

BIOTECHNOLOGY, A FARMER'S PERSPECTIVE

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I want to start by asking a question: Can anyone tell me who this quote is attributed to--"This corn is going to kill agriculture." If you said a French farmer talking about hybrid corn introduction in France in 1950, you are right. So, the fear of new technology is nothing new.

Currently, bio-tech seeds that are available today appear to have more producer benefits, but I believe the next round of bio-tech introductions will offer the starving and malnourished of the world new hope and salvation. As an example of this, a new bio-tech rice has been developed that is higher in Vitamin A and iron. This year alone 1/2 million children will go blind from lack of vitamin A, and iron deficiencies are responsible for anemia in millions of women and children. I feel that it is our moral responsibility to do everything we can to insure that more of these products become available to every farmer in the world.

The whole story of bio-technology is not being told, it is not just a crop issue. Bio-tech enzymes have been used in detergents and cheese-making for more than a decade. Bio-tech yeast is used in making bread, beer and wine. Bio-tech medicines save lives everyday. But, I'm here to talk about one farmer's perspective on bio-tech crops.

I have received many messages from Agriculture in the last 30 years. The one message that has remained constant for all that time is: "You have to become more efficient in order to stay in business." This is a message that producers take very seriously and work very hard to achieve.

I believe our desire to become more efficient is the reason we not only accept but embrace new technology. Every farmer has to evaluate any new technology to determine whether it will do one of two things for his or her operation: (1) lower production costs while maintaining yield or (2) increase yield while maintaining production costs.

Bio-technology is no different than any new technology that farmers employ, but evaluating bio-tech is a lot more demanding. There are many factors that have to be considered and the uncertainty of where this technology is going is always a constant worry. Take for example BT corn on my irrigated farm in Nebraska. I have a lot more to evaluate than the technology fee for BT vs costs of chemical treatment for corn borer control on conventional corn. If I choose to plant BT corn, I have made a decision to treat for corn borer that may or may not occur at an economic treatment level 6 to 10 months in the future. Currently, this tech fee runs about \$10 per acre.

I have to be sure that any variety I plant is approved for export, or will be used domestically. In Nebraska, we produced a little over 1.2 billion bushels of corn in the 98/99 marketing year. Of that we used 577 million bushels in-state and exported 575 million bushels. Of that 575 million bushels, only 230 million bushels left the

United States. So, you can see that foreign exports are a small but very important part of our business. I am constantly aware of the fact that the rules for sale of my corn that are in place during the spring when I'm planting may be changed completely by the fall when I'm harvesting. Sometimes I feel my odds would be better in Las Vegas.

As a producer, I get very frustrated with what appears to be public concern over bio-technology. I blame the radical environmental groups for the misinformation that is offered and the media for playing it up so it sells better. The questionable report on the Monach Butterfly got a lot of media attention, but when was the last time you read an article about the environmental benefits? BT corn contains a protein from a soil organism which is very effective against European Corn Borer but is harmless to other living things--birds, fish, mammals and most beneficial insects. Another big benefit to me is farm safety. I don't have to handle and be exposed to commercial insecticide to control corn borer. Another benefit for all of us is the use of less chemicals. Water quality will also improve. This story is not being told.

The American farmer is very proud of the fact that he not only feeds himself but also 135 other people. With world population at 6 billion plus, and with the expected growth in the next 20 years, the most conservative figure I've seen is 8 to 9 billion...we have a problem! We need to produce for a lot more than 135 people and bio-technology can help us meet these challenges of tomorrow. In an article in the Washington Times dated November 15, 1999, Secretary of Agriculture Dan Glickman, was quoted as saying, "Today, in a world of growing population and shrinking farmland and forests, biotechnology becomes that much more important. We have more and more people to feed, more and more fiber to produce, and a limited amount of arable land to put into production."

In closing, I can tell you that I believe in and trust biotechnology; and yes, I do plant bio-tech seeds on my farm, when and where I feel it will be profitable!