

Publications

1. Official publications

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- 1) NIAES Annual Report 2008
 - 2) NIAES Research Executive Summary (Japanese ed.) (Kenkyu seika joho), No.25
 - 3) Annual Report of National Institute for Agro-Environmental Sciences (Japanese ed.) (Nogyo kankyo gijutsu kenkyusho nenpo), No.25
 - 4) NIAES News (Japanese ed.) (No-kan-ken nyusu), No.79 - No.82
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2. Research Papers published by the NIAES Staff

Scientific Papers	English	137
	Japanese	30
	Others	2
Proceedings (incl. Abstracts)	English	135
	Japanese	361
	Others	17
Others	English	11
	Japanese	159
	Others	5

3. Research staff activities (English papers)

NIAES staff's names are boldfaced.

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Nagai T , Imai A, Matsushige K, Yokoi K, Fukushima T	Short-term temporal variations in iron concentration and speciation in a canal during a summer algal bloom	Aquatic Sciences	70(4)	388-396	2008
Kim Y , Eun H , Katase T	Historical distribution of PCDDs, PCDFs, and coplanar PCBs in sediment core of Ariake Bay, Japan	Archives of Environmental Contamination and Toxicology	54(3)	395-405	2008
Kim Y , Eun H , Cho H, Kim K, Sakamoto T , Watanabe E , Baba K , Katase T	Organochlorine pesticides in the sediment core of Gwangyang Bay, South Korea	Archives of Environmental Contamination and Toxicology	54(3)	386-394	2008
Phong TK, Nhung DTT, Yamazaki K, Takagi K , Watanabe H	Simulated rainfall removal of tricyclazole sprayed on rice foliage	Bulletin of Environmental Contamination and Toxicology	80	438-442	2008
Inui H, Wakai T, Gion K, Kim Y , Eun H	Differential uptake for dioxin-like compounds by zucchini subspecies	Chemosphere	73(10)	1602-1607	2008

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Kawakami T, Takezawa A, Nishi I, Watanabe E, Ishizaka M, Eun H, Onodera S	Monitoring of cholinesterase-inhibiting activity in water from the Tone canal, Japan, as a biomarker of ecotoxicity	Ecotoxicology	17(4)	221-228	2008
Sakai M, Seike N, Kobayashi J, Kajihara H, Takahashi Y	Mass balance and long-term fate of PCDD/Fs in a lagoon sediment and paddy soil, Niigata, Japan	Environmental Pollution	156(3)	760-768	2008
Liu X, Zhang G, Li J, Yu L, Xu Y, Li XD, Kobara Y, Jones KC	Seasonal patterns and current source of DDTs, chlordanes, hexachlorobenzene, and endosulfan in the atmosphere of 37 Chinese cities	Environmental Science and Technology	43(5)	1316-1321	2009
Weber R, Matsunaga S, Moccarelli P, Santillo S, Seike N, Symons R, Torres JPM, Verta M, Varbelow G, Vijgen J, Watson A, Gaus C, Costner P, Woelz J, Wycisk P, Zennegg M, Tysklind M, Johnston P, Forter M, Hollert H, Heinisch E, Holoubek I, Lloyd-Smith M	Dioxin-and POP-contaminated sites-contemporary and future relevance and challenges	Environmental Science and Pollution Research	15(5)	363-393	2008
Kamo M, Nagai T	An Application of the biotic ligand model to predict the toxic effects of metal mixtures	Environmental Toxicology and Chemistry	27(7)	1479-1478	2008
Yamazai K, Fujii K, Iwasaki A, Takagi K, Satsuma K, Harada N, Uchimura T	Different substrate specificities of two triazine hydrolases (TrzNs) from Nocardioide species	FEMS Microbiology Letters	286	171-177	2008
Kim Y, Eun H, Cho HS, Kim KS, Watanabe E, Baba K, Katase T	The characterization of PCDDs, PCDFs and coplanar PCBs during the past 50 years in Gwangyang Bay, South Korea	Journal of Hazardous Materials	154(1-3)	756-765	2008

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Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Yamazaki K, Takagi K , Fujii K, Iwasaki A, Harada N, Uchimura T	Simultaneous biodegradation of chloroand methylthio-s-triazines using charcoal enriched with a newly developed bacterial consortium	Journal of Pesticide Science	33(3)	266-270	2008
Yokoyama A , Ohtsu K , Iwafune T , Nagai T , Ishihara S, Kobara Y , Horio T , Endo S	Sensitivity difference to insecticides of a riverine caddisfly, <i>Cheumatopsyche brevilineata</i> (Trichoptera: Hydropsychidae), depending on the larval stages and strains	Journal of Pesticide Science	34(1)	21-26	2008
Yokoyama A , Ohtsu K , Iwafune T , Nagai T , Ishihara S, Kobara Y , Horio T , Endo S	A useful new insecticide bioassay using first-instar larvae of a net-spinning caddisfly, <i>Cheumatopsyche brevilineata</i> (Trichoptera: Hydropsychidae)	Journal of Pesticide Science	34(1)	13-20	2008
Tomioka N, Nagai T , Kawasaki T, Imai A, Matsushige K, Kohata K	Quantification of microcystis in eutrophic lake by simple DNA extraction and SYBR Green real-time PCR	Microbes and Environments	23(4)	306-312	2008
Wei Y, Nishimori M , Kobara Y , Akiyama T	Development of global scale multimedia contaminant fate model: Incorporating paddy field compartment	Science of the Total Environment	406(1-2)	219-226	2009
Yun M, Chen W, Deng F, Yogo Y	Selective growth suppression of five annual plant species by chalcone and naringenin correlates with the total amount of 4-coumarate: coenzyme A ligase	Weed Biology and Management	9(1)	27-37	2009
Arao T , Maejima Y , Baba K	Uptake of aromatic arsenicals from soil contaminated with diphenylarsinic acid by rice	Environmental Science and Technology	43	1097-1101	2009
Murakami M , Ae N, Ishikawa S , Ibaraki T, Ito M	Phytoextraction by a high-Cd-accumulating rice: Reduction of Cd content of soybean seeds	Environmental Science and Technology	42(16)	6167-6172	2008
Murakami M , Ae N	Potential for phytoextraction of copper, lead, and zinc by rice (<i>Oryza sativa</i> L.), soybean (<i>Glycine max</i> [L.]Merr.), and maize (<i>Zea mays</i> L.)	Journal of Hazardous Materials	162	1185-1192	2009
Kawasaki A , Yada S	Determination of labile cadmium in agricultural soils by isotope dilution plasma mass spectrometry and a co-precipitation separation technique	Journal of Nuclear Science and Technology	Sup.5	138-142	2008
Yada S , Kawasaki A	Determination of labile cadmium in lime-amended soils by isotope dilution plasma mass spectrometry	Journal of Nuclear Science and Technology	Sup.5	143-145	2008

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Kham MSH, Uemura M, Ishikawa S , Wagatsuma T, Tawaraya K, Sekimoto H, Koyama H, Kobayashi Y, Murayama T, Chuba M, Kambayashi M, Shiono Y	Relative abundance of Δ 5-sterols in plasma membrane lipids of root-tip cells correlates with aluminum tolerance of rice	Physiologia Plantarum	135	73-83	2009
Kuramata M, Masuya S, Takahashi Y, Kitagawa E, Inoue C, Ishikawa S , Youssefian S, Kusano T	Novel cysteine-rich peptides from <i>Digitaria ciliaris</i> and <i>Oryza sativa</i> enhance tolerance to cadmium by limiting its cellular accumulation	Plant and Cell Physiology	50(1)	106-117	2009
Tsai H, Maejima Y , Hseu Z	Meteoric ^{10}Be dating of highly weathered soils from fluvial terraces in Taiwan	Quaternary International	188	185-196	2008
Yamaguchi N , Kawasaki A , Iiyama I	Distribution of uranium in soil components of agricultural fields after long-term application of phosphate fertilizers	Science of the Total Environment	407	1383-1390	2008
Arao T , Takeda H, Nishihara E	Reduction of cadmium translocation from roots to shoots in eggplant (<i>Solanum melongena</i>) by grafting onto <i>Solanum torvum</i> rootstock	Soil Science and Plant Nutrition	54	555-559	2008
Mori S , Kobayashi N, Arao T , Higuchi K, Maeda Y, Yoshida M, Tadano T	Enhancement of nitrate reduction by chlorine application in <i>Suaeda salsa</i> (L.) pall	Soil Science and Plant Nutrition	54	903-909	2008
Haruyama N, Naka H, Mochizuki A , Nomura M	Mitochondrial phylogeny of cryptic species of the lacewing <i>Chrysoperla nipponensis</i> (Neuroptera: Chrysopidae) in Japan	Annals of the Entomological Society of America	101(6)	971-977	2008
Arakaki N, Akino T, Yasui H, Fukaya M, Yasuda T, Wakamura S, Yamamura K , Nagayama A, Kobayashi A, Tarora K, Kishita M, Sadoyama Y, Mougi N, Kijima K, Suzuki Y	Estimation of abundance and dispersal distance of the sugarcane click beetle <i>Melanotus sakishimensis</i> Ohira (Coleoptera: Elateridae) on Kurima Island, Okinawa, by mark-recapture experiments	Applied Entomology and Zoology	43(3)	409-419	2008

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Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Mon E, Hirata T, Kawamoto K, Hiradate S , Komatsu T, Moldrup P	Adsorption of 2,4-Dichlorophenoxy-acetic acid onto volcanic ash soils: effects of pH and soil organic matter	Environment Asia	2(1)	1-9	2009
Yamanaka T , Tatsuki S, Shimada M	Adaptation to the new land or effect of global warming? An age-structured model for rapid voltinism change in an alien lepidopteran pest	Journal of Animal Ecology	77	585-596	2008
Arakaki N, Higa M, Shinzato T, Kawamitsu H, Nakama S, Wakamura S, Yamamura K , Nagayama A, Kobayashi A, Hokama Y, Sadoyama Y, Mogi N, Kishita M, Adaniya K, Ueda K	Mating disruption for control of <i>Melanotus okinawensis</i> (Coleoptera: Elateridae) with synthetic sex pheromone	Journal of Economic Entomology	101(5)	1568-1574	2008
Golisz AM , Sugano M , Fujii Y	Microarray expression profiling of <i>Arabidopsis thaliana</i> L. in response to allelochemicals identified in buckwheat	Journal of Experimental Botany	59(11)	3099-3109	2008
Tani A, Inoue C, Tanaka Y, Yamamoto Y, Kondo H, Hiradate S , Kimbara K, Kawai F	The crucial role of mitochondrial regulation in adaptive aluminium resistance in <i>Rhodotorula glutinis</i>	Microbiology	154	3437-3446	2008
Watanabe T, Misawa S, Hiradate S , Osaki M	Characterization of root mucilage from <i>Melastoma malabathricum</i> , with emphasis on its roles in aluminum accumulation	New Phytologist	178	581-589	2008
Yamamura K , Matsuda H, Yokomizu H, Kaji K, Uno H, Tamada K, Kurumada T, Saitoh T, Hirakawa H	Harvest-based Bayesian estimation of sika deer populations using state-space models	Population Ecology	50(2)	131-144	2008
Haruyama N, Mochizuki A , Duelli P, Naka H, Nomura M	Green lacewing phylogeny, based on three nuclear genes (Chrysopidae, Neuroptera)	Systematic Entomology	33	275-288	2008
Nakatani K, Fujii Y	Tissue culture system for in vitro tuber formation in <i>Equisetum arvense</i>	Weed Biology and Management	8(3)	219-223	2008
Shinoyama H, Mochizuki A , Nomura Y, Kamada H	Environmental risk assessment of genetically modified chrysanthemums containing a modified cry1Ab gene from <i>Bacillus thuringiensis</i>	Plant Biotechnology	25	17-29	2008

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Ushiyama T, Du M, Inoue S, Shibaike H, Yonemura S, Kawashima S	Three-dimensional simulation of rice pollen dispersal and hybridization in field scale	Proceedings of the 5th WSEAS International Conference on Mathematical Biology and Ecology (MABE)		27-32	2009
Mizuguti A, Yoshimura Y, Matsuo K	Flowering phenologies and natural hybridization of genetically modified and wild soybeans under field conditions	Weed Biology and Management	9(1)	93-96	2009
Amano T, Kusumoto Y, Tokuoka Y, Yamada S, Kim E, Yamamoto S	Spatial and temporal variations in the use of rice-paddy dominated landscapes by birds in Japan	Biological Conservation	141(6)	1704-1716	2008
Tanaka K	Genetic variation in flight activity of <i>Ophraella communa</i> (Coleoptera: Chrysomelidae): Heritability estimated by artificial selection	Environmental Entomology	38(1)	266-273	2009
Tanaka K, Yamanaka T	Factors affecting flight activity of <i>Ophraella communa</i> (Coleoptera: Chrysomelidae), and exotic insect in Japan	Environmental Entomology	38(1)	235-241	2009
Amano T, Ushiyama K, Higuchi H	Methods of predicting risk of wheat damage by white-fronted geese	Journal of Wildlife Management	72(8)	1845-1852	2008
Yamanaka T, Tanaka K, Hamasaki K, Nakatani Y, Iwasaki N, Sprague DS, Bjørnstad ON	Evaluating the relative importance of patch quality and connectivity in a damselfly metapopulation from a one-season survey	Oikos	118	67-76	2009
Morimoto S, Ogawa N, Hasebe A, Fujii T	Isolation of effective 3-chlorobenzoate-degraders in soil using community analyses by PCR-DGGE	Microbes and Environments	23(4)	285-292	2008
Okada H, Oba H	Comparison of nematode community similarities assessed by polymerase chain reaction-denaturing gradient gel electrophoresis (DGGE) and by morphological identification	Nematology	10(5)	689-700	2008
Hoshino YT, Morimoto S	Comparison of 18S rDNA primers for estimating fungal diversity in agricultural soils using polymerase chain reaction-denaturing gradient gel electrophoresis	Soil Science and Plant Nutrition	54(5)	701-710	2008
Tabata J, Yokosuka T, Hattori M, Ohashi M, Noguchi H, Sugie H	Sex attractant pheromone of the limabean pod borer, <i>Etiella zinckenella</i> (Treitschke) (Lepidoptera: Pyralidae), in Japan	Applied Entomology and Zoology	43(3)	351-358	2008
Sugie H, Teshiba M, Narai Y, Tsutsumi T, Sawamura N, Tabata J, Hiradate S	Identification of a sex pheromone component of the Japanese mealybug, <i>Planococcus kraunhiae</i> (Kuwana)	Applied Entomology and Zoology	43(3)	369-375	2008

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Mochizuki F, Noguchi H, Sugie H, Tabata J, Kainoh Y	Sex pheromone communication from a population resistant to mating disruptant of the smaller tea tortrix, <i>Adoxophyes honmai</i> Yasuda (Lepidoptera: Tortricidae)	Applied Entomology and Zoology	43(2)	293-298	2008
Mitsuno H, Nishioka T, Sakurai T, Murai M, Yasuda T, Kugimiya S, Ozawa R, Toyohara H, Takabayashi J, Miyoshi H	Identification of receptors of main sex-pheromone components of three Lepidopteran species	European Journal of Neuroscience	28(5)	893-902	2008
Tabata J, Huang Y, Ohno S, Yoshiyasu Y, Sugie H, Tatsuki S, Ishikawa Y	Sex pheromone of <i>Ostrinia</i> sp. newly found on the leopard plant <i>Farfugium japonicum</i>	Journal of Applied Entomology	132(7)	566-574	2008
Yoshida S, Ogawa N, Fujii T, Tsushima S	Enhanced biofilm formation and 3-chlorobenzoate degrading activity by the bacterial consortium of <i>Burkholderia</i> sp. NK8 and <i>Pseudomonas aeruginosa</i> PA01	Journal of Applied Microbiology	106(3)	790-800	2009
Ichiki RT, Kainoh Y, Kugimiya S, Takabayashi J, Nakamura S	Attraction to herbivore-induced plant volatiles by the host-foraging parasitoid fly <i>Exorista japonica</i>	Journal of Chemical Ecology	34(4)	614-621	2008
Lin T, Ishizawa M, Ishii H	Acibenzolar-S-methyl-induced systemic resistance against anthracnose and powdery mildew diseases on cucumber plants without accumulation of phytoalexins	Journal of Phytopathology	157(1)	40-50	2009
Faize M, Faize L, Ishii H	Gene expression during acibenzolar-S-methyl-induced priming for potentiated responses to <i>Venturia nashicola</i> in Japanese pear	Journal of Phytopathology	157(3)	137-144	2009
Yoneya K, Kugimiya S, Takabayashi J	Do adult leaf beetles (<i>Plagioderma versicolora</i>) discriminate between odours from intact and leaf-beetle-infested willow shoots?	Journal of Plant Interactions	4(2)	125-129	2009
Ishii H, Yoshimatsu H, Shimizu M, Kozawa T, Tanoue J, Ohshima M, Chung W, Nishimura K, Yamaguchi J, Nemoto F, So K, Iwama T	First application of PCR-Luminex system for molecular diagnosis of fungicide resistance and species identification of fungal pathogens	Journal of General Plant Pathology	74	409-416	2008
Chung W, Ishii H, Nishimura K, Ohshima M, Iwama T, Yoshimatsu H	Genetic analysis and PCR-based identification of major <i>Fusarium</i> species causing head blight on wheat in Japan	Journal of General Plant Pathology	74	364-374	2008

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Saito A, Fujii T , Shinya T, Shibuya N, Ando A, Miyashita K	The msrK gene, encoding the ATP-hydrolysing component of N, N	Microbiology	154(11)	3358-3365	2008
Liu C, Ruan Y, Lin Z, Wei R, Peng Q, Guan C, Ishii H	Antagonism between acibenzolar-S-methyl-induced systemic acquired resistance and jasmonic acid-induced systemic acquired susceptibility to Colletotrichum orbiculare infection in cucumber ☆	Physiological and Molecular Plant Pathology	72	141-145	2008
Jiang S, Park P, Ishii H	Ultrastructural study on acibenzolar-S-methyl-induced scab resistance in epidermal pectin layers of Japanese pear leaves	Phytopathology	98(5)	585-591	2008
Furukawa T, Imamura T, Kitamoto HK , Shimada H	Rice exonuclease-1 homologue, OsEXO1, that interacts with DNA polymerase λ and RPA subunit proteins, is involved in cell proliferation	Plant Molecular Biology	66(5)	519-531	2008
Chu H, Fujii T , Morimoto S , Lin X, Yagi K	Population size and specific nitrification potential of soil ammonia-oxidizing bacteria under long-term fertilizer management	Soil Biology and Biochemistry	40	1960-1963	2008
Kuwagata T , Hamasaki T, Watanabe T	Modeling water temperature in a rice paddy for agro-environmental research	Agricultural and Forest Meteorology	148	1754-1766	2008
Tao F, Yokozawa M , Zhang Z	Modelling the impacts of weather and climate variability on crop productivity over a large area: A new process-based model development, optimization, and uncertainties analysis	Agricultural and Forest Meteorology	149(5)	831-850	2008
Iizumi T , Yokozawa M , Nishimori M	Parameter estimation and uncertainty analysis of a large-scale crop model for paddy rice: Application of a Bayesian approach	Agricultural and Forest Meteorology	149(5)	333-348	2008
Maruyama A, Kuwagata T	Diurnal and seasonal variation in bulk stomatal conductance of the rice canopy and its dependence on developmental stage	Agricultural and Forest Meteorology	148	1161-1173	2008
Cheng W , Sakai H , Yagi K , Hasegawa T	Interactions of elevated [CO ₂] and night temperature on rice growth and yield	Agricultural and Forest Meteorology	149	51-58	2009
Tao F, Yokozawa M , Liu J, Zhang Z	Climate change, land use change, and China's food security in the twenty-first century: an integrated perspective	Climatic Change	93	433-445	2008
Xu J, Yu S, Liu J, Haginoya S, Ishigooka Y , Kuwagata T , Hara M, Tasunari T	The implication of heat and water balance changes in a lake basin on the Tibetan Plateau	Hydrological Research Letters	3	1-5	2009
Tao F, Yokozawa M , Zhang Z, Hayashi Y,	Land surface phenology dynamics and climate variations in the North East China Transect (NECT), 1982-2000	International Journal of Remote Sensing	29(19)	5461-5478	2008

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Ishigooka Y Kotera A, Sakamoto T, Nguyen KD,	Regional consequences of seawater intrusion on rice productivity and land use in coastal area of the Mekong river Delta	JARQ-Japan Agricultural Research Quarterly	42(4)	267-274	2008
Yokozawa M Shimono H, Okada M, Yumakawa Y, Nakamura H, Kobayashi K, Hasegawa T	Genotypic variation in rice yield enhancement by elevated CO2 relates to growth before heading, and not to maturity group	Journal of Experimental Botany	60(2)	523-532	2008
Iizumi T, Yokozawa M	Climate Change Impact on Rice Insurance Payouts in Japan	Journal of Applied Meteorology and Climatology	47(9)	2265-2278	2008
Murai-Hatano M, Okada M, Kuwagata T, Sakurai J, Nonami H, Ahamed A, Nagasuga K, Matsunami T, Fukushi K, Maeshima M	Effect of low root temperature on hydraulic conductivity of rice plants and the possible role of aquaporins	Plant and Cell Physiology	49(9)	1294-1305	2008
Okada M, Iizumi T, Nishimori M, Yokozawa M	Mesh climate change data of Japan ver.2 for climate change impact assessments under IPCC SRES A1B and A2	Journal of Agricultural Meteorology	65(1)	97-109	2008
Nguyen KD, Kotera A, Sakamoto T, Yokozawa M	Sensitivity of salinity intrusion to sea level rise and river flow change in Vietnamese Mekong delta-impacts on availability of irrigation water for rice cropping	Journal of Agricultural Meteorology	64(3)	167-176	2008
Iizumi T, Nishimori M, Yokozawa M	Combines equations for estimating global solar radiation: Projection of radiation field over Japan under global warming conditions by statistical downscaling	Journal of Agricultural Meteorology	54(1)	9-23	2008
Kubo T, Kobayashi T, Kato K, Nishimura S, Uemura S, Ono K, Sumida A, Hara T	Estimating the three-dimensional structure of canopy foliage based on the light measurements in a Betula ermanii stand	Agricultural and Forest Meteorology	148(8-9)	1293-1304	2008
Nishimura S, Yonemura S, Sawamoto T, Shirato Y, Akiyama H, Sudo S, Yagi K	Effect of land use change from paddy rice cultivation to upland crop cultivation on soil carbon budget of a cropland in Japan	Agriculture Ecosystems and Environment	125(1-4)	9-20	2008
Ma J, Xu H, Han Y, Cai ZC, Yagi K	Short-term effects of wheat straw incorporation in to paddy field as affected by rice transplanting time	Australian Journal of Soil Research	46	281-287	2008
Tao F, Yokozawa M, Liu J, Zhang Z	Climate-crop yield relationships at provincial scales in China and the impacts of recent climate trends	Climate Research	38	83-94	2008

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Jumadi O, Hala Y, Anas I, Ali A, Sakamoto K, Saigusa M, Yagi K , Inubushi K	Community structure of ammonia oxidizing bacteria and their potential to produce nitrous oxide and carbon dioxide in acid tea soils	Geomicrobiology Journal	25	381-389	2008
Cheng W , Inubushi K, Hoque MM, Sasaki H, Kobayashi K, Yagi K , Okada M, Hasegawa T	Effect of Elevated [CO ₂] on soil bubble and CH ₄ emission from a rice paddy: A test by ¹³ C pulse-labeling under free-air CO ₂ enrichment	Geomicrobiology Journal	25	396-403	2008
Cheng W , Sakai H , Hartley A, Yagi K , Hasegawa T	Increased night temperature reduces the stimulatory effect of elevated carbon dioxide concentration on methane emission from rice paddy soil	Global Change Biology	14	644-656	2008
Lou Y, Inubushi K, Mizuno T, Hasegawa T , Lin Y, Sakai H , Cheng W , Kobayashi K	CH ₄ emission with differences in atmospheric CO ₂ enrichment and rice cultivars in a Japanese paddy soil	Global Change Biology	14	2678-2687	2008
Jumadi O, Hala Y, Muis A, Ali A, Palennari M, Yagi K , Inubushi K	Influences of chemical fertilizers and a nitrification inhibitor on greenhouse gas fluxes in a corn (Zea mays L.) field in Indonesia	Microbes and Environments	23(1)	29-34	2008
Endo A, Mishima S , Kohyama K	Modeling nitrate leaching on a cropped Andosol	Nutrient Cycling in Agroecosystems		doi: 10.1007/s 107 05- 009-9247-x	2009
Ma J, Xu H, Yagi K , Cai Z	Methane emission from paddy soils as affected by wheat straw returning mode	Plant and Soil	313(1-2)	167-174	2008
Itoh M , Ohte N, Koba M	Methane flux characteristics in forest soils under an East Asian monsoon climate	Soil Biology and Biochemistry	41(2)	388-395	2009
Hayakawa A , Akiyama H , Sudo S , Yagi K	N ₂ O and NO emissions from an Andisol field as influenced by pelleted poultry manure	Soil Biology and Biochemistry	41(3)	521-529	2009
Ma J, Yagi K , Xu H, Han Y, Cai Z	Is burial of wheat straw in ditches a way to reduce CH ₄ emissions from rice cultivation?	Soil Science and Plant Nutrition	54	638-643	2008
Hadi A, Jumadi O, Inubushi K, Yagi K	Mitigation options for N ₂ O emission from a corn field in Kalimantan, Indonesia	Soil Science and Plant Nutrition	54	644-649	2008

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Shimoda S, Murayama S, Mo W , Oikawa T	Seasonal contribution of C3 and C4 species to ecosystem respiration and photosynthesis estimated from isotopic measurements of atmospheric CO2 at a grassland in Japan	Agricultural and Forest Meteorology	149(3-4)	603-613	2009
Fukuo A, Akiyama T, Mo W , Kawamura K , Chen Z, Saito G	Spectral detection of grazing degradation in the Xilingol steppe, Inner Mongolia	Journal of Integrated Field Science	5	39-50	2008
Wagai R , Mayer LM, Kitayama K	Nature of the "occluded" low-density fraction in soil organic matter studies: A critical review.	Soil Science and Plant Nutrition	55	13-25	2009
Hayashi K , Hiradate S , Ishikawa S , Nouchi I	Ammonia exchange between rice leaf blades and the atmosphere: Effect of broadcast urea and changes in xylem sap and leaf apoplastic ammonium concentrations	Soil Science and Plant Nutrition	(54)	807-818	2008
Eguchi S , Nakajima Y , Yabusaki S, Kasuya M, Shibayama H, Tsunekawa A, Imai K	Denitrification during vertical upwelling at an alluvium-diluvium interface below the upland perimeter of a riparian paddy	Journal of Environmental Quality			
Eguchi S , Sawamoto M, Shiba M	Field scale determination of the aquifer-aquitard boundary in Joso Clay by cone penetrometry	Soil Science and Plant Nutrition	55(3)	337-348	
Abe K , Komada M, Ookuma A	Efficiency of removal of nitrogen, phosphorus and zinc from domestic wastewater by a constructed wetland system in rural areas: a case study	Water Science and Technology	58(12)	2427-2433	2008
Tanimoto T, Tsuboi K, Zhang L, Sawa Y, Yonemura S , Yumimoto K, Matsueda H, Uno I, Hayasaka T, Mukai H, Tohjima Y	Diagnosing recent CO emissions and ozone evolution in East Asia using coordinated surface observations, adjoint inverse modeling, and MOPITT satellite data	Atmospheric Chemistry and Physics	8	3521-3561	2008
Takagi K, Takahashi Y, Nakaji T, Oguma H, Mano M , Akibayashi Y, Murayama T, Koike T, Sasa K, Fujimura Y, Fukuzawa K, Liang N, Kayama M, Nomura M, Hojo H, Sugata S	Change in CO2 balance under a series of forestry activities in a cool-temperate mixed forest with dense undergrowth	Global Change Biology	15(5)	1275-1288	2008

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Hobe MV, Kuhn U, Diest HV, Sandoval-Soto L, Kenntner T, Helleis F, Yonemura S , Andreae MO, Kesselmeier J	Automated in situ analysis of volatile sulfur gases using a Sulfur Gas Analyser (SUGAR) based on cryogenic trapping and gas-chromatographic separation	International Journal of Environmental Analytical Chemistry	88(5)	303-315	2008
Shiraiwa M, Kondo Y, Moteki N, Takegawa N, Sahu LK, Takami A, Hatakeyama S, Yonemura S , Blake DR	Radiative impact of mixing state of black carbon aerosol in Asian outflow	Journal of Geophysical Research	113(D2 4210)	doi:10.1029/2008JD0105	2008
Gu S, Qi P, Zhao X, Tang Y, Cui X, Du M , Zhao L, Li Y, Xu S, Zhou H, Kato T	Characterizing evapotranspiration over a meadow ecosystem on the Qinghai-Tibetan Plateau	Journal of Geophysical Research	113(D0 8118)	doi:10.1029/2007JD009173	2008
Mizoguchi Y, Miyata A , Ohtani Y, Hirata R , Yuta S	A review of tower flux observation sites in Asia	Journal of Forest Research	14(1)	1-9	2008
Ohtsuka T, Hirota M, Zhang X, Shimono A, Senga Y, Du M , Yonemura S , Kawashima S , Tang T	Soil organic carbon pools in alpine to nival zones along an altitudinal gradient (4400 – 5300 m) on the Tibetan Plateau	Polar Science	2(4)	277-285	2008
Du M , Yonemura S , Yamada T, Zhang X, Li Y, Gu S, Zhao L, Tang Y	A numerical simulation of the influences of local circulation over complex terrain on gas dispersion on the Tibetan Plateau	Proceedings of the 6th International Conference on Fluid Mechanics		58-63	2009
Ono K, Mano M , Miyata A , Inoue Y	Applicability of the planar fit technique in estimating surface fluxes over flat terrain using eddy covariance	Journal of Agricultural Meteorology	64(3)	121-130	2008
Oue H, Motohiro S, Inada K, Miyata A , Mano M , Kobayashi K, Zhu J	Evaluation of ozone uptake by the rice canopy with the multi-layer model	Journal of Agricultural Meteorology	64(4)	223-232	2008

Appendix

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Kim W, Cho J, Myong G, Mano M, Komori S, Kim S	Quality assessment of data from the Daegwallyeong Flux Measurement Station (DFMS) based on short-term experiments	Journal of Agricultural Meteorology	64(3)	111-120	2008
Inoue S	Comparison of four instruments for measuring solid precipitation below the freezing point condition	Journal of Agricultural Meteorology	65(1)	77-82	2009
Baba K, Arao T, Maejima Y, Watanabe E, Eun H, Ishizaka M	Arsenic speciation in rice and soil containing related compounds of chemical warfare agents	Analytical Chemistry	80(15)	5768-5775	2008
Abe K, Sakurai Y, Okuyama A, Sasaki K, Tawarada K	Simplified method for determinig cadmium concentrations in rice foliage and soil by using a biosensor kit with immunochromatography	Journal of the Science of Food and Agriculture	89	1097-1100	2009
Fukuyama T, Fujiwara H	Contribution of Asian dust to atmospheric deposition of radioactive cesium (137Cs)	Science of the Total Environment	405	389-395	2008
Asai H, Samson BK, Stephan HM, Songyikhangsuthor K, Homma K, Kiyono Y, Inoue Y, Shiraiwa T, Horie T	Biochar amendment techniques for upland rice production in Northern Laos: 1. Soil physical properties, leaf SPAD and grain yield	Field Crops Research		doi:10.1016/j.fcr.2008.10.008	2008
Kawamura K, Watanabe N, Sakanoue S, Inoue Y	Estimating forage biomass and quality in a mixed sown pasture based on partial least squares regression with waveband selection	Grassland Science	54	131-145	2008
Inoue Y, Douangsavanh L, Qi J, Oliosio A, Kiyono Y, Horie T, Asai H, Saito K, Ochiai Y, Shiraiwa T	Reflectance characteristic of major land surfaces in slash-and-burn ecosystem in Laos	International Journal of Remote Sensing	29(7)	2011-2019	2008
Shibayama M, Watanabe Y	Testing polarization measurements with adjusted view zenith angles in varying illumination conditions for detecting leaf orientation of wheat canopy	Plant Production Science	11(4)	498-506	2008
Mishima S, Endo A, Kohyama K	Recent trend in residual nitrogen on national and regional scales in Japan and its relation with groundwater quality	Nutrient Cycling in Agroecosystems	83(1)	1-11	2008
Someya N, Tsuchiya K, Sugisawa S, Noguchi MT, Yoshida T	Growth promotion of lettuce (<i>Lactuca sativa</i> L.) by a rhizobacterium <i>Pseudomonas fluorescens</i> strain LRB3W1 under iron-limiting condition	Environment Control in Biology	46(2)	139-146	2008

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Yoshida T , Kawabe M, Miyata Y, Teraoka T, Arie T	Biocontrol activity in a nonpathogenic REMI mutant of <i>Fusarium oxysporum</i> f. sp. <i>conglutinans</i> and characterization of its disrupted gene	Journal of Pesticide Science	33(3)	234-242	2008
Hirooka Y, Ishikawa S, Takeuchi J, Horie H, Nakayama K, Koitaabashi M , Okuda S, Natsuaki KT	New cylindrocladium diseases of strawberry and coral bells caused by <i>Cylindrocladium canadense</i>	Journal of General Plant Pathology	75(1)	83-86	2009
Enya J, Togawa M, Takeuchi T, Yoshida S , Tsushima S , Arie T, Sasaki T	Biological and phylogenetic characterization of <i>Fusarium oxysporum</i> complex, which causes yellows on Brassica spp., and proposal of <i>F. oxysporum</i> f. sp. <i>rapae</i> , a novel forma specialis pathogenic on B., rapa in Japan	Phytopathology	98(4)	475-483	2008
Yasuda N, Noguchi MT , Fujita Y	Induced rice resistance to blast varies as a function of <i>Magnaporthe grisea</i> avirulence genes	Plant Disease	92(8)	1144-1149	2008
Ando S, Tsushima S , Kamachi S, Konagaya K, Tabei Y	Alternative transcription initiation of the nitrilase gene (BrNIT2) caused by infection with <i>Plasmodiophora brassicae</i> Woron. in Chinese cabbage (<i>Brassica rapa</i> L.)	Plant Molecular Biology	68	557-569	2008
Huang J, Yoshitake H , Zhang R, Ito M	Two new species of Hainokisaruzo Yoshitake & Colonnelli from China, with a checklist of the species of the genus (Coleoptera: Curculionidae: Ceutorhynchinae)	Zootaxa	1776	59-68	2008
Huang J, Yoshitake H , Zhang R, Ito M	A new species of Augustinus Korotyaev from China, with a key to the species groups of the genus (Coleoptera: Curculionidae: Ceutorhynchinae)	Zootaxa	1871	63-68	2008
Yoshitake H , Kato T, Jinbo J, Ito M	A new Wagnerinus (Coleoptera: Curculionidae) from northern Japan: description including a DNA barcode	Zootaxa	1740	15-27	2008
Olia M , Ahmad W, Araki M , Minaka N , Oda H, Okada H	<i>Actus salvadoricus</i> Baqri and Jairajpuri (Mononchida: Mylonchulidae) from Japan with comment on the phylogenetic position of the genus <i>Actus</i> based on 18S rDNA sequences	Japanese Journal of Nematology	38(2)	57-69	2008
Osumi N, Kakehashi Y, Matsumoto S, Nagaoka K, Sakai J, Miyashita K , Kimura M, Asakawa S	Identification of the gene for disaggregatase from <i>Methanosarcina mazei</i>	Archaea	2	185-191	2008
Hashimoto S, Sato Y	Participatory rural planning in Japan: promises and limits of neighborhood associations	Paddy and Water Environment	6(2)	199-210	2008

4. Patents

- 1) Polygalacturonase and Polygalacturonase Gene of Rhizopus Family Filamentous Fungi
Patent number: 4168130
Date of application: June 13, 2002
Date of registration: August 15, 2008
Inventors: Shigenobu Yoshida, Fumihiko Suzuki, Takao Tsukiboshi and Seiya Tsushima
 - 2) Remediation System of Contaminated Soil
Patent number: 4116975
Date of application: February 2, 2004
Date of registration: April 25, 2008
Inventors: Tomoyuki Makino, Kazuo Sugahara, Hiroyuki Takano, Takashi Kamiya and Kota Sasaki
 - 3) Remediation System of Heavy Metal Contaminated Soil
Patent number: 4116988
Date of application: September 9, 2004
Date of registration: April 25, 2008
Inventors: Tomoyuki Makino, Kazuo Sugahara, Hiroyuki Takano, Takashi Kamiya and Kota Sasaki
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5. Collaborative Research

Collaborative Research	Number
Private Enterprise	18
University	6
Other Independent Administrative Institution	6
Prefectural Research Institution	4

Advisory Council

NIAES Advisory Council (2008)

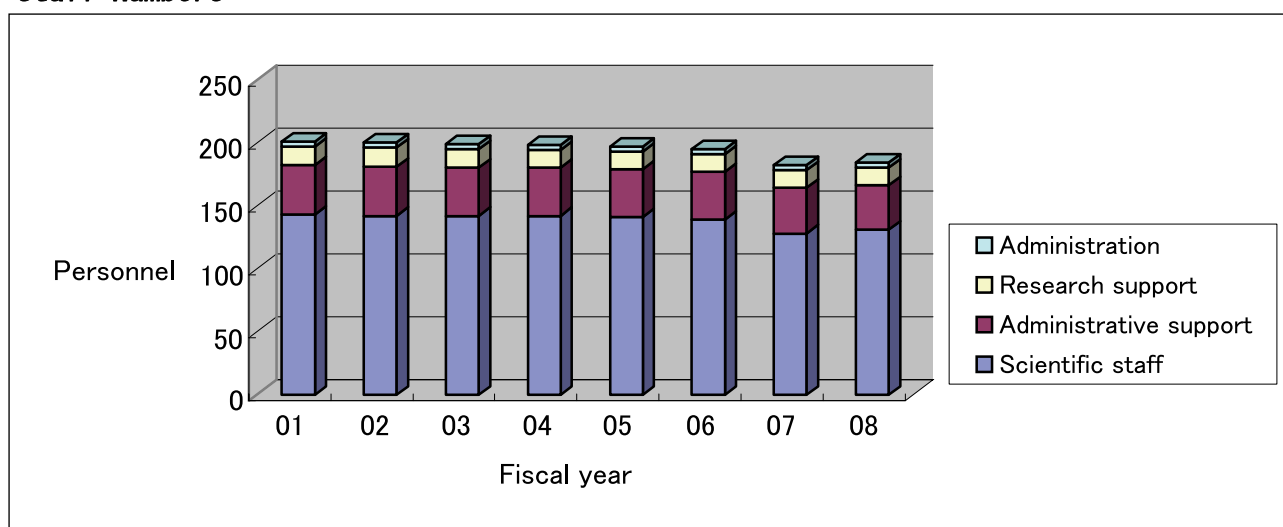
Ayumi Ohnuma	Professor, Keio University
Toyoki Kozai	Professor, Chiba University
Masahiko Saigusa	Professor, Toyohashi University of Technology
Hisashi Nemoto	Deputy Director General, Saitama Prefecture Agriculture and Forestry Research Center
Waki Matsunaga	Science Writer
Yoko Yamazaki	President, Inakano Heroine Wakuwaku Network
Ryutaro Ohtsuka	President, National Institute for Environmental Studies
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Kyouichi Tamai	President, National Research Institute of Fisheries and Environment of Inland Sea, Fisheries Research Agency
Masamichi Saigo	Head of Environment and Biomass Policy Division, Minister's Secretariat, MAFF

Appendix

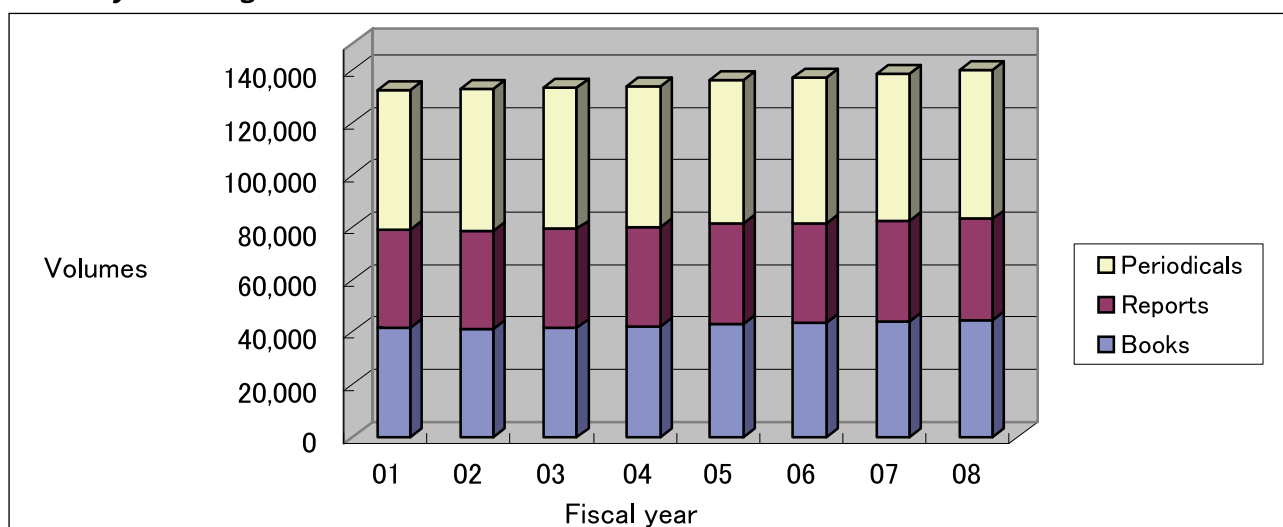
Budget in the FY 2008 (Million yen)

Operational Budget	3,306
Facilities Maintenance Subsidy	48
Project Research Budget	1,671
Miscellaneous Income	3
Incidental Income	–
Total	5,028

Staff Numbers

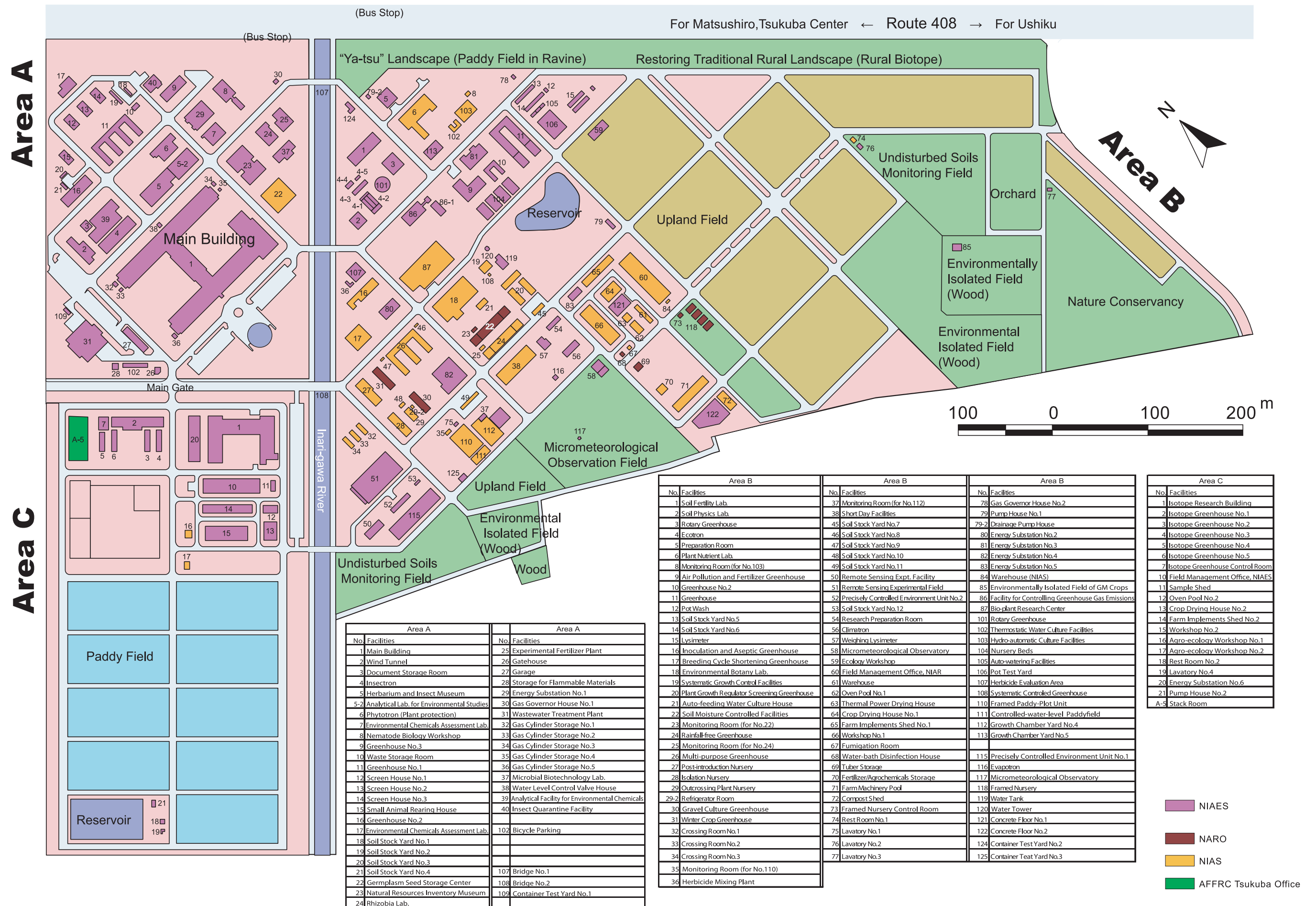


Library Holdings



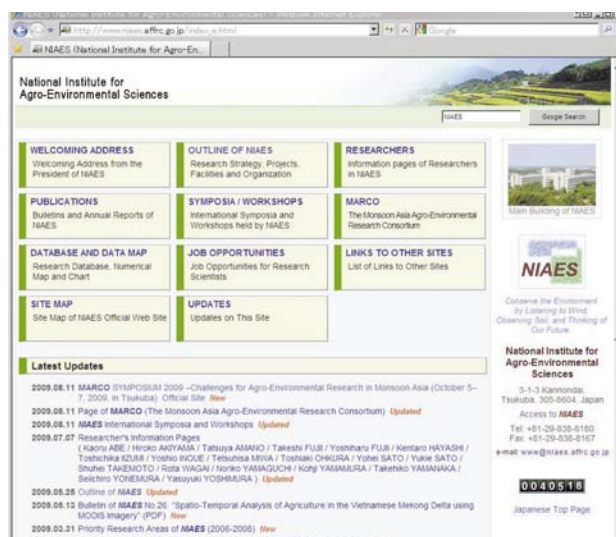


NIAES Campus Map



NIAES Internet Web Site

NIAES has an official Internet website in English (http://www.niaes.affrc.go.jp/index_e.html). This site provides relevant information on the international affiliations, research work, and collections of NIAES, including the Monsoon Asia Agro-Environmental Research Consortium (MARCO), Asian-Pacific Alien Species Database (APASD), Ecosystem Database, microForce (a microorganism inventory), and the Type Specimens in the NIAES Insect Museum.



http://www.niaes.affrc.go.jp/index_e.html

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Ecosystem Database

Asian-Pacific Alien Species Database (APASD)

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microForce: a Microorganism Inventory

An Illustrated Key to the Hymenopterous Parasitoids of *Liriomyza trifolii* in Japan

An Illustrated Key to Japanese Species of the Tribe Pilophorini (Heteroptera, Miridae)

A Checklist of Japanese *Cinara* Curtis (Homoptera: Aphididae), with Keys to the Species

NIAES Type Specimens

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NIAES Annual Report

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