

Add some healthy skepticism to the toolbox

Dustin Sawyer for Progressive Forage

AT A GLANCE

Keeping the end goal of making a profit in mind, learning how to objectively evaluate emerging ideas can be an invaluable management tool.

Every day, it seems, we hear about a new idea, concept, program or way of thinking that will dramatically improve our lives. Agriculture is a particular target of these new ideas and emerging technologies. That's fitting, as agriculture is full of

creative thinkers and problem-solvers in an industry historically plagued with financial turmoil. Finding a way to get by is a common thread of the farming lifestyle and is perfect fodder for people or companies who want to sell miracles.

Not every new technology is automatically a fraud, but it's always wise to exercise healthy, scientifically based skepticism when heading into previously uncharted territories - especially when money is involved. When a new idea catches attention and an investment is being considered, those of us in the agriculture industry should follow a few guidelines:

Who is talking about it? First, determine whether the product information is from the

person or company that's selling the product or service, or from an independent third party. Many articles are disguised advertisements with the intent to either drive readers toward a new way of a bad thing, it's important to pay attention to where and how the

Lab Director

Rock River Laboratory

dustin_sawyer@rockriverlab.com

Continued on page 12

thinking or introduce them to a new product. While that's not necessarily presented data were collected and be consciously on the lookout for bias or attempts at persuasion.



Add some healthy skepticism to the toolbox, cont'd from page 11

If an article cites "internal" studies or research, was the research really unbiased? Are citations presented? Internal research without any ties to published data is a red flag that there may be bias, and the information should be looked at with a skeptical eye. Generally speaking, data collected by a known, trusted institute and cited with clear references to a publication are most trustworthy. For example, this sentence: "Research has shown a 90% improvement," is vague and doesn't allow a path for the reader to find and verify the research. Conversely, the statement: "A study conducted by Dr.

Local universities are great at investigating agricultural products and are valuable resources for such information. A local extension office can also provide a knowledgeable resource; contact them regarding what is known about the product in question.

Smith of Awesome University and published in the *Journal of Miracle Science* found a 90% improvement" offers a place to follow up on the study (the *Journal of Miracle Science*) and observe the data firsthand – suggesting the authors trust the data and have nothing to hide.

2 Who can be consulted?
Peer review and replication of results are two of the most important tenets of the scientific community.
Those same tenets should be used in everyday business affairs, especially with big financial decisions. Is there a group of trusted peers that know about

the subject? If so, have they been able to replicate the claims made about the product or service? It's not uncommon for truly sound research results to fail in real-world conditions, especially in agriculture, when weather can make all the difference between a study conducted in a greenhouse versus applying the same practice in a field.

Local universities are great at investigating agricultural products and are valuable resources for such information. A local extension office can also provide a knowledgeable resource; contact them regarding what is known about the product in question. If no trusted local peers are available, a simple internet search may also help. But be careful and keep tip No. 1 in mind when using the internet as a source.

3 Dip a toe and collect firsthand data

If, after the aforementioned recommendations, an investment in the product or service is still interesting, proceed cautiously. The great thing about agriculture is: There are respected, independent laboratories ready to help. Let's say a person wants to try a new soil amendment that claims to make soil nutrients more available to the plant. This is a perfect scenario to collect firsthand data. The key is to dip a toe into the decision water. Set up an area that will receive the treatment and a different area that will not. A soil testing lab can help set up a robust experimental design, collect samples and analyze them to procure truly unbiased data that can investigate the specific situation.

These data can help definitively decide whether or not more soil nutrients moved into the crop under treatment than the control crop. It's important here to use real data, not visual comparisons or anecdotal information, to decide whether or not the treatment worked.

Most importantly, always keep in mind: The ultimate goal of the farm is to make more profit, not to be confused with getting higher yield or making more milk. In the end, did the treatment make more money than it cost? Truly unbiased data from personal research is the only way to know for certain. In times of great abundance, as well as times of belt-tightening, it's important to scrutinize product and service decisions that affect the bottom line on any farm. Adding a bit of healthy skepticism to the decision-making process through the aforementioned tips can help ensure those decisions lead to success.



1 Higher Digestibility

Alforex[™] varieties with Hi-Gest[®] alfalfa technology average **5-8% more leaves** than conventional varieties which can result in the following:

- 5-10% increased rate of fiber digestion*
- 22% reduction in indigestible fiber at 240 hours (uNDF240)**
- 3-5% more crude protein**

2 More Tonnage

Alforex varieties with Hi-Gest alfalfa technology provide farms flexibility to adjust to aggressive harvest systems to **maximize yield and quality** or to a more relaxed schedule focused on tonnage. Either way, growers put the odds of improved returns per acre and animal performance in their favor.

3 More Milk

While management and feeding practices vary widely, it's common for dairies feeding Alforex varieties with Hi-Gest alfalfa technology to report a positive production response from their cows when alfalfa makes up a higher percentage of the ration. Based on the increased rate of digestion, you could expect **2.5 lbs. more milk per cow, per day**.¹ And while not every producer experiences this level of improvement, some producers report even better results.



Ready to bring higher digestibility, more tonnage and more milk to your farm?

Visit us at www.alforexseeds.com or call us at 1-800-824-8585

*The increased rate of fiber digestion, extent of digestion and crude protein data was developed from replicated research and on-farm testing. During the 2015 growing season at West Salem, Wil and Woodland, CA, the following commercial dommant, semi-dommant and non-dommant alfalfa varieties were compared head-to-head with Alforex varieties with Hi-Gest alfalfa technology for rate of digestion extent of digestion and percent crude protein: America's Alfalfa Brand Ameristand 42710, Croplan Brands LegenDairy XHD and Artesia Sunries; Fertizona Brand Fertilac; S&W Seed Brands SW6330, SW7410 and SW10; and W-L Brands WL 319HQ and WL 354HQ. Also, during the 2015 growing season, 23 on-farm Alforex varieties with Hi-Gest alfalfa technology hay and silage samples were submitted to Rock River Laboratory, Inc., for forage analysis. The results for rate of digestion, extent of digestion and percent crude protein were averaged and compared to the 60-day and four-year running averages for alfalfa in the Rock River database which included approximately 1,700 alfalfa hay and 3,800 silage 60-day test results and 23,000 hay and 62,000 silage tests results in the four-year average.

**Crude protein—60-day running averages and uNDP240—four-year running average (Combs, D. 2015. Relationship of NDF digestibility to animal performance. Tri-State Dairy Nutrition Conference, 101–112. Retrieved from https://pdfs.semanticscholar.org/5350/f0a2cb916e74edf5(69cdb73/091e1c8280b.pdf.

**Trademarks of Dow AgroSciences, DuPont or Pioneer, and their affiliated companies or their respective owners. © 2020 Corteva.

