

Major Symposia and Seminars

1. Overview of NIAES 30th Anniversary Program and Commemorative Symposium

The National Institute of Agro-Environmental Sciences (NIAES) was established in 1983 through reorganization of the National Institute of Agricultural Sciences. After becoming an independent administrative corporation in April 2001, it marked its 30th anniversary in December 2013. In commemoration, on Friday, December 13 NIAES held the “National Institute of Agro-Environmental Sciences 30th Anniversary Symposium ‘Agriculture and the Environment in the 21st Century’” at Shinjuku Meiji Yasuda Life Hall in Tokyo. Director-General Tetsuzo Yasunari of the Research Institute for Humanity and Nature delivered the symposium’s keynote address, and NIAES researchers described the history of our 30 years of research and the latest research achievements in the form of one special report and three research topics. In a panel discussion called “Agro-Environmental Research in the 21st Century,” experts from various fields discussed the direction of future research. Please see other articles in this issue for details.

2. Keynote Address

Future Earth: The Significance of Asian Environmental Research

Tetsuzo Yasunari (Director-General, National Institutes for the Humanities, Research Institute for Humanity and Nature)

For the keynote address, NIAES invited Tetsuzo Yasunari, Director-General of the Research Institute for Humanity and Nature, which is one of the National Institutes for the Humanities, an inter-university research institute corporation. He both described Future Earth, an international program for new research on global environmental change that was formally proposed in spring 2013, and explained the importance of Future Earth in Monsoon Asia. Mr. Yasunari is a member of Future Earth’s International Council for Science; he bears the important responsibility of heading the Science Council of Japan’s Future Earth Committee.

Mr. Yasunari began by addressing the current state of the global environment and explained that a limit (tipping point) is being crossed because of the 20th century’s rapid increase in human activity. He then described the events leading to establishment of Future Earth that has the objectives of providing knowledge society needs to deal with the risks of global environmental change and facilitating the transition to a sustainable global society. On the topic of Monsoon Asia he observed that the natural

environment in this zone of great crustal movement enabled the viability of wet rice agriculture, which has served as the foundation to feed the world’s largest population. On the other hand, because today’s rapid modernization and globalization have made this region into “a hotspot of global pollution,” he argued that there is an urgent need to build an international framework, called Future Earth in Asia, that includes researchers, policymakers, and citizens to pursue the transition to sustainable societies throughout Asia.

The details of the address are also contained in the following article, which Mr. Yasunari handed out on that day. Interested readers should read it in conjunction with this article.

Yasunari, T. (2013) Future Earth: A New International Framework for Research on Global Environmental Change. *Environmental Research Quarterly*, No. 170, 5–13. (in Japanese)

3. Panel Discussion

In the panel discussion, which was chaired by NIAES President Miyashita, five stakeholders discussed “Agro-Environmental Research in the 21st Century.”

From the standpoint of farmers, Ms. Yuko Kobayashi, director of the NPO Heroines of the Country, expressed her hopes that agro-environmental research will help solve problems that farmers face in the fields. As an example, she cited the high-temperature crop damage that has emerged in the last few years.

From the standpoint of facilitating local government agricultural policy, experimentation, and research, Mr. Hiromichi Kato, director of the Ibaraki Agriculture Institute, expressed his wish that the latest research results for agro-environmental technologies in fields such as global warming response measures, resource conservation, and reducing environmental burdens would be quickly shared with farmers at the local level.

Professor Takashi Kosaki from Tokyo Metropolitan University indicated his hope, from the perspective of the management and use of land including farmland, that the results of agro-environmental research will be communicated to not only farmers, but to people from all walks of life.

From the perspective of the social sciences, Professor Kentaro Yoshida from Nagasaki University indicated the possibility that, through the fusion of the natural sciences and social sciences, the partnership of science with policy and industry, and other linkages, diverse stakeholders will become users of agro-environmental research. His observations were based on discussions at a plenary session of the Intergovernmental Platform on Biodiversity

and Ecosystem Services (IPBES), in which he had been participating until the previous day.

Finally, from the perspective of consumers and citizens, who seek food and environmental safety, science writer Waki Matsunaga observed that the close linkage of research results with political policy over the 30-year history of NIAES is a form of regulatory science, and expressed her hope that this will be further facilitated.

Based on these opinions and expectations, the panelists further advanced the discussion on the direction that agro-environmental research should take from perspectives such as linkages between basic research and applied research, between specialized research and interdisciplinary research, and the way in which science and society relate to one another. Participants deepened their awareness that pursuing interdisciplinary research with the participation of diverse stakeholders benefits society by producing important initiatives for solving agro-environmental problems in which various factors are related in complex ways; these initiatives can contribute to solving food and environmental problems in our 21st-century world.

With this main symposium as the central event, we also held side events for each research field throughout the 2013 fiscal year.

NIAES 30th Anniversary Workshop 1

Development of Techniques to Reduce the Risk of Residual POP Pesticides in Vegetables –13th Annual Seminar on Organic Chemicals Studies–

Every year the National Institute for Agro-Environmental Sciences (NIAES) holds a seminar to discuss problems related to pesticides and other organic chemicals in the environment. On October 30, 2013, a diverse group of 105 people from independent administrative corporations and other research institutions, prefectural agriculture experimental stations, universities, government agencies, private enterprises, interested organizations (such as agricultural cooperatives), and the general public participated in the seminar.

Persistent organic pollutants (POPs) are a group of substances that signatories to an international convention must endeavor to reduce and abolish. Seven of the 22 substances covered by the convention were formerly used as pesticides in Japan. Some of these — drin family pesticides and heptachlor — still remain in the soil, and sometimes are detected in excess of residue limits in gourd family vegetables. This is a problem that subverts food safety; producing districts must address the problem in ways such as voluntary restraints on production or performing broad-based soil and crop testing.

At the seminar, seven speakers, who had been developing techniques to prevent and reduce crop contamination by residual soil POPs, presented their research findings. Participants then had an in-depth discussion on the challenges of and outlook on pesticides that persist in soil.

NIAES 30th Anniversary Workshop 2

On the Strategic Use of Spatial Information Technologies for Crop Intelligence in Producing Areas

In farming areas during recent years, declining crop quality caused by high-temperature damage, aging of the farming population, and fewer farmers make it necessary for production to reduce physical labor, raise value added, and increase resilience. In responding to these requirements, it is important to first precisely diagnose the state of crop growth in each geographical region, and then appropriately manage production.

To achieve this, in addition to “Japanese-style precision agriculture” that has been traditionally practiced, there are expectations for the use of regional-scale intelligence that makes the maximum use of remote sensing and other spatial information technologies (information collection, analysis, monitoring, forecasting, and decision-making support).

For these reasons the National Institute for Agro-Environmental Sciences hosted a workshop on October 31 in Akihabara, where participants discussed ways to strategically use spatial information technologies in crop-producing areas. The workshop had 94 participants from organizations including the national and prefectural governments, publicly operated experimentation and extension agencies, independent administrative corporation research institutes, and private enterprises. The participants described the latest trends in spatial information technologies, and also discussed means and cooperation arrangements for their application in farming areas throughout Japan.

NIAES 30th Anniversary Workshop 3

National Institute for Agro-Environmental Sciences Public Seminar Agriculture that Supports Abundant Life

Agriculture has long been conducted in harmony with ecosystems. Agricultural ecosystems, which serve as habitat for many of the very familiar organisms such as the red dragonfly and Japanese rice fish, are nurtured by farming activities. Agriculture has benefited from biodiversity, while at the same time creating distinctive

ecosystems that differ from wilderness and have maintained biodiversity; however, that is generally not well known. Therefore, to inform the general public about the relationship between agriculture and biodiversity, we held a public seminar in Tokyo (Akihabara) on Tuesday, November 5 with 111 participants comprising 16 members of the general public, five people in farming and other activities, 24 from companies and other organizations, nine from universities, 24 from research institutions, 21 from local governments, and 12 from the Ministry of Agriculture, Forestry and Fisheries and other government agencies.



The environment that rice paddies provide for organisms

From the presentation by Nagoya University Professor Yoshihiro Natsuhara

The seminar featured research on the relationship of agriculture and rural areas to biodiversity, indicator organisms that measure the effectiveness of conservation agriculture, and bird diversity in relation to landscape structure and farmland consolidation. Participants presented examples of how agricultural production and biodiversity are both achieved compatibly and also explained how the general public conceives biodiversity. The discussion featured questions and views from a variety of standpoints, ranging from the intrinsic problems of biodiversity to problems directly connected to farms. NIAES intends to make use of participants' views in future research.

**NIAES 30th Anniversary Workshop 4
The 27th Symposium of NIAES Agro-Meteorology Division**

Experts in Agro-Meteorology Division of NIAES is leading and/or joining various international research networks and projects to promote scientific researches

on agriculture and atmospheric environment. To promote these international activities, we held the 27th Symposium of NIAES Agro-Meteorology Division “International Research Networks and Projects in Agricultural Meteorology and Their Collaborations” at International Congress Center EPOCHAL Tsukuba on 2 December 2013 with support of the Society of Agricultural Meteorology of Japan, Crop Science Society of Japan, and Japanese Society of Soil Science and Plant Nutrition. After keynote lectures by Prof. Takehisa Oikawa (Professor Emeritus, The University of Tsukuba) and Prof. Joon Kim (Seoul National University, Korea), seven experts talked about objectives and activities in international networks and projects they have been leading or participating, and discussed collaborations between those networks and projects. The networks and projects talked about in the symposium are as follows: the Monsoon Asia Agro-Environmental Research Consortium (MARCO); Global Research Alliance on Agricultural Greenhouse Gases (GRA); FLUXNET/AsiaFlux (the flux monitoring tower flux network for carbon and water cycles), Integrated Land Ecosystem-Atmosphere Processes Study (iLEAPS), MINCERnet (a global research alliance to support the fight against heat stress in rice), Global crop FACE Network, and the Agricultural Model Intercomparison and Improvement Project (AgMIP). The participants in the MARCO-AgMIP Workshop (2-6 December 2013) joined the symposium and made 14 poster presentations. This is the first in the 30 years to use English as the official language of the Symposium of NIAES Agro-Meteorology Division. About 50 participants including 11 from overseas cultivated mutual understanding for the future collaboration.

**NIAES 30th Anniversary Workshop 5
31st Seminar on Soil and Water
Cadmium and Arsenic Absorption by Crops, and Risk Management**

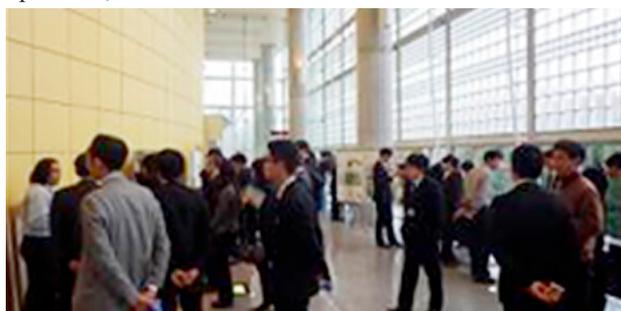
On February 26 the Seminar on Soil and Water was held at the Tsukuba International Congress Center with about 120 participants. There is heightened awareness of and concern about food safety in Japan and abroad. With regard to cadmium, rice standards based on the Food Sanitation Act were reviewed in February 2011, but there is also a need to expedite cadmium reduction measures for other crops as well. For arsenic, it has been found that in Japan rice makes a large contribution to the intake from agricultural products. At the seminar Masanori Aoki, Assistant Section Chief in the Food Safety and Consumer Affairs Bureau of the Ministry of Agriculture, Forestry and Fisheries, delivered a lecture on the situation in Japan and internationally, and on future initiatives. This was

followed by a presentation of NIAES achievements in suppressing crop absorption of cadmium. Dr. Nobuo Suzui from the Japan Atomic Energy Agency then used a video in his talk to explain the dynamics of cadmium in plant bodies. Shimane University Associate Professor Shingo Matsumoto described techniques to suppress arsenic uptake by rice plants by using agricultural materials and water management. Finally, Tomohito Arao of NIAES further developed the discussion with an overview of “Development of Cultivation Management Techniques to Mitigate Arsenic Risk in Rice Plants,” a project which has been in progress since the 2013 research year under a commission from the Ministry of Agriculture, Forestry and Fisheries.

NIAES 30th Anniversary Workshop 6 **4th Agro-Environment Inventory Workshop** **Building an Inventory for Efficiently Assessing the Risks from Agricultural Chemicals**

On Thursday, February 27 at the Tsukuba International Congress Center, NIAES held a workshop with about 90 participants on the theme of “building an agricultural chemical inventory” necessary for assessing the risks from agricultural chemicals, which are indispensable agricultural inputs.

Associate Professor Takeshi Kobayashi from Yokohama National University delivered the keynote address, “Current State of Information Infrastructure on Health Risks of Chemicals,” which was followed by a lecture from Atsushi Nakamura of the National Institute of Technology and Evaluation about the provision of basic information on chemicals under the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture. Next was a lecture by Lin Bin-Le of the National Institute of Advanced Industrial Science and Technology about assessing and managing the ecological risks that can be addressed under the same law. NIAES personnel Iwasaki and Nagai delivered reports on the use of geographical information in building agricultural chemical inventories and in assessing exposure and ecological risks. In the discussion, participants exchanged information on the challenges of database creation, management, and operation, and on effective database use.



During the break, visitors viewed displays of soil and insect specimens and research results were presented in the lobby.

NIAES 30th Anniversary Workshop 7 **Microbial Ecology and Functions Useful to Agriculture, as Discovered from Nucleic Acids**

Nearly all the microorganisms in nature are yet-unknown microorganisms that are hard to culture. NIAES has developed techniques to directly extract, from soil and other environments, the nucleic acid molecules (i.e., DNA and RNA) that contain the genetic information of microorganisms, and then analyze the types and functions of these unknown microorganisms. On the auspicious occasion of NIAES’ 30th anniversary, this public seminar focused on research covering microbial ecology and functions, which have become known from nucleic acids extracted from the environment. The seminar featured lectures from the scientists who are leading research in this field; they introduced research findings obtained thus far at NIAES. The 164 participants, ranging from students to company personnel, provided us with valuable opinions via questionnaires and other means.



Akihabara Convention Hall, Friday, March 27

MARCO-FFTC Workshop **Genetically Modified Crops in Asia**

Two-thirds of the world’s poor live in the Asia-Pacific region. In this region there is great interest in genetically modified (GM) crops, the purpose of which is to provide a stable food supply. For that reason, NIAES and the Food & Fertilizer Technology Center for the Asian and Pacific Region (FFTC) invited experts from abroad and jointly held a workshop on the theme of “Benefits and Risks of GM Crops in Asia” from October 8–10, 2013 at the Tsukuba International Congress Center. Enthusiastic discussions facilitated by lectures, poster presentations, and other means clearly revealed the similarities and differences among Asia-Pacific countries with regard to

a broad array of considerations ranging from GM crop development to regulation. NIAES shall continue to take the lead in expanding networking by creating venues for information exchange and technical cooperation.

MARCO Workshop

Assessing and Reducing Environmental Burdens for Sustainable Agro-Ecosystem Management

NIAES, in partnership with the Tohoku University Graduate School of Agricultural Science and the Institute of Soil Science, Chinese Academy of Sciences, is conducting joint international research* aimed at assessing and reducing environmental burdens in agro-ecosystems. To disseminate research results, we held a MARCO Workshop called “Assessing and Reducing Environmental Burdens for Sustainable Agro-Ecosystem Management” from October 16 to 19 at the Tsukuba International Congress Center (Tsukuba City) and other venues. The workshop had a total of 68 participants from six countries, including four leading researchers from abroad, and featured a lively exchange of views.

* Research projects: “Comparative Research on the Nitrogen Cycles of Agro-Environment Watersheds in Japan and China, and Their Impacts on Water Quality,” and “Development of Techniques to Reduce Greenhouse Gases Arising from Rice Paddies, and Assessment of Their Reduction Potential”



Photo. Workshop session.

Public Seminar on Agro-Environmental Technology in Niigata

An Agricultural Approach to Alleviating Burdens on the Global Environment

Every year the National Institute for Agro-Environmental Sciences hosts public seminars to broadly inform the public of our research results and to strengthen our collaboration with the staff of prefectural and local governments for the dissemination of our results. With the support of Niigata Prefecture and the cooperation of the Niigata Agricultural Research Institute, this year we held a seminar in Nagaoka City with over 260 participants. At the seminar, six researchers described techniques for rice plant growth forecasting and cultivation management using grid climatic values,* techniques for limiting emissions of the greenhouse gas methane from rice paddies, and organic cultivation techniques for rice growing and biodiversity. There was also lively debate on subjects such as “How should one go about limiting greenhouse gas emissions while also maintaining biodiversity?”

* Estimated climatic value for each square, about 1 km² in size, of a grid drawn along latitude and longitude lines.

Research Overview in FY2013

Conferences, Workshops, and Research Meetings

Title	Place	Date	Participants
Symposium FY 2013			
MARCO-FFTC Joint International Workshop 2013: “Benefits and Risks of Genetically Modified Food Crops in Asia”	Tsukuba	8-10 Oct 13	83
This international workshop was jointly organized by the Food and Fertilizer Technology Center (FFTC) to collaborate with the Monsoon Asia Agro-Environmental Research Consortium (MARCO), and supported by College of Agriculture of Ibaraki University and National Institute of Agrobiological Sciences. The workshop aimed to exchange the information on genetically modified food crops, to discuss on uncertainty regarding benefits and potential risks, and to establish a platform for technical cooperation and capacity building among Asian countries.			
MARCO International Workshop 2013: “Evaluation and Mitigation of Environmental Impacts in Agricultural Ecosystems for Sustainable Management”	Tsukuba	16-19 Oct 14	68
This Workshop based on international collaborative projects between Japan and China, supported by the Japan Science and Technology Agency (JST), the Ministry of Science and Technology of China (MOST), and the Natural Science Foundation of China (NSFC). The Workshop highlighted the current situation and major progress of these Japan-China collaborative projects by discussing nutrient cycling in agricultural watersheds and mitigation of greenhouse gas emission from rice paddies.			
The Ecosystem Informatics Workshop I (NIAES 30 th Anniversary): “Strategic Use of Geoinformation Technologies for Intelligent Crop Production.”	Tokyo	31 Oct 13	94
The advanced use of geoinformation technologies such as remote sensing and GIS is crucial for the efficient and sustainable crop production. The state-of-the-art in remote sensing methodologies for crop monitoring as well as some of practical applications in regional crop production were reported by specialists from various public and private sectors. The application needs, technological potential, and collaboration frameworks were discussed. The importance of interdisciplinary and inter-sector collaborations was emphasized.			
International Symposium on Soil Carbon Modeling in Agricultural and Forest Ecosystems: “Current status and future challenges”	Tsukuba	12-13 Nov 13	51
This symposium aimed to share current status of research on soil carbon modelling and to discuss future direction of this issue, by inviting four foreign speakers. It was supported by the Research Program of the Ministry of Agriculture, Forestry and Fisheries, “Evaluation, Adaptation and Mitigation of Global Warming in Agriculture, Forestry and Fisheries: Research and Development”, and jointly hosted by Forestry Forest Products Research Institute and National Institute for Agro-Environmental Sciences.			
NIAES 30 th Anniversary symposium: “Agriculture and the Environment in the 21 st Century”	Tokyo	13 Dec 13	205
In commemoration of NIAES 30 th Anniversary, NIAES held an agro-environmental symposium. Researchers from NIAES introduced the research activities, and the expert persons done a lecture about the agriculture environment in the monsoon Asia. By the panel discussion, Researchers argued about an agro-environmental study of the 21 st century with the expert person of various quarters.			
The Ecosystem Informatics Workshop II (NIAES 30 th Anniversary): “Strategic Use of Remote Sensing for the Intelligence of Food Security.”	Tokyo	14 Feb 14	107
The advanced use of satellite remote sensing is vital for the near real-time assessment of crop productivity at sufficient spatial resolutions towards food security. In addition to the state-of-the-art in remote sensing methodologies in optical, thermal and microwave domains, some practical case studies for regional assessment of crop production were presented. The practical information-needs and possible collaboration schemes towards the national food security, crop insurance and solution businesses were discussed.			

	Title	Place	Date	Participants
Seminar				
	The 171 st Tsukuba Bioscience Hall Workshop: “Observation Technique of Air Temperature and Its Application in Field Trials”	Tsukuba	12-14 Jun 13	15
	To build capacity of agronomists to fight against the impact of global warming on agricultural production, researchers from NIAES gave lectures to them on theoretical basis and practical techniques for observation and use of air temperature. Each participant made his/her own force-ventilated radiation shield "NIAES-09S" which was developed by NIAES. By comparing the measured values of air temperature taken by the shields they had just made and set in various conditions in the same field, they realized the importance of methodology to obtain air temperature which correctly represents the real condition of the field.			
	The 174 th Tsukuba Bioscience Hall Workshop: “PCR-DGGE analysis of soil microbial community”	Tsukuba	29-30 Aug 13	18
	NIAES developed the manual of PCR-DGGE analysis using soil DNA, as a useful evaluation technique of soil microbial community, which is deeply involved in crop production and agricultural environment. Here, This workshop introduced this technique and gave a training class of the short term.			
	NIAES Open Seminar “Promoting Wildlife-friendly Agriculture”	Tokyo	5 Nov 13	111
	Research on the relationships between agricultural activities and biodiversity in farmlands was presented, and probability to achieve the synergistic interaction between agricultural production and biodiversity conservation was discussed.			
	The 176 th Tsukuba Bioscience Hall Workshop: “Molecular Phylogenetics — Theory and Practice”	Tsukuba	6-8 Nov 13	18
	Three-day hands-on workshop on the theory of molecular phylogenetics and its applications with PC exercise of computing phylogenetic trees based on DNA and amino acid sequences held in the computer room in AFFRIT. Thirty students selected all over Japan participated in this workshop featuring several leading scientists in molecular phylogenetics and evolution as teachers.			
	NIAES Open Seminar in Niigata, “Reducing global environmental load - Challenge of agriculture –“	Niigata	18 Nov 13	263
	The seminar was organized under close collaboration with Niigata Prefecture. The objective of this seminar was to introduce various research subjects NIAES challenged to citizens in Niigata. The presentation consisted of utilization of mesh agro-climate data for predicting rice growth and its management, reducing technology of GHG (methane) in paddy field, organic farming and biodiversity in rice paddy. Recent research topics were also introduced in the poster session.			
	The 6 th NIAES science café: “Let’s understand the relationship between agriculture and alien species with songs.”	Tsukuba	2 Mar 14	29
	Members of the Biodiversity Division of NIAES performed four original songs to describe the current situation of alien species expanded in Japan. After each performance, they had a lecture to explain the meaning of the lyric from the point of view of positive and negative effects of alien species on the agriculture in Japan. They also enjoyed the game to find out the alien species hidden in the ingredients of sukiyaki with the participants so that they understood the closeness of the problem to daily life.			
	NIAES 30 th Anniversary Open Seminar: “Microbial diversity and functions related to agriculture revealed by nucleic acids”	Tokyo	7 Mar 14	164
	The nucleic acids extracted directly from agricultural soil are very useful for understand the diversity and the function of the microbe related to agriculture. In this seminar, research achievements of NIAES in this field and excellent studies using nucleic acids extracted from environments were introduced.			
Research Meeting				
	The 13 th Seminar on Organic Chemical Studies: “Reduction techniques of POPs insecticides pollution in vegetables”	Tsukuba	30 Oct 14	105
	Persistent organic pollutants (POPs) remain in Japanese farming soils, more than 40 years after their use as insecticides was prohibited. In recent years, residues of POPs in cucurbit fruits have become a problem. In this seminar, the study about some reduction techniques of POPs pollution in vegetables were presented. And the future prospects and problems were discussed.			

Research Overview in FY2013

Title	Place	Date	Participants
The 27 th workshop on Climate and Agro-Environment: “International Research Networks and Projects in Agricultural Meteorology and Their Collaborations”	Tsukuba	2 Dec 13	45
After keynote lectures by Prof. Takehisa Oikawa (Professor Emeritus, The University of Tsukuba) and Prof. Joon Kim (Seoul National University, Korea), seven experts talked about objectives and activities in international networks and projects they have been leading or participating, and discussed collaborations between those networks and projects.			
MARCO-AgMIP workshop: “Evaluation and improvements of rice growth and yield models”	Tsukuba	2-5 Dec 13	22
This workshop was held as an annual meeting for the rice growth model team of the Agricultural model inter-comparison and improvement project (AgMIP) to better understand the performance of existing rice growth models under elevated CO ₂ conditions based on datasets obtained in the free-air CO ₂ enrichment facilities in Japan and China. We also discussed critical growth processes that need to be improved for better prediction of rice yields under climate change.			
The 31 st Seminar on Soil and Water (NIAES 30 th Anniversary): “Uptake of cadmium and arsenic of agricultural crops and risk management measures.”	Tsukuba	26 Feb 14	118
We focused on remediation technologies of cadmium-contaminated areas, development of low cadmium rice cultivar “Koshihikari kan-1”, imaging technologies of cadmium and arsenic in plants and mitigation technologies of arsenic in rice. Future directions for integrating these studies toward achieving simultaneous mitigation technologies for cadmium and arsenic in rice were discussed.			
The 4 th Agro-environmental Inventory Seminar (NIAES 30 th Anniversary): “Construction of inventory (database) for efficient risk assessment of chemicals including pesticides”	Tsukuba	27 Feb 14	90
First, the current status of databases on chemical health risks was presented. Chemical Substances Control Law (CSCL) in Japan and related activities were introduced. Third, ecological risk associated with CSCL was presented. Finally, two researchers of our institute introduced the status of open-database concerning geographic information and its use for exposure assessment, and the construction of chemical inventory and its use for ecological risk assessment, respectively.			