



In Perspective: The rise of biologicals Colleen Scherer

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Although the last decade has seen the rise in the use of biotechnology and seed traits, the next decade is likely to be focused more on the research and use of biological products.

Up until the past couple of years, the U.S. market has not been interested in researching or using biological products, but that appears to be changing. Major crop protection companies are jumping on the biological bandwagon—in a big way.

Traditional crop protection companies have been systematically buying up the smaller biological companies. BASF purchased Becker Underwood, Syngenta purchased Pasteuria and DevGen and Bayer bought AgraQuest and Prophyta. In mid-December, Monsanto and Novozymes announced a collaboration they are calling the BioAg Alliance. The alliance is a long-term strategic alliance to transform research and commercialization of sustainable microbial products.

The announcement of the alliance was big news in the industry, and seemed to call greater attention to the use of biologicals. With large crop protection companies, especially Monsanto, jumping into partnerships with biological companies, the industry is gaining attention and respect.

It's about time the United States investigated biologicals. The U.S. is behind many other agricultural powerhouse countries when it comes to using and investigating biologicals. In an interview with *SeedWorld*, Bob Streit, independent ag consultant, said Brazil and Argentina are way ahead of U.S. farmers in adopting biological pest management strategies. The reason? He claims that South American agronomists and farmers are more hands-on with their teaching and scouting of their fields.

The U.S. appears to be ready to adopt biological solutions in crop production. The EPA and USDA seem ready to approve biologicals since they consider them more environmentally friendly than pesticides. Streit said, “EPA will fast-track that development, so much so that if the company with the new product asks for a label on three crops, EPA might grant a label for 20 crops ... And that's basically because these new products present little or no challenge to the environment and the soils which grow our crops.”

One of the challenges with introducing biologicals to the U.S. market is their previous perception as snake oil. Many farmers have been skeptical of biological products due to their varying performance. Fortunately, more research is being done, but there needs to be so much more. Universities have typically not spent a lot of time researching biologicals as their budgets have been cut and there just hasn't been the grant money available to begin that type of research. However, with major crop protection companies either acquiring or partnering with smaller biological companies and expanding research, it gives the whole biological industry more legitimacy. And with that legitimacy, there will hopefully come more research at the university level.

The challenge facing these companies will be to convince farmers of biologicals' efficacy and positive impact to their bottom line. They may be challenged to think outside of the traditional crop production box. But as more research at the company and university level proceeds, farmers are likely to be convinced if the results are improved crops.

Although research will continue into crop breeding and developing new genetically modified crops, the next era of big biotech may be proceeding side by side with big biologicals. So, expect to see a lot more research and information on this topic in the years ahead.