

Title of Papers Presented at the 115th Meeting of  
The JAPANESE SOCIETY OF BREEDING  
Held at Tsukuba International Congress Center, Tsukuba, Ibaraki, Japan  
March 27-28, 2009

**Poster presentations**

- B001A Breeding of a new rice cultivar "Sainohohoemi" with disease and pest combined resistance, excellent palatability for double cropping○M. Arakawa1,N. Oooka1,S. Noda1,T. Minoda1,H. Ishii1,Y. Takei2,T. Ueno3,K. Tokura1,K. Saito1,K. Watanabe4(1.Saitama Pref. Agr. Fores. Res. Ctr., Crops and Field Lab.2.Saitama Pref. Honjyo Agr. Fores. Promo. Ctr.3.Saitama Pref. Agricultural Management Support Division4.Saitama Pref. Agr. Fores. Res. Ctr., Crops and Field Lab. ret.)
- B002B Development of DNA-marker-aided selection technology for rice blast field resistance derived from upland rice cultivar Sensho○N. Saka1,S. Fukuoka2,T. Terashima1,I. Endo1,I. Ando3,T. Ando4,M. Yano2(1.MARI., Aichi Agric. Res. Ctr.2.NIAS3.NARO4.STAFF)
- B003C A New Glutinous Rice Variety "Chubu-mochi 110" for Rice Cake○T. Terashima1,N. Saka1,S. Kudo2,T. Kato3,T. Otake2,K. Sugiura2,I. Endo2,Y. Nakajima3,M. Hayashi2,M. Shiota2,K. Ito4,H. Kato1,M. Inoue2(1.MARI, Aichi Agric. Res. Ctr.2.Aichi Agric. Res. Ctr.3.Aichi Coll. Agric.4.Toyota-Kamo Agric. Fores. Fishe. Office)
- B004D Breeding of new rice cultivar 'Akisakari'.K. Tomita1,H. Horiuchi2,○A. Kobayashi1,M. Tanoi1,I. Tanaka3,t. Minobe1,K. Kanda4,T. Hayashi1,K. Terada2(1.Fukui Agr. Exp. Stn.2.Former Fukui Agr. Exp. Stn. 3.Fukui Pref. Reinan Prom. Office4.Fukui Agr. Ext. Cen.)
- B005A The folage rice lines with less grain are improved sugar contents of straw and lodging resistance.○ K. Matsushita1,N. Kanda2,M. Takakuwa2,S. Kouno2,S. Shinde2,H. Fujimoto1,S. Iida1,O. Ideta1,Y. Sunohara1(1.WeNARC2.Hiroshima Pref.Tech.Res.Ins.Livest.Tech.Res.Cent.)
- B006B Iron biofortification by enhancing iron uptake and translocation in rice plants○H. Masuda1,T. Kobayashi1,Y. Ishimaru1,K. Usuda1,M. Suzuki1,K. Morikawa2,M. Saigusa2,M. Takahashi1,K. Higuchi3,H. Nakanishi1,T. Yoshihara4,F. Takaiwa5,S. Mori1,N. Nishizawa1(1.Graduate School of Agricultural and Life Sciences, University of Tokyo2.Graduate School of Agricultural Science, Tohoku University3.Department of Applied Biology and Chemistry, Tokyo University of Agriculture4.Central Research Institute of Electric Power Industry5.National Institute of Agrobiological Sciences)
- B007C QTL analysis of seeding emergence in rice variety Ta Hung Ku.○H. Ohta,H. Maeda,H. Kato,H. Nemoto(The National Institute of Crop Science)
- B008D A new multiple pests resistance rice variety "Aichi 108" with good grain quality and excellent taste ○M. Nakamura1,N. Sugiura1,T. Kato2,N. Saka3,T. Tsuji1,T. Funao4,Y. Nakazima2,T. Touyama5,S. Kudo1,Y. Hamada1,K. Fujii1(1.Aichi Pref. Agric. Res. Ctr.2.Aichi Pref. College of Agric.3.MARI,Aichi Pref. Agric. Res. Ctr.4.Chita Agric. Forestry and Fisheries Office5.Toyotakamo Agric. Forestry and Fisheries Office)
- B009A Rice new germplasm Minihikari is super short-culmed Koshihikari containing useful semidwarf genes sd1 and d60.○M. Tomita(Mol. Genet. Lab., Fac. Agr., Tottori U.)
- B010B Relationship between grain shape and occurrence of white-back kernels under high temperature during the ripening period○K. Tomita,A. Kobayashi(Fukui Agri.Exp.Stn.)
- B011C DNA Analysis in relation to flavour of aroma in rice varieties○A. Chau Thi,K. Win ,H. Yutaka(Tokyo University of Agriculture and Technology)
- B012D Gene expression atlas of rice development○Y. Sato,B. Antonio,R. Motoyama,Y. Nagamura(Genome Resource Center, NIAS)
- B013A Development and evaluation of CSSLs carrying overlapping chromosome segments of rice cultivar Habataki in a genetic background of cultivar Koshihikari○K. Murata,T. Ebitani(Toyama Pref. Agr. Fores. Fish. Res. Cent.)
- B014B Studies on the tolerance mechanism of Puccinellia tenuiflora. (3) Generation of rice plants expressing Na<sup>+</sup>/H<sup>+</sup> antiporters (PutNHX,PutNHA).○N. Abe1,S. Nishiuchi1,D. Tsugama1,S. Liu2,T. Takano1(1.ANESC, U.Tokyo2.Northeast Forest. U., China)
- B015C Analysis of rice varietal differences with chlorophyll fluorescence○I. Kasajima1,K. Takahara1,M. Kawai2,H. Uchimiya1,3(1.Inst. Mol. Cell. Biol., U. Tokyo2.Grad. Sch. Sci. Engin., Saitama U3.Iwate Biotech. Res. Center)

- B016D Population Structure in Japanese Rice Cultivars.○M. Yamasaki1,O. Ideta2(1.Food Resources Education and Research Ctr., Grad. Sch. Agric. Sci., Kobe U.2.Natl. Agr. Res. Cent. Western Region)
- B017A Evaluation of genetic diversity of wild rice populations in Myanmar 3. H. Ikarashi1,○R. Shishido1,K. Nomura1,M. Akimoto2,T. Ishii3,T. Sato4,S. Minn5,S. Than5,H. Tin5(1.Coll.Bioresource Sci., Nihon U.2.Obihiro U. Agr. Vet. Med.3.Fac. Agr., Kobe U.4.Grad.Sch. Life Sci., Tohoku U.5.Dept. Agr. Res., Min. Agr. & Irri., Myanmar)
- B018B Positive researches for the establishment of on-farm conservation system in wild rice genetic resources II. Effects of disturbance on population structure.○M. Akimoto1,R. Shishido2,T. Ishii3,S. Minn4,T. U4,H. Tin4,T. Sato5(1.Obihiro U. Agr. Vet. Med.2.Coll. Bioresource Sci., Nihon U.3.Fac. Agr. Kobe U.4.Ministry of Agr. Irrig., Myanmar5.Grad. Sch. Life Sci., U. Tohoku)
- B019C Molecular evolution of PolA1 gene in the Oryza AA genome species○S. Makabe1,H. Takahashi2,I. Nakamura2(1.Fac. Hort., Chiba U.2.Grad. Sch. Hort., Chiba U.)
- B020D Characterization of blast resistance for upland New Rice for Africa (NERICA) varieties○A. Kawasaki1,A. Fukuo1,K. Konisho2,N. Hayashi3,Y. Fukuta1(1.JIRCAS2.Nagano Prefecture3.NIAS)
- B021A Test of artificial selection for Semidwarf1 during japonica rice domestication○K. Asano1,M. Yamasaki2,K. Miura1,J. Wu3,K. Ebana3,T. Matsumoto3,H. Kitano1,M. Matsuoka1,M. Ashikari1(1.Bioscience and Biotechnology Center ,Nagoya University2.Food Resources Education and Research Ctr., Grad. Sch. Agric. Sci., Kobe U.3.National Institute of Agrobiological Sciences)
- B022B New repetitive sequence accumulated in wild rices belonging section Granulata of the genus Oryza ○S. Nakayama(Plant Genetic Engineering Research U, Div. Plant Sci., NIAS)
- B023C Origin of indica waxy strains by analysing SSR polymorphisms neighbouring waxy gene among rice landraces in Northern Laos. ○C. Muto1,R. Ishikawa2,K. Kawano3,C. Bounphanousay4,T. Tanisaka5,Y. Sato6(1.Uni.Grad.Sch.Agric.Sci.Gifu Univ.2.Facul.Agric.Life Sci.Hirosaki Univ.3.Kagoshima Pref. Muse.Cul.Reimeikan4.Agr. Res.Cent.,Lao P.D.R.5.Kyoto Univ.6.RIHN)
- B024D Genetic diversity of upland rice varieties in Indonesia○S. Mr1,A. Hairmansis1,A. Ms1,E. Lubis1,S. Dr2,S. Dr1,Y. Fukuta3,B. Kustiano1(1.ICRR2.CAIRT3.JIRCAS)
- B025A Genetic characterization of NERICA varieties. IV Association analyses between segments from O. glaberrima and agronomic traits in different cultivate conditionsA. Fukuo1,S. Yanagihara1,H. Tsunematsu2,S. Namai1,K. Konisho3,○Y. Fukuta1(1.JIRCAS2.WARDA3.Nagano Prf.)
- B026B Cell death induced by the hybrid weakness between rice varieties carrying Hwc2 and a rice variety "Jamaica"○Y. Okiyama1,K. Ititani2,M. Fujita3,N. Kurata3,N. Watanabe1,T. Kuboyama1(1.Col. Agr., Ibaraki. U.2.Fac. Agr. , Kagoshima U.3.Natl. Inst. Genet.)
- B027C Genetic variation of low temperature germinability in rice among cultivars from Europe○N. Iwata,K. Fujino(Hokuren)
- B028D Analysis of transgenic rice plants expressing NAD biosynthesis-related gene○K. Takahara1,I. Kasajima1,H. Onodera2,S. Toki2,M. Kawai3,H. Uchimiyama1,4(1.IMCB, U. Tokyo2.Div. Plant. Sci. NIAS3.Dep. Environ. Sci. Tech. Saitama U4.IBRC)
- B029A Comparison of T-DNA integration efficiency between rice cultivars, Nipponbare and Kasalath○H. Saika,S. Toki(NIAS)
- B030B QTL analysis of morphological traits related with the yield potential in rice○T. Yamamura1,Y. Shibata2,M. Ikeda3,T. Takashi4,K. Doi3,M. Ashikari1,M. Matsuoka1,H. Kitano1(1.Biosci. Biotech. Ctr., Nagoya U.2.Grad. Sch. Educ., Aichi U. Educ.3.Grad. Sch. Bioagr. Sci., Nagoya U.4.HRI-JP)
- B031C Molecular cloning and characterization of nyc3 gene in rice.○R. Morita1,Y. Sato2,Y. Masuda3,M. Nishimura1,M. Kusaba3(1.NIAS, IRB2.NIAS3.Grad. Sch. Sci., Hiroshima U.)
- B032D Improved protocols for genetic transformation of NERICA.○T. Ishizaki1,2,T. Kumashiro1(1.Biological Resources Division, JIRCAS2.TARF, JIRCAS)
- B033A Effect of temperature on cleistogamy of the rice spw1-cls mutant.○S. Ohmori1,H. Satoh2,Y. Nagato3,H. Yoshida1(1.Hokuriku Research Center, NARC2.Grad. sch. Fac. Agric., U. Kyushu3.Grad. Sch. Agric. Life Sci., U. Tokyo)
- B034B QTL analysis of rice panicle structure using the image analyzing method.○M. Ikeda1,Y. Hirose2,T. Yamamura3,H. Kitano3(1.Grad. Sch. Bioagr. Sci., Nagoya U.2.Honda R&D Co., Ltd.3.Biosci. Biotech. Ctr., Nagoya U.)

- B035C The studies on rapid-gene analysis in order to isolate the mutation-related genes.○H. Takehisa1,Y. Hayashi1,H. Ichida1,Y. Miyazawa2,H. Toukairin2,Y. Nagamura3,T. Satou2,T. Abe1(1.RIKEN Nishina Cent.2.Grad. Sch. Life. Sci., Tohoku U.,3.NIAS)
- B036D Novel quantitative trait locus involving semi-dwarfism derived from Japanese rice varieties.○K. Hori1,K. Ebana1,Y. Takeuchi2,M. Yano1,T. Yamamoto1(1.NIAS2.NICS)
- B037A A systematic elucidation for the functions of rice transcription-factors by using cDNA-overexpressing rice plants○A. Horikawa1,K. Okada1,T. Tsuchida-Mayama1,A. Miyao1,T. Nagata1,S. Kikuchi1,N. Mitsuda2,Y. Takiguchi2,K. Matsui2,M. Takagi2,H. Nakamura1,3,M. Hakata1,4,K. Amano5,T. Ichikawa5,M. Matsui5,Y. Nagamura1,H. Hirochika1,H. Ichikawa1(1.NIAS2.AIST3.Univ. Tokyo4.NARO5.RIKEN)
- B038B Characterization of salt-tolerant mutants of rice by C-ion beam irradiation.○Y. Hayashi1,H. Takehisa1,Y. Kazama1,H. Ichida 1,S. Ohbu1,H. Tokairin1,S. Miyamoto2,S. Takada2,A. Hokura 2,I. Nakai2,T. Sato3,T. Abe1(1.RIKEN, Nishina Cent.2.Fac. of Sci. Tokyo Univ. of Sci.3.Grad. Sch. Life Sci., Tohoku U.)
- B039C Identification of genes involved in aerenchyma formation in a primary root of maize during waterlogged conditions○I. Rajhi1,H. Takahashi1,K. Shiono1,T. Ji2,R. Watanabe1,K. Ohtsu2,3,A. Kanno4,P. Schnable2,N. K. Nishizawa1,N. Tsutsumi 1,M. Nakazono1(1.Graduate School of Agricultural and Life Science, Univ. Tokyo, 2.Department of Agronomy, Iowa State Univ,3.Graduate School of Science, Univ. Tokyo,4.Graduate School of Life Sciences, Tohoku Univ)
- B040D Functional roles of raffinose under cold stress in transgenic rice plants overproducing wheat galactinol synthase.○E. Shimosaka,K. Ozawa(Natl.Agr.Res.Cent.Hokkaido., NARO)
- B041A Two NBS-LRR class genes are required to confer Pikm-specific rice blast resistance○I. Ashikawa1,N. Hayashi2,H. Yamane3,H. Kanamori3,J. Wu2,T. Matsumoto2,K. Ono2,M. Yano2(1.NARO/Nat. Inst. Crop Sci.2.Nat. Inst. Agrobiol. Sci.3.STAFF Inst.)
- B042B Functional analysis on ABC transporter involved in waterlogging tolerance in rice.○M. Ando1,K. Shiono1,N. Shitan2,M. Nagano3,H. Takahashi1,M. Nakamura1,J. Abe1,M. Kawai4,H. Uchimiya3,N. Tsutsumi1,I. Takamure5,N. Nishizawa1,K. Yazaki2,M. Nakazono1,K. Kato6(1.Grad. Sch. Agric. Life Sci., U.Tokyo2.RISH., U.Kyoto3.Inst. Mol. Cel. Biosci.,U.Tokyo4.Dep. Environ. Sci. Human Engin., U.Saitama5.Grad. Sch. Agr., U.Hokkaido6.Obihiro Univ. Agric. & Vet. Med)
- B043C Rice promoted oxygen transportation toward root tip to acclimate waterlogged condition○K. Shiono1,S. Ogawa3,M. Ohta3,T. Fujimura3,H. Isoda4,Y. Abe4,T. Colmer5,N. Tsutsumi1,M. Nakazono1(1.Grad. Sch. Agric. Life Sci., U.Tokyo2.JOCV3.Grad. Sch. Life Environ. Sci., U. Tsukuba4.ARENA, U. Tsukuba5.Fac. Nat. Agric. Sci., U. West. Aus.)
- B044D Mapping of QTLs for field resistance to rice blast in the Philippine rice variety Inggoppor-tinawon.○R. Mizobuchi1,S. Fukuoka1,S. Yamamoto1,H. Sato2,I. Ando3,T. Imbe4,M. Yano1(1.Natl. Inst. Agrobiol. Sci.2.Ministry of Agriculture, Forestry and Fisheries3.National Institute of Crop Science4.National Agricultural Research Center for Kyushu Okinawa Region)
- B045A Suppression of cell division and elongation in coleoptile of rice reduced adh activity (rad) mutant. ○H. Takahashi1,H. Saika2,H. Matsumura3,Y. Nagamura2,N. K. Nishizawa1,N. Tsutsumi1,M. Nakazono1(1.Grad. Sch. Agr. Life. Sci., Univ. Tokyo2.NIAS3.Iwate. Biotech. Res. Cent.)
- B046B The effects of pyramiding QTLs for cold tolerance at the booting stage in rice.○M. Kuroki,K. Saito,S. Matsuba,N. Yokogami,H. Shimizu(Natl. Agr. Res. Ctr. Hokkaido, NARO)
- B047C Functional Analysis of the Rice Plasma Membrane-Localized Receptor Kinase like Protein, OsCMPK1Y. Watanabe1,Y. Nishino1,H. Kobayashi1,T. Shinkai1,H. Shimada1,2,○T. Sasaki1,2(1.Dept. Biol. Sci. & Technol, Tokyo U. Sci.2.Inst. Sci. & Technol., Tokyo U. Sci)
- B048D Cadmium uptake characteristics of rice lines with low cadmium uptake.○M. Yamaguchi,R. Kaji,K. Nakagomi,H. Sato(NARCT)
- B049A Evaluation of QTLs, the 'Awa-akamai' alleles increasing emergence of seedling in soil at low temperature, using near isogenic lines○T. Yamaguchi1,m. omoteno2,t. ebitani1,h. sakui1(1.Toyama.Pref.Agr.Fores.Fish.Res.Cent.2.Toyama.Pref.Agr.food.prod.div.)
- B050B Comprehensive analysis of gene expression related to efficient oxygen transportation toward root tip under the waterlogged condition○S. Yamazaki1,K. Shiono1,I. Malik1,M. Ando1,Y. Nagamura2,N. Nishizawa1,T. Colmer3,N. Tsutsumi1,M. Nakazono1(1.Grad.Sch.Agric.LifeSci., U.Tokyo2.Natl.Inst.Agrobiol. Sci.3.Fac. Nat. Agric. Sci., U. Western )

- B051C Genetic analysis of rice blast resistance genes, *Pia* and *Pi7(t)*, using near isogenic lines with US-2 genetic background○Y. Koide<sup>1,2</sup>,N. Hayashi<sup>3</sup>,I. Ando<sup>4</sup>,A. Kawasaki<sup>2</sup>,M. Telebanco-Yanoria<sup>1</sup>,N. Kobayashi<sup>1,2</sup>,Y. Fukuta<sup>2</sup>(1.International Rice Research Institute2.JIRCAS3.NIAS4.NICS)
- B052D Phosphorus recycling in rice leaf under Phosphorus deficiency○A. Shimizu<sup>1</sup>,A. Katayama<sup>1</sup>,H. Hasegawa<sup>1</sup>,K. Ochiai<sup>2</sup>,T. Matoh<sup>2</sup>(1.Sch. Environ. Sci., Univ. Shiga Pref.2.Grad. Sch. Agr., Kyoto Univ.)
- B053A Physiological analysis of the *Chloris virgata* and rice metallothionein1 transgenic *Arabidopsis*. ○S. Nishiuchi<sup>1</sup>,S. Liu<sup>2</sup>,T. Takano<sup>1</sup>(1.ANESC, U.Tokyo2.Northeast Forestry University, China )
- B054B Metabolic adaptation and stress tolerance in rice overexpressing cell death suppressor *Bax* inhibitor-1.○T. Ishikawa<sup>1,2</sup>,Y. Ogawa<sup>1</sup>,K. Tamura<sup>1</sup>,H. Uchimiy<sup>1,3</sup>,M. Kawai<sup>1,2</sup>(1.Inst. Mol. Cell. Biosci., U.Tokyo2.Grad. Sch. Sci. Eng., Saitama Univ.3.Iwate Biotech. Res. Ctr.)
- B055C A major QTL increasing cadmium translocation of rice.K. Tezuka<sup>1</sup>,H. Miyadate<sup>1</sup>,K. Kato<sup>2</sup>,T. Kawamoto<sup>2</sup>,I. Kodama<sup>2</sup>,S. Masaki<sup>2</sup>,H. Satoh<sup>3</sup>,M. Yamaguchi<sup>3</sup>,N. Satoh-Nagasawa<sup>1</sup>,A. Watanabe<sup>1</sup>,H. Takahashi<sup>1</sup>,K. Sakurai<sup>1</sup>,○H. Akagi<sup>1</sup>(1.Fac. Biores. Sci., Akita Pref. Univ.2.Akita Agr. Exp. Sta.3.NARCT)
- B056D Screening for resistance to *C. higginsianum* in 20,000 transgenic *Arabidopsis* overexpressing rice full-length cDNA and characterization of the resistant lines.○S. Maeda<sup>1</sup>,J. Dubouzet<sup>1</sup>,M. Ohtake<sup>1</sup>,S. Sugano<sup>1</sup>,N. Hayashi<sup>1</sup>,T. Ichikawa<sup>2</sup>,Y. Kondou<sup>2</sup>,H. Kuroda<sup>2</sup>,Y. Horii<sup>2</sup>,M. Matsui<sup>2</sup>,K. Oda<sup>3</sup>,H. Takatsuji<sup>1</sup>,H. Hirochika<sup>1</sup>,M. Mori<sup>1</sup>(1.National Institute of Agrobiological Sciences2.RIKEN,PSC 3.RIBS Okayama)
- B057A Expression of globulin-like protein and stromal heat shock protein 70 among sake-brewing rice cultivars.○J. Kamara,T. Sasanuma,T. Abe(Fac. Agr. Yamagata U.)
- B058B Mode of segregation on heated gelatinization properties derived from upland rice 'Hiderishirazu D' ○K. Okamoto,T. Manabe,M. Hirayama,H. Hirasawa(IBARAKI Agricultural Center Plant-Biotechnology Institute)
- B059C Development of CoQ10-enriched rice from giant embryo lines○S. Takahashi<sup>1</sup>,O. Toshikazu<sup>1</sup>,S. Iida<sup>2</sup>,Y. Sunohara<sup>2</sup>,K. Matsushita<sup>2</sup>,H. Maeda<sup>3</sup>,Y. Taneani<sup>4</sup>,K. Kawai<sup>4</sup>,K. Miyahara<sup>1</sup>,T. Enomoto<sup>5</sup>,H. Shimada<sup>5</sup>,M. Kawamukai<sup>6</sup>,K. Kadowaki<sup>1</sup>(1.NIAS2.Natl. Agr. Res. Cent. Western Reg.3.Natl. Inst. Crop Sci.4.Kumiai Chem. Indust. Co.5.Tokyo Univ. of Sci.6.Shimane Univ.)
- B060D Rice bread properties made from high yield rice cultivars○N. Aoki,T. Umemoto,Y. Suzuki(National Institute of Crop Science)
- B061A Genetic variation and distribution of rice seed lipoxxygenase-3 deficiency involved in the generation of stale flavorK. Shirasawa<sup>1,2</sup>,T. Nagamine<sup>1</sup>,K. Ise<sup>3</sup>,○Y. Suzuki<sup>1</sup>(1.Natl. Inst. Crop Sci.2.Present: Kazusa DNA Res. Inst.3.Jap. Int. Res. Cent. Agric. Sci.)
- B062B Characterization of reduced culm number 4 mutant in rice○M. Ariyaratne<sup>1</sup>,I. Takamure<sup>2</sup>,K. Kato<sup>1</sup>(1.Obihiro U.Agr. & Vet.Med.,2.Grad.Sch.Agr., Hokkaido U.,)
- B063C Search for the candidate gene of *dp1* (depressed palea-1) locus in rice.A. Chiba,H. Nagano,Y. Sano, ○I. Takamure(Grad. Sch. Agr., Hokkaido U.)
- B064D Analysis of TAWAWA4 gene controlling the panicle branching in rice.○N. Yasuno<sup>1</sup>,K. Ikeda<sup>2</sup>,S. Iida<sup>3</sup>,Y. Nagato<sup>1</sup>,M. Maekawa<sup>2</sup>,J. Kyozuka<sup>1</sup>(1.Graduate school of Agriculture and Life Sciences, University of Tokyo2.Research Institute for Bioresearch, Okayama University3.National Institute for Basic Biology)
- B065A The TIFY/ZIM domain containing protein of rice regulates plant growth and seed size through JA signaling.○M. Hakata<sup>1,2</sup>,M. Muramatsu<sup>2</sup>,Y. Oka<sup>2,3</sup>,H. Nakamura<sup>2,4</sup>,M. Kajikawa<sup>2</sup>,N. Hara<sup>2</sup>,A. Tagiri<sup>2</sup>,M. kuroda<sup>1</sup>,S. Kiyota<sup>2</sup>,Y. Kawagoe<sup>2</sup>,S. Toki<sup>2</sup>,Y. Nagamura<sup>2</sup>,H. Hirochika<sup>2</sup>,H. Yamakawa<sup>1</sup>,M. Takano<sup>2</sup>,H. Ichikawa<sup>2</sup>(1.NARC2.NIAS3.Plant Gene Expression Center (CA, USA)4.Univ. of Tokyo)
- B066B Reduced activity of CDKB2 and polyploidy in rice.○M. Endo<sup>1</sup>,S. Nakayama<sup>1</sup>,M. Umeda<sup>2</sup>,S. Toki<sup>1</sup>(1.NIAS2.NAIST)
- B067C Identification of *Rcn1* controlling the outgrowth of tiller bud in rice○K. Kato<sup>1</sup>,N. Yasuno<sup>1</sup>,I. Takamure<sup>3</sup>,S. Kidou<sup>2</sup>,Y. Tokuji<sup>1</sup>,A. Ureshi<sup>1</sup>,A. Funabiki<sup>1</sup>,K. Ashikaga<sup>1</sup>,U. Yamanouchi<sup>4</sup>,M. Yano<sup>4</sup>(1.Obihiro U.Agr. & Vet. Med.2.Fac.Agr., Iwate U.3.Grad.Sch.Agr., Hokkaido U.,4.Natl.Inst.Agrobiol.Sci.)
- B067C Identification of *Rcn1* controlling the outgrowth of tiller bud in rice○K. Kato<sup>1</sup>,N. Yasuno<sup>1</sup>,I. Takamure<sup>3</sup>,S. Kidou<sup>2</sup>,Y. Tokuji<sup>1</sup>,A. Ureshi<sup>1</sup>,A. Funabiki<sup>1</sup>,K. Ashikaga<sup>1</sup>,U. Yamanouchi<sup>4</sup>,M. Yano<sup>4</sup>(1.Obihiro U.Agr. & Vet. Med.2.Fac.Agr., Iwate U.3.Grad.Sch.Agr., Hokkaido U.,4.Natl.Inst.Agrobiol.Sci.)

- B068D Root development in rice rcn1 mutant.○A. URESHI1,S. Kido 2,M. Ando3,K. Shiono3,M. Nakazono3,Y. Tokuji1,M. Kinoshita1,i. Takamura4,K. Kato1(1.Obihiro University of Agriculture and Veterinary Medicine2.Cryobiosystem Research Center, Faculty of Agriculture, Iwate University3.Graduate School of Agricultural and Life Sciences, The University of Tokyo4.Graduate School of Agriculture, Hokkaido University )
- B069A Diversity of panicle branching patterns in wild relatives of rice○S. Yamaki1,T. Miyabayashi1,M. Eiguchi1,K. Nonomura1,2,N. Kurata1,2(1.Natl. Inst. Genet.2.Sokendai, Life Science)
- B070B Mapping of QTL controlling seminal root length grown under various nitrogen concentrations in rice.○M. Obara1,T. Yamaya2,T. Takada1(1.Iwate Biotechnology Research Center2.Grad.Sch.Agric., U.Tohoku)
- B071C Diversification in flowering time due to tandem FT-like gene duplication, generating novel Mendelian factors in rice○N. Uwatoko1,W. Hagiwara1,A. Sasaki1,2,K. Matsubara1,3,Y. Sano1(1.Res. Fac. Agric., Hokkaido U.2.Honda Research Institute Japan3.Natl. Inst. Agrobiol. Sci.)
- B072D Functional analysis of Sdr4, a QTL controlling seed dormancy in rice.○K. Sugimoto1,Y. Takeuchi2,M. Kobayashi3,H. Sakakibara4,T. Hattori5,H. Hirochika1,M. Yano1(1.Natl. Inst. AgroBiol. Sci.2.Natl. Inst. Crop Sci.3.RIKEN BioResource Center4.RIKEN Plant Science Center5.Bioscience and Biotechnology Center)
- B073A Promoter analysis of a rice glutelin gene GluD-1 expressed in the starchy endosperm.○T. Kawakatsu,F. Takaiwa(NIAS)
- B074B QTL analysis for the withering of primary rachis-branches in Indica-type rice panicle.○H. Maeda,H. Ohta,H. Kato,H. Nemoto,I. Ando,M. Okamoto(National Institute of Crop Science, NARO)
- B075C Regulation of DROOPING LEAF gene expression and an attempt to reinforce the midrib in *Oryza sativa*○Y. Ohmori,H. Hirano(Grad. Sch. Sci., Univ. Tokyo)
- B076D Genetic analysis of phenotypic plasticity between cultivated and wild rice○K. Onishi,M. Maruoka,N. Ichikawa,A. Baruah,Y. Sano(Res. Fac. Agric. Hokkaido U.)
- B077A The effect of nitric oxide on growth and response to iron deficiency in rice. ○D. Tsugama,T. Takano(ANESC., U.Tokyo)
- B078B Genome-wide analysis of genes involved in carpel development in rice (*Oryza sativa*)○W. Tanaka,M. Abiko,H. Hirano(Dept. Biol. Sci., Grad. Sch. Sci., Univ. Tokyo)
- B079C The PETER PAN SYNDROME gene of rice regulates the juvenile-adult phase change and photomorphogenesis.○N. Tanaka1,J. Ito1,N. Sentoku2,Y. Nagato1(1.Graduate school of Agricultural and Life Sciences, The University of Tokyo2.National Institute for Agro-Environmental Sciences)
- B080D Analysis of mps1 mutant defective in maintenance of embryonic pattern formation in rice○H. Tazuke1,J. Itoh1,M. Kusaba1,2,H. Kitano3,Y. Nagato1(1.Grad.Sch.Agric.Life Sci., U.Tokyo2.Grad. Sch. Sci., Hiroshima U.3.Biosci. Biotech. Ctr., Nagoya U.)
- B081A Identification of ADL genes involved in the patterning of leaf and embryo in rice.○K. Hibara,J. Itoh,Y. Nagato(Grad.Sch.Agric.Life Sci., U.Tokyo)
- B082B A new F1 pollen sterility locus, S35, interacting with S24 found in an intersubspecific rice cross.○T. Kubo1,2,Y. Yamagata1,M. Eguchi1,A. Yoshimura1(1.Fac. Agr., Grad. Sch., Kyushu Univ.2.National Institute of Genetics)
- B083C Studies on mitochondrial DNA amount and mitochondrial morphology in rice egg cell○H. Takanashi1,T. Ohnishi1,M. Mogi1,T. Okamoto2,S. Arimura1,N. Tsutsumi1(1.Grad.Sch.Agric.Life Sci., U.Tokyo2.Dep. Biol. Sci., U. Tokyo Metropolitan)
- B084D Mapping of a reproductive barrier loci observed in a cross between Nipponbare and Kinandang puti ○M. Niihama,Y. Harushima,N. Kurata(National Institute of Genetics)
- B085A A comprehensive analysis of small RNAs in rice male reproductive organs○T. Fujioka1,K. Suwabe1,K. Yano2,F. Kaneko1,Y. Ogawa2,H. Kato2,A. Suzuki2,A. Makino3,T. Mae3,M. Endo4,M. Kawagishi4,G. Suzuki5,M. Watanabe1,6,7(1.Grad.Sch.Life Sci., Tohoku Univ.2.Fac.Agric., Meiji Univ.3.Grad.Sch.Agric.Sci., Tohoku Univ.4.Natl.Inst.Crop Sci.5.Osaka Kyoiku Univ.6.21st COE program, Iwate Univ.7.Fac.Sci., Tohoku Univ.)

- B086B Rice reproductive expression atlas: a comprehensive transcriptome analysis of plant reproductive development and its impact○M. Fujita1,Y. Horiuchi1,Y. Ueda1,2,Y. Mizuta1,2,T. Kubo1,2,K. Yano3,S. Yamaki1,K. Tsuda1,2,M. Niihama1,H. Kato3,S. Kikuchi3,K. Hamada3,T. Mochizuki1,N. Tsutsumi4,N. Kurata1,2(1.Plant Genetics Laboratory, National Institute of Genetics2.Department of Genetics, Graduate University for Advanced Studies3.Faculty of Agriculture, Meiji University4.Graduate School of Agricultural and Life Sciences, The University of Tokyo)
- B087C Molecular cloning and functional analysis of a rice gene essential for a transition to meiosis○K. Nonomura1,4,K. Takashima1,M. Nakano1,M. Eiguchi1,A. Miyao2,H. Hirochika2,N. Kurata3,4(1.Exp.Farm, Ntl. Inst. Genet.2.Ntl.Inst.Agr.Sci.3.Plant Genet., Ntl. Inst. Genet.4.Sch.LifeSci., Grad.Univ.Adv.Studies/SOKENDAI)
- B088D Mobilization of mPing and Pong transposons by interspecific cross between *Oryza sativa* and *O. glaberrima*○S. Karki,T. Tsukiyama,Y. Okumoto,G. Rizal,M. Teraishi,T. Tanisaka(Grad. Sch. Agr., Kyoto U.)
- B089A Application of Next Generation Sequencing technology to rice breeding○H. Matsumura1,A. Abe2,K. Yoshida1,T. Fujibe1,Y. Kiuchi2,R. Terauchi1(1.Iwate Biotechnology Research Center2.Iwate Agricultural Research Center)
- B090B QTL analysis for blast resistance in rice using recombinant inbred lines derived from cross between japonica and indica rice cultivar○A. Abe1,M. Takakusagi1,H. Matsumura2,Y. Kiuchi1,3,R. Terauchi2(1.Iwate Agric.Res.Ctr.2.Iwate Biotech.Res.Ctr.3.Dep.Agric.,Fores.and Fish., Iwate Pref.)
- B091C The latest Rice Genome Assembly, Nipponbare Pseudomolecule Build 5 constructed by IRGSP○Y. Ito,M. Hamada,M. Shibata,Y. Mukai,S. Katagiri,H. Ikawa,H. Kanamori,J. Wu,T. Sasaki,T. Matsumoto(Rice Genome Research Program, NIAS/STAFF)
- B092D Analysis of structure and expression of genes located on the QTL region for cool tolerance at the booting stage of the cool tolerant rice line Hokkai PL5. ○A. Kato,T. Ishizaki(Natl. Agric. Res. Center for Hokkaido Region)
- B093A Analysis of mutant panel lines by next generation sequencing○A. Miyao1,T. Ohnuma1,A. Takahashi2,H. Hirochika1(1.Div. of Genome Biodiversity Res., NIAS2.Div. of Plant Sci., NIAS)
- B094B QTL analysis for vigorous crown root formation under drought stress condition in an indica rice cultivar, KDML105H. Tomatsu1,M. Kano2,H. Kitano3,A. Yamauchi2,○Y. Inukai2(1.Fac. Agr., Nagoya U.2.Grad. Sch. Bioagr. Sci., Nagoya U.3.Biosci. Biotech. Ctr., Nagoya U. )
- B095C Regulation of genome dynamics by small RNAs derived from transposons in rice.M. Nosaka1,J. Itoh2,M. Abe2,Y. Nagato2,○Y. Sato1(1.Grad.Sch.Bioagric.Sci., Nagoya U.2.Grad.Sch.Agric.Life Sci., U. Tokyo)
- B096D Comparative study on the genomic sequences of functional genes related to grain size and grain number among the cultivated and wild rice○H. Yamane1,T. Ito1,H. Ishikubo1,K. Kamiya1,H. Yamagata1,H. Kanamori1,Y. Ito1,M. Shibata1,M. Hamada1,H. Ikawa1,J. Wu2,T. Sasaki2,T. Matsumoto2(1.Institute of the Society for Techno-innovation of Agriculture, Forestry and Fisheries (STAFF)2.National Institute of Agrobiological Sciences (NIAS))
- B097A Improvement of the dot-blot-SNP technique for efficient and cost-effective genotyping○S. Siokai1,K. Shirasawa1,2,T. Nishio1(1.Grad. Sch. Agr. Sci., Tohoku U.2.Present address: Kazusa DNA Res. Inst.)
- B098B An attempt to improve root system formation in rice through QTL analysis○T. Deguchi,S. Nakamura,A. Yamauchi,Y. Inukai(Grad. Sch. Bioagr. Sci., Nagoya U.)
- B099C Identification of genomic regions associated with segregation distortion in an intersubspecific cross of riceT. Kubo1,2,○Y. Harushima1,Y. Mizuta1,2,N. Kurata 1,2(1.Natl. Inst. Genet.2.Sch. Life Sci., Grad. Univ. Adv. Studies, SOKENDAI)
- B100D Map-based cloning for a new extremely dwarfing gene in rice.○T. Morikawa1,G. Dario2,K. Mishiba1,M. Yanase1(1.Grad.Sch.Life Envi.Sci, Osaka Pref.U.2.INIFAP, Mexico)
- B102B Molecular mapping of Rcn5 gene in rice○Y. Shimizu1,M. Tokui1,I. Takamura2,K. Kato1(1.Obihiro University of Agriculture and Veterinary Medicine 2.Graduate School of Agriculture,Hokkaido University)
- B103C Mapping of one QTL for amylose content on chromosome 2 in rice○Y. Takemoto-Kuno,Y. Takeuchi,H. Hirabayashi,I. Ando(Marker-Assisted Rice Breeding Research Team)
- B104D Unique genomic organizations revealed by the comparison of five mitochondrial genome sequences in riceS. Fujii,○K. Toriyama(Grad.Sch.Agric.Sci.,Tohoku U.)

- B105A Development of DNA markers to detect seed contamination and cross-pollination of Niigata rice cultivars.○H. Tabuchi1,N. Hashimoto2,K. Hayashi1,S. Abe2,H. Yoshida1(1.Hokuriku Res. Cen., NARO 2.Niigata Agr. Res. Ins.)
- B106B A novel gene, OsCEO1, as a superior conductor of endosperm organogenesis○H. Shimada1,2,K. She1,H. Kusano1,T. Imamura1,2,T. Sasaki1,2,H. Satoh3,T. Aoyama4,M. Hakata5,H. Yamakawa5(1.Dept. of Biol. Sci. & Technol., Tokyo Univ. of Science2.Res. Inst. Sci. Tech., Tokyo Univ. of Science3.Fac. Agric., Kyushu Univ.4.Inst. Chem. Res., Kyoto Univ.5.Hokuriku Branch Lab., Nat. Inst. Crop Sci.)
- B107C Development and evaluation of near-isogenic lines for a QTL controlling blast field resistance of Japanese upland rice variety Kahei.○T. Manabe,K. Okamoto,M. Hirayama,H. Hirasawa(Plant Biotechnology Institute IBARAKI Agricultural Center)
- B108D High efficiency Agrobacterium-mediated transformation system and the improvement of several new selection systems that utilize native plant genes.○K. Ozawa(Natl. Agri. Res. Ctr. Hokkaido Region )
- B109A Proteomic analysis of low-abundance proteins changing in the embryo-less half seeds of rice after treatment of gibberellic acid○H. Kuwata,S. Masaki,T. Yamada,K. Hamano,M. Kanekatsu(Grad. Sch. Agr., Tokyo U. Agr. Tec.)
- B110B Proteomic Analysis of proteins in developing seeds of rice○N. Sano,s. Masaki,t. Yamada,m. Kanekatsu(Fac.Agr.,Tokyo U.Agr.Tec.)
- B111C Over-expression of ascorbate recycling enzyme genes in transgenic rice plants○H. Yasuda(Natl.Agr.Res.Ctr. Hokkaido)
- B112D Breeding of new wheat lines with high resistance to wheat yellow mosaic virus ○S. Munekata1,S. Asayama1,K. Senda2,M. Satoh3,T. Suzuki1,H. Horita1,T. Takeuchi1(1.Hokkaido Pref.Central Agri.Exp.Stn.2.Hokkaido Pref.Kitami Agri.Exp.Stn.3.Satoh Professional Engineer's Office )
- B113A A CAPs marker for selection of proanthocyanidin-free gene ant28 in barley breeding○N. Haruyama,T. Sotome,M. Oozeki(Tochigi Pref. Agr. Exp. Stn.)
- B114B Breeding for Fusarium head blight resistance with marker-assisted backcrossing in winter wheat.○ S. Kobayashi1,T. Suzuki2,Y. Yoshimura1(1.Hokkaido Kitami Agricultural Experiment Station2.Hokkaido Central Agricultural Experiment Station)
- B115C Breeding of New Hard Wheat Variety 'Touzan42gou' with Bread-making Quality and Disease Resistance○Y. Uehara1,H. Maejima1,S. Hosono1,T. Ushiyama1,K. Nakamura2,N. Nakazawa3,N. Takahashi4,T. Arai1,T. Taniguchi5,K. Gotou6,h. Tabuchi7,N. Sakai1,M. Kubota8,T. Kondo7(1.Nagano Agr.Exp.Stn.2.Natl.Agr.Res.Cent.Tohoku3.Nanshin.Agr.Exp.Stn.4.Nagano Pref.Plant protection Assoc.5.Nagano Pref.Agr.Exp.Dvi.6.Nagano Animal Industry Exp.Stn.7.Nagano Agr.Ext.Cent.8.Nagano pref.Farmers Academy)
- B116D A new wheat cultivar nominee "Toukai 103" for Japanese noodle with better texture, color and dough property. ○K. Fujii1,T. Tsuji1,T. Yoshida1,T. Izawa1,W. Maruyama-Funatsuki2,T. Ikeda3(1.Aichi Pref. Agric. Res. Cent.2.NARCH3.WeNARC)
- B117A Breeding of 'CDC Reserve' -The characteristics and the breeding process of a new malting barley variety with sprouting tolerance in CANADA-○T. Hoki1,W. Saito1,T. Zhou1,S. Takahashi1,M. Kihara1,K. Hayashi1,B. Rossnagel2(1.BRDD, Sapporo Breweries Ltd.2.CDC, University of Saskatchewan, Canada)
- B118B Breeding of a new two-rowed hull-less barley cultivar "Yumesakiboshi" ○T. Yanagisawa1,T. Nagamine1,A. Takahashi1,T. Takayama2,Y. Doi3,H. Matsunaka4,M. Fujita5,M. Sugiura1,E. Domon 6,M. Ito7,N. Ishikawa1(1.WeNARC2.Tochigi Pref. Agr. Stn.3.Bio-oriented Technology Research Advancement Institution 4.NICS5.KONARC6.NIAS7.Shikoku Agr.Exp.Stn.)
- B119C Graphical genotype of spring wheat variety Haruyokoi ○A. Torada1,S. Ikeguchi1,D. Somers2(1.Hokuren Agricultural Research Institute2.Agriculture and Agri-Food Canada, Cereal Research Center)
- B120D Comparative genetic mapping of the genes for non-glaucousness in *Triticum durum* and *Triticum dicoccoides*.○K. Yoshiya,N. Watanabe,T. Kuboyama(College of Agr,ibaraki U.)
- B121A Genetic mapping of the gene for semi-compact spike mutant in hexaploid wheat.○A. Takayama1,N. Watanabe1,T. Kuboyama1,V. Melnik2,M. Rosova2,N. Goncharov3(1.College of Agr., Ibaraki U.2.Altai Res. Inst. Soil Manage. Plant Breed.3.Inst. Cytol. Genet.)
- B122B Genetic and breeding research of MIZUTA-KAMOJI (*Elymus humidus*), a wild Triticeae species indigenous to Japan, as a genetic resource for water tolerance○T. Sasanuma1,K. Takata2,K. Kawaguchi3,A. Oyanagi3(1.Fac.Agr., Yamagata U.2.WeNARC3.NICS)

- B123C Evolution and diversification of spring type wheat - Geographical variation in the sequence variation at Vrn-D1 locus.○S. Shibai,Y. Omura,Y. Akashi,H. Nishida,K. Kato(Grad. Sch. Nat. Sci. Tech., Okayama U.)
- B124D Diversity in spring-winter growth habit of barley germplasm.○M. Ishii,T. Mitsuura,S. Yasuda,K. Takeda(Res. Inst. Bioresources, U. Okayama)
- B125A Morphology and dormancy variation among grains in a spikelet of wild diploid wheat and its change through domestication.○S. Ohta,M. Sasaki,A. Kishimoto(Dep. Biosci., Fukui Pref. U.)
- B126B Analysis of tetraploid wheat genetic resources to diversify durum wheat○J. TAGUCHI1,T. BAN1,C. OTOBE2,H. MATSUNAKA2(1.Kihara Inst.Biol.Res.,Yokohama City U.2.National Institute of Crop Science,Independent Administrative Legal Entity)
- B127C Microsatellite monitoring around the Ba1 locus for blue grain introduced from alien species in near-isogenic lines of durum wheat○N. Watanabe1,E. Ogata1,T. Kuboyama1,Z. Peng 2, . Martinek 3(1.Coll. Agr. Ibaraki U.2.China West Normal U.3.Agrotest fyto, Ltd.)
- B128D Production of transgenic wheat plants overexpressing the sucrose:sucrose 1-fructosyltransferase gene (1-SST) and the cold inducible defensin gene (Tad1).○F. Abe1,M. Yoshida2,R. Imai2,K. Kawaguchi1,S. Nakamura1,M. Chono1,I. Ashikawa1(1.NICS2.NARCH)
- B129A Analysis of genotype for heading-time genes in two-row and six-row barley varieties of Japan and its relationship with heading time.○K. Kato1,A. Matsumoto1,T. Tonooka2,D. Ishihara1,E. Aoki2,T. Yoshioka2,Y. Akashi1,H. Nishida1(1.Grad. Sch. Nat. Sci. Tech., Okayama U.2.Natl. Inst. Crop Sci., NARO)
- B130B Structural variation in the 5' upstream region of photoperiod-insensitive genes Ppd-A1 and Ppd-B1 in wheatT. Yoshida,○H. Nishida,S. Shibai,Y. Akashi,K. Kato(Grad. Sch. Nat. Sci. Tech., Okayama U.)
- B131C Dough properties of transgenic wheat transformed with Cys-mutated low-molecular-weight glutenin genes○W. Funatsuki1,P. Tosi2,M. Ito1,H. Jones 2,C. Sparks2,A. Riley2,Z. Nishio1,T. Tabiki1,H. Yamauchi1,P. Shewry2(1.Nat. Agr. Res. Cen. Hokkaido 2.Rothamsted Research)
- B132D Molecular genetic analyses of a naked-caryopsis mutant induced in a covered barley cultivar Fibersnow○S. Taketa1,T. Yuo1,Y. Tsujino1,K. Nakamura2,H. Maejima3,S. Hosono3,T. Ushiyama3(1.Res. Inst. Bioresour., Okayama U.2.Tohoku Natl. Agric. Res. Ctr.3.Nagano Pref. Agr. Exp. Stn.)
- B133A Evaluation of waterlogging tolerance in new wheat cultivar nominee "Toukai 103".○T. Yoshida,T. Tsuji,K. Fujii(Aichi Pref. Agr. Res. Cent.)
- B134B Multiplexed quantitative analysis for trichothecene genes expression of Fusarium graminearum causing FHB.○T. Miyazaki,T. Ban(Kihara Inst.Biol.Res.,Yokohama City U.)
- B135C QTL regions in barley controlling seedling elongation of deep-sown seeds○H. Takahashi1,M. Noda1,J. Nagasawa1,N. Satoh-Nagasawa1,K. Tezuka1,K. Sakurai1,A. Watanabe1,H. Akagi1,K. Sato2,K. Takeda2(1.Fac. Biores. Sci., Akita Pref. U.2.Res. Inst. Biores., Okayama U.)
- B136D Consensus map of Fusarium head blight resistance QTL in wheat○T. Ban1,H. Buerstmayr2,J. Anderson3(1.Kihara Inst. Biol. Res., Yokohama City U.2.IFA-Tulln, BOKU-Univ. Vienna3.Dept. Agron. Plant Genet., U. Minnesota)
- B137A Characteristics of resistance lines to scald of barley in test field.○O. Yamaguchi,S. Ito(Hokuriku Res. Cent., NARC)
- B138B Effects of R gene genotypes on wheat seed dormancy.○H. Matsunaka1,4,M. Chono1,K. Noda2,E. Himi2,M. Fujita3,K. Kubo3,M. Kokubun4(1.NICS/NARO2.RIB.,Okayama Univ.3.KONARC/NARO4.Graduate School of Agricultural Science, Tohoku Univ.)
- B139C A SNP marker for the MRP gene as a candidate of FHB resistance QTL 'Qfhs.kibr-2DS' to reduce Fusarium mycotoxin accumulation in wheat grains.○S. Niwa1,R. Kikuchi2,H. Handa2,T. Ban1(1.Kihara Inst. Biol. Res., Yokohama City U.2.NIAS)
- B140D Proteomics Profile of Pre-Harvest Sprouting Wheat by using MALDI-TOF Mass Spectrometry○M. Abu Hena 1,k. kim1,K. shin1,H. Seo1,D. Shin1,S. Cho1,L. Hong3,C. Park2,H. Heo2,S. Woo1(1.Department of Crop Science, Chungbuk National University, Cheong-ju KOREA2.Honam Agricultural Research Institute, National Institute of Crop Science3.Center for Research Instruments and Experimental Facilities Chungbuk National University)
- B141A Relationship among flour yield, arabinoxylan content and flour particle size in waxy wheat lines.○C. Kiribuchi-Otobe,M. Seki,H. Matsunaka(National Institute of Crop Science)
- B142B Influence of the protein content in browning reaction after heat treatment of barley○T. Takayama1,A. Takahashi2,W. Shuichi2,T. Yanagisawa2(1.Tochigi. Pref. Agric. Exp. Stn2.WeNARC)

- B143C A comparison analysis of flour color among winter wheat variety "Kitahonami" and its related lines. ○T. Nishimura<sup>1</sup>, Y. Yoshimura<sup>1</sup>, G. Ishikawa<sup>2</sup>, K. Nakamura<sup>2</sup>, H. Ito<sup>2</sup>, H. Maejima<sup>3</sup>, Y. Uehara<sup>3</sup> (1. Hokkaido Pref. Kitami Agr. Exp. Stn. 2. Tohoku Natl. Agr. Res. Cent. 3. Nagano Agr. Exp. Stn.)
- B144D Research on flour milling evaluation in Japanese common wheats. 3. Measurement the degree of bran contamination in wheat flour for Kitami breeding lines. ○H. Nakamura<sup>1</sup>, Y. Yoshimura<sup>2</sup> (1. Nat. Inst. of Crop Sci., NARO 2. Kitami Agric. Exp. Sta.)
- B145A Relations among the quality characters of pearled barleys in the yield trials in northern Kanto district ○T. Nagamine<sup>1</sup>, T. Minoda<sup>2</sup>, Y. Terakado<sup>3</sup>, S. Oogoshi<sup>3</sup>, K. Tezuka<sup>4</sup>, T. Yanagisawa<sup>1</sup>, A. Takahashi<sup>1</sup>, K. Tokura<sup>2</sup> (1. WeNARC 2. Saitama Pref. Agric. Res. Cen. 3. Ibaraki Pref. Agric. Res. Cen. 4. Tochigi Pref. Agric. Res. Cen.)
- B146B Systematic Analysis of Biosynthetic Genes for Sterol in Barley Chromosome Addition Lines of Common Wheat ○J. Tang<sup>1</sup>, K. Kawaura<sup>1</sup>, T. Muranaka<sup>1</sup>, M. Isshiki<sup>1</sup>, T. Ikeda<sup>2</sup>, Y. Ogihara<sup>1</sup> (1. KIBR, Yokohama City U. 2. WeNARC)
- B147C Development of beta-glucanless NILs of barley and their growing properties and quality characteristics. ○T. Tonooka<sup>1,2</sup>, E. Aoki<sup>1</sup>, T. Yoshioka<sup>1</sup>, C. Kiribuchi-Otobe<sup>1,2</sup> (1. Natl. Inst. Crop Sci., NARO 2. Grad. Sch. Life Envir. Sci., U. Tsukuba)
- B148D Transgenic wheat suppressing  $\alpha/\beta$  gliadin genes produced by the RNAi silencing method. ○M. Saito<sup>1</sup>, M. Isshiki<sup>1</sup>, K. Kawaura<sup>1</sup>, Y. Ogihara<sup>1</sup> (KIBR, Yokohama City U.)
- B149A Proteomics Approach on Wild Types Wheat using Identification of Proteins by MALDI-TOF Mass Spectrometry ○K. Kim<sup>1</sup>, M. Abu Hena<sup>1</sup>, C. Park<sup>2</sup>, H. Heo<sup>2</sup>, K. Chung<sup>3</sup>, H. Kim<sup>1</sup>, Y. Cho<sup>1</sup>, B. Song<sup>1</sup>, C. Lee<sup>1</sup>, S. Jong<sup>1</sup>, S. Wool<sup>1</sup> (1. Department of Crop Science, Chungbuk National University, Cheongju 2. Breeding Resource Development, National Institute of Crop Science 3. Department of Agricultural Chemistry, Chungbuk National University, Cheongju)
- B150B Variation of the spike morphology in TILLING lines of common wheat ○M. Takaku<sup>1</sup>, M. Yasumoro<sup>1</sup>, K. Kawaura<sup>1</sup>, Y. Ogihara<sup>1</sup> (KIBR, Yokohama City U.)
- B151C Relationship between genotype of ABA 8'-hydroxylase and seed dormancy in Japanese wheat ○M. Chono<sup>1</sup>, H. Matsunaka<sup>1</sup>, M. Fujita<sup>2</sup>, M. Seki<sup>1</sup>, C. Kiribuchi-Otobe<sup>1</sup>, A. Torada<sup>3</sup>, N. Kawakami<sup>4</sup> (1. National Institute of Crop Science 2. National Agricultural Research Center for Kyushu Okinawa Region 3. Hokuren Agricultural Research Institute 4. Sch. Agric., Meiji U.)
- B152D Effects of *Aegilops tauschii* on the heading characters in synthetic hexaploid wheats ○Y. Fujiwara<sup>1</sup>, S. Shimada<sup>1</sup>, S. Takumi<sup>2</sup>, K. Murai<sup>1</sup> (1. Dep. Biosci., Fukui Pref. U. 2. Grad. Sch. Agric. Sci., Kobe U.)
- B153A Molecular study on regulation systems of WAP2 genes expression in polyploid wheat ○M. Yasumoro<sup>1</sup>, K. Kawaura<sup>1</sup>, M. Takaku<sup>1</sup>, Y. Ogihara<sup>1</sup> (KIBR, Yokohama City U.)
- B154B Analysis of the water channel gene family in wheat. ○S. Utsugi<sup>1</sup>, M. Maekawa<sup>1</sup> (Res. Inst. Biores., Okayama U.)
- B155C Comparative genomic analysis of S haplotypes in *Hordeum bulbosum* ○K. Kakeda<sup>1</sup>, K. Ohgishi<sup>1</sup>, Y. Ishihama<sup>1</sup> (Grad. Sch. Bioresour., Mie U.)
- B156D Imputation of ungenotyped SNPs that have been genotyped for a reference panel: its accuracy in predicting genome-wide SNP data of barley breeding lines ○H. Iwata<sup>1</sup>, J. Jannink<sup>2</sup> (1. NARC 2. USDA-ARS)
- B157A Genotyping of barley core collection accessions by whole genome SNP array. ○K. Sato<sup>1</sup>, K. Takeda<sup>1</sup> (RIB, Okayama U.)
- B158B Analyses of genomic structure and expression patterns of  $\alpha/\beta$ -gliadin genes in common wheat ○K. Kawaura<sup>1</sup>, J. Wu<sup>2</sup>, T. Matsumoto<sup>2</sup>, H. Kanamori<sup>3</sup>, S. Katagiri<sup>3</sup>, Y. Ogihara<sup>1</sup> (1. KIBR, Yokohama City U. 2. NIAS 3. STAFF Inst.)
- B159C Characterization of barley cDNAs encoding the beta-1,3:1,4-glucan synthase ○S. kidou<sup>1</sup> (Fac. Agr. Iwate U.)
- B160D Codominant markers to distinguish Wx-B1 null allele type and High molecular weight glutenin subunit Glu-D1d in Wheat ○T. Suzuki<sup>1</sup>, T. Takeuchi<sup>1</sup> (Hokkaido central agricultural experiment station)
- B161A Local adaptability of new Japanese barnyard millet variety with semidwarfness and low amylose content. ○S. Nakajo<sup>1</sup>, H. Yoshida<sup>1</sup>, Y. Oshimizu<sup>1</sup> (Iwate Agric. Res. Cent., Nor. Reg. Agric. Res. Inst.)
- B162B Genetic studies on Bambuseae species in Japan. XXVI. A study of Asian and American species as food plants of *Artona funeralis*, an injurious insect. ○M. Muramatsu<sup>1</sup> (None, Professor emeritus, U. Okayama)

- B163C Ribosomal DNA variation in foxtail millet landraces from Pakistan and Afghanistan ○K. Fukunaga<sup>1</sup>, K. Ichitani<sup>2</sup>, M. Kawase<sup>3</sup> (1. Fac. Life Environ. Sci., Pref. U. Hiroshima, 2. Fac. Agr., Kagoshima U., 3. NIAS)
- B164D Foxtail millet core collection developed on transposon display. ○R. Hirano<sup>1</sup>, K. Fukunaga<sup>2</sup>, K. Watanabe<sup>1</sup>, M. Kawase<sup>3</sup> (1. Grad. Sch. Life & Env. Sci., U. Tsukuba, 2. Fac. Life & Env. Sci., Pref. U. Hiroshima, 3. NIAS Genebank)
- B165A Effect of cupric sulfate on embryogenic callus formation and plant regeneration in ruzigrass (*Brachiaria ruziziensis*). ○G. Ishigaki<sup>1</sup>, T. Gondo<sup>2</sup>, K. Suenaga<sup>3</sup>, R. Akashi<sup>2</sup> (1. Interdisciplinary Graduate School of Agriculture and Engineering, U. Miyazaki, 2. Frontier Science Research Center, U. Miyazaki, 3. Japan International Research Center for Agricultural Sciences)
- B166B Evaluation of transgenic rice and bentgrass with RSOsPR10 gene. ○K. Ohta<sup>1</sup>, H. Hasegawa<sup>1</sup>, S. Komatsu<sup>2</sup>, T. Koshiba<sup>3</sup>, T. Terakawa<sup>1</sup> (1. Hokko Chem. Industry, 2. NICS, 3. Tokyo Metro U.)
- B167C Functional comparison of HKT-type K<sup>+</sup> transporters, PutHKT1 and OsHKT1, by over-expressing in *Arabidopsis* ○S. Ardie<sup>1</sup>, R. Takahashi<sup>2</sup>, S. Liu<sup>3</sup>, T. Takano<sup>1</sup> (1. ANESC., U. Tokyo, 2. Grad. Sch. Agric. Life Sci., U. Tokyo, 3. Alkali Soil Natural Environmental Science Center (ASNESC))
- B168D Morphological characteristics and changes in Na, K contents after salt solution treatment in high salt tolerance line in *Zoysia* genus ○Y. Matsuda, F. Furutomi, A. Ichiba, H. Kaneko, T. Murata (Sch. Ag., Tokai U.)
- B169A Growth and yield performance, and starch properties in local variety Japanese barnyard millet with three different amylose content. ○S. Kumagai, R. Kiuchi, H. Yoshida, S. Sagawa, T. Hoshino (Field Science Center, Faculty of Agriculture, Iwate University)
- B170B Fine structural analysis for appearance of aposporous embryo sac initial cell in guinea grass (*Panicum maximum*) ○L. Chen<sup>1</sup>, L. Guan<sup>2</sup> (1. Fac. Horti., Minami Kyushu U., 2. Fac. Edu. & Cul., U. Miyazaki)
- B171C Intra-specific variation in germination ability and tolerance to water logging and the association mapping on Sorghum (*Sorghum bicolor* L. Moench) ○J. Bhandari K., Y. Elmannai, T. Shehzad, K. Okuno (Grad. Sch. Life & Envi. Sci., U. Tsukuba)
- B172D Molecular mapping and analysis of flowering time on *Sorghum bicolor* L. Moench ○Y. Elmannai, J. Bhandari K., T. Shehzad, K. Okuno (Grad. Sch. Life & Envi. Sci., U. Tsukuba)
- B173A Genome-wide association mapping of morphological traits in sorghum (*Sorghum bicolor* (L.) Moench) by using multiple models ○T. Shehzad<sup>1</sup>, H. Iwata<sup>2</sup>, K. Okuno<sup>1</sup> (1. Grad. Sch. Life & Envi. Sci., U. Tsukuba, 2. Natl. Agr. Res. Cent.)
- B174B Comprehensive identification of genome fragments in the apomixis locus in guineagrass using dense STS markers. ○M. Takahara<sup>1</sup>, M. Ebina<sup>1</sup>, Y. Akiyama<sup>1</sup>, H. Yamada-Akiyama<sup>1</sup>, K. Iimura<sup>1</sup>, S. Sugita<sup>1</sup>, T. Takamizo<sup>1</sup>, H. Nakagawa<sup>2</sup> (1. NILGS, 2. NIAS)
- B175C Development of genome-wide simple sequence repeat markers in sorghum. ○J. Yonemaru<sup>1</sup>, T. Ando<sup>2</sup>, T. Mizubayashi<sup>2</sup>, S. Kasuga<sup>3</sup>, T. Matsumoto<sup>1</sup>, M. Yano<sup>1</sup> (1. Natl. Inst. Agr. Sci., 2. STAFF, 3. Shinshu Univ.)
- B176D Efficacy of insect-resistant GM maize (Bt11 sweet) in field against Oriental corn borer (*Ostrinia furnacalis*) in Japan. ○T. Ugajin<sup>1</sup>, T. Uchida<sup>2</sup>, T. Morimoto<sup>1</sup>, T. Ishikawa<sup>2</sup>, T. Manabe<sup>3</sup>, Y. Tabei<sup>2</sup> (1. Syngenta Japan K.K., 2. National Institute of Agrobiological Sciences, 3. Syngenta Seeds K.K.)
- B177A Inheritance of stem termination and its effect on morphological characters in soybean ○S. Kato, S. Yumoto, Y. Kono, A. Kikuchi (Natl. Agr. Res. Cent. Tohoku)
- B178B Evaluation of soybean to soil waterlogging tolerance and high tolerant variety. ○F. Kousaka<sup>1</sup>, Y. Tanaka<sup>2</sup>, S. Ohnishi<sup>1</sup>, T. Miyoshi<sup>2</sup>, S. Fujita<sup>1</sup> (1. Hokkaido Central Agri. Exp. Stn., 2. Hokkaido Tokachi Agri. Exp. Stn.)
- B179C Germplasm Evaluation on Myanmar mungbean (*V. radiata*) and its wild relatives based on protein analysis and morphological traits ○K. Win, T. Chau Thi Anh, Y. Hirata (Grad. Sch. IEAS. TUAT.)
- B180D Low content of beta-conglycinin alpha subunit in soybean variety 'Peking' is caused by the deletion of CG-3 ○R. Endo, T. Yoshikawa, Y. Okumoto, T. Fukuda, H. Saito, M. Teraishi, T. Tanisaka (Grad. Sch. Agr., Kyoto U.)
- B181A Genetic variation of amino acid compositions of seed in *Lotus japonicus*. ○M. Hashiguchi<sup>1</sup>, M. Umino<sup>2</sup>, R. Akashi<sup>1,2</sup> (1. Frontier Sci. Res. Center, U. Miyazaki, 2. Grad. Sch. Agric., U. Miyazaki)
- B182B Molecular diversity of FAD2 gene family in the genetic resource of soybean ○T. Anai (Fac. Agric. Saga U.)

- B183C Evaluation of genetic diversity in Lotus species, based on molecular marker○S. Kai1,M. Hashiguchi2,K. Inoue3,H. Tanaka2,T. Gondo2,S. Tsuruta4,R. Akashi2(1.Interdisciplinary Graduate School of Agriculture and Engineering, University of Miyazaki2.Frontier Science Research Center, University of Miyazaki3.Bayer CropScience4.Faculty of Agriculture University of Miyazaki)
- B184D Modification of seed protein components in soybean by genetic engineering○K. Takagi1,K. Nishizawa1,2,A. Hirose1,A. Kita1,H. Hasegawa3,T. Terakawa3,M. Ishimoto1(1.NARCH2.NICS3.Hokko Chemical Industry Co. Ltd.)
- B185A Establishment of high efficiency and rapid transformation system in Japanese soybean Kariyutaka.○ T. Yamada1,S. Watanabe2,K. Harada2,K. Kitamura1(1.Grad. Sch. Agr., Hokkaido U.2.NIAS)
- B186B Production of transgenic soybean with the Alzheimer's disease epitope gene introduced by Whisker method.○H. Hasegawa1,K. Nishizawa2,M. Ishimoto2,S. Utsumi3,T. Terakawa1(1.Hokko Chem.Industry2.NICS3.Kyoto U.)
- B187C Evaluation of root morphology and growth in Arabidopsis full-length cDNA overexpressed (FOX)-superroot (Lotus corniculatus) lines ○Y. Himuro1,H. Tanaka2,M. Hashiguchi2,T. Ichikawa3,M. Nakazawa3,M. Seki3,M. Fujita3,K. Shinozaki3,M. Matsui3,R. Akashi2,4(1.Interdisciplinary Graduate School of Agriculture and Engineering U.Miyazaki 2.Division of BioResource, Frontier Science Research Center, U.Miyazaki 3.Plant Science Center, RIKEN4.Faculty of Agriculture, U.Miyazaki)
- B188D Studies of varietal difference of resistance to Southern Bean Mosaic Virus in soybean.○M. Saruta,Y. Takada,A. Okabe(WeNARC)
- B189A A simple method for evaluation of salt tolerance and its application on screening salt tolerance in wild soybean germplasm○D. Xu(JIRCAS)
- B190B QTL analysis of lodging resistance in soybean cultivar "Toyoharuka"○N. Yamaguchi1,H. Funatsuki2,H. Yamazaki3,M. Ishimoto2,T. Miyoshi1(1.Hokkaido Pref. Tokachi Agr. Exp. Stn.2.Natl. Agr. Res. Ctr. Hokkaido3.Hokkaido Pref. Kitami Agr. Exp. Stn.)
- B191C Differences in virulence among Japanese and Brazilian isolates for Asian soybean rust○N. Yamanaka1,Y. Yamaoka2,M. Kato3,N. Lemos1,A. Passianotto4,J. Santos4,E. Benitez5,R. Abdelnoor4,R. Soares4,K. Suenaga1(1.JIRCAS2.U.Tsukuba3.NARC4.EMBRAPA5.NICS)
- B192D Searching for sources of cool tolerance at flowering and pod setting in azuki bean.○S. Aoyama,H. Shimada(Hokkaido Prefectural Tokachi Agric. Exp. Sta.)
- B193A Analysis of rhg2 locus, resistant gene of soybean cyst nematode.○C. Suzuki1,T. Takeuchi2,Y. Tanaka1,T. Miyoshi 1(1.Hokkaido Pref. Tokachi Agri. Exp. Stn.2.Hokkaido Pref. Central Agri. Exp. Stn.)
- B194B Expression mechanism of 7S storage protein in Soybean <Glycine Max Merrill>○L. Yu1,Y. Kobayashi2,Y. Hirata2(1.Uni.Grad.Sch, TUAT2.Grad.Sch.Agric.IEAS, TUAT)
- B195C Analysis of genetic variation for the composition of sugar chains attached at the C-22 position of soyasapogenol A in soybean seed.○Y. Takada1,T. Sayama2,A. Kikuchi3,S. Kato3,N. Tatsuzaki4,Y. Nakamoto2,A. Suzuki2,C. Tsukamoto4,M. Ishimoto2(1.WeNARC2.NARCH3.NARCT4.Grad. Sch. Agr. Iwate U.)
- B196D Fine mapping of a gene controlling sugar chain composition linked to C-22 site of soyasaponin○T. Sayama1,Y. Takada2,S. Kato3,N. Tatsuzaki4,Y. Nakamoto1,A. Suzuki1,C. Tsukamoto4,M. Ishimoto1(1.NARCH2.WeNARC3.NARCT4.Grad. Sch. Agr. Iwate U.)
- B197A Metabolic profiling of seed component diversity in soybean germplasm based on LC-MS analysisT. Hwang1,2,K. Nishizawa1,3,N. Iwasaki4,T. Nirasawa4,K. Kitamura2,○M. Ishimoto1(1.National Agricultural Research Center for Hokkaido Region2.Grad. Sch. Agr., Hokkaido U.3.Natl. Inst. Crop Sci.4.Brucker Daltonics)
- B198B Saponin composition and contents in the seeds of a soyasapogenol A-deficient soybean [Glycine max (L.) Merr.]○C. Tsukamoto1,H. Sasama1,Y. Takada2,K. Kitamura3,S. Yumoto4,M. Ishimoto5(1.Grad.Sch.Agric,Iwate U2.National Agricultural Research Center for Western Region3.Grad.Sch.Agric,Hokkaido U4.National Agricultural Research Center for Tohoku Region5.National Agricultural Research Center for Hokkaido Region)
- B199C Saponin composition of Glycine soja (Sieb. & Zucc.) mutants having new soyasapogenol aglycones and its geographical distribution in South Korea.○N. Honda1,Y. Maehara2,C. Tsukamoto2,K. Kitamura3,J. Lee4,G. Chung5(1.Grad.Sch.Agric.,Iwate U.2.Appl.Biol.Chem., Agric., Iwate U.3.Grad.Sch.Agric., Hokkaido U.4.National Agrobiodiversity Center, S. Korea5.Biotech., Chonnam Natl. U., S. Korea)

- B200D Effects of the genes controlling the saponin composition polymorphism on the saponin contents in soybean seed hypocotyls ○N. Tatsuzaki1,Y. Takada2,S. Yumoto3,M. Ishimoto4,K. Kitamura5,C. Tsukamoto1(1.Grad.Sch.Agric,Iwate U2.National Agricultural Research Center for Western Region3.National Agricultural Research Center for Tohoku Region4.National Agricultural Research Center for Hokkaido Region 5.Grad.Sch.Agric,Hokkaido U)
- B201A Characterization of Dadacha-beans in vegetable soybeans and changes in culture conditions.○T. Abe(Fac. Agr. Yamagata U.)
- B202B Is there any difference in the pod dehiscence gene loci among soybean cultivars? :QTL analysis and comparison of pod dehiscence rate between marker genotypes○T. Yamada1,H. Funatsuki2,M. Hajika1,k. Takahashi1,N. Oki1(1.Natl.Inst.Crop Sci.2.Natl.Agr.Res.Ctr.Hokkaido)
- B203C QTL analysis of pod shattering in *Lotus japonicus*○T. Gondo,M. Hashiguchi,R. Akashi(Front. Sci. Res. Cent., U. Miyazaki)
- B204D Development of cDNA resource and its database for utilization of genomic information of *Arabidopsis* in crop research○M. Kobayashi1,I. Sasaki1,M. Narusaka2,K. Hatakeyama3,K. Fukami-Kobayashi1,Y. Narusaka2,H. Abe1(1.RIKEN BRC2.RIBS3.NIVTS)
- B205A MiBASE and KaFTom: Databases of Transcriptome and Full-Length cDNAs of TomatoA. Suzuki1,K. Aoki2,D. Shibata2,○K. Yano1(1.Fac. of Agri., Meiji Univ.2.Kazusa DNA Res. )
- B206B Genetic relationships within *Brassica rapa* based on microsatellites○Y. Takahashi1,S. Yokoi1,M. Kawase2,Y. Takahata1(1.Fac. Agri., Iwate U2.NIAS)
- B207C A comparative study of the three cucumber cultivars using fluorescent staining and FISH○Y. Hoshi1,K. Yagi1,H. Matoba2,N. Tagashira3,W. Plader4,S. Malepszy4(1.Grad.Sch.Agricu., U.Tokai2.College Bioresource Sci., U.Nihon3.Faculty Human Life Sci., U.Hiroshima Jogakuin4.Breeding Biotechnology, U.Warsaw Agric.)
- B208D Variation of flowering phenology in everbearing strawberry cultivars○M. Honjo,S. Kataoka,S. Yui,M. Morishita,H. Yamazaki,M. Hamano,T. Yano(NARCT)
- B209A Tomato TILLING platform for functional genomics based on the Micro-Tom EMS mutagenized lines.○Y. Okabe1,E. Asamizu1,T. Mizoguchi1,C. Matsukura1,C. Rothan2,H. Ezura1(1.Grad. Sch. Life. Env. Sci., U. Tsukuba2.INRA-Bordeaux)
- B210B An efficient condition for infection of *Agrobacterium* to germinating seeds of radish○M. Yamazoe,Y. Nishikawa,H. Yamagishi(Fac. Eng., Kyoto Sangyo U.)
- B211C Genetic diversity of genes involved in the carotenoid synthesis pathway in *Capsicum*○R. Ichikawa1,2,T. Ban1,T. Sasanuma2(1.Kihara Inst. Biol. Res., Yokohama City U.2.Fac. Agr., Yamagata U.)
- B212D Behavior of the pollen tube in the cross between *Cucumis melo* and relative species. ○Y. Matsumoto1,2,Y. Ujiie1,3,M. Miyagi1,N. Watanabe2,4,T. Kuboyama2,4(1.Plant Biotec. Inst., Ibaraki Agr. Cent.2.Grad. Sch. Agr., Tokyo U. Agr. Tec.3.Ibaraki Agr. Academy4.Sch. Agr. Ibaraki U.)
- B213A Use of gamma ray irradiated pollen for mutation induction in melon.○A. Shimizu,T. Morishita(IRB,NIAS)
- B214B Analysis of phytoene synthase 1 gene (*Psy1*) involved in variations of mature fruit color in the progenies of interspecific-grafting in peppers○M. Ishimori1,G. Gulyas2,S. Tsuchiya1,Y. Hirata1(1.Grad.Sch.Agric.,TUAT2.Uni.Grad.Sch.Agric.,TUAT)
- B215C Estimation of the genetic introgression in hybrid progenies of *Brassica rapa* x *B. napus*.○M. Akaba1,Y. Kaneko1,B. Jeong1,M. Tsuda2,S. Bang1,Y. Tabei2,Y. Matsuzawa1(1.Fac.Agric., U.Utsunomiya 2.NIAS)
- B216D QTL analysis of short leaf sheath in bunching onion (*Allium fistulosum*).○H. Tsukazaki,K. Yamashita,A. Kojima,T. Wako(NIVTS, NARO)
- B217A Development of materials having high-hybridization ability derived from *B. rapa* x *R. sativus*○K. Tonosaki,K. Michiba,S. Bang,Y. Kaneko,Y. Matsuzawa(Fac.Agric.,U.Utsunomiya)
- B218B Improvement of male transmission rate of alien chromosome in rape-radish monosomic addition lines by limited pollination○K. Tsutsui,M. Akaba,S. Bang,Y. Kaneko,Y. Matsuzawa(Fac.Agric., U.Utsunomiya)
- B219C Proteomic analysis of proteins in the water-stressed cotyledons of oriental melon.○T. Kojima,T. Yamada,M. Kanekatsu(Grad. Sch. Agr., Tokyo U. Agr. Tec.)
- B220D An altered transcript of sterility related gene, forming orf507, in chili pepperG. Gulyas1,Y. Shin2,M. Ishimori2,J. Lee1,○Y. Hirata2(1.Uni.Grad.Sch.Agric.Sci.,TUAT2.Grad.Sch.Agric.Sci.,TUAT)

- B221A Study on the radish recA gene homolog which may involve in substoichiometric shifting of mitochondrial genome.○Y. Odake,H. Yamagishi,T. Terachi(Fac. Eng., Kyoto Sangyo U.)
- B222B QTL mapping of Brassica oleracea clubroot resistance using SRAP,CAPS and SSR○T. Nagaoka1,M. Doullah1,S. Matsumoto2,s. Kawasaki3,T. Ishikawa1,H. Hori1,K. Okazaki4(1.Grad. Sch. Sci. Tech, U.Niigata 2.NIVTS3.NIAS4.Fac. Agric, U.Niigata)
- B223C A linkage map of SSR and SNP markers using an inter-specific F2 population in tomato.○K. Shirasawa1,S. Isobe1,E. Asamizu2,S. Negoro3,A. Ohyama3,H. Fukuoka3,S. Tabata1(1.Kazusa DNA Res. Inst.2.U. Tsukuba3.Natl. Inst. Tea Vegetable Sci.)
- B224D Focused proteomics of organelles in sesame seedsY. Kobayashi,H. Imakouji,E. Tanesaka,○M. Yoshida(Dept. Agri., Kinki U.)
- B225A Regulation of AGPase gene expression in tomato fruit.○A. Sanuki1,Y. Yin1,S. Kondo2,S. Sugaya1,C. Matsukura1(1.Grad.Sch.Life envi. Sci., U.Tsukuba2.Grad. Sch. Hort.,Chiba U.)
- B226B Diversity of Mango (Mangifera) genetic resources○S. Yamanaka1,Y. Ueda2,T. Ogata1,H. Higuchi2,J. Yonemoto1(1.Trop.Agr.Res.Front, JIRCAS2.Fac./Grad.Sch.Agr., Kyoto U.)
- B227C Genetic analysis of mango in Myanmar○H. Ishii1,R. Hirano2,A. Kikuchi2,K. Watanabe2(1.College of Agrobiological Resource Sciences.,University of Tsukuba2.Graduate School of Life and Environmental Sciences.,University of Tsukuba)
- B228D Development of SNP markers in pear.S. Terakami,C. Nishitani,N. Shigeta,T. Yamamoto(National Agriculture and Food Research Organization National Institute of Fruit Tree Science)
- B229A Analysis of graft-transmittable mRNAs in Malus.T. Iwaya,○H. Xu,T. Harada(Fac. Agric. Life. Sci., Hirosaki U.)
- B230B The researches on genus Cosmos at Tamagawa University and the breeding and the prevalence of new garden varieties derived from the materials.○A. Inazu,M. Kokushi,Y. Iinuma(Fac.Agr., Tamagawa U.)
- B231C Transformation of chrysanthemum and petunia with PSARK-IPT○K. Yoshida,K. Ushijima,Y. Kubo,R. Nakano(Grad.Sch.Natural Sci. and Tech.,Okayama.U)
- B232D Application of yellow flower distinction marker of cyclamen○H. Matsufuru1,Y. Ishigaki2(1.Gifu Pref. Res. Inst. Bio.2.Nakatsugawa Branch Gifu Pref. Res. Inst. Agric. Hilly Mount. Areas)
- B233A Genetic relationships in the genus Gentiana based on chloroplast DNA sequence data and nuclear DNA content○K. Mishiba1,K. Yamane1,T. Nakatsuka2,Y. Nakano2,S. Yamamura2,J. Abe3,H. Kawamura3,Y. Takahata 4,M. Nishihara2(1.Grad. Sch. Life Env. Sci., Osaka Pref. U.2.Iwate Biotech. Res. Ctr.3.Iwate Agr. Res. Ctr.4.Fac. Agr., Iwate U.)
- B234B Comparative analysis of floral pigmentation between Cyclamen graecum and its colorless mutant.○ Y. Akita1,H. Ishizaka2,A. Shimada1,M. Nakayama3,S. Kitamura1,Y. Hase1,A. Tanaka1,I. Narumi1(1.QuBS, JAEA2.Hortic. Lab., Saitama Pref. Agric. Forestry Research Center3.NIFS)
- B235C Sequence polymorphism of an alpha/beta hydrolase gene in gentian plants: the allelic variation of the gene identifies gentian strains/cultivars○T. Hikage1,K. Kogusuri2,S. Watanabe2,Y. Saitoh1,2,Y. Takahata1,K. Tsutsumi1,2(1.United Grad. Sch. Agric. Sci., Iwate Univ.2.Cryobiofrontier Res. Center, Iwate Univ.)
- B236D Clonal structure of a lotus (Nelumbo nucifera) population in Uchinuma pond revealed by AFLP analysisT. Harada1,H. Hayashi1,M. Katori2,R. Shishido1,○K. Nomura1(1.Coll. Bioresource Sci., Nihon U.2.Katori City Aqua. Bot. Gard.)
- B237A Variation of ploidy levels caused by unreduced gametes in progenies obtained from crosses using diploid cultivars with one genome of Cymbidium floribundum○H. Shiota1,Y. Futagami1,S. Kama1,T. Yagame2,K. Nakashima3,M. Mii4,J. Kato1,S. Ichihashi1(1.Dep. Biol., Aichi U. Educ.2.Orchid Museum, Takamori3.Tokai Munic. Agric. Cent.4.Grad. Sch. Hort., Chiba U.)
- B238B Transmission and phenotypic effect of LG4 chromosome of Primula sieboldii in BC2 progenies of triploid SOO hybrid between P. sieboldii and P. obconica Y. Murata1,K. Suzuki2,R. Kanehara1,S. Fukui1,M. Ito3,J. Amano4,Y. Yoshida5,R. Osawa5,○J. Kato1,M. Mii2(1.Dep. Biol., Aichi U. Educ.2.Grad. Sch. Hort., Chiba U.3.Grad. Sch. Med., Nagoya U.4.Innov. Plaza Tokai, JST5.Grad. Sch. Life and Envi. Sci.,U. Tsukuba)
- B239C Breeding of new cultivar 'Koto no Yume' and its flower color mutations by X-ray irradiation in spray-type chrysanthemum○H. Yamada,Y. Iwazaki(Shizuoka Pref. Res. Inst. Agr. Forest.)
- B240D Diallel analysis of the time of onset of petal senescence in morning glory (Ipomoea nil)○T. Yamada1,Y. Shimizu1,T. Tanabata2,S. Miyagawa1,Y. Shinozaki1,M. Kanekatsul1(1.Grad.Sch.Agric., Tokyo U.Agric.Tec.2.NIAS)

- B241A Production of intersectional hybrids between *Primula kisoana*(section *Cortusoides*) and *P. tosaensis*(section *Reinii*) via ovule culture○S. Fukui1,M. Hayashi2,Y. Murata1,R. Kanehara1,H. Ohashi3,J. Kato1,M. Mii2(1.Dep. Biol., Aichi U. Educ.2.Grad. Sch. Hort., Chiba U.3.Fac. Agr., Ehime U. )
- B242B Quantification of branching structure in garden rose and the estimation of its heritability○K. Kawamura,T. Thouroude,L. Hibrand-Saint Oyant,F. Foucher (INRA, France)
- B243C Heterostyly in *Linum grandiflorum* I: Identification of floral morph-specific pollen proteins○K. Ushijima1,Y. Shigezane2,H. Mori3,R. Nakano1,Y. Kubo1(1.Grad. Sch. Natural Sci. Tech., Okayama U.2.Fac. Agr., Okayama U.3.Grad. Sch. Bioagr. Sci., Nagoya U.)
- B244D Identification and functional analysis of non-S-specific pistil-part self-incompatibility factor HT-B of *Petunia*A. Puerta1,K. Ushijima2,T. Koba1,3,○H. Sassa1,3(1.Grad. Sch. Sci. Tech., Chiba U.2.Grad. Sch. Natl. Sci. Tech., Okayama U.3.Grad. Sch. Hort., Chiba U)
- B245A Embryogenesis and plant regeneration in non-fertilized ovule culture of gentian (*Gentiana triflora* and *G. scabra*).○H. Doi1,R. Takahashi2,T. Hikage2,S. Yokoi1,Y. Takahata1(1.Fac. of Agr., Iwate U.2.Hachimantai City Floric. Res. Dev. Cent.)
- B246B Inter-specific hybrid production between *F.escrentum* and *F.homotoropicum* by in vitro cross breeding-characterization of in vitro born inter-specific hybrid plants○W. Winyasuk1,W. MANGKITA2,Y. KACHONGPADUNGKITT13,R. OHSAWA1,S. YOSHIDA 1,S. HISAJIMA1(1.Graduate School of Life and Environmental Sciences, University of Tsukuba2.Faculty of Agriculture Technology, Mae Jo University3.Faculty of Science and Technology, Thammasat University)
- B248D Breeding of tea clone 'Makura-Ko 03-1384' with high anthocyanin○A. Nesumi1,A. Ogino1,K. Yoshida1,J. Tanaka1,F. Taniguchi1,M. Yamamoto(Maeda)1,A. Murakami2(1.NIVTS2.Nippon Paper Group Inc.)
- B249A Categorization of QTLs of chemical concentration (%) in seed grains by their histo-developmental roles and importance as a target of marker selection○T. Ishii1,T. Hayashi2,K. Yonezawa3(1.Natl. Inst. Crop Sci.2.Natl. Inst. Agrobiological Sci.3.Fac Engin., Kyoto Sangyo Univ.)
- B250B Breeding of a potato line "Kitakei 29" which combines late blight field resistance with early maturity. ○S. Iketani,R. Fujita,K. Senda,S. Tanaka(Hokkaido Kitami Agr. Exp. Stn.)
- B251C Breeding of extremely early tea clone 'Makura-Kei 47-18'A. Nesumi,K. Yoshida,○J. Tanaka,F. Taniguchi,A. Ogino(Natl. Inst. Vegetable & Tea Science, NARO)
- B252D Studies on heterosis breeding of self-compatible buckwheat -Productivity of F1, hybrid seed production, and propagation of self-incompatible pin line -○Y. Mukasa,T. Suzuki,Y. Honda(Natl. Agric. Res. Center for Hokkaido Region)
- B253A Database construction of the amino acid sequence to identify species in eukaryotes.○H. Takahashi1,Y. Sato2,I. Nakamura1(1.Grad. Sch. Hort., Chiba U.2.RIHN)
- B254B Ploidy variations and their relations to phenotypic characters of *Dioscorea alata* accessions collected in Myanmar○P. Babil1,K. Irie2,S. Lamvilai2,H. Shiwachi1,2,H. Toyohara1,2,H. Fujimaki1,2(1.Graduate School of Agricultural Sciences, Tokyo University of Agriculture2.Department of International Agricultural Development, Tokyo University of Agriculture)
- B255C Use of mitochondrial minisatellite in sugar beet breeding: frequency and distribution of CMS in chinese germ plasmsD. Cheng,K. Kitazaki,○T. Kubo,T. Mikami(Res. Fac. Agr., Hokkaido U.)
- B256D Identification of cotton seeds found from Edo epoch literature○H. Yamaguchi1,M. Ohe1,F. Javadi1,T. Kotani2,H. Okuizumi3(1.Grad. Sch. Life Envi. Schi., Osaka Pref. U.2.Yao Hist. Folk. Museum3.Gene Bank, Natl. Inst. Agrbio. Sci.)
- B257A Phylogenetic analysis of *Sesamum* based on plastid and nuclear spacer sequences.○M. Yamamoto1,H. Tanei2,Y. Yokoshima2,K. Fujiwara2,T. Wakasugi1,K. Yamada1(1.Grad.Sch.Sci.Eng., U.Toyama2.Fac.Sci., U.Toyama)
- B258B Development of STS markers to identify *Azolla* speciesS. Ahmed,○T. Nakazaki,T. Tsukiyama,Y. Okumoto,M. Teraishi,T. Tanisaka(Grad. Sch. Agric., Kyoto U.)
- B259C Expression of polyphenol biosynthesis-related genes in different sweetpotato varieties.○M. Tanaka,Y. Takahata,R. Kurata(Natl. Agr. Res. Cent. Kyushu Okinawa Region )
- B260D The distribution and evolution of Au SINE in the plant kingdom○E. Yagi1,T. Akita2,T. Kawahara1(1.Grad. Sch. Agr., Kyoto U.2.NIPPON SHINYAKU CO,LTD.)

- B261A Production of transplastomic tobacco plants containing an APX-SOD operon in the chloroplast genome. ◦H. Yamamoto<sup>1</sup>, Y. Kunikata<sup>1</sup>, M. Nakagawa<sup>1</sup>, S. Hayashi<sup>1</sup>, S. Morita<sup>2</sup>, T. Terachi<sup>1</sup> (1. Fac. Eng., Kyoto Sangyo U. 2. Grad. Sch. Life and Envi., Kyoto Pref U.)
- B262B Production of transplastomic tobacco plants containing a gene encoding the SBPase. A. Shigeno, H. Yamagishi, T. Terachi (Fac. Eng., Kyoto Sangyo U.)
- B263C Identification of genomes involved in hybrid lethality in interspecific hybrids between *Nicotiana tabacum* and *N. occidentalis* ◦T. Tezuka<sup>1</sup>, M. Oda<sup>1</sup>, W. Marubashi<sup>2</sup> (1. Grad. Sch. Life Envi. Sci., Osaka Pref. U. 2. Sch. Agr., Meiji U.)
- B264D Production of recombinant plant lectin in tobacco BY-2 cells ◦H. Tanaka<sup>1</sup>, J. Toyama<sup>2</sup>, M. Mori<sup>3</sup>, R. Akashi<sup>1</sup> (1. FSRC, U. Miyazaki 2. JST Innovation Satellite Miyazaki 3. Res. Inst. for Biores. and Biotech., Ishikawa Pref. U.)
- B265A DNA mutations induced by C-ion beam irradiation in *Arabidopsis thaliana* ◦Y. Kazama<sup>1</sup>, Y. Liu<sup>1,2</sup>, S. Ohbu<sup>1</sup>, Y. Hayashi<sup>1</sup>, T. Matsuyama<sup>3</sup>, T. Abe<sup>1</sup> (1. RIKEN Nishina Center 2. Inst. Modern Phys., Chin. Acad. Sci 3. RIKEN Plant Breeding & Cell Engn. Res. Unit)
- B266B Molecular variation of the waxy locus among three species (*Amaranthus caudatus* L., *A. cruentus* L., and *A. hypochondriacus* L.) in grain amaranths. ◦Y. Park<sup>1</sup>, K. Nemoto<sup>2</sup>, T. Nishikawa<sup>3</sup>, K. Matsushima<sup>2</sup>, M. Minami<sup>2</sup>, M. Kawase<sup>3</sup> (1. Interdiscipl. Grad. Sch. Sci. & Technol., U. Shinshu 2. Grad. Sch. Agric., U. Shinshu 3. Nat. Inst. Agrobiol. Sci.)
- B267C The effect of heavy ion beam on seed and cuttings of tea plant ◦T. Saito<sup>1</sup>, Y. Suzuki<sup>1</sup>, H. Nishikawa<sup>1</sup>, Y. Kazama<sup>2</sup>, Y. Hayashi<sup>2</sup>, T. Abe<sup>2</sup> (1. Shizuoka Prefectural Research Institute of Agriculture and Forestry Tea Research 2. Radiation Biology Team, RIKEN Nishina Center)
- B268D Half diallel analysis for *Cercospora* leaf spot of sugar beet (*Beta Vulgaris* L.) ◦K. Taguchi, H. Takahashi, H. Abe (Nat. Agr. Res. Cent. Hokkaido)
- B269A Quantitative variation of curcuminoids in the autochthonal mango ginger (*Curcuma amada*) of Myanmar ◦D. Ahmad<sup>1</sup>, H. Nakajyo<sup>1</sup>, A. Kikuchi<sup>1</sup>, S. Jatoi<sup>2</sup>, F. Kiuchi<sup>3</sup>, T. Ye tint<sup>4</sup>, H. Shigemori<sup>1</sup>, K. Watanabe<sup>1</sup> (1. Graduate School of Life and Environmental Sciences, University of Tsukuba 2. Plant Genetic Resources Program, National Agriculture Center 3. Research Center for Medicinal Plant Resources, National Institute of Biomedical Innovation 4. Myanmar Agriculture Services (MAS), Ministry of Agriculture and irrigation, Union of Myanmar)
- B270B Caffeine-less individuals appeared in the population derived from a sib-crossing of 'Cha Chuukanbohon Nou 6' ◦A. Ogino<sup>1</sup>, J. Tanaka<sup>1</sup>, F. Taniguchi<sup>1</sup>, K. Yamada<sup>2</sup> (1. National Institute of Vegetable and Tea Science (NIVTS), NARO 2. Grad. Sch. Sci. and Engi., U. Toyama)
- B271C Effect of fertility restorer gene, Fr, on mitochondrial genome in *Brassica napus* ◦M. Oshima<sup>1</sup>, N. Koizuka<sup>1</sup>, H. Handa<sup>2</sup>, J. Imamura<sup>1</sup> (1. Fac. Agr. Tamagawa U., 2. NIAS)
- B272D Defective RNA polymerase catalytic subunits make an impact on *Arabidopsis* life cycle stage. ◦K. Nakagawa, Y. Ito, Y. Onodera, T. Mikami (Hokkaido Univ., Grad. sch. of Agri. )
- B273A Growth inhibition of the mitochondrial fission-mutants under high-light conditions. ◦Y. Doniwa<sup>1</sup>, M. Fujimoto<sup>1</sup>, K. Noguchi<sup>2</sup>, S. Arimura<sup>1</sup>, N. Tsutsumi<sup>1</sup> (1. Grad. Sch. Agric. Life Sci., U. Tokyo 2. Grad. Sch. Sci., U. Tokyo)
- B274B Effort of line selection and line crossing in Yacon (*Smallanthus sonchifolius*) ◦N. Kondo, Y. Matsuda, T. Murata (Sch. Ag., Tokai U.)
- B275C Analysis for promoters act in companion cell using transient expression assay in vascular bundle in *Brassica napus*. ◦R. Tsuwamoto, T. Harada (Fac. Agri. Life Sci., Hirosaki U.)
- B276D Impact of transgenic *Eucalyptus* conferring salt tolerance on soil microbial communities ◦K. Lelmen, X. Yu, A. Kikuchi, K. Watanabe (Graduate School of Life and Environmental Sciences, University of Tsukuba )
- B277A Functional domain analysis of *Arabidopsis* ELM1 (ELONGATED MITOCHONDRIA 1) ◦N. Kadoya, S. Arimura, N. Tsutsumi (Grad. Sch. Agric. Life Sci., U. Tokyo)
- B278B Genetic and epigenetic variation of an epiallele in *Arabidopsis thaliana* ◦Y. Habu (Div. Plant Sci., NIAS)