



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

## HOW GRAIN SHIPPING AND PROCESSING FIRMS ARE HANDLING BIOENGINEERED PRODUCTS

Dan Dye

Vice President, North American Grain Group, Cargill, Incorporated

As a grain handler and primary processor of agricultural crops, our most important job is to make connections across the global agrifood system – between farmers and the people and companies that turn that grain into livestock feed, industrial inks, oils and plastics, and, of course, into the consumer food products that sustain all of us. We try to bring both ends of the food chain closer together – to help farmers gain a better understanding of what feed and food manufacturers want and are willing to pay for, and to help feed and consumer food companies recognize what it takes to produce the quality they seek.

Most of the time, producers and end users can rely on fairly clear market signals to help make decisions about what to plant and what to buy. That's not necessarily the case with genetically enhanced crops today.

All the noise surrounding agricultural biotechnology has created an enormous amount of uncertainty and confusion. What should farmers plant? How big is the market for conventional grains? Will there be premiums for non-genetically enhanced grains? Will those premiums be large enough to offset the higher production costs for conventional grains? Can the U.S. grain-handling system meet the challenges of a market that seems to be shifting from a commodity focus to greater specialization? Will the current debate over genetically enhanced grains cripple future biotechnology research and development? And perhaps the trickiest question of all -- What do consumers really want?

I wish I could tell you that I had all the answers. Unfortunately, I don't. But I can tell you how our company is approaching these issues.

Cargill has been supportive of farmers who want to use biotechnology since the first genetically enhanced corn and soybeans were commercially planted in the United States in 1996. But a couple of months ago, we decided that we owed it to our farmer customers to restate our position – to try to take at least some of the uncertainty out of an uncertain market. We told our farm customers that we would accept crops enhanced through modern biotechnology at our U.S. grain-handling, oilseed processing and corn wet milling facilities for crops planted in 1999 and 2000.

Although our processing plants will accept only those grains and oilseeds that have been approved in Europe, we will work with producers to find other markets for those few varieties of corn that have not yet been approved. Our grain-handling facilities will handle all varieties approved in the United States. We ask farmers who will be delivering varieties that have not yet been approved in Europe or Japan to notify us so that we can channel those crops into appropriate markets.

We believe very strongly that farmers should have the choice and the option of planting and marketing genetically enhanced crops, conventional crops and a wide range of specialty grains and oilseeds. Cargill is participating in all of these markets, including the market for conventional grain.

We are working with customers who are requesting conventional grain on a case by case basis. We won't guarantee that any shipment is 100-percent gmo-free. We will, however, work to meet reasonable tolerances, and we will establish an identity-preserved, traceable system that guarantees the source and the handling and shipping methods used.

Identity preservation is a traceable "chain of custody" that begins with the grower's purchase of seed and continues through the shipping and handling system. It is not the same as segregation, which suggests completely separate marketing systems for genetically enhanced and non-genetically enhanced grain. Such a system, in our view, is neither practical nor economically viable.

On the other hand, the logistics of an IP system, while complicated and more costly, are doable. Companies, like Cargill, have been involved in specialty grains markets for years, and we have experience in using identity-preservation systems to capture increased value for the producer, the handler and the final customer.

The genius of the U.S. agricultural system is that we are very, very good at moving huge volumes of undifferentiated commodities from producers to consumers at an extremely low cost. We understand commodity markets. We are fast, efficient and have well-established methods of setting values and evaluating risks.

There are a number of customers who seem to believe that we can operate a niche market with the same level of efficiency and low costs. We can't. And today, the market for non-genetically enhanced grain is essentially a niche market.

Conventional grains cost more to produce and, if they are to be identity preserved, require a lot of special handling at the farm. To prevent inadvertent commingling with enhanced grains that are now so pervasive throughout U.S. agricultural areas, planters have to be thoroughly cleaned between fields. Farmers need to pay attention to field location and wind conditions to prevent cross-pollination. Harvesting equipment and storage bins need to be thoroughly cleaned, and farmers may need additional storage to identity preserve non-genetically enhanced crops. Farmers need to be compensated for those additional costs.

Similar steps need to be taken at the country elevator or terminal. Separate bins have to be prepared and cleaned. Trucks need to be dumped in the right pit. Pits, conveyers and loading equipment need to be cleaned as do trucks, railcars or barges at every stage in the supply chain. These extra steps reduce efficiency and raise handling costs.

Finally, transportation costs are volume driven and rise quickly for small, irregular shipments that cannot be commingled with other grain.

Some customers are prepared to pay the additional costs for identity-preserved conventional grains and oilseeds, but many are not.

The biotech debate has made the job of connecting producers and the best markets at home and abroad more challenging and more complex in the short term. But I believe the market ultimately will sort out the signals. We just need to keep our heads and remember what it is that we are here to do – to provide abundant supplies of safe, nutritious food to a growing world population.

At Cargill, we believe that biotechnology can be an important tool in helping us meet the central challenge of this century – to feed several billion additional people without having to plow up the most fragile lands on the planet to do it. We cannot force the technology on consumers, but if the past few months have taught us anything it is that we as an industry – producers, grain handlers, livestock feeders and food companies – must do a better job of promoting the benefits of modern biotechnology.