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Biodiversity In Focus: Genetic Modification Of Living Organisms Is A Threat

Christine von Weizsäcker visits Japan: Genetic modification of living organisms is a threat to biodiversity

In October 2010, an important international conference will be held in Nagoya, Japan, to discuss the integrity of biodiversity, as genetic engineering threatens to influence and disturb the ecosystems around the world. The topic of genetically modified organisms is on the agenda in Nagoya, because there is concern that the shipping and handling of imported GMO crops can contaminate local varieties of similar crops.

In October 2009 Consumers Union of Japan and other NGOs in the Japan Citizens' Network for Planet Diversity (JCNPD) invited Christine von Weizsäcker, biologist, author and activist from Germany who has been closely following all the negotiations about the Convention on Biological Diversity (CBD). She gave several lectures and met with activists and politicians in Japan.

JCNPD held citizen meetings in Nagoya and Tokyo to learn more about her views about the negotiation process and the issues that are currently being discussed at the United Nations level. These include access to genetic resources and the fair and equitable sharing of benefits arising out of their utilization (ABS), and international rules and procedures on liability and redress for damage resulting from transboundary movements of living modified organisms in the context of the Cartagena Protocol.

At the meeting in Nagoya on October 24, citizens' groups also made detailed reports about the nation-wide investigation in Japan, showing how imported GMO canola seeds have fallen from trucks, taken root and crossed with other related species in many locations, especially near ports.

This has clearly shown the environmental pollution involved when importing GMO crops, a risk that has caused anxiety among many people.

Parliament symposium with elected politicians

Talking directly to elected politicians in Japan, many who may never before have heard about the Convention on Biological Diversity or the Cartagena Protocol in such detail, Christine emphasized that parliamentary initiatives and decisions can help to promote new topics and tasks. She also expressed hope that the international association called GLOBE should participate in Nagoya: "Representatives of cities come to Nagoya, civil society comes, business comes, why not members of Japan's parliament?"

Christine von Weizsäcker spoke to about 100 participants at the Diet Members Building in Kasumigaseki, Tokyo on October 27. Among the audience, some 25 were elected members of parliament and some 40 were secretaries of Upper and Lower Houses members. She noted that nature and people worldwide are hoping for Japan to act as an "excellent" host of the meeting, having prepared a coherent national position, consolidated between the different government ministries, and led by the Environment Minister: the position should not be led by other ministries, such as the Trade and Agriculture Ministries.

"Developing countries in particular are waiting for a legally binding agreement on equitable

sharing of the benefits arising from the use of their genetic resources and associated traditional knowledge. Their motivation to conserve and to sustainably use biodiversity is being destroyed if justice is not established,” Christine said.

She pointed out that the negotiations should finalize legally binding international liability rules for potential harm caused by GMO (called living modified organisms in the CBD context for historical reasons). The harm can be both to biodiversity and to human health, in addition to human socio-economic and cultural well-being. Even “spiritual” harm is identified in the text that is currently under negotiation. “Nagoya must succeed in taking a major step in international environmental governance, making the polluter pay and ensuring that no victim shall go without compensation,” said Christine.

The visit of Christine von Weizsäcker was all the more successful because she was invited by Mr. Sakihito Ozawa, Japan’s Minister of Environment, who will be the chair person at the Nagoya meeting in 2010, to give him a special briefing on what Japan needs to do as the host country in order not to repeat the failures of the past meetings.

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Organic Agriculture, Forestry and Fishery Project Based On Humus

“Only good things will come from the clean water that flows in the stream, when only good things are put into the water...”

Notes from a lecture by Mr. Uozumi Michio, Japan Organic Agriculture Association, on December 9, 2009 as part of Consumers Union of Japan’s seminar series about safe living, connecting food and agriculture with our daily lives.

Uozumi-san emphasized that humus is the most important organic material for living things: “Let us create a movement to promote deep connections and affiliations with strong links between organic farmers, fishermen, forest workers, and consumers!”

Japanese people have had many historical experiences such as Ashio mining pollution, Minamata disease (methyl mercury) and serious health damage since the Meiji era. We should study and understand that the most important thing for the people is to preserve the natural environment of the forest, farm fields, rivers and the sea.

Uozumi-san pointed out that it is emphasized by the nuclear power industry that nuclear reactors do not discharge CO₂, but the technology for proper disposal of nuclear waste has still not been developed. Nuclear power plants contribute to global warming by discharging heated water into the environment.

Fulvic acid-Fe can increase phytoplankton and sea weeds by river mouths and along coasts. Fulvic acid-Fe -rich humus can protect the marine ecosystem and enrich fishing grounds.

Chemical fertilizer ingredients (N, P, K) are easily carried away from conventional rice fields, because the soil cannot preserve them. The chemical ingredients are delivered to rivers, ponds, lakes and the sea, and are also accumulating in the groundwater. Said Uozumi-san: “It is necessary to convert to organic agriculture.”

People living in the Lake Kasumigaura area in Ibaraki Prefecture are using the water for drinking. Agriculture, forestry and fisheries must promptly be converted to organic practices and methods to protect the health of all living beings.

Surplus nutrients in lakes and wetlands can increase the growth rate of harmful water weeds. The water quality deteriorates resulting in the decrease of fish and shellfish. Harmful chemicals can also accumulate in the human body.

Leaves from forests in nearby mountains can be collected and used to enrich composts and contribute to the healthy soil. Rice grown in fields with plenty of humus tastes very good!

Uozumi-san noted that reclamation of tidal flats leads to a number of environmental problems. The brackish water regions will lose their ability to function as a filter, and natural habitats and feeding grounds for waterfowl and other wild birds are lost. Concrete dams also contribute to a loss of the water purification function.

Prof. Katsuhiko Matsunaga of Yokkaichi University has shown how seaweed and algae – the forest of the ocean – can contribute to sustainable fishery and act as a large CO₂ sink. Coastal regions and beaches are also important sources of biofuel.

Organic farming should be expanded to avoid eutrophication and to enrich rivers and the coastal regions, and to keep N, P and K out of the groundwater. From now on, let us cooperate with consumers to convert to organic agriculture, with mountain region forestry and fisheries, said Uozumi-san.

“Farm fields and rivers are enriched by humus flowing in the water originating from forests. This is good for the river basin region and the brackish water region.”

Promote organic farming

Uozumi-san pointed out that humus consists of humic acid, humin, and Fulvic acid-Fe. Broad leaf trees contribute to making healthy humus and organic matter, with more than ten times as much Fulvic acid compared to conifers. In organic rice fields there are more phytoplankton and zooplankton. Also, the breeding levels of phototropic bacteria are higher, and Nitrogen (N₂) is fixed.

“Enjoy composting! Mix your kitchen garbage (vegetables and organic matter) with fallen leaves as a way to restore CO₂ levels in the soil. We call it wakuwaku composting using waku boxes. It is fun for everyone! The Japanese word, wakuwaku, means to enjoy something and do it with enthusiasm. Elementary schools and junior high schools can let the children experience composting. This is an important educational experience to teach young students about organic farming, forestry and fishery projects, and promote a better understanding with a link to the daily food they eat.

Uozumi-san noted that a healthy mountain forest with a large biological diversity, and lots of fallen leaves that can be used for composting: “The forest is the mother of the earth.” Fields should have a large variety of crops. In Japan, projects are underway to help develop shellfish farming and oyster cultivation by planting broad leaves tree saplings in the forest regions upstream from the river basin region. This is based on the understanding that all things are connected: “The forest is the lover of the ocean.”

Conifer forests that are not thinned properly do not allow much sunlight to reach the ground. Thus, the undergrowth is not well developed, and the absorption of CO2 is bad. Use good quality compost to enrich the soil. Create warm beds for vegetables, using heat created by the fermentation and composting of leaves, straw, rice bran and other organic material.

Uozumi-san concluded: "Only good things will come from the clean water that flows in the stream, when only good things are put into the water..."

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Interview With Noguchi Isao: Why Do Old-Style Vegetables Taste Much Better!?

The Future of the Seed of Life (Part 1)

Noguchi Isao was born in the seed shop that his grandfather started. In this special 2-part interview Consumers Union of Japan highlights his efforts to share his wealth of knowledge about seed and farming. Noguchi explains his fascination with "old" style vegetables and the huge difference in taste compared to F1 (hybrid) varieties and why he is against GMOs. We get a glimpse of his deep respect for the biological diversity and genetic heritage that are the basis for the seeds he helps develop and sell to farmers, giving consumers a taste of real food.

Noguchi moved to Tokyo and dropped out of college when he was hired by the famous animation company run by Tezuka Osamu. Noguchi, who is 65 years old, has been fascinated by the world of manga and animation since elementary school, but when he turned 30, he quit Mushi Production Co. to enter his family's seed business in Hanno, a city in rural Saitama prefecture, northwest of Tokyo.

Noguchi remembers a discussion he overheard during a dinner with the three great Science Fiction writers Tezuka Osamu, Sakyō Komatsu and Hoshi Shinichi talking about cod roe. Hoshi Shinichi asked: "If you collect the ova from Yoshinaga Sayuri, how many years would you have to carry on until you had as many eggs as in one cod roe?" Yoshinaga Sayuri was a popular actress around that time, and Noguchi was very surprised by the mind-boggling question.

It turns out that a female cod carries as many as 300,000 eggs in one single bag of roe. On the other hand, the number that a human female can produce in her life is only about 400. Also, the cod can make 750 generations in the same time as humans make only one. Thinking about it that way, the SF writers calculated that 750 generations before Yoshinaga Sayuri appeared on the scene, there wasn't really a country called Japan as we would be back about 18,000 years ago. Noguchi remembers how Sakyō Komatsu pondered this information saying: "That is just outer space, contained in a single cod roe egg." Noguchi is still impressed by the SF writers he met in his youth and their brilliant minds.

After 35 years in the vegetable seed business, Noguchi maintains a great interest in the science of DNA and respect for its mysteries. In his books and lectures, he likes to remind people of the role of the mitochondria in living organisms. It is the tiny organelle that provides energy inside cells. Noguchi is fascinated by the fact that the mitochondria have their own genome, irregardless of whether they are inside a human cell or a plant cell. Also, because mitochondria are transmitted only from the ovum, they allow us to trace the mother's genetic lineage.

Noguchi enjoys talking about the ancient history of mitochondria as a way to explain how we humans became different from plants through evolution. After the birth of the first living organism some 3.5 billion years ago, we have anaerobic bacteria to thank for surviving on planet Earth.

But when the genome or a gene is damaged by aging or stress, the mitochondria also have the role of attacking the cell. This can cause cancer or other disease. Noguchi points out that we need to understand this mechanism to also grasp the importance of staying healthy – and he makes the connection to conserving and preserving healthy seed.

Old-style vegetables are more delicious!

In 2004, Noguchi's seed shop got an unusual request from a TV program. The reporter and actor Fumio Watanabe contacted the shop, saying he wanted to eat "old" style vegetables. The staff of the program initially visited the shop in Hanno city, and they talked at length with Noguchi about heirloom varieties and veggies with names like Hanshiro kyuri (half white cucumber that was popular in Tokyo in the Meiji era) and Izumi mizunasu (water eggplant from the Izumi area of Osaka which is particularly suitable for pickling).

A photograph of the famous actor together with Noguchi was displayed in the shop window. This prompted a customer from a local newspaper to ask if Noguchi was always enjoying such delicious heirloom vegetables.

Of course, as the old saying goes, "seeing is believing," or "a picture is worth a thousand words." In Japan, Noguchi explains, the saying is "hyakku bun ha hitokuchi ni shikazu" or, loosely translated: "One bite is worth a hundred words." He sees it as his mission to educate people about the great taste of "old" varieties of vegetables, and the importance of using heirloom seed for local varieties that are well suited to the climate, the geological features, and the soil.

Since ancient times, farmers would carefully select seed from vegetables that grew well and tasted wonderful, in addition to other characteristics including shape and color. By continuously saving such seed, season after season, the regular native seed (sometimes called heirloom varieties to emphasize that they are regarded as an important cultural heritage) that became trusted as stable varieties over long time periods.

This is in stark contrast to the F1 seed used for most vegetable farming since the 1960s, when they replaced the regular native varieties. F1 are hybrid seeds that are developed in an artificial way so that the plants will be growing fast in a uniform way. The shape and size of the vegetables are also more similar, and they can be treated in an industrial way. The aim is to develop products that are as identical as possible, for easy processing in the food industry and supermarkets.

On the other hand, heirloom seeds are often having uneven shapes and come in all sizes. Some may also start growing earlier than others, and a few may even adapt to changes in the climate or the growing conditions. The vegetables from such regular seeds went out of fashion, as people complained about the difficulties of shipping and storage. Noguchi chuckles as he remembers a story about a customer of an organic food delivery company who refused to accept a box of Miura daikon grown locally in the Miura region of Kanagawa prefecture, because none of the radishes in the box were the same size.

It is thought that there were as many as 200 different kinds of daikon in Japan during the Edo era (1603-1868). Today, most people think of daikon as a white, long root vegetable, but there were many varieties with shades of purple or other colours and shapes. The Miura daikon, for example, is a descendant of the Nerima daikon, as farmers found a variety that could be grown further south in the warmer climate in the Miura region.

Noguchi emphasizes that the taste is so very different if we compare such heirloom varieties to the ones produced from F1 seed: "The F1 daikon is dull, there is no sweetness, while the heirloom daikon really tastes like daikon!" Also, the heirloom seed can take up to 4 months to grow, while the F1 seed will be ready in just 2 months. This also means that the heirloom daikon stays moist and tastes fresh longer, as each cell has developed a little more slowly and properly.

Noguchi's grandfather won awards for his vegetables, including a Miyama turnip that was praised by experts almost 80 years ago. It is still on sale today, as a heirloom seed.

Recently, as people tasted this Miyama turnip, they were surprised and told Noguchi that they hadn't been bothered to try eating turnips for a long time. They all agreed that this is because the F1 variety turnips on the market today simply don't taste very good. Today's turnips have been "improved" by modern seed companies to the point where they have become unpalatable.

Noguchi thinks this is because the native Japanese heirloom turnips were bred with the type of turnips used in Europe as animal feed. F1 turnips are more firm and easy to pack and ship without any cracking, and there has been little or no consideration for the taste. Noguchi laments this state of affairs.

Trying to explain why farming has changed so much, Noguchi mentions how nitrogen became available after WW2. This was the main raw material for bombs, and many factories had been built to produce as much nitrogen as possible. Using nitrogen as fertilizer on farms was also a way to quickly produce more food, as countries like Japan and South Asia and China faced food shortages.

However, in the case of rice, if too much chemical fertilizer is applied, including nitrogen, the stalks just grow too long and the rice plants bend down instead of producing more rice. The solution for this was the "improved" strains of rice that could handle the chemical fertilizers. (Sometimes these hybrids are called "high-yield" varieties in English, although critics note that they are actually "high-response" varieties that respond to the artificial growing conditions with chemicals and other added tools to increase the yield.)

Around the same time, the petrochemical industry developed and promoted more types of chemical fertilizers, pesticides, vinyl houses and other modern tools for the farmers. Noguchi sees the irony in that the poison gas factories of war could so easily be made to produce agrochemicals instead.

By 1964, the year of the Tokyo Olympics, Japan had basically completed the shift towards such “modern” agriculture. Around that time, it was getting more common to send a second and a third son away to work in factories, and they were called “golden eggs” as they could earn a living. Farm rules also changed to help elderly farmers survive with only the help of one son, through different reforms. One such new system designated different regions to be integrated and selected for specific vegetables or farm products. This made farming more efficient as new machines could be introduced to save labour.

This reform of designated vegetable production meant that a region like Kochi focused on red peppers, Gunma on cabbage, Kumamoto on tomatoes, and so on. But after a few years of this kind of continuous monoculture cropping, the soil suffered and insects became an increasingly serious problem. The answer to this was more research and development into F1 varieties to deal with the different issues.

This is how F1 vegetables became so common in Japan. Noguchi likes to compare to France, where some 70-80% of the vegetables come from heirloom seed, and even supermarkets mostly sell “old” style varieties.

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Interview With Noguchi Isao: A Passion For Biological Diversity

The Future of the Seed of Life (Part 2)

In the early part of the 20th century, Japanese researchers were the first in the world to develop F1 hybrids of silkworms. This was done using a basic F1 method of breeding and soon it was applied to eggplants and other vegetables as well. For example, at the Agricultural Experiment Station in Saitama prefecture, researchers first crossed purple eggplants with a true black eggplant using artificial pollination.

Noguchi Isao uses this as an example to explain F1 hybrids when he holds lectures, with charts and graphs. He notes that most water melons for sale today are of the striped type, with a harder skin, that are easier to transport to supermarkets. “Most people have forgotten the taste of the older varieties,” he says.

In some cases, such as the Komatsuna (leafy Japanese spinach mustard) researchers mobilized large groups of housewives to help with the intricate work of artificially pollinating the plants. This required a lot of patience and skill with tweezers, as the tiny buds had to be carefully opened and pollen inserted. The pollination had to be done this way, to avoid natural pollination that would occur after the bud had opened. It was thought that this technique, called “self-incompatibility” was a Japanese specialty. Newer methods include using green houses that are sealed up carefully, to increase the levels of CO₂ in the air. This changes the plants as their physiology goes mad, as Noguchi-san calls it. The stress response mechanism in the plants makes it possible for bees to spread the pollen and achieve the desired cross breeding result.

Male sterility is another technique used to create F1 hybrid vegetables. This was discovered in California in 1929 and soon imported to Hokkaido Agricultural Experiment Station, where new types of onions were developed, including a yellow variety that was crossbred with a red onion. The researchers were able to produce a novel yellow onion with disease resistance in this way.

For the brassica family, researchers found a way to use male sterility to create new F1 hybrids of cabbage and spinach with traits found in a type of radish. As the chromosomes of radish and cabbage are different, they would not normally cross breed, but using the stressful CO2 intensive method described above, the pollination suddenly becomes possible. Most cabbages sold in supermarkets today come from seeds that have been produced in this way. These cabbages are easy to store over long periods of time, but it is not possible to save seeds from such plants, as they will not grow normally.

Understanding male sterility

Noguchi-san uses his website to post articles and essays about seeds and breeding, and he often writes about his own discoveries and “aha” – experiences. One such case was when he wrote about male sterility, and his concerns about this artificial breeding method. One of his readers contacted him to comment on this essay. The reader was an expert at one of Japan’s large commercial seed companies. Noguchi-san learned that male sterility in plants actually is a result of the mitochondria in the cells of plants. The unique character of the mitochondria is that it is only passed on to the offspring from females, and never from males.

The F1 hybrid vegetables we are commonly eating all have the abnormal characters of male sterility. Noguchi-san then got worried when the World Health Organization noted that Japanese males have the lowest sperm counts in the world compared to other developed countries. This was big news in Japan in the fall of 2006. One theory is that this is due to endocrine disrupters, a type of chemicals that can influence fertility. Noguchi-san, however, thinks it is due to dysfunctional mitochondria, passed along through F1 hybrids: “I think we lose some of our original vitality as a function of both the environment and possibly also from the food we eat.”

The modern breeding techniques used for many vegetables and legumes to produce F1 hybrids do not work so well for beans. Noguchi-san points out that beans simply are too costly to breed that way, and seed companies cannot make a profit. However, by using irradiation the researchers found a way to make new F1 varieties of soybeans, in particular the smaller beans used for making natto in Japan. The irradiation used by seed companies and researchers damage the plant’s genome, and the character of the offspring is thus changed. Another example of a root vegetable developed this way is the salad gobo (salad burdock), a miniature variety of the usually much longer and stronger plant.

GMO is “environmental damage”

Noguchi-san is very critical of genetically modified organisms (GMO) and especially the development of GM foods. He thinks this is environmental damage to the highest degree and worst extent possible. In particular, he notes that the understanding of genetic engineering still is in its infancy, and the researchers do not really know what they are doing. “Neither insect resistance nor herbicide tolerance is very useful, except as a way for the agrochemicals industry to make a huge profit,” he says. He adds that they are profiting from the very problem they caused in the first place by having encouraged farmers to use large amounts of agrochemicals, and now many plants and insects have become resistant and the toxic pesticides and herbicides have become useless.

Noguchi Isao warns that the so-called Terminator technology, an extreme form of genetic engineering that passes on a trait rendering the offspring of the GMO sterile, will make it impossible for farmers to save seed: “It is a suicide technology,” he says, and points out

that companies like Monsanto have already done a lot of research and development in this area. If this trait is accidentally spread across fields, for example through bacteria, it can be the origin of a terrible plague killing plants on our planet. But he also reminds us that F1 hybrids work in a similar way, as the offspring do not breed true.

Rather than entering such an abnormal world, Noguchi-san wants to promote healthy seeds. The regular native seeds (such as heirloom varieties) do not really need any chemical fertilizers, as the crops from such seeds are powerful enough to grow.

“We should listen more to nature, with a modest attitude, rather than fighting it with our intellects,” he says. Real seeds are healthy because their genome is vital, with energetic mitochondria: “Such seeds want to grow, and we want to eat such vegetables!”

* * *

Protect biodiversity from living modified organisms at MOP5 in Nagoya!

Japan Citizens' Network for Planet Diversity (JCNPD) is a nationwide network for citizens who are working on protecting our food crop diversity from living modified organisms. We started this network in order to act on the United Nations' major meeting to be held in Nagoya, October 2010, for the Protocol on Biosafety (also called Cartagena Protocol) which regulates the international trade of organisms modified by modern biotechnology (living modified organisms). We want the meeting in Nagoya to define rules to protect consumers and the environment. The rules will be a crucial element of the global regulations regarding the integrity and continued sustainable use of living organisms under threat from certain risky applications of modern biotechnology.

Make binding global rules!

The Cartagena Protocol was adopted as a supplementary agreement to the Convention on Biological Diversity. It sets forth procedures for the transport, handling, and use of living organisms modified by modern biotechnology (LMO) that have the potential to adversely affect biodiversity. The protocol specifies regulations on cross-border transfer of modified living organisms developed with biotechnology, such as genetically modified agricultural seed, food products, and microorganisms. Such regulations are needed because of the possibility that LMOs can exert adverse effects on other living organisms. Most countries around the world have become parties to this treaty, with the notable exception of the United States of America.

By February 2009, 191 countries and regions had become contracting parties. Japan also became a party to the convention in May 1993. Japan approved the first National Strategy for the Conservation and Sustainable Use of Biological Diversity at a Cabinet meeting in October 1995 and the third National Strategy was approved at a Cabinet meeting in November 2007.

The meeting in Nagoya called MOP5 (meaning the fifth meeting of the parties of the Protocol) is an important part of the Convention on Biological Diversity, which aims to conserve, use and share biological diversity in general. Issues concerning CBD will be discussed at COP10 (meaning the tenth conference of the parties of the Convention) to be held together with MOP5.

MOP5 should finalise the discussion about liability and redress!

GMO crops are known to disturb and destroy other living organisms. Their cultivation have expanded in a few countries, and its introduction has led to increased control over seed, as smaller plant breeding companies have been bought up by a few multinational corporations. This has also led to a major shift in the control of food and agriculture. This urgently needs to be addressed at the international level.

One of the focal points of MOP5 will be to discuss liability and redress. What measures should an administration undertake if biological diversity is damaged by the introduction of a genetically modified organism? Who is going to bear the costs and expenses of the damage, and how? What backup financial system should be established for the cases where the cost for the redress is not properly covered? The rules and methods will be debated as stipulated by the Cartagena Protocol.

In Japan, this is a very real question as exemplified by the spread of imported genetically modified rape seed, that has been found to mix with natural local varieties of related crops on a number of occasions along roads and near harbors. How should an administration (local or national) and the corporations involved approach such contamination?

Our Goals and Vision

Our goal is to take food and agriculture into our own hands, and make every effort to protect living organisms and biological diversity by establishing the Japan Citizens' Network for Planet Diversity, in cooperation with other NGOs in Japan and around the world.

Caring deeply about food and agriculture, we strongly believe that the debate and discussion during MOP5 should rapidly be brought to agreement so that the legal framework will be strengthened for truly protecting local crop varieties and all living things.

- Parties should finalise a binding international regime to ensure that both liability and redress will be forthcoming.
- The damage-scope should be as wide as possible to include human health and socio-economic effects.
- Strict liability, financial security and limited exemptions are fundamental to ensure that payment is forthcoming to consumers and farmers in all cases of damage caused by living modified organisms.
- Parties should establish a backup fund to ensure that the environment can be truly protected and victims compensated.

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Japan Citizens' Network for Planet Diversity

Website: <http://mop5.jp>

Participating organizations:

No! GMO Campaign
Association of GMO Concerns, Chubu-district, Japan
Seikatsu Club Consumers Co-operative Union
Seikatsu Club Consumers Co-operative in Aichi
Shumei Natural Agriculture Network
Kiso River Ryuiki Min-min Association
Consumers Union of Japan/ GM Kokusai Watch
Consumers Union of Japan
Policy Research Institute for the Civil Sector
Japan Organic Agricultural Association
Co-op Shizenha Consumers Co-operative



Japan Resources is published by Consumers Union of Japan (CUJ). CUJ was founded in April 1969 and was officially certified as a non-profit organization on May 1, 2006 by the new Japanese NPO legislation. We continue to be a non-political and financially independent organization (NGO). CUJ is funded by membership fees and donations. The main concern of CUJ and its members is to realize a world of liberty and equality, a world free of economic, social and legal discrimination, and to preserve a safe and healthy environment for our children's future.

CUJ pursues the following goals on behalf of consumers: (1) To secure for ourselves and our families safe and healthy lives, (2) to establish systems/laws to protect the rights of consumers, (3) to promote peace, social justice and economic fairness, (4) to support and empower consumers who care about the environment, and (5) to cooperate with foreign consumer groups/organizations.

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