

October 2001

Group Opposed to Agrochem TNCs, GMOs Launched

A broad alliance to confront the growing menace of agrochemical transnational corporations (Agrochem TNCs), genetically modified organisms (GMOs) and imperialist globalization was launched last September 14 at the Continuing Education Center of the University of the Philippines in Los Banos, Laguna. The Resistance and Solidarity Against Agrochemical TNCs (RESIST Agrochem TNCs!) is composed of peasant organizations, scientists, environmental groups, academe, church people, nongovernment organizations (NGOs) and concerned individuals nationwide.

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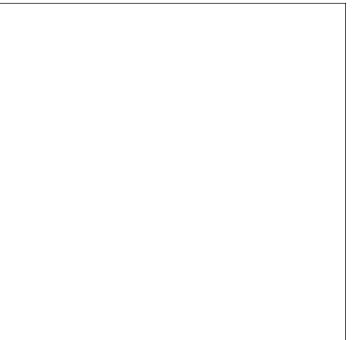
RESIST Agrochem TNCs lead convenor and Kilusang Magbubukid ng Pilipinas (KMP) Chair Rafael Mariano said "agrochemical TNCs put profits above the life and health of the people to the extent of inflicting permanent damage to the environment and thereby affecting the biodiversity of life, survival, food security and livelihoods over a billion of peoples worldwide."

SIST

Mariano stressed that "liberalization of agricultural trade, propelled by the World Trade Organization (WTO) and its Agreement on Agriculture, has only worsened and led the increasing monopolization of the world markets as it favored the strongest trading partners, like the US."

The RESIST Agrochem TNCs said "they bind into one

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Rafael "Ka Paeng" Mariano, KMP Chairperson and RESIST spokesperson discussing an overview of the anti-agrochem TNCs campaign

Isabela Farmers Stage Protest Against Bt Corn Testing

The Anti-GMO Alliance of Isabela (AGMAIS) staged a protest action last Sept. 16, 2001 against the continuing field testing of Bt corn in Isabela.

AGMAIS Spokesperson and RESIST! convenor and member Fr. Greg Uanan of the Diocese of Ilagan, Isabela condemned the ongoing Bt corn field testing and stated that the genetically-engineered corn, aside from the ill effects on health and the environment, will only worsen the poverty being experienced by farmers.

The protesters also accused Monsanto of not having any legal documents that prove that they are allowed to conduct field testings in the area. They also criticized the former mayor of Cauayan for his one-sided move against the town council's move to stop the ongoing field testing. They also criticized the Department of Agriculture's Bt corn promotion.

From the Catholic church of Echague, Isabela, the protesters

organized a caravan towards Carulay, Echague where the Bt corn testing is being held. From here, they staged a short program expressing their resistance against the on-going testing despite the lack of permit by dagti mannalon ti Isabela (DAGAMI), and Anti Coal Mining Movement of Isabela, Panagkakaisa ti Umili a Mannalon laban iti panang-agaw ti daga.



RESIST!

KMP to Monsanto: Prove Your Legality!

The militant Kilusang Magbubukid ng Pilipinas (KMP) dared agro-chemical transnational corporation (Agrochem TNC) -Monsanto Philippines, Inc. to prove the legality of their field trials of the controversial Bt-corn plants and reiterated that the multi-location field trials conducted by the seed giant is illegal.

Earlier reports said Monsanto's country director, Juan Agustin Ferreira, is considering the filing of cases against the farmers, church people and activists who uprooted the Bt corn at its field trial site in Tampakan, South Cotabato last August 29.

The KMP said that the National Committee on Bio-safety of the Philippines (NCBP) acted in excess of its jurisdiction when it decided to approve the field testing of the Bt-corn contrary to powers granted to it by Executive Order No. 430, series of 1990.

KMP Chair Rafael Mariano said "the NCBP is only a recommendatory body dedicated to policy formulation. It has no explicit power to allow or approve any sort of field testing involving genetically modified organisms."

"Monsanto failed to prove conclusively that there shall be no harmful effects or risks associated with the experiment. They have failed to submit this information to the NCBP, thereby subjecting the ecology of the testing sites to potential adverse effects which even Monsanto are not capable of curtailing," the peasant leader added.

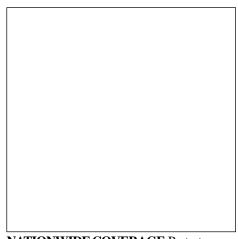
The KMP added that they have filed a petition to the Department of Agriculture (DA) to: 1. Immediately stop field testing of Bt corn and entry of Genetically Modified Organisms (GMOs) and GE crops in the country;

2. Conduct immediate investigation and extend necessary punishment to Monsanto and DA officials found guilty in initiating and/or facilitating the illegal field testing of GE crops, particularly, Bt corn;

3. Assert DA's authority over NCBP, particularly the approval of field testing of GE crops; and

4. Recall the current Policy Statement of Modern Biotechnology and the Use of GMOs and reformulate it in consistent with people's right to a safe and healthy food and a balanced ecology, not at the expense of the farmers, in particular, and the Filipino people, in general.

The KMP also assailed the Monsanto's conceited advertisement that they invested \$4.9 million, 15% higher than last year. "This only shows the TNCs greed for profit at the expense of small farmers. In fact, US based Monsanto and Du Pont already controls 70% of hybrid corn seed market in Asia. Now, they are gearing to control the market of transgenic corn seeds, like Bt corn, in the Philippines. Farmers did not benefit even a single cent from these profit-thirsty agrochem TNCs."

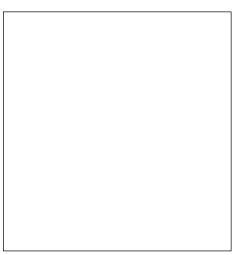


NATIONWIDE COVERAGE.Protests against Monsanto's dreaded Bt corn goes on national scale like this one in Isabela.

FORUM/DISCUSSION ON GMO HELD

As a part of their continued struggle against Agrochemical Transnational Corporations (TNCs), the Resistance and Solidarity Against Agrochemical TNCs (RESIST Agrochem TNCs) held the "Talakayan/Pagaaral Hinggil sa Genetically Modified Organisms (Forum/Discu-ssion on GMOs)" on October 22, 2001 at the National Housing Authority in Quezon City. In particular, the Forum on GMOs hoped to cover the following: to give a comprehensive discussion or orientation on the effects of GMOs on the environment, health and livelihood of the Filipino people, to determine the level, status and results of mass campaigns in the local, provincial, regional, national and international level and from here, and to serve as a guide to other sectors in the future campaign and propaganda works and projects the IAAATNCs' local counterpart alliance.

A total of 46 representatives from various sectors such as peasants, workers, health, science and technology, and youth and students, attended the one day event. The participants met with the main objective of reaching a level of unity in terms of the line and analysis on the GMO issue which would serve as guide in the launching of educational discussions, campaign and propaganda in the future. The activity was a success and similar discussions are being planned to become a regular part aof alliance's educational campaign activities.



Panel of speakers during the GMO forum/discussion at the NHA.



October 2001 Parkinson's Disease Possibly Linked to Pesticide Exposure

Recent research into the causes of Parkinson's disease suggests that inheritance, age and environmental exposures may all be important factors. In particular, numerous studies conducted over the past two years have shown that there may be a link between pesticide exposure and loss of neurological functions associated with Parkinson's.

Parkinson's disease is a progressive, incurable ailment. It is the second most common neurodegenerative disorder in the United States after Alzheimer's and affects more than a million people, including about 1% of the population over age 60. Despite years of research, neither definitive causes of the disease nor effective long-term treatments have been found.

Parkinson's disease begins when brain cells that produce dopamine—a chemical that helps control muscles—start to die. Symptoms become apparent only after 60 to 80% of the cells are dead. The disease is characterized by resting tremor, rigidity, slow movement, postural instability and progressively involuntary writhing movements, paralysis and an inability to talk or swallow.

Only about 10% of Parkinson's cases are genetic, with the remainder resulting from unknown factors such as environmental exposure or some interaction between genetic susceptibility and the environment.

Researchers believe that chemical exposures, particularly to pes-

ticides, play a role in some cases of Parkinson's. Three lines of evidence suggest this finding. First, people who live in farming areas, especially those who drink well water, and have a history of exposure to pesticides are more likely to contract Parkinson's. Second, several studies have shown that those who die of Parkinson's disease have higher levels of organochlorine pesticides in their brains than the general population. Finally, in the early 1980s, a group of young people developed Parkinson's symptoms after taking an illegal drug called MPTP whose structure is similar to meperidine or Demerol. The structure of its metabolite is similar to the herbicide paraquat.

Although previous investigations only established an association between workplace pesticide exposure and Parkinson's, a study conducted last year at Stanford University showed that exposure to pesticides in homes and gardens may also increase the risk of developing the disease. The researchers interviewed 1038 people, including 496 who had recently developed Parkinson's, about their lifestyle habits and whether or not they had used or been exposed to insecticides, herbicides or fungicides in homes or gardens.

The study revealed that individuals who were exposed to pesticides in the home or garden were 70% more likely to develop Parkinson's than those who were not exposed. "In-home insecti-

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INTERNATIONAL NEWSBRIEF

GM Cotton Crop to be Destroyed

Chandrika Mago/ Times of India, Oct 19, 2001

NEW DELHI: In a landmark decision, the Union environment ministry's Genetic Engineering Approval Committee (GEAC) has ordered the destruction of genetically modified cotton grown illegally over hundreds of hectares in Gujarat. The crop is ready for harvest, therefore there is immediate need to intervene. The permission of GEAC is mandatory for the introduction of any GM food or crops.

Farmers to Protest Against US Research, American Work Seen As Bid to Seek Patent

Sumeth Wannapruek Biothai

Hundreds of northeastern farmers are planning nationwide protests against the United States' attempts to genetically modify Thai jasmine rice for a rice patent. The group was led by Vithoon Lianchamroom, of BioThai Network, and Bamrung Khayotha, of the Alternative Farming Network.

Mr Vithoon said the activities were part of a campaign by the Network of Northeastern People Against Globalisation. "This is a loss of Thai sovereignty because rice is the life of Thai farmers and people. We will fight to save this inheritance for our children. Unless the US returns the rice to us, we will declare ourselves her enemy for good," he said. **Bayer Buys CropScience.** *Source: CNN, USA.*

Germany's Bayer agreed to buy Aventis's agrochemicals unit. Bayer will combine the unit with its existing agrochemical business creating Bayer CropScience. As a consequence Bayer will become the world's second-largest agrochemical company behind Switzerland's Syngenta., Aventis will be responsible for any potential liabilities arising from the controversy over StarLink genetically modified corn.

The Canadian Minister of Health Wants Mandatory Labels on GM Food.

Source: National Post/CTV, Canada, by Robert Fife.

Allan Rock, the Minister of Health said that mandatory labelling of all genetically modified foods imported or produced in Canada is necessary to respond to citizens' growing demand to know what is in the food they eat. A national task force had recommended in August that the federal government allow a voluntary system of labels for socalled GM foods, but Mr. Rock was cited as telling the National Post that Canada must follow the European example of imposing mandatory regulations. Despite strong opposition to mandatory labelling from the departments of Industry, International Trade and Agriculture, Mr. Rock intends to ask the House of Commons health committee to begin a comprehensive study of the issue.

4 THE HIDDEN HEALTH HAZARDS OF GENETICALLY-ENGINEERED FOODS Policy Studies, HEALTH ALLIANCE FOR DEMOCRACY (HEAD)

TAKE A LOOK AT THE LABEL OF THE FOOD BE-FORE YOU EAT. Chances are there is no label to indicate if the food has been genetically engineered (GE). Consumers have no way of knowing what foods are genetically engineered because the government does not require labeling of these products. In effect, millions of consumers are made into unwilling guinea pigs, unknowingly testing the safety of dozens of gene altered food products. Primary suspected ingredients and products are soybeans: soya flour, soya oil, lecithin, soya protein isolates and concentrates; corn: corn flour, corn oil, sweeteners, syrups; canola: oil; cotton: oil and fabric; potatoes: tomatoes; dairy products and animal products.

What is genetic engineering and what are genetically modified organisms?

Genetic engineering refers to all technologies that artificially

move genes from one organism to another, often from one specie to another, to produce 'new' or "novel' organisms. These techniques involve highly sophisticated manipulation of genetic material and other biologically important chemicals to change the DNA of living organisms. Genetic engineering experiments are conducted inside high tech laboratories, factories and greenhouses where temperature and humidity are controlled and monitored, and a glass tube or

It is even more disturbing that the regulatory agencies, especially the National Biosafety Committee, supposedly mandated to safeguard public health, continue to ignore the dangers that GMOs bring. And worse, they choose to believe the empty promises of the transnational companies that are obviously profit-motivated and who aim to strengthen their monopoly control of agriculture

petri-dish is all that is needed to multiply a desirable organism. Transnational corporations are willing to pay millions of money for such a technology to enhance their trade and earn greater profits from the development, ownership and sale of these products.

Genetic engineering is not a progression from traditional or existing technologies of growing crops, breeding animals or fermentation that has been done in a natural setting of farming communities that has been going on for centuries.

Also, GE is not to be confused with biotechnology (biotech) or cloning. Biotechnology refers to technologies that manipulate the genes of life forms. However, not all biotechnology is genetic engineering. Cloning is another type of an organism that has been produced through direct manipulations of its DNA.

Health Hazards of GE Foods

Findings show that the genetic engineering of foods can transform safe foods into dangerous products that can be potential human health threats. The following are the unexpected effects and health risks posed by genetically engineered food. **Toxicity** –genetic engineering can cause unexpected mutations in an organism, which can create new and higher levels of toxins or poisons in foods. In the late 1980s, when a new GMO was used to produce L-tryptophan (a nutrient supplement), a toxic metabolite was inadvertently produced. Within a period of months, thousands of people who had taken the supplement began to suffer from eosinophilia myalgia syndrome, a new disease characterized by hematologic, neurologic and other abnormalities. Eventually at least 1,500 people were permanently disabled and 37 died.

<u>Allergic reactions</u>-genetic engineering can also produce unforeseen and unknown allergens in foods. There are already indications that this might be happening. A study by the York Nutritional Laboratory in England showed that soy allergies have increased 50 percent in the past year. It is the first time

> in 17 years of testing that soy has crept into top 10 foods to cause allergic reactions. As soybean is most commonly genetically engineered food, there is the possibility that the increase in soy allergies is due to the increase in genetically engineered soybean. It is also worth noting that in the US where genetically engineered crops are widespread, there is a tremendous increase in the incidence of reported food allergies. It has been estimated that presently, about a quarter of the total number of US citizens have an adverse reaction to some food. While other fac-

tors are likely to be involved, the contribution of genetic engineering to the increased morbidity cannot be ruled out.

It has also been found that allergens from one type of food can be transferred to another type of food by genetic engineering manipulation. A study by *New England Journal of Medicine* showed that when a gene from a Brazil nut was engineered into soybeans, people allergic to nuts had serious reactions to the engineered product. At least one food, a Pioneer Hi-Breed International soybean, was abandoned because of this problem. Without labeling, people with known food allergies have no way of avoiding the potentially serious health consequences of eating GE foods containing hidden allergenic material.

Antibiotic resistance- genetic engineers use antibiotic-resistance genes to mark genetically engineered crops. This means that the crops contain genes, which confer resistance to antibiotics. These genes may be picked up by bacteria, which may infect consumers. For example, genetically engineered maize from Novartis includes an ampicillin-resistance gene.

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Ampicillin is a valuable antibiotic used to treat a variety of infections in people and animals. A number of European countries, including Britain, have refused to permit the Novartis Bt corn to be grown, due to health concerns that the ampicillin resistance gene could move from the corn into bacteria in the food chain, making ampicillin far less effective in fighting a wide range of bacterial infections.

Immuno-suppression-animal test results link genetically engineered foods to immuno-suppression. For example, a British medical journal *The Lancet* published an important study conducted by Drs. Arpad Pusztai and Stanley W.B. Ewen under a grant from the Scottish government. The study examined the effect on rats of the consumption of potatoes genetically engineered to contain the biopesticide *Bacillus thringiensis* (Bt). The scientists found that the rats consuming genetically altered potatoes developed abnormalities in the immune system, brain, liver, kidneys and gastrointestinal system.

The study demonstrated that the theory of "substantial equivalence" which had become the basis of regulatory approval of GMOs without basic toxicology screening is grossly erroneous and dangerous.

Cancer - In 1993, the US Food and Drug Administration approved the use of genetically recombinant Bovine Growth Hormone (rBGH) used to induce cows to produce more milk. At the time the FDA assured consumers that the milk was safe. However, regulatory bodies in Canada and Europe have rejected the drug, citing numerous animal and human health concerns. Recent research shows conclusively that the levels of a hormone called insulin-like growth factor-1 (IGF-1) are increased in dairy products produced from cows treated with rBGH. Canadians and Europeans further found out that the FDA had completely failed to consider a study which showed that the increased IGF-1 in rBGH milk could survive digestion and make its way into the intestines and blood streams of consumers. These findings are significant because numerous studies now demonstrate that IGF-1 is an important factor in the growth of breast cancer, prostrate cancer and colon cancer.

 <u>Decreased nutrition value</u> – transgenic foods may mislead consumers with counterfeit freshness. A luscious-looking, bright red tomato could be several weeks old of little nutritional worth

Perhaps the greatest hazard with GMO is that artificial vectors and the genes they carry have the potential so spread horizontally to a wide range of species, to recombine with their genes and to generate new viral and bacterial pathogens.

Reputable scientists pointed out that horizontal gene transfer is a most likely mechanism in the occurrence of several new infectious diseases over the past 20 years or so, coinciding with the advance of genetically engineered technology. While there is no causal link, the possibility that genetic engineering has something to do with the appearance of novel infectious diseases cannot be ruled out. Horizontal gene transfer can result in the spread of antibiotic resistance genes to various types of micro-organisms that can cause human disease. In 1995, expert advice received by the UK's Ministry of Agriculture warned about the dangers from antibiotic resistance gene, used particularly in genetically engineered corn (BT corn), but the information was suppressed. The antibiotics being threatened are used in diseases such as bronchitis, septicemia, gangrene, and life-threatening relations related to cystic fibrosis and AIDS. The advice warned that antibiotic resistance genes could mutate. Even if the resistance gene is that against an antibiotic not used for human infections, the antibiotics; a phenomenon called "cross-resistance." This phenomenon has already been shown with respect to hygromycin resistance gene used as a marker gene in Monsanto's genetically engineered BT corn.

There are probably many other potential adverse effects from GMOs that are as yet unidentified. It must be noted that there are numerous examples where a chemical, drug food product or additive have been initially claimed to be safe but were later banned because of being deemed dangerous to health. It must be noted further that safety testing of GMOs has been grossly inadequate. Routine toxicologic screening tests usually employed on new chemicals or food additives have not been performed on the basis of a dubious and grossly unscientific conclusion of "substantial equivalence."

Approval from the US regulatory bodies is often cited as proof of the safety of GMOs but even a cursory examination of historical evidence would show that regulatory approval is no proof of safety. It is no secret that several officials of the US regulatory agencies become officials of Monsanto (and vice versa), the chemical company that pushed for the approval of GMOs. It is disturbing that the transnational companies that have a long history of numerous wrong doings in the conduct of their business, including manipulation and falsification of scientific data, manipulation of and buying off scientists, influence peddling among public and regulatory officials, and unethical and even illegal trade practices are apparently successful in forcing the widespread acceptance of GMOs. It is even more disturbing that the regulatory agencies, especially the National Biosafety Committee, supposedly mandated to safeguard public health, continue to ignore the dangers that GMOs bring. And worse, they choose to believe the empty promises of the transnational companies that are obviously profit-motivated and who aim to strengthen their monopoly control of agriculture.

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- Say No to Genetically Engineered Food in Pulso ng Bayan, official publication of Health Alliance for Democracy, Jan-March 2000

RESIST!

HYBRID RICE AS ANIMAL FEEDS

A study by seven Asian NGOs has condemned hybrid rice as being of poor taste and suitable only for animal feeds.

Hybrid rice, a variety first developed in China and sought to be spread through Asia by the International Rice Research Institute (IRRI) has been condemned by non-government organizations in Asia as being of poor taste and suitable only for animal feeds.

The condemnation is voiced in a recent collaborative study by seven Asian NGOs. The study, titled Hybrid Rice in Asia: An Unfolding Threat, was researched by Devlin Kuyek for the Kilusang Magbubukid ng Pilipinas, GRAIN, Masipag, Philippine Greens (Philippines), Biothai (Thailand), PAN Indonesia, and UBINIG (Bangladesh).

The study claims that the crop was produced from a rice variety considered as China's lowest-quality crop, making consumers despise the hybrid's taste.

"In fact, much of the crop is purchased by the Chinese state and a large part of the harvest is used in state programs to feed the urban poor, stored in the country's rice stocks, or used as animal feeds," the study says.

The most glaring drawback of hybrid rice, it adds, is that it is not intended for small-scale farmers.

Dr. S. S. Virmani, head of the hybrid rice program of the IRRI, admitted that, "This technology is not for farmers still struggling

at the level of two or three tons. The cost of hybrid seed, being 10 to 15 times higher than that of ordinary seeds of rice, discourages poor farmers from taking advantage of the hybrid technology."

The NGOs' study notes that by favoring wealthy farmers, it would only exacerbate the problems of distribution and poverty. Moreover, this variety loses its "hybrid vigor" after one planting season, thus putting a stop to farmers' traditional practice of saving and exchanging seeds.

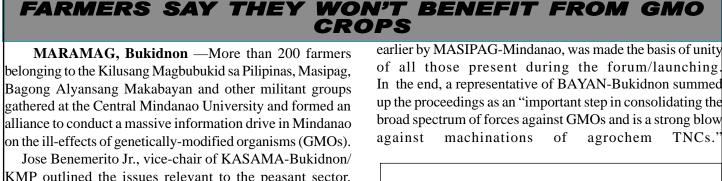
The study points out that the biggest beneficiaries of this technology would be the agrochemical companies involved in the hybrid rice-seed industry in Asia.

"As intellectual property regimes allow companies to charge an additional 10% to 30% over the cost of the seed, in the form of royalties or license payments, the income opportunities for the industry are attractive indeed," the study says.

"The real motivation behind the development of hybrid rice is to create a rice-seed industry as a motor for the deeper industrialization of rice farming," the study adds.

The study notes that so far, three hybrid rice varieties have already been released in the Philippines: two from the IRRI and one from Monsanto's Agroseed.

In 1997, it was planted in 500 hectares in the country and was estimated to have been increased to 100,000 has in 2000.



KMP outlined the issues relevant to the peasant sector. "These GMOs will only impoverish further the poor farmers, in the same way that agrochemicals and the so-called Green Revolution pushed farmers in abject poverty." Benemerito during the launching. said Poldo Guilaran, Masipag national president, said instead of the government supporting local food production, it promotes the production of high-value crops for export. This practice, he said, is causing widespread land and land-use conversions that render the Comprehensive Agrarian Reform Program (CARP) inutile. Given that corn and food security were some of the main issues at hand, the discussion also touched on the impending corn importation due to US PL480. This would be a major blow on agriculture especially in Mindanao. The group agreed to conduct a stronger campaign against

GMOs and agrochemical TNCs. The unity statement by RESIST Agrochemical TNCs (RESIST!), which was read



SALOT! KASAMA-BUKIDNON reiterate firm stand against agrochem TNCs and GMOs during the October peasant week

October 2001

GMO, SERVING CORPORATE SCIENCE AND TECHNOLOGY FOR GREATER PROFIT

AGHAM

MOST INNOVATIONS IN AGRICULTURAL BIOTECHNOLOGY HAVE BEEN PROFIT-DRIVEN RATHER THAN NEED-DRIVEN. The real thrust of the genetic engineering industry is not to make third world agriculture more productive, but rather to generate profits. Herbicide resistant crops, such as Monsanto's "Roundup Ready" soybeans, are seeds tolerant to Monsanto's herbicide Roundup. The goal behind this is to win a greater herbicide market-share for a proprietary product "Bt" (Bacillus thuringiensis) crops that are engineered to produce their own insecticide. The motivation is to boost seed sales at the cost of damaging the usefulness of a key pest management product (the Bacillus thuringiensis based microbial insecticide) relied upon by many farmers as a powerful alternative to insecticides. While the packaging of micronutrients into rice (such as ironfortified rice, the vitamin A rice, etc) only diversifies the kinds of products to be sold to the poor undernourished families.

These technologies respond to the need of biotechnology companies to intensify farmers' dependence upon seeds protected by so-called "intellectual property rights" which conflict directly with the practice of farmers to reproduce, share or store seeds. Since the 1970's corporations require farmers to buy a company's brand of inputs. Now by controlling the germplasm from seed to sale, and by forcing farmers to pay inflated prices for seed-chemical packages, companies are determined to extract the most profit from their investment by forbidding farmers from keeping or selling seeds.

Group Opposed...(from page 1)

alliance to advance and intensify the on-going struggle against the agrochemical TNCs and assert the right to land and food without poisons."

Meanwhile, farmers belonging to KMP and members of the scientist group AGHAM staged a protest rally in front of the Department of Agriculture (DA) in Quezon City demanding the immediate stop to the multi-location field trials of the controversial Bt Corn conducted by US based agrochem TNC Monsanto, the recall of the governments Policy Statement of Modern Biotechnology and the use of GMOs, and stop liberalization of Philippine agriculture.

"It has become crystal clear that the WTO is mainly to blame for the catastrophe in Philippine agriculture as its policies promote the business interests of TNCs resulting in the displacement of thousands of farmers, domestic food and agricultural sector," KMP said. The on-going field testings are short term and already in the context of commercialising the seeds being tested. The opposition to field trials might be misconstrued as anti-science by some scientists but when we look at the field trials as a prelude to commercialization of these seeds then the issue is more than a safety issue. The dangers of the premature commercial release of genetically engineered crops due to commercial pressures are more apparent especially in the context of a profit driven industry.

While scientific debates might center around "health risks", the issue of control of the production of such foods is still left unresolved even if such foods are proven safe to eat.

Transnational companies have shown more and more dominance in advancing and developing new biotechnologies. The patent system and intellectual property rights intrinsic to the World Trade Organization (WTO) provides multinational corporations with the right to seize and patent genetic resources and also accelerates the rate at which market forces already encourage monocultural cropping with genetically uniform transgenic varieties. With this global trend, only giant companies of industrialized countries can compete in the world market.

The real causes of hunger are poverty, inequality and lack of access to food and land – not in insufficient food production. Too many people are too poor to buy the food that is available (but often poorly distributed) or lack the land and resources to grow it themselves. As such, any method of boosting food production that deepens inequality is bound to fail to reduce hunger. Conversely, only when such technologies are in the hands of the people who need them can they truly help in the reduction of hunger.

Parkinsons...(From page 3)

cide exposure showed the strongest association, but herbicide ex posure in the garden was also associated with an increased risk of [Parkinson's disease]," concluded the researchers.

Although the mechanism by which Parkinson's is induced by pesticides—if they do cause the disease in humans—is not yet well understood, and the cause-effect relationship between pesticides and Parkinson's is still unclear, many studies on rats and mice have shown links between pesticide exposure and the development of Parkinson's-like symptoms. Other studies have shown that rotenone causes the degeneration of nerve cells in the brain in rats. Rotenone is a natural compound derived from the roots of tropical plants. Generally considered relatively harmless to mammals, it is used to kill nuisance fish in lakes, insects in gardens, and fleas and ticks in pets.

Sources: Hileman, Bette, "The Environment and Parkinson's," Chemical & Engineering News, September 17, 2001; Higgins, Margot, "Pesticides linked to Parkinson's disease," Environmental News Network (ENN), January 11, 2001; Associated Press, "Study links pesticides, Parkinson's," November 6, 2000; Chubb, Lucy, "Pesticide exposure linked to Parkinson's disease," May 6, 2000, ENN.

RESIST!

WITHOUT SURRENDER

rAYmundo "Ka Mundo" Mercado

When Raymundo "Ka. Mundo" Mercado was told that he will retrenched in 1996, he was neither cowed nor intimidated. Instead, he acted jointly with the Brotherhood of IRRI Support Services Group (BISSIG) and spearheaded the struggle of field workers against the International Rice Research Institute (IRRI). Ka. Mundo had spent most of his productive years in IRRI for 22 years.

But atrocious deed prevails hence, in 1997, IRRI management arbitrarily terminated Ka. Mundo together with about 500 Filipino workers, mostly BISSIG members. But it's not the end but only the beginning of the painstaking task for Ka. Mundo thus, he is aware of the painful struggle ahead. As a former tenant, Ka. Mundo is obsessed of taking back his land forcibly brought by UP-Los Banos, by virtue of P.D. 457, only to be leased as experimental field of IRRI. Tenants were made to believe that in exchange for the lands, they will enjoy security of tenure in IRRI. "Niloko nila kami at hindi ito makatwiran".

Ka. Mundo is one of the forefront of BISSIG delegation to the 10th Congress

Six months ago, students of the University of the Philippines did a survey on the possible effects of certain work practices and environments on the health of farmers/workers. The results showed that the majority of the farmers/workers were ill as a result of inadequate or no training, and if at all trained on their assigned task, most farmers/ workers were not provided with adequate protective devices or gear. They were also not given the proper information in regards to the effect of certain chemicals used in their working environment on their health.

Importantly, the survey conducted by the students showed that all those farmers/workers who were interviewed shared the same or almost the same symptoms of illness as a result of long-term exposure to chemicals such as pesticides.

INSTITUTE FOR OCCUPATIONAL HEALTH AND SAFETY DEVELOPMENT (IOHSAD)

questioning the legality and constitutional validity of Presidential Decree 1620, a law that gave absolute immunity to IRRI. In one instance, Ka. Mundo confronted one of the Senator during the 11th Congress and asked him why the Philippine Senate seems to be overprotective of IRRI instead of upholding the rights of the Filipino workers and farmers. Unfortunately, the 10th and 11th Congress junked the bills seeking for repeal of P.D. 1620. All cases filed by BISSIG against IRRI were dismissed and to add insult to injury, the Supreme Court of the Philippines decided in favor of IRRI.

But the agony did not stop Ka. Mundo and other tenants in pursuit of their noble objective of reclaiming back their land from IRRI and UP-Los Banos. Through the coordination and assistance

by JUN LAYOSA, President, BISSIG-KMP

of the PAGKAKAISA'T UGNAYAN NG MAGBUBUKID SA LA-GUNA (PUMALAGO, the local chapter of KILUSANG MAGBUBUKID NG PILIPINAS (KMP) Ka. Mundo became a vital cog in organizing the farmers and worker into a unified group called ALYANSA NG MAGSASAKA'T MANGGAGAWANG

SEKTOR or ALMASEK.

But in a sudden twist of time, Ka. Mundo became ill last October and was diagnosed to be suffering from kidney failure. He was confined for more than a week in San Pablo Medical Center, in San Pablo City, Laguna. Recently, Ka. Mundo undergone blood transfusion (type A) and have to endure dialysis twice a month putting his family in deep financial burden.

Yet, Ka. Mundo remains stubborn and in spite of his physical condition, he is determine to preside BISSIG delegation in the 12th Congress. "Siguro, yun na ang huling pagkilos ko laban sa IRRI, para sa mga kasama. Sayang nga laang at hindi na kaya ng katawan ko", teary-eyed Ka. Mundo uttered .

Nevertheless, Ka. Mundo bravely confronted his present dilemma. In fact, he will

call for a meeting between BISSIG and PUMALAG to discuss the present situation. But still, Ka. Mundo is remains unfazed but the situation bounded BISSIG more closely together. "Ang BISSIG kasi ka-pamilya ko na yan", he said. But overall, "kahit wala na ako sa kilusan, alam kong hindi pababayaan ni Ka Paeng ang laban. Buo ang tiwala ko sa kanya at sa organisasyon". In the midst of indisposition, Ka. Mundo is always there, as a good friend, a leader, and a father to most of us longing for changes and justice.

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RESISTANCE AND SOLIDARITY AGAINST AGROCHEMICAL INCs is a broad alliance of Philippine-based farmer's organizations, NGOs, scientists, heath workers/professionals, academes, and concerned individuals in opposition to Agrochemical TNCs and the evil menace of imperialist globalization. It promotes and advocates for alternative, natural and sustainable farming, and pushes for genuine agrarian reform as the foundation of food security and social justice.

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