

Appendix

Publications

1. Official publications

- 1) NIAES Annual Report 2009
- 2) NIAES Research Executive Summary (Japanese ed.) (Kenkyu seika johu), No.26
- 3) Annual Report of National Institute for Agro-Environmental Sciences (Japanese ed.) (Nogyo kankyo gijutsu kenkyusho nenpo), No.26
- 4) NIAES News (Japanese ed.) (No-kan-ken nyusu), No.83 - No.86

2. Research Papers published by the NIAES staff

Scientific Papers	English	130
	Japanese	31
	Others	7
Proceedings (incl. Abstracts)	English	179
	Japanese	404
	Others	2
Others	English	14
	Japanese	122
	Others	0

3. Research staff activities (English papers)

NIAES staff's names are boldfaced.

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Takagi, K. Iwasaki, A. Kamei, I. Satsuma, K. Yoshioka, Y. Harada, N.	Aerobic mineralization of hexachlorobenzene by newly isolated pentachloronitrobenzene-degrading <i>Nocardioides</i> sp. strain PD653	Applied and Environmental Microbiology	75(13)	4452-4458	2009
Si, Y. Takagi, K. Iwasaki, A. Zhou, D.	Adsorption, desorption and dissipation of metolachlor in surface and subsurface soils	Pest Management Science	65(9)	956-962	2009
Harada, N. Takagi, K. Baba, K. Fujii, K. Iwasaki, A.	Biodegradation of diphenylarsinic acid to arsenic acid by novel soil bacteria isolated from contaminated soil	Biodegradation		doi: 10.1007/s10532-009-9318-3	2009
Inao, K. Mizutani, H. Yogo, Y. Ikeda, M.	Improved PADDY model including photoisomerization and metabolic pathways for predicting pesticide behavior in paddy fields: Application to the herbicide pyriminobac-methyl	Journal of Pesticide Science	34(4)	273-282	2009
Yokoyama, A. Hamaguchi, K. Ohtsu, K. Ishihara, S. Kobara, Y. Horio, T. Endo, S.	A method for mass-rearing caddisfly, <i>Cheumatopsyche brevilineata</i> (Iwata) (Trichoptera: Hydropsychidae), as a new test organism for assessing the impact of insecticides on riverine insects	Applied Entomology and Zoology	44(2)	195-201	2009
Mori, S. Uraguchi, S. Ishikawa, S. Arao, T.	Xylem loading process is a critical factor in determining Cd accumulation in the shoots of <i>Solanum melongena</i> and <i>Solanum torvum</i>	Environmental and Experimental Botany	67(1)	127-132	2009

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Arao, T. Kawasaki, A. Baba, K. Mori, S. Matsumoto, S.	Effects of water management on cadmium and arsenic accumulation and dimethylarsinic acid concentrations in Japanese rice	Environmental Science and Technology	43(24)	9361-9367	2009
Mori, S. Kawasaki, A. Ishikawa, S. Arao, T.	A new method for evaluating symplastic cadmium absorption in the roots of <i>Solanum melongena</i> using enriched isotopes ^{113}Cd and ^{114}Cd	Soil Science and Plant Nutrition	55(2)	294-299	2009
Iwafune, T. Inao, K. Horio, T. Iwasaki, N. Yokoyama, A. Nagai, T.	Behavior of paddy pesticides and major metabolites in the Sakura River, Ibaraki, Japan	Journal of Pesticide Science	35(2)	114-123	2009
Akhter, A. Khan, M. S. H. Egashira, H. Tawaraya, K. Rao, I. M. Wenzl, P. Ishikawa, S. Wagatsuma, T.	Greater contribution of low-nutrient tolerance to sorghum and maize growth under combined stress conditions with high aluminum and low nutrients in solution culture simulating the nutrient status of tropical acid soils	Soil Science and Plant Nutrition	55(3)	394-406	2009
Ishikawa, S. Abe, T. Kuramata, T. Yamaguchi, M. Ando, T. Yamamoto, T. Yano, M.	A major quantitative trait locus for increasing cadmium-specific concentration in rice grain is located on the short arm of chromosome 7	Journal of Experimental Botany	61(3)	923-934	2009
Uraguchi, S. Mori, S. Kuramata, M. Kawasaki, A. Arao, T. Ishikawa, S.	Root-to-shoot Cd translocation via the xylem is the major process determining shoot and grain cadmium accumulation in rice	Journal of Experimental Botany	60(9)	2677-2688	2009
Nhung, D. T. T. Phong, T. K. Watanabe, H. Iwafune, T. Thuyet, D. Q.	Simulating the dissipation of two herbicides using micro paddy lysimeters	Chemosphere	77(10)	1393-1399	2009
Murano, H. Otani, T. Seike, N. Sakai, M.	Dieldrin uptake and translocation in plants growing in hydroponic medium	Environmental Toxicology and Chemistry	29(1)	142-148	2009
Murano, H. Otani, T. Makino, T. Seike, N. Sakai, M.	Effects of the application of carbonaceous adsorbents on pumpkin (<i>Cucurbita maxima</i>) uptake of heptachlor epoxide in soil	Soil Science and Plant Nutrition	55(2)	325-332	2009
Sakai, M. Seike, N. Murano, H. Otani, T.	Article relationship between dieldrin uptake in cucumber and solvent-extractable residue in soil	Journal of Agricultural and Food Chemistry	57(23)	11261-11266	2009
Suda, A. Makino, T. Maejima, Y. Akahane, I. Higashi, T.	Effects of sterilization on the chemical forms of heavy metals in soils	Soil Science and Plant Nutrition	55(5)	623-626	2009

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Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Murakami, M. Nakagawa, F. Ae, N. Ito, M. Arao, T.	Phytoextraction by rice capable of accumulating Cd at high levels: Reduction of Cd content of rice grain	Environmental Science and Technology	43(15)	5878-5883	2009
Ibaraki, T. Kuroyanagi, N. Murakami, M.	Practical phytoextraction in cadmium-polluted paddy fields using a high cadmium accumulating rice plant cultured by early drainage of irrigation water	Soil Science and Plant Nutrition	55(3)	421-427	2009
Phong, T. K. Nhung, D. T. T. Yamazaki, K. Takagi, K. Watanabe, H.	Behavior of sprayed tricyclazole in rice paddy lysimeters	Chemosphere	74(8)	1085-1089	2009
Yamaguchi, H. Fukuoka, H. Arao, T. Ohyama, A. Nunome, T. Miyatake, K. Negoro, S.	Gene expression analysis in cadmium-stressed roots of a low cadmium-accumulating solanaceous plant, <i>Solanum torvum</i>	Journal of Experimental Botany	61(2)	423-437	2009
Yamaguchi, N. Nakano, M. Takamatsu, R. Tanida, H.	Inorganic iodine incorporation into soil organic matter: evidence from iodine K-edge X-ray absorption near-edge structure	Journal of Environmental Radioactivity	101(6)	451-457	2010
Miura, K. Yamanaka, T. Suzuki, Y. Tagami, Y. Davies, A. P.	Male rescue maintains low frequency parthenogenesis-including <i>Wolbachia</i> infection in <i>Trichogramma</i> populations	Population Ecology	51(2)	245-252	2009
Yara, K. Kunimi, Y.	Discrimination of <i>Torymus sinensis</i> Kamijo (Hymenoptera: Torymidae) and <i>T.beneficus</i> Yasumatsu et Kamijo and their hybrids by allele-specific PCR	Applied Entomology and Zoology	44(2)	275-280	2009
Yamanaka, T. Liebhold, A. M.	Mate-location failure, the Allee effect, and the establishment of invading populations	Population Ecology	51(3)	337-320	2009
Yamanaka, T. Liebhold, A. M.	Spatially implicit approaches to understand the manipulation of mating success for insect invasion management	Population Ecology	51(3)	427-444	2009
Nishida, T. Yamashita, N. Asai, M. Kurokawa, S. Enomoto, T. Pheloung, P. C. Groves, R. H.	Developing a pre-entry weed risk assessment system for use in Japan	Biological Invasions	11(6)	1319-1333	2009
Osmankhil, M. H. Mochizuki, A. Hamasaki, K. Iwabuchi, K.	Oviposition and larval development of <i>Neochrysocharis formosa</i> (Hymenoptera: Eulophidae) inside the host larvae, <i>Liriomyza trifolii</i>	JARQ-Japan Agricultural Research Quarterly	44(1)	33-36	2010
Yamamura, K. Ishimoto, M.	Optimal sample size for composite sampling with subsampling, when estimating the proportion of pecky rice grains in a field	Journal of Agricultural Biological and Environmental Statistics	14(2)	135-153	2009

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Arakaki, N. Hokama, Y. Yamamura, K.	Efficient bait for sampling the wireworm <i>Melanotus okinawensis</i> (Coleoptera: Elateridae) in a sugarcane field	Applied Entomology and Zoology	44(4)	561-568	2009
Tominaga, A. Goka, K. Kimura, T. Ito, K.	Genetic structure of Japanese introduced populations of the Golden Mussel, <i>Limnoperna fortunei</i> , and the estimation of their range expansion process	Biodiversity	10(2&3)	61-66	2009
Kato-Noguchi, H. Yamamoto, M. Tamura, K. Teruya, T. Suenaga, K. Fujii, Y.	Isolation and identification of potent allelopathic substances in raitail fescue	Plant Growth Regulation	60(2)	127-131	2010
Uraguchi, K. Yamamura, K. Saitoh, T.	Estimating number of families for an urban fox population by using two public data sets	Population Ecology	51(2)	271-277	2009
Gilani, S. A. Fujii, Y. Sugano, M. Watanabe, K. N.	Chemotypic variations and phytotoxic studies of essential oils of endemic medicinal plant, <i>Seriphidium kurramense</i> , from Pakistan	Journal of Medicinal Plants Research	4(4)	309-315	2010
Hamasaki, K. Yamanaka, T. Tanaka, K. Nakatani, Y. Iwasaki, N. Sprague, D. S.	Relative importance of within-habitat environment, land use and spatial autocorrelations for determining odonate assemblages in rural reservoir ponds in Japan	Ecological Research	24(3)	597-605	2009
Takemoto, S. Okada, H.	Suppressed-priming PCR, a novel concept of DNA quantification based on PCR kinetics	Bioscience Biotechnology and Biochemistry	73(9)	2121-2123	2009
Karim, N. Jones, J. T. Okada, H. Kikuchi, T.	Analysis of expressed sequence tags and identification of genes encoding cell-wall-degrading enzymes from the fungivorous nematode <i>Aphelenchus avenae</i>	BMC Genomics	10(525)	doi: 10.1186 / 1471-2164-10-525	2009
Nakamori, T. Fujiwara, N. Matsumoto, N. Okada, H.	Collembolan fauna in arable land, including the first record of <i>Mesaphorura silvicola</i> (Folsom) from Japan	Edaphologia	84	5-9	2009
Koyanagi, T. Kusumoto, Y. Yamamoto, S. Okubo, S. Takeuchi, K.	Historical impacts on linear habitats: The present distribution of grassland species in forest-edge vegetation	Biological Conservation	142(8)	1674-1684	2009
Amano, T. Katayama, N.	Hierarchical movement decisions in predators: effects of foraging experience at more than one spatial and temporal scale	Ecology	90(12)	3536-3345	2009
Amano, T.	Conserving bird species in Japanese farmland: Past achievements and future challenges	Biological Conservation	142(9)	1913-1921	2009
Raine, A. F. Brown, A. F. Amano, T. Sutherland, W. J.	Assessing population changes from disparate data sources: the decline of the Twite <i>Carduelis flavirostris</i> in England	Bird Conservation International	19(4)	401-416	2009

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Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Child, M. F. Cumming, G. S. Amano, T.	Assessing the broad-scale impact of agriculturally transformed and protected area landscapes on avian taxonomic and functional richness	Biological Conservation	142(11)	2593-2601	2009
Okada, H. Hasegawa, H. Hashimoto, T. Sekiguchi, H. Urashima, Y.	Are community structures of soil nematodes different between organic and conventional farming systems in commercial tomato fields?	Nematological Research	39(2)	63-71	2009
Yamaura, Y. Amano, T. Koizumi, T. Mitsuda, Y. Taki, H. Okabe, K.	Does land-use change affect biodiversity dynamics at a macroecological scale? A case study of birds over the past 20 years in Japan	Animal Conservation	12(2)	110-119	2009
Ishii, H. Fontaine, J. Chung, W. H. Kansako, M. Nishimura, K. Takahashi, K. Oshima, M.	Characterisation of QoI-resistant field isolates of <i>Botrytis cinerea</i> from citrus and strawberry	Pest Management Science	65(8)	916-922	2009
Lin, T. C. Ishii, H.	Accumulation of H ₂ O ₂ in xylem fluids of cucumber stems during ASM-induced systemic acquired resistance (SAR) involves increased LOX activity and transient accumulation of shikimic acid	European Journal of Plant Pathology	125(1)	119-130	2009
Kanedo, I. Ishii, H.	Effect of azoxystrobin on activities of antioxidant enzymes and alternative oxidase in wheat head blight pathogens <i>Fusarium graminearum</i> and <i>Microdochium nivale</i>	Journal of General Plant Pathology	75(5)	388-398	2009
Wei, C. Z. Katoh, H. Nishimura, K. Ishii, H.	Site-directed mutagenesis of the cytochrome b gene and development of diagnostic methods for identifying QoI resistance of rice blast fungus	Pest Management Science	65(12)	1344-1351	2009
Miyamoto, T. Ishii, H. Seko, T. Kobori, S. Tomita, Y.	Occurrence of <i>Corynespora cassiicola</i> isolates resistant to boscalid on cucumber in Ibaraki Prefecture, Japan	Plant Pathology	58(6)	1144-1151	2009
Morimoto, S. Fujii, T.	A new approach to retrieve full lengths of functional genes from soil by PCR-DGGE and metagenome walking	Applied Microbiology and Biotechnology	83(2)	389-396	2009
Wang, Y. Morimoto, S. Ogawa, N. Oomori, T. Fujii, T.	An improved method to extract RNA from soil with efficient removal of humic acids	Journal of Applied Microbiology	107(4)	1168-1177	2009
Kamo, T. Kato, K. Abe, S. Hirota, M. Yamaya, H. Hiradate, S. Fujii, Y.	Biosynthetic origin of the nitrogen atom in cyanamide in <i>Vicia villosa</i> subsp. <i>varia</i>	Soil Science and Plant Nutrition	55(2)	235-242	2009

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Ooshiro, A. Hiradate, S. Kawano, S. Takushi, T. Fujii, Y. Natsume, M. Abe, H.	Identification and activity of ethyl gallate as an antimicrobial compound produced by <i>Geranium carolinianum</i>	Weed Research	9(2)	169-172	2009
Kawazu, K. Shimoda, K. Kobori, Y. Kugimiya, S. Mukawa, S. Suzuki, Y.	Inhibitory effects of permethrin on flight responses, host-searching, and foraging behaviour of <i>Cotesia vestalis</i> (Hymenoptera: Braconidae), a larval parasitoid of <i>Plutella xylostella</i> (Lepidoptera: Plutellidae)	Journal of Applied Entomology	134(4)	313-322	2009
Il, A. L. Kugimiya, S. Williams, D. G. Takabayashi, J.	Volatile compounds from young peach shoots attract males of oriental fruit moth in the field	Journal of Plant Interactions	4(4)	289-294	2009
Abe, H. Shimoda, T. Ohnishi, J. Kugimiya, S. Narusaka, M. Seo, S. Narusaka, Y. Tsuda, S. Kobayashi, M.	Jasmonate-dependent plant defense restricts thrips performance and preference	BMC Plant Biology	9(97)	doi: 10.1186 / 1471-2229-9-97	2009
Yoneya, K. Kugimiya, S. Takabayashi, J.	Can herbivore-induced plant volatiles inform predatory insect about the most suitable stage of its prey?	Physiological Entomology	34(4)	379-386	2009
Tabata, J. Minamishima, M. Sugie, H. Fukumoto, T. Mochizuki, F. Yoshiyasu, Y.	Sex pheromone components of the pear fruit moth, <i>Acrobasis pyrivorella</i> (Matsumura)	Journal of Chemical Ecology	35(2)	243-249	2009
Shigematsu, M. Ogawa, T. Kido, A. Kitamoto, H. Hidaka, M. Masaki, H.	Cellular and transcriptional responses of yeast to the cleavage of cytosolic tRNAs induced by colicin D.	Yeast	26(12)	663-673	2009
Mohri, Y. Sagehashi, M. Yamada, T. Hattori, Y. Morimura, K. Hamauzu, Y. Kamo, T. Hirota, M. Makabe, H.	An efficient synthesis of procyanidins using equimolar condensation of catechin and/or epicatechin catalyzed by ytterbium triflate	Heterocycles	79	549-563	2009
Iijima, T. Mohri, Y. Hattori, Y. Kashima, A. Kamo, T. Hirota, M. Kiyota, H. Makabe, H.	Synthesis of (-)-epicatechin 3-(3-O-methylgallate) and (+)-catechin 3-(3-O-methylgallate), and their anti-inflammatory activity	Chemistry and Biodiversity	6(4)	520-526	2009

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Nakase, M. Tani, M. Morita, T. Kitamoto, H. Kashiwazaki, J. Nakamura, T. Hosomi, A. Tanaka, N. Takegawa, K.	Mannosylinositol phosphorylceramide is a major sphingolipid component and is required for proper localization of plasma membrane proteins in <i>Schizosaccharomyces pombe</i>	Journal of Cell Science	123	1578-1587	2010
Smakgahn, K. Fumoto, T. Yagi, K.	Validation of revised DNDC model for methane emissions from irrigated rice fields in Thailand and sensitivity analysis of key factors	Journal of Geophysical Research	114 (G02017)	doi: 10.1029/2008JG000775	2009
Fukayama, H. Fukuda, T. Masumoto, C. Taniguchi, Y. Sakai, H. Cheng, W. Hasegawa, T. Miyao, M.	Rice plant response to long term CO ₂ enrichment: Gene expression profiling	Plant Science	177(3)	203-210	2009
Masaki, Y. Kuwagata, T. Ishigooka, Y.	Atmospheric turbidity estimation from hourly global solar radiation data under cloudless skies	Journal of the Meteorological Society of Japan	87(5)	849-863	2009
Haginoya, S. Fujii, H. Kuwagata, T. Xu, J. Ishigooka, Y. Kang, S. Zhang, Y.	Air-lake interaction features found in heat and water exchanges over Nam Co on the Tibetan Plateau	SOLA	5	172-175	2009
Iizumi, T. Yokozawa, M. Nishimori, M.	Development of impact functions on regional paddy rice yield in Japan for integrated impact assessment models	Journal of Agricultural Meteorology	65(2)	179-190	2009
Kobayashi, K. Matsui, T. Yoshimoto, M. Hasegawa, T.	Effects of temperature, solar radiation, and vapor-pressure deficit on flower opening time in rice	Plant Production Science	13(1)	21-28	2009
Okada, M. Iizumi, T. Hayashi, Y. Yokozawa, M.	A climatological analysis on the recent declining trend of rice quality in Japan	Journal of Agricultural Meteorology	65(4)	327-337	2009
Tao, F. Zhang, Z. Liu, J. Yokozawa, M.	Modelling the impacts of weather and climate variability on crop productivity over a large area: A new super-ensemble-based probabilistic projection	Agricultural and Forest Meteorology	149(8)	1266-1278	2009
Masaki, Y. Kuwagata, T. Ishigooka, Y.	Precise estimation of hourly global solar radiation for micrometeorological analysis by using data classification and hourly sunshine	Theoretical and Applied Climatology	100 (3-4)	283-297	2009
Kossonou, G. A. Kashiwagi, J. Hasegawa, T. Iwama, K. Jitsuyama, Y.	Genetic improvements for high yield and low soil nitrogen tolerance in rice (<i>Oryza Sativa</i> L.) under a cold environment	Field Crops Research	116 (1-2)	38-45	2010

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Shimono, H. Okada, M. Inoue, M. Nakamura, H. Kobayashi, K. Hasegawa, T.	Diurnal and seasonal variations in stomatal conductance of rice at elevated atmospheric CO ₂ under fully open-air conditions	Plant Cell and Environment	33(3)	322-331	2009
Yan, X. Akiyama, H. Yagi, K. Akimoto, H.	Global estimations of the inventory and mitigation potential of methane emissions from rice cultivation conducted using the 2006 Intergovernmental Panel on Climate Change Guidelines	Global Biogeochemical Cycles	23(GB 2002)	doi: 10.1029/2008GB003299	2009
Akiyama, H. Hayakawa, A. Sudo, S. Yonemura, S. Tanonaka, T. Yagi, K.	Automated sampling system for long-term monitoring of nitrous oxide and methane fluxes from soils	Soil Science and Plant Nutrition	55(3)	435-440	2009
Ono, K. Hirai, K. Morita, S. Ohse, K. Hiradate, S.	Organic carbon accumulation processes on a forest floor during an early humification stage in a temperate deciduous forest in Japan: Evaluations of chemical compositional changes by ¹³ C NMR and their decomposition rates from litterbag experiment	Geoderma	151 (3-4)	351-356	2009
Hayashi, K. Hayakawa, A. Akiyama, H. Yagi, K.	Measurement of ammonia volatilization loss using a dynamic chamber technique: A case study of surface-incorporated manure and ammonium sulfate in an upland field of light-colored Andosol	Soil Science and Plant Nutrition	55(4)	571-581	2009
Hayashi, K. Koga, N. Yanai, Y.	Effects of field-applied composted cattle manure and chemical fertilizer on ammonia and particulate ammonium exchanges at an upland field	Atmospheric Environment	43(35)	5702-5707	2009
Shindo, J. Okamoto, K. Kawashima, H. Konohira, E.	Nitrogen flow associated with food production and consumption and its effect on water quality in Japan from 1961 to 2005	Soil Science and Plant Nutrition	55(4)	532-545	2009
Fumoto, T. Yanagihara, T. Saito, T. Yagi, K.	Assessment of the methane mitigation potentials of alternative water regimes in rice fields using a process-based biogeochemistry model	Global Change Biology	16(6)	1845-1859	2009
Zheng, Q. L. Ishii, H.	Molecular cloning and expression analysis of genes related to phosphatidic acid synthesis in Japanese pear leaves inoculated with <i>Venturia nashicola</i>	Journal of General Plant Pathology	75(6)	413-421	2009
Chu, H. Morimoto, S. Fujii, T. Yagi, K. Nishimura, S.	Soil ammonia-oxidizing bacterial communities in paddy rice fields as affected by upland conversion history	Soil Science Society of America Journal	73(6)	2026-2031	2009
Watanabe, T. Son, T. T. Hung, N. N. Truong, N. V. Giau, T. Q. Hayashi, K. Ito, O.	Measurement of ammonia volatilization from flooded paddy fields in Vietnam	Soil Science and Plant Nutrition	55(6)	793-799	2009

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Uchida, M. Kishimoto, A. Muraoka, H. Nakatsubo, T. Kanda, H. Koizumi, H.	Seasonal shift in factors controlling net ecosystem production in a high Arctic terrestrial ecosystem	Journal of Plant Research	123	79-85	2009
Sollins, P. Kramer, M. G. Swanston, C. Lajtha, K. Fillee, T. Aufdenkampe, A. K. Wagai, R. Bowden, R. D.	Sequential density fractionation across soils of contrasting mineralogy: evidence for both microbial- and mineral-controlled soil organic matter stabilization	Biogeochemistry	96(1-3)	209-231	2009
Moritz, L. K. Liang, C. Wagai, R. Kitayama, K. Balser, T. C.	Vertical distribution and pools of microbial residues in tropical forest soils formed from distinct parent materials	Biogeochemistry	92(1-2)	83-94	2009
Matsumoto, N. Hoshino, T. Yamada, G. Kawakami, A. Takada-Hoshino, Y.	Sclerotia of <i>Typhula ishikariensis</i> biotype B (Typhulaceae) from Archaeological sites (4000 to 400 BP) in Hokkaido, Northern Japan	American Journal of Botany	97(3)	1-5	2010
Hayashi, K. Yan, X.	Airborne nitrogen load in Japanese and Chinese agroecosystems	Soil Science and Plant Nutrition	56(1)	2-18	2010
Minamikawa, K. Nishimura, S. Sawamoto, T. Nakajima, Y. Yagi, K.	Annual emissions of dissolved CO ₂ , CH ₄ , and N ₂ O in the subsurface drainage from three cropping systems	Global Change Biology	16(2)	796-809	2009
Sasaki, K. Yongvongsoontorn, N. Tawarada, K. Ohnishi, Y. Arakane, T. Kayama, F. Abe, K. Oguma, S. Ohmura, N.	Cadmium purification and quantification using immunochromatography	Journal of Agricultural and Food Chemistry	57	4514-4519	2009
Hayashi, K. Takagi, K. Noguchi, I. Fukuzawa, K. Takahashi, H. Fukazawa, T. Shibata, H. Fujinuma, Y.	Ammonia emission from a young larch ecosystem afforested after clear-cutting of a pristine forest in northernmost Japan	Water Air and Soil Pollution	200	33-46	2009
Du, M. Chen, H. Lei, J. Xu, X. Li, S. He, Q.	Observation of Effects of Tree Planting on Local Climate in the Central Part of the Taklimakan Desert, China	Journal of Arid Land Studies	19(1)	49-52	2009
Du, M. Yonemura, S. Den, H. Shen, Z. Shen, Y.	Relationship between the climate change and dust storm occurrence in China	Journal of Arid Land Studies	19(1)	149-152	2009

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Xu, G. Chao, Z. Wang, S. Hu, Y. Zhang, Z. Duan, J. Chang, X. Su, A. Luo, C. Li, Y. Du, M.	Temperature sensitivity of nutrient release from dung along elevation gradient on the Qinghai–Tibetan plateau	Nutrient Cycling in Agroecosystems	87(1)	49-57	2009
Luo, C. Xu, G. Chao, Z. Wang, S. Lin, X. Hu, Y. Zhang, Z. Duan, J. Chang, X. Su, A. Li, Y. Zhao, A. Du, M. Tang, Y. Kimball, B.	Effect of warming and grazing on litter mass loss and temperature sensitivity of litter and dung mass loss on the Tibetan plateau	Global Change Biology	16(5)	1606-1617	2009
Motohka, T. Nasahara, K. N. Miyata, A. Mano, M. Tsuchida, S.	Evaluation of optical satellite remote sensing for rice paddy phenology in monsoon Asia using a continuous in situ dataset	International Journal of Remote Sensing	30(17)	4343-4357	2009
Alberto, M. C. R. Wassmann, R. Hirano, T. Miyata, A. Kumar, A. Padre, A. Amante, M.	CO ₂ /heat fluxes in rice fields: Comparative assessment of flooded and non-flooded fields in the Philippines	Agricultural and Forest Meteorology	149(10)	1737-1750	2009
Huemmerich, K. F. Gamon, J. A. Tweedie, C. E. Oberbauer, S. F. Kinoshita, G. Houston, S. Kuchy, A. Hollister, R. D. Kwon, H. Mano, M. Harazano, Y. Webber, P. J. Oechel, W. C.	Remote sensing of tundra gross ecosystem productivity and light use efficiency under varying temperature and moisture conditions	Remote Sensing of Environment	114(3)	481-489	2009
Harazono, Y. Chikamoto, K. Kikkawa, S. Iwata, T. Nishida, N. Ueyama, M. Kitaya, Y. Mano, M. Miyata, A.	Applications of MODIS-visible bands index, greenery ratio to estimate CO ₂ budget of a rice paddy in Japan	Journal of Agricultural Meteorology	65(4)	365-374	2009

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Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Xu, G. Hu, Y. Wang, S. Zhang, Z. Chang, X. Luo, C. Chao, Z. Su, A. Lin, Q. Li, Y. Du, M.	Effects of litter quality and climate change along an elevation gradient on litter mass loss in an alpine meadow ecosystem on the Tibetan plateau	Plant Ecology		doi: 10.1007/s11258-009-9714-0	2009
Oue, H. Feng, Z. Pang, J. Miyata, A. Mano, M. Kobayashi, K. Zhu, J.	Modeling stomatal conductance and photosynthesis of a flag leaf of wheat under elevated O ₃ concentration	Journal of Agricultural Meteorology	65(3)	239-248	2009
Hirose, D. Shirouzu, T. Hirota, M. Ohtsuka, T. Senga, Y. Du, M. Shimono, A. Zhang, X.	Species richness and species composition of fungal communities associated with cellulose decomposition at different altitudes on the Tibetan Plateau	Journal of Plant Ecology	2(4)	217-224	2009
Hirota, M. Zhang, P. Gu, S. Du, M. Shimono, A. Shen, H. Li, Y. Tang, Y.	Altitudinal variation of ecosystem CO ₂ fluxes in an alpine grassland from 3600 to 4200 m	Journal of Plant Ecology	2(4)	197-205	2009
Shi, F. Yamada, P. Han, J. Abe, Y. Hatta, T. Du, M. Maki, T. Yoshikoshi, H. Wakimizu, K. Isoda, H.	Detection of foot and mouth disease virus in yellow sands collected in Japan by real time polymerase chain reaction (PCR) analysis	Journal of Arid Land Studies	19(3)	483-490	2009

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Hakoyama, T. Niimi, K. Watanabe, H. Tabata, R. Matsubara, J. Sato, S. Nakamura, Y. Tabata, S. Li, J. Matsumoto, T. Tatsumi, K. Nomura, M. Tajima, S. Ishizaka, M. Yano, K. Imaizumi-Anraku, H. Kawaguchi, M. Kouchi, H. Suganuma, N.	Host plant genome overcomes the lack of a bacterial gene for symbiotic nitrogen fixation	Nature	462(26)	514-517	2009
Kajiwara, H. Imamaki, A. Nakamura, M. Mita, K. Xia, Q. Ishizaka, M.	Promote analysis of silkworm 1. Fat body	Journal of Electrophoresis	53	19-26	2009
Kajiwara, H. Imamaki, A. Nakamura, M. Mita, K. Xia, Q. Ishizaka, M.	Promote analysis of silkworm 2. Hemolymph	Journal of Electrophoresis	53	27-31	2009
Kajiwara, H. Imamaki, A. Nakamura, M. Mita, K. Xia, Q. Ishizaka, M.	Promote analysis of silkworm 3. Malpighian tube	Journal of Electrophoresis	53	33-38	2009
Polsan, P. Komori, D. Patamatamkul, S. Aoki, M. Kim, W.	Practical estimation of evapotranspiration in rice cultivation in Thailand	Hydrological Research Letters	3	41-44	2009
Yokozawa, M. Shirato, Y. Sakamoto, T. Yonemura, S. Nakai, M. Ohkura, T.	Use of the RothC model to estimate the carbon sequestration potential of organic matter application in Japanese arable soils	Soil Science and Plant Nutrition	56(1)	168-176	2010
Toda, M. Yokozawa, M. Sumida, A. Watanabe, T. Hara, T.	Foliage profiles of individual trees determine competition, self-thinning, biomass and NPP of a Cryptomeria japonica forest stand: A simulation study based on a stand-scale process-based forest model	Ecological Modelling	220(18)	2272-2280	2009
Mishima, S. Endo, A. Khoyama, K.	Recent trends in phosphate balance nationally and by region in Japan	Nutrient Cycling in Agroecosystems	86(1)	69-77	2010

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Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Ishitsuka, N.	Investigation of possibility using PAL-SAR to monitor changes in rice paddy fields	Journal of Integrated Field Science	6	29-36	2009
Shibayama, M. Sakamoto, T. Takada, E. Inoue, A. Morita, K. Takahashi, W. Kimura, A.	Continuous monitoring of visible and near-infrared band reflectance from a rice paddy for determining nitrogen uptake using digital cameras	Plant Production Science	12(3)	293-306	2009
Shibayama, M. Sakamoto, T. Homma, K. Okada, S. Yamamoto, H.	Daytime and nighttime field spectral imagery of ripening paddy rice for determining leaf greenness and 1000-grain weight	Plant Production Science	12(3)	307-318	2009
Yoshitake, H. Niisato, T.	A redescription of <i>Euryarthrum hastigerum</i> Holzschuh (Coleoptera, Cerambycidae), with description of its new relative from Kalimantan, Indonesia	Elytra	37(1)	155-163	2009
Sakamoto, T. Cao, P. V. Kotera, A. Nguyen, K. D. Yokozawa, M.	Analysis of rapid expansion of inland aquaculture and triple rice-cropping areas in a coastal area of the Vietnamese Mekong Delta using MODIS time-series imagery	Landscape and Urban Planning	92(1)	34-36	2009
Sakamoto, T. Cao, P. V. Nguyen, N. V. Kotera, A. Yokozawa, M.	Agro-ecological interpretation of rice cropping system in flood-prone areas using MODIS imagery	Photogrammetric Engineering and Remote Sensing	75(4)	413-424	2009
Sakamoto, T. Cao, P. V. Kotera, A. Nguyen, K. D. Yokozawa, M.	Detection of yearly change in farming system in the Vietnamese Mekong Delta from MODIS time-series imagery	JARQ-Japan Agricultural Research Quarterly	43(3)	173-185	2009
Mishima, S. Endo, A. Kohyama, K.	Nitrogen and phosphate balance on crop production in Japan on national and prefectural scales	Nutrient Cycling in Agroecosystems	87(2)	159-173	2009
Henry, C. S. Mochizuki, A. Nakahira, K. Haruyama, N. Nomura, M.	Courtship songs of <i>Chrysoperla nipponensis</i> (Neuroptera: Chrysopidae) delineate two distinct biological species in Eastern Asia	Annals of The Entomological Society of America	102(5)	747-758	2009
Umemoto, S. Odake, Y. Takeuchi, T. Yoshida, S. Tsushima, S. Koitaabashi, M.	Blue mold of tomato caused by <i>Penicillium oxalicum</i> in Japan	Journal of General Plant Pathology	75(5)	399-400	2009
Majid, O. Ahmad, W. Araki, M. Minaka, N.	Molecular characterisation of some species of <i>Mylonchulus</i> (Nematoda: Mononchida) from Japan and comments on the status of <i>Paramylonchulus</i> and <i>Pakmylonchulus</i>	Nematology	11(3)	337-342	2009

Author(s)	Title	Journal Title	Vol.(No.)	Pages	Year
Matsumura, H. Kitajima, H. Akada, S. Abe, J. Minaka, N. Takahashi, R.	Molecular cloning and linkage mapping of cryptochrome multigene family in soybean	The Plant Genome	2(3)	271-281	2009
Kawamura, K. Betteridge, K. Sanches, I. D. Tuohy, M. P. Costall, D. Inoue, Y.	Field radiometer with canopy pasture probe as a potential tool to estimate and map pasture biomass and mineral components: a case study in the Lake Taupo catchment, New Zealand	New Zealand Journal of Agricultural Research	52	417-434	2009
Arai, H. Saito, K. Samson, B. Songyikhangsuthor, K. Homma, K. Shiraiwa, T. Kiyono, Y. Inoue, Y. Horie, T.	Yield response of indica and tropical japonica genotypes to soil fertility conditions under rainfed uplands in northern Laos	Field Crops Research	112 (2-3)	141-148	2009
Takata, Y.	Analysis of spatial and temporal variation of soil organic carbon budget in northern Kazakhstan	JARQ-Japan Agricultural Research Quarterly			2010
Tani, N. Tsumura, Y. Kado, T. Taguchi, Y. Lee, S. L. Muhammad, N. Ng, K. K. Numata, S. Nishimura, S. Konuma, A. Okuda, T.	Paternity analysis-based inference of pollen dispersal patterns, male fecundity variation, and influence of flowering tree density and general flowering magnitude in two dipterocarp species	Annals of Botany	104(7)	1421-1434	2009
Nakagami, K. Hojito, M. Itano, S. Kohyama, K. Miyaji, T. Nishiwaki, A. Matsuura, S. Tsutsumi, M. Kano, S.	Soil carbon stock in typical grasslands in Japan	Grassland Science	55(2)	96-103	2009

Appendix

4. Patents

- 1) Pesticide degradation method with novel pesticide degradation bacteria and bacterial consortium
Patent number: 4363624
Date of application: July 9, 2003
Date of registration: August 28, 2009
Inventors: Kazuhiro Takagi and Naoki Harada
 - 2) Pesticide degradation bacteria and cleanup method
Patent number: 4395712
Date of application: August 26, 2003
Date of registration: October 30, 2009
Inventors: Kazuhiro Takagi and Naoki Harada
 - 3) Continuous micro liquid atomization equipment and standard gas generator with it
Patent number: 4332625
Date of application: December 12, 2003
Date of registration: July 3, 2009
Inventors: Yuso Kobara and Shozo Endo
 - 4) PDR primer to distinguish insecticide-resistant cotton aphid
Patent number: 4410620
Date of application: June 28, 2004
Date of registration: November 20, 2009
Inventors: Ken Suzuki
 - 5) Plant growth regulator, cinnamic acid derivatives, and their production method
Patent number: 4415106
Date of application: August 24, 2004
Date of registration: December 4, 2009
Inventors: Syuntaro Hiradate, Hiroshi Araya and Yoshiharu Fujii
 - 6) Methods for reductive disinfection of soil, reductive disinfectants for soil, methods for wetting disinfection of soil, wetting disinfectants for soil, and systems for drenching soil with disinfectants
Patent number: 4436426
Date of application: September 18, 2008
Date of registration: January 8, 2010
Inventors: Yoso Kobara
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5. Collaborative Research

Collaborative Research	Number
Private Enterprise	12
University	7
Other Independent Administrative Institution	7
Prefectural Research Institution	2