

# Hybrid Sudangrass Comes of Age



During the past two years, California-based Cal/West Seeds has conducted a number of field studies in order to demonstrate the benefits of hybrid Sudangrass for forage.

These field trials - conducted in several key California hay production areas (including the Imperial Valley) - have led to the conclusion that hybrid sudangrass offers growers the potential for up to 20 percent higher yields without sacrificing fine stems and top forage quality.

Cal/West researchers worked closely with El Toro Export's Jeff Plourd, past president of the National Hay Association, in staging the recent trials.

"When we did the experiment, it was a very late sudangrass planting," Plourd said. "Typically, we'll get brown leaf if we plant that late. The main part of the experiment was not to grow the plants really big, but instead to still get premium quality even though we planted so late.

"While planting late impacts the

yield, all the hybrids yielded about two tons per acre," he said.

"Due to the season and late planting - even with only one cut - the documented data showed that one of the adapted hybrids had a 14 percent yield advantage."

Because of the extensive tillering of hybrid sudangrass after subsequent cuttings, Plourd said that producers can expect a significant yield improvement after the first cut.

Plourd summed up the tests by saying, "All of the sudangrasses tested were premium quality. Now we need to take this information and put in bigger trials."

During the 2003 growing season, Cal/West Seeds worked with Dr. Dan Putnam of the University of California who conducted hybrid sudangrass trials in the Sacramento and Imperial valleys.

The trials in different regions were especially helpful in demonstrating how these hybrids adapted to changes in heat, pest pressures and drought toler-

ance.

An advantage in yield from between 8 to 20 percent was reported in certain hybrids, depending on their location.

Replicated research also showed that the hybrid sudangrass recorded gains in forage quality.

## Hybrid vs. Open-pollinated

Hybrid sudangrass is bred to maximize forage for all usage, including export sales. Open-pollinated or non-hybrid sudangrass varieties have traditionally offered cattle and dairy producers a warm season forage source that competes favorably with sorghum and other summer grasses.

These non-hybrids, however, also produce less yield-potential. Increased yield-per-acre with frequent cutting of stands is possible if the forage can provide quick recovery.

Hybrid sudangrass varieties are bred to do well under an aggressive multi-cutting schedule, with 25 to 32 days between harvests.

They will also recover more quickly than non-hybrids when proper field management is practiced.

As for plant nutrition, hybrid sudangrass features increased leafiness and finer stems, traits that help to improve digestibility for bigger beef gains or more milk per acre.

Replicated sudangrass trials have shown that higher yields are, in fact, possible without sacrificing forage quality.

As measured by such accepted benchmarks as protein, fiber and digestibility, hybrid sudangrass is consistently equal to or better than non-hybrid varieties.

## A Commitment to Quality

Cal/West Seeds, a leader in forage

# Hybrid Sudangrass Comes of Age Continued

research, has committed itself to a long term program of advanced hybrid sudangrass research and development.

The company operates research facilities in both California and Wisconsin in order to breed the most desirable characteristics into its seed products.

As a result of its innovative plant breeding programs (and the research behind them), Cal/West expects to offer tangible production increases to growers throughout the world.

- by Richard Tudor  
VALLEY GROWER

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\* Data from UC Davis was not included in the original article.

## UC Davis Sudangrass Cultivar Trial 2003 Yields

Trial Planted 5/29/03—Single Location Yield Summary

	Cut 1 7/18	Cut 2 8/18	Cut 3 10/14	Year Total	% of Piper
Deligrass	2.95	2.69	4.58	10.23	122.3
Vercors	3.13	2.61	4.43	10.16	121.5
Monarch	2.94	2.25	3.97	9.16	109.5
Imperial	2.91	1.95	4.19	9.06	108.3
CW 1-30-33	2.87	1.92	4.31	8.89	106.3
Piper	2.54	2.20	3.62	8.37	100.0
Mean	2.66	2.27	4.18	9.31	
CV	14.4	13	11.3	7.6	
LSD (.05)	NS	0.39	NS	0.93	

Trial planted at 120 lbs/acre viable seed on Yolo clay foam soil at the Univ. of Cal. Agronomy Farm, Davis, CA. Entries followed by the same letter are not significantly different at the 5% probability level according to Fishers (protected) LSD.