Market, Technical Hurdles Face Corn Uses

ST. LOUIS, Mo. — "Corn growers can take pride in the impact of the three corn utilization conferences," said Tim Trotter, NCGA president and a corn farmer from Coal City, Ill. "But our work is far from over."

He said, "These meetings have carried on NCGA's tradition of investing in research that will broaden our markets. That's the only way we see to take the boomor-bust cycles — and the government — out of our markets. By helping to focus the resources of the entire corn industry, from basic researcher to international processor, on the issue, we can get the most bang for our limited checkoff dollars targeted for research.

"We've had a role in the scientific advances that have moved some of these products off the lab bench and into the marketplace in record time," he said. "But all the new uses face rugged competition. And researchers tell us that we've just begun to tap the potential of corn."

The Corn Utilization Conference (CUC) IV, to be held June 24-26 at the Henry VIII Hotel and

LANCASTER EXPRESS WAGON

Conference Center in St. Louis, is cosponsored by NCGA and Ciba-Geigy Seed Division. It will focus the attention of more than 400 scientists on the current and future industrial uses for corn.

Several current commercial successes can be traced to the first CUC in 1987. At the first conference, prototypes of biodegradable plastics contained 6 percent cornstarch. Today several commercial articles approach a content of 100 percent cornstarch.

In 1987, the large-scale production of commodity chemicals from a corn feedstock was a theory. Today, corn-derived dextrose is used to produce specialty chemicals such as lactic, citric, and acetic acid as well as vitamins, enzymes, and pharmaceuticals.

"The sky's the limit" in the use of corn-derived dextrose for microbial fermentation, said Anthony Pometto III, professor of

food science and human nutrition at Iowa State University at Ames. "We are witnessing an explosion of interest in the transformation of corn into dozens of very high value products."

However, each of those products face technical and competitive hurdles, according to Dale Gyure, group leader for bioengineering at ZeaGen, Inc. in Fort Collins, Colo.

"Corn growers are going to have

to work through processes that are very complex and technically challenging to come up with new products," said Gyure. "Then they will face market resistance. The bigger the market a new product tries to penetrate, the greater the effort it will take. And the more lucrative the market, the tougher the competition. Ethanol is taking on big oil. The plastics market is

"But the potential payback is there if corn growers can become the least cost reliable supplier of products that are technically superior to the competition."

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