Exhibit No. 1
Date 2-4-05
Bill No. SB 218

NORTHERN PLAINS
RESOURCE COUNCIL

Testimony of Dena Hoff, Glendive, Montana
on behalf of the Northern Plains Resource Council
in Support of SB 218
Senate Judiciary Committee, February 4, 2005

Mr. Chairman, members of the committee, for the record, my name is Dena Hoff. I farm near Glendive and I am here today representing the Northern Plains Resource Council. Northern Plains is a grassroots conservation and family agriculture group that organizes Montana citizens to protect our water quality, family farms and ranches, and our high quality of life. We stand in support of Senate Bill 218

As you know, wheat is very important to Montana—our economy and our way of life. Wheat is a $800 million dollar a year industry in Montana and we are the largest producer of organic wheat in the nation. The legislature recognized this in 2003 with the passage of Senate Joint Resolution 8 which stated that you felt that genetically engineered wheat should not be introduced until our markets were ready for it. Also part of that resolution was the recognition that segregation systems were not adequate to keep genetically engineered wheat from contaminating non-genetically engineered wheat. They still are not adequate and contamination is still a certainty if genetically engineered wheat is introduced.

Senate Bill 218 takes the intent of Senate Joint Resolution 8 one step further because if genetically engineered wheat is introduced, it will protect farmers from the liabilities associated with this crop resulting from contamination by making sure biotechnology companies are responsible for their product.

The problem: if genetically engineered wheat is introduced farmers who grow it, even though they don't own the seed and are not allowed to save it, will assume all liability for damages to their neighbor's crops or the grain marketing system when contamination occurs—both in marketing channels and in the fields. Even if they follow all the directions of the seed manufacturers perfectly, they, not the company that produces the product that cannot be contained, are liable. Farmers who don't plant genetically engineered wheat, when contaminated, will have no recourse but to sue their neighbors. And what makes this even worse is that if a farmer who doesn't grow genetically engineered wheat and doesn't want it, is contaminated, the farmer can be sued by the seed manufacturer for patent infringement. Monsanto has sued or is suing more than 100 farmer in 90 cases in 20 states. Most of these cases are heard in Missouri courts, where Monsanto is headquartered and found in Monsanto's favor. I've passed out the report "Monsanto vs. U.S. Farmers," recently released by the Center for Food Safety. I encourage you to read about these cases.

Senate Bill 218 is a solution to this problem that will protect Montana wheat farmers should genetically engineered wheat be introduced because:

2401 Montana Avenue, Suite 200, Billings, MT 59101
Tel: 406.248.1154 Fax: 406.248.2110 Email: info@northernplains.org www.northernplains.org

## Biotechnology Could Benefit Northern Plains

Biotechnology could bring significant benefits to the Northern Plains in the United States, helping keep wheat a viable crop for this region. Biotechnology could help producers manage their risks, such as drought and scab, when growing wheat. According to a recent study by North Dakota State University, producers lost $5.3 billion due to wheat scab in North Dakota and Minnesota from 1993 to 2001.

Some crops, such as corn and soybeans, have benefited from biotechnology, and have given farmers a profitability edge when growing these instead of wheat. Further modifications will extend the areas where these crops can be grown successfully. Genetic enhancement of wheat may restore its competitive position and provide greater choice and opportunities for farmers in the Northern Plains. To do so, it will need to address some of the many challenges faced by growers, such as drought and scab. Scab is a fungus that hurts yield and quality.

However, some people continue to oppose biotech wheat based on many misconceptions about biotechnology.

The first misconception is that U. S. farmers would lose markets based on the reluctance of some countries to accept biotech wheat. The major markets for U.S. wheat, especially markets with significant growth potential, are countries that already accept biotech crops. Countries rejecting the crops are either mature or small and limited. Overall profitability would benefit the growers by providing increased yield with drought and/or scab-tolerant wheat.

The second misconception is concern about cross-pollination, especially among organic growers. According to one of the world's most respected research institutions, the International Wheat and Maize Improvement Center, wheat provides its own biosafety in this regard. Wheat plants are self-pollinating, with 99 percent of fertilization occurring within the same plant. Cross-pollination is also limited by the relatively heavy pollen grains produced by wheat, and by the very short viability of wheat pollen, only 20 to 30 minutes.

The final misconception involves concerns about the safety of food produced from biotech wheat. The United States is generally understood to have the best system for monitoring the safety of food and feed generally. New genetically engineered crops are analyzed and reviewed for years before being brought to market. This safety scrutiny is far more rigorous than that afforded more conventional crops in the U. S..

Global science-based assessments of food and feed safety of genetically enhanced foods ensure their safety. Realistically, in a super-sensitive climate in which people are concerned with food safety, those most committed to ensuring their safety are the companies that develop the crops and the manufacturers that use them in food products.

*"Bogus Arguments Back Biotech Ban; Technology Good For U.S. Agriculture Industry"* Grand Forks Herald

# German Academies: Health Benefits Tied to GM-derived Food

"In consuming food derived from genetically modified (GM) plants approved in the European Union (EU) and in the United States (USA), the risk is in no way higher than in the consumption of food from conventionally grown plants. On the contrary, in some cases, food from GM plants appears to be superior in respect to health," the Union of The German Academies of Science and Humanities Commission writes in a recently released paper.

With various health issues taken into account, including toxicity, carcinogenicity, and allergenicity, the Commission concluded that (1) Since absolute safety is not possible for any food on the market, GM or non-GM, the basis for the approval of food products containing GMO is the evidence that they are at least as safe and nutritious as the corresponding products derived by conventional means, and that (2) GMO products offer the advantage that they have been exceptionally thoroughly tested in respect to health risks.

Download the article at akademienunion.de

*"GM Food 'Healthier Than Conventional' – German Academies Commission"* *ISAAA Crop Biotech Update*

## "GM Products On The Market Are Safe"

*Eighteen Italian scientific associations, representing 10,000 researchers, present their first Consensus Document on "Food Safety and GMOs"*

Milan, November 3, 2004 – The first ever consensus document on "Food Safety and GMOs," signed by 18 respected Italian associations was launched in Milan today on the initiative of the Società Italiana di Tossicologia (SITOX). According to the associations, which represents over 10,000 researchers:

- Ever since man turned from hunter-gatherer into breeder and farmer, he has tamed animals and plants and altered—sometimes knowingly—their genetic makeup. As such, most of the crops currently farmed and animals raised in our world are in fact genetically modified organisms (GMOs).
- GMOs are governed by rules that are unparalleled elsewhere in the food industry, so they are more strictly controlled than any other food product. What's more, they must undergo the full range of food safety tests before they are authorized for sale.
- It would be wise to concentrate research not on the technology used to produce these crops, but on their engineered genetic features on a case-by-case basis.
- The GMOs now on the market have passed all tests and have been properly authorized, so on the basis of current knowledge, they should be considered safe for both human and animal consumption.
- Therefore, the dualistic stance on GM food (i.e. one is either "pro" or "anti") should be abandoned in favor of rational consensus based on knowledge of the process and its products.

"Recombinant DNA technology is the basis of advanced biotechnologies, i.e. processes that use living organisms or parts of them to obtain goods and services with a view to improving the lives of humans," said Giorgio Cantelli Forti, president of the Società Italiana di Tossicologia, today.

"It allows us to produce new medicines, diagnostic and treatment tools, industrial and food products, animal breeds, varieties of produce and forms of energy, faster and more cheaply than ever before. However, while public opinion is quick to accept the innovations and hope that biotechnology brings to the field of health, it is highly resistant when these same innovations are used in farming and food. This attitude stems from doubts and fears fueled by a lack of well-balanced information. It is the obligation of the scientific community—namely, researchers who have the means to do so—to shift the debate over genetically modified organisms to a more balanced, scientific plane."

The consensus was drafted after thorough evaluation of the international literature on the subject and of the opinions of the various Learned Societies and international organizations. It addresses several topics, including the relationship between GMOs and nature, safety evaluation procedures, the principle of substantial equivalence, toxicity analysis, allergenicity, gene transfer, antibiotic resistance, long-term effects, and animal feed. The meeting that generated the consensus was held in Bologna on May 5, 2004 at the invitation of the Società Italiana di Tossicologia. It was organized as a research conference to follow up on the honorary degree in pharmaceutical biotechnology granted to Kary B. Mullis, winner of the 1993 Nobel Prize in Chemistry, by the Pharmaceuticals Faculty of Alma Mater Studiorum (University of Bologna).

Food Safety and GMOs Consensus Document

# GM Foods Safer Than 'Natural' Counterparts

A recently published book by Dr. Henry Miller, M. D., and Gregory Conko set out to refute many scare tactics regarding the safety of genetically-modified food. The authors, of the Hoover Institute and the Competitive Enterprise Institute, respectively, argue that the scientific methods used to develop these products and the regulatory review to which they are subject to has made them safer than their "natural" counterparts.

In this review of *The Frankenfood Myth: How Protest and Politics Threaten the Biotech Revolution,* by Miller and Conko, the author asserts that the book makes a compelling case that the world has been made poorer by the "GM food phobes" and regulators. The evidence suggests that anti-biotech activists and regulators have literally taken food off the table, and away from those who desperately need it.

Miller and Conko argue that it is fruitless to try to persuade the entrenched and radical anti-biotech activists, asserting that, "There is little common ground." Further, they cite the efforts of European regulators to restrict GM foods in an effort to prevent *hypothetical* risks in the name of the "precautionary principle," and to achieve the impossible, to conclusively rule out all risks.

According to Miller and Conko, "If today's rich nations decide to stop or turn back the clock [to a point at which the new biotechnology is no longer used on GM foods] they will still be rich. But if we stop the clock for developing countries, they will still be poor and hungry. And many of their inhabitants will be dead."

*"Why Modified Food Is A Good Idea"* The Washington Times

# Myths about Biotech Dangers Exposed

According to Mr. Henry Miller, a fellow at the Hoover Institute, genetic modification of plants is a practice that goes back centuries. In his review of a new book, *Mendel in the Kitchen*, by Nina Federoff and Nancy Marie Brown, he observes that virtually all grains, fruits and vegetables in our diet, except wild berries and mushrooms, are genetically modified from their "natural" state.

"Potatoes, tomatoes, oats, rice and corn, for instance, come from plants created – during the past half-century – by 'wide-cross' hybridizations that transcend natural breeding boundaries." In that sense, agricultural practices have been "unnatural" for 10,000 years.

Genetic modification through gene-splicing is just the latest chapter in the centuries of crop improvements. The authors argue that it is a refinement of earlier techniques.

Miller notes a kind of hysteria around biotechnology among its critics, alleging vague, hidden dangers. But, he observes, the dangers have proven nonexistent and the technology superior to earlier approaches. The demonstrated and future benefits of plant biotechnology are enormous. The cultivation of biotech crops has reduced pesticide applications and offers virus-resistance, and drought and water tolerance. According to Miller, the idea that, "gene-splicing is unproved, untested and unregulated is one of the Big Lies of the current technophobia. *Mendel in the Kitchen* goes a long way toward exposing it."

*"The Miracles of Modifying"* Truth About Trade

# GM "Scare" Campaigns Refuted

A recently published report from the National Research Council and the Institute of Medicine Academy has refuted many GM scare campaigns regarding the safety of genetically-engineered food.

According to the report, "Hazards associated with genetic modifications, specifically genetic engineering, do not fit into a simple dichotomy of genetic engineering versus non-genetic engineering (or conventional) breeding. Not only are many mechanisms common to both...but also those techniques slightly overlap each other." In other words, all foods contain potentially harmful substances, and genetic engineering can introduce novel substances that can have unintended effects – but so can conventional breeding. Consequently, researchers recommend that safety assessments on these new products be done on a case-by-case basis.

Opponents' scare tactics are not based on science. Nearly half of Angola's children suffer from malnutrition, but the Angolan government banned import of 19,000 tons of U. S. corn, based on the fear that it was genetically modified. Similarly, Zambia rejected food shipments last year, in the face of drought-caused hunger, out of concern that trade with Europe would be lost if trace amounts of the modified foods showed up in future harvests.

According to the editorial: "No hungry child should be denied a mouthful of food, regardless of what the genes of the plant that it came from look like."

*"Safely Feeding the Hungry" (editorial)* The Washington Times

# Ethical Consumerism Not at Odds with Biotechnology

Julian Baggini, editor of the *Philosophers' Magazine* and author of *What's It All About? Philosophy and the Meaning of Life*, recently examined "ethical consumerism," focusing on three convictions shared by many of its advocates: that multinationals are inherently bad; that the "natural" and organic are inherently superior; and that science and technology are not to be trusted. According to Baggini, a self-professed advocate of ethical consumerism, it is a way of life that promotes use of consumers' purchasing power to make the world better.

After debunking the "irrational prejudice" toward multinationals, asserting that they could be a force for good, Baggini reviews one of the biotech myths in light of the other convictions: that genetically modified foods are inherently unethical. Calling this idea ludicrous, he points out that biotechnology has the potential to improve crop yields and, therefore, benefit farmers, including those in developing countries. He goes on to quote Philip Stott, professor emeritus at the University of London, who wrote that, "to deny GM technology to the developing world would be unforgivable."

Baggini applies the term "eco-narcissism" to those who present the advocacy of organic and GM-free foods as an ethical issue. Opposition to biotechnology on these grounds is based on an almost superstitious view that anything "natural" is somehow better than conventionally grown or genetically modified crops. According to Baggini, there is nothing wrong with most non-organic foods and this position becomes "self-serving, self-deception."

Baggini concludes that he believes in ethical consumerism passionately, and that "truly ethical consumerism requires a harder-headed look at what is in the interests of the world's poor."

*"Feeling Pure Won't Help the World's Poor"* The Guardian

## Compendium of the Social Doctrine of the Church (Vatican)

Saying the Church's social doctrine must be "known, lived and propagated," Cardinal Renato Martino, president of the Pontifical Council for Justice and Peace presented the "Compendium of the Social Doctrine of the Church" in the Holy See Press Office. Work on the volume, published in both Italian and English, began at the council five years ago under the presidency of the late Cardinal Francois-Xavier Nguyen Van Thuan.

Joining Cardinal Martino at the presentation were Bishop Giampaolo Crepaldi and Msgr. Frank Dewane, respectively secretary and under-secretary of the council.

The cardinal pointed out that the book is dedicated to the Holy Father who, in No. 54 of the 1999 Post-synodal Apostolic Exhortation "Ecclesia in America," recommended that "it would be very useful to have a compendium or approved synthesis of Catholic social doctrine, including a catechism which would show the connection between it and the new evangelization."

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EXCERPTS FROM THE COMPENDIUM OF THE SOCIAL DOCTRINE OF THE CHURCH

Chapter 10: Safeguarding the Environment
Section 4: A Common Responsibility

Paragraph b

473. The Christian vision of creation makes a positive judgment on the acceptability of human intervention in nature.... nature is not a sacred or divine reality that man must leave alone..... the human person does not commit an illicit act when .... he intervenes by modifying some of their characteristics or properties.

474. Modern biotechnologies have powerful social, economic and political impact locally, nationally and internationally.... above all the criteria of justice and solidarity must be taken into account

475. Equitable commercial exchange, without the burden of unjust stipulations is to be facilitated...It is indispensable to foster the development of a necessary scientific and technological autonomy of the part of these same peoples, promoting the exchange of scientific and technological knowledge and the transfer of the technologies to developing countries

476. Solidarity also means.... promoting trade policies that are favorable to their peoples and the exchange of technology that can improve the conditions of their food supply and health

478. Entrepreneurs ... involved in the research, production and selling of products derived from new biotechnologies must take into account not only legitimate profit but also common good.... by their decisions... they can guide developments in the area of biotechnologies towards very promising ends, as far as concerns the fight against hunger, especially in poorer countries, the fight against disease ad the fight to safeguard the ecosystem....

479. Public authorities must also encourage a correctly informed public opinion and make decisions that are best-suited to the common good

480. Leaders in the information sector also have an important task, which must be undertaken with prudence and objectivity... The temptation to fall into superficial information, fuelled by over enthusiasm or unjustified alarmism, must be avoided