$65.46
Total fertility investment	\$170.16

Producer's actual product costs for this field. Advanced Cal establishment pass not included in the feeding-cost figures.

FERTILITY PER ACRE \$170.16 total NitroMaxx+ and 3-18-18+ investment	PER POUND OF FORAGE 2.7¢ $\$170.16 \div 6,375 \text{ lb} = \text{about } \53 per ton	BALES PER ACRE 7.5 $6,375 \text{ lb/ac} \div 850 \text{ lb average bale weight}$	FERTILITY PER BALE \$22.69 $\$170.16 \div 7.5 \text{ bales per acre}$
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Fertility cost per bale vs. what that bale sells for



Market basis: USDA AMS Texas Direct Hay Report, Aug 7, 2026 — "Good" grade Bermuda grass large round bales, \$65-\$80/bale F.O.B. (comparable quality range to this cutting's analysis). Bar drawn at the \$72.50 midpoint.

Read it either way, it works: every 4x5 bale rolling out of this field carries \$22.69 of fertility and sells in the \$65-\$80 range at current Texas market prices — the fertility bill is roughly 30 cents of every hay dollar, before a single extra bale from the yield bump is counted.

And the yield bump is the point: at his old 2 ton/ac average, this acre makes about 4.7 bales. On the liquid program it made 7.5 — nearly three more bales per acre, worth \$180-\$225 at today's market, grown for \$170.16 of total fertility on the whole acre.

FORAGE QUALITY — THE HONEST NUMBERS

Solid cattle hay, with room to improve on timing

We report quality the same way we report tonnage: as tested. The first cutting graded a little lower than ideal — the direct cost of harvesting 7–10 days past optimal maturity when rain pushed the schedule. Bermuda loses digestibility and protein fast once it goes stemmy, and this analysis shows exactly that pattern:

Measure	This cutting	Typical target	What it means
Dry Matter	87%	85 – 90%	Cured and baled right — no moisture concerns in storage
Crude Protein (CP)	9%	10 – 14%	Slightly under target — protein drops as the stand over-matures
ADF	39%	< 35%	More fiber, less digestible — the signature of a late cut
TDN	58%	58 – 62%	Adequate energy for lactating and dry cattle

Independent forage quality analysis, first cutting 2026. Target ranges: typical objectives for premium hybrid Bermuda cattle hay.

Bottom line on quality: this hay is more than adequate for lactating and dry cattle. And the fix isn't a product — it's a calendar. Cut this same stand 7–10 days earlier and the protein comes up, the ADF comes down, and the tonnage barely moves. That's precisely the adjustment planned for the next cutting.

ALREADY GROWING THE NEXT ONE

Five days after baling, the field was fed again — **July 13:** 6 gpa of NitroMaxx+ and 4 gpa of 3-18-18+ — and the regrowth is underway. With the earlier harvest window planned, the producer's target for this cutting is simple: keep the tonnage, raise the quality numbers.

Date	Product	Rate (gpa)	Purpose
July 13	NitroMaxx+	6	Nitrogen to drive the second-cutting regrowth
July 13	3-18-18+	4	Replace the P and K that left the field in 22 bales

IN HIS OWN ASSESSMENT

From skeptic to repeat customer in one cutting

This is a producer who started the season doubting liquid fertility claims from any company. After watching this field through a rough spring and one heavy harvest, here's where he landed:

"I possibly over-did it a bit on that second 10-gallon shot of NitroMaxx+."

— The producer, joking about the application ahead of the cutting that broke his baler belt lacing

On control and convenience: he applies on his own schedule, at the exact rates he wants, on any given field — no waiting on a spreader truck, no compromise blends. For a man with his spray experience, the products fit straight into equipment and habits he already had.

On support: the customer service and agronomic support from AgriTec impressed him as much as the tonnage did — a real person who knows forage, walking the program with him from the soil test through the second feeding.

His verdict: he will continue to use AgriTec for **all of his fertility needs** going forward, and he's already asking about the new hay-specific blends AgriTec is developing. The performance won him over once the weather turned — but it's the flexibility and the support he talks about when he tells the story.



Working the windrows on the test field — first season on liquid, first cutting weighed at 3.19 tons per acre.

THE TAKEAWAY

Your soil has a story too. Let's read it.

One field, one season, one skeptical producer — and a first cutting 59% over his 25-year average, through a spring that did him no favors. It started the same place every AgriTec program starts: a soil test, and an agronomist reading it. We find the problem first. The products are simply how we fix it.



Evening on the Whitesboro place, 2026 — second cutting already on its way.

The next step is a soil test — and fall is the window.

Sampling this fall means your 2027 program is built, priced, and ready before spring green-up. Reach out by **early September 2026** and we'll get your fields pulled, read the results together, and build a liquid program sized to what your soil actually needs — nothing more, nothing less.

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Results shown are from a single field and single season as reported by the producer; individual results vary with soil, weather, and management. Producer identity withheld by request. Document prepared August 7, 2026.