

**Testimony by Karin Duncker**  
**Executive Director, New York Biotechnology Association**  
**Opposing a prospective moratorium on genetically modified crops**  
**September 13, 2000**  
**Farmingdale, New York**

Thank you Senator LaValle, Senator Fuschillo and Senator Stavinsky for the opportunity to testify today. I am Karin Duncker, the Executive Director of the New York Biotechnology Association. On behalf of the members of New York Biotechnology Association (NYBA) and in conjunction with the Biotechnology Industry Organization (BIO) I encourage the Members of the New York Legislature to oppose legislation to create a moratorium against “Genetically Modified Crops.” Senate Bill 6899 and Assembly Bill 9871 are a direct affront to the Empire State’s progressive stance on encouraging new industries and technologies.

The New York Biotechnology Association is a statewide not-for-profit trade association dedicated to the development and growth of New York State’s biotechnology-related industries. Our 240 member companies and institutions seek to strengthen the competitiveness of New York State as a premier global location for biotechnology and biomedical education, research and industry.

The idea of genetic engineering can seem foreign, mysterious, and even threatening to those who do not understand that it is really a logical step forward in what we, as humans, continue to learn about life and reproductive processes. Essentially we have learned how nature generates changes in the genetic makeup of cells and we have harnessed that ability in plant and animal breeding as well as in creating innovative new drugs, therapies and methods to detect and treat human disease.

New York State has long been a center of excellence for biotechnology research and development. The Legislature has spearheaded a host of incentives for biotechnology companies and product development. In the past few years, significant new legislation has been put into effect with the expressed purpose of building infrastructure and increasing New York’s competitiveness to attract and retain biotech and high tech companies. The Qualifying Emerging Technologies Credit or QETC program, sponsored by both Senator LaValle and Fuschillo, and passed by the Legislature in 1998 was a significant step in this process. The Legislature recognized the economic importance of biotech and other high tech industries in New York State’s future. Last year’s state budget earmarked an unprecedented \$522 million to support biotech and high-tech development, with almost half of that for venture capital aimed at emerging technology companies. The Jobs 2000 or J2K program, part of that extraordinary high tech program, will be very significant to the continuing development of biotech and high-tech academic research, workforce development, and economic growth in New York State. And this year the biotech industry saw an additional \$5 million dollars dedicated to the development of biotechnology companies in New York State.

Not only has the state taken steps to insure the creation of this industry, our leading academic institutions are internationally recognized for the biomedical and agricultural research. Cornell's Boyce Thompson Institute for Plant Research, Inc. (BTI) has a mission of conducting pioneering research that ultimately benefits humankind. This research spans the vast array of agricultural biotechnology including, forest biology, plant molecular genetics, insect biology, herbal medicine and plants for human health.

One of the most promising areas of agricultural biotechnology is in the area of creating edible vaccines. Cornell has received approval from the Food and Drug Administration to test an edible vaccine in human clinical trials. This holds incredible promise for delivering inoculations against infectious diseases in developing countries.

Another innovative area of biotechnology research is in the industrial and environmental sector. Over the past two decades, new enzymes have become available for widespread use in products such as laundry detergents and paper and textile production. The harsh and environmentally hazardous acids once used for the production of acid-washed denim has been replaced by enzymes created through biotechnology. The use of new enzymes in detergents enables consumers to remove difficult stains at lower wash temperatures without the use of harsh chemical additives. This reduces the presence of such chemicals in wastewater systems, something of particular interest here on Long Island. Enzymes in paper processing can significantly reduce the need for chlorine bleach, another substance that can have devastating effects on the environment. Enzymes, being simple proteins, are fully biodegradable and harmless to our environment.

New York's biotechnology companies are working to bring the benefits of agricultural and industrial biotechnology to the citizens of New York State. Biotechnology is being used to develop enzymes and other biochemical products to make products as diverse as beer, baked goods, contact lens cleaner, paper, starches and sweeteners, and fuel ethanol.

Does the industry need to proceed with caution and due diligence? Absolutely! The biotechnology industry is one of the most heavily regulated industries in this country. Agricultural biotechnology products are subject to U.S. Environmental Protection Agency (EPA), U.S. Department of Agriculture (USDA), and Food and Drug Administration (FDA) oversight. Each of these federal agencies has overlapping authority to research, test and approve genetically modified agricultural products. And each of these agencies have come forward to publicly state that all forms of agricultural biotechnology currently on the market are safe for human consumption and safe for the environment.

In fact, the biotechnology industry supported a recent decision of the Food and Drug Administration to make the approval process for foods improved through biotechnology more transparent, and to also provide more guidance to the food industry with regard to voluntary claims on food labels. This was an effort by the FDA to further strengthen public confidence in the United States' already strict regulatory system and the safety of our food supply.

With all this effort to secure the State's position as a high technology leader, legislation to ban a segment of innovative research is incomprehensible. By arbitrarily creating a moratorium on agricultural biotechnology, this State will send a message to the rest of the biotechnology industry, and to the financial community supporting it, that it does not want biotechnology in New York. I can tell you for certain that if we don't want the industry here, New Jersey, Connecticut and Massachusetts, among others, will gladly step in and take their pick.

We are situated in one of the most competitive regions for biotechnology growth in the U.S. Massachusetts has a very well established biotech corridor, which continues to stretch across borders for new companies. New Jersey, Connecticut and Pennsylvania have aggressive legislative initiatives in place and strong pharmaceutical presence, both very enticing to biotech companies looking for a site to build their business. Significant efforts are being made by statewide and regional economic development agencies in Maryland and North Carolina. And both Toronto and Quebec are constantly looking to New York to recruit companies across their borders.

Do we want to be certain the technology we do is safe and well monitored? Yes, and it is. Can we afford to paint New York as unfriendly to biotechnology, in any of its disciplines and lose more high tech jobs to our neighbors? I think we all know the answer is No.