

Title of Papers Presented at the 117th Meeting of
The JAPANESE SOCIETY OF BREEDING
Held at Kyoto University, Kyoto, Kyoto, Japan
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- 104** Discovery and utilization of genome wide SNPs by whole-genome resequencing of japonica rice.
○Y. Arai-Kichise¹, K. Ebana², H. Nagasaki², Y. Shiwa¹, H. Yoshikawa^{1,3}, M. Yano², K. Wakasa^{1,4} (1.NGRC, Tokyo Univ. Agric. 2.QTL Genomics Research Center, NIAS 3.Dept. Biosci., Tokyo Univ. Agric. 4.Dept. Agric., Tokyo Univ. Agric.)
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 ○H. Funatsuki¹, M. Suzuki^{2,3}, A. Sato², K. Komatsu¹, M. Ishimoto¹, K. Fujino⁴ (1. Natl. Agric. Res. Ctr. Hokkaido 2. Fac. Agric., Hokkaido U 3. Asian Nat. Environ. Sci. Ctr., U. Tokyo 4. Grad. Sch. Agric., Hokkaido U.)
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 ○N. Yamaguchi¹,T. Sayama²,K. Komatsu²,H. Yamazaki³,S. Ohnishi⁴,H. Funatsuki²,M. Ishimoto²,T. Miyoshi¹(1.Hokkaido Pref. Tokachi Agr. Exp. Stn.².Natl. Agr. Res. Ctr. Hokkaido³.Hokkaido Pref. Kitami Agr. Exp. Stn.⁴.Hokkaido Pref. Central Agr. Exp. Stn.)
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 ○Y. Okiyama¹, N. Katsunuma¹, K. Ichitani², A. Miyao³, H. Hirochika³, N. Watanabe¹, T. Kuboyama¹ (1.Col. Agr., Ibaraki. U.².Fac. Agr., Kagoshima U.³.Natl. Inst. Agrobiol. Sci.)
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 ○O. Yatou, H. Aoki (Hokuriku Res. Center, Natl. Agr. Res. Center, NARO)

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M. Hayashi¹, H. Serizawa², H. Sassa¹, T. Koba¹ (1. Grad. Sch. Hort., U. Chiba 2. Nagano Veg. Orna. Exp. Sta.)
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T. Suzuki¹, M. Nitta², S. Nasuda², Y. Yoshimura³, t. Takeuchi¹ (1. Hokkaido Pref. Central Agri. Exp. Stn. 2. Grad. School Agri., Kyoto Univ. 3. Hokkaido Pref. Kitami Agri. Exp. Stn.)
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T. Tsukiyama¹, Y. Nakai², Y. Okumoto¹, Y. Nakata¹, S. Teramoto¹, M. Teraishi¹, H. Hayashi², T. Tanisaka¹ (1. Grad. Sch. Agr., Kyoto U. 2. Dep. Biochem., Osaka Med. C.)
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K. Miyatake¹, T. Saito¹, K. Nakase², S. Negoro¹, H. Yamaguchi¹, T. Nunome¹, A. Ohyama¹, H. Fukuoka¹ (1. NIVTS 2. FUKUI Agr. Exp. Stn.)
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K. Tsuji^{1,2}, M. Ghazalli³, M. Khaidizar³, Z. Ariffin³, M. Dulloo⁴, L. Sebastian¹, M. Nordin³ (1. Bioversity International APO 2. Jpn.-CGIAR fellowship program 3. MARDI 4. Bioversity International HQ, Rome, Italy)
- 402** Genetic studies on Bambuseae species in Japan XXVIII. A classification of Japanese genera by their origination.
M. Muramatsu (None, Professor emeritus, U. Okayama)
- 403** Diversification on morphological and life-historical traits in *Oryza* AA genome wild plants.
M. Akimoto¹, H. Morishima² (1. Obihiro U. Agr. Vet. Med. 2. Emeritus Pro. Nat. Inst. Genet.)
- 404** Evolution of plastid DNA recorded on the nuclear genome of *japonica* rice
I. Nakamura¹, H. Takahashi¹, S. Kato², K. Tanaka³, Y. Sato³ (1. Grad. Sch. Horticult., Chiba U. 2. Fac. Horticult., Chiba U. 3. Res. Inst. Humanity & Nature)
- 405** Genetic differentiation between Oceaninan and Asian rufipogon in *Oryza* genus
R. Ishikawa¹, T. Honda¹, Y. Hao¹, K. Tanaka², K. Ichitani³, I. Nakamura⁴, T. Sato⁵, Y. Sato² (1. Fac. Agri. Life Sci., Hirosaki U. 2. RIHN 3. Fac. Agri., Kagoshima U. 4. Grad. Sch. Hort., Chiba U. 5. Grad. Sch. Life Sci., Tohoku U.)
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Y. Mizuta^{1,2}, Y. Harushima¹, N. Kurata^{1,2} (1. Plant Genet., Natl. Inst. Genet. 2. Sch. Life Sci., Grad. Univ. Adv. Studies, SOKENDAI)

- 407** Duplication and reciprocal loss of genes required for pollen development caused F1 pollen sterility in hybrid between *O. sativa* and *O. glumaepatula*
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 ○S. Taketa¹, Y. Tsujino¹, T. Yuo¹, D. Saisho¹, N. Shitsukawa¹, N. Haruyama², M. Oozeki² (1. Res. Inst. Bioresour., Okayama U. 2. Tochigi Pref. Agr. Exp. Stn.)
- 409** Dimorphism in grain morphology and seed dormancy in wild emmer wheat and its change with domestication
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- 410** Genetic diversity on wild timopheevi wheat *Triticum araraticum*
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 ○A. Haque^{1,2}, N. Watanabe^{1,2}, T. Kuboyama^{1,2} (1. United Grad. Sch. Agric. Sci, U. Agric and Tech, TUAT 2. Col. Agr., Ibaraki. U)
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- 415** Origin and spread of tea. 8. Diversity in leaf shape of indigenous tea plants in Ningbo and Guzhu
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- 417** Genetic analysis of unilateral incompatibility in *Brassica rapa*.
 ○Y. Takada¹, G. Suzuki², H. Shiba³, S. Takayama³, A. Isogai³, M. Watanabe¹ (1. Grad. Sch. Life Sci., Tohoku Univ. 2. Div. Natl. Sci., Osaka kyoiku Univ. 3. Grad. Biol. Sci., Nara Inst. Tech.)
- 418** Heterostyly in *Linum grandiflorum* III: Isolation of a floral morph-specific expressed gene using cDNA subtraction analysis
 ○K. Ushijima, M. Bando, T. Kitabata, Y. Kubo, R. Nakano (Grad. Sch. Natural Sci. Tech., Okayama U.)

- 419** Tissue culture and chromosomes analysis of a new bio-fuel plant, *Jatropha curcas* L.
T. Nishikawa¹, E. Makigano¹, M. Himeno¹, J. Cartagena², M. Witkowska², K. Fukui², S. Tsuchimoto³, N. Ohmido¹ (1. Grad. Sch. Human Develop. Environ., Kobe Univ. 2. Grad. Sch. Engineering, Osaka Univ. 3. Ins. Mole. Cellular Biosci., U. Tokyo)
- 420** Approach to making transgenic plants of *ASG-1*. I. Efficiently multiple shoot formation by culture of leaf segments in Sweet Potato of Koganesengan
Y. Nishimura¹, Z. Du², L. Chen^{1,3} (1. Grad. Sch. Hort. Food Sci., Minamikyushu U. 2. Agricultural Academy of Henan, China 3. Fac. Hort. Minamikyushu U.)
- 421** Molecular comparison among three fertility restorer lines originated from *Oryza rufipogon*
T. Kazama¹, T. Nakamura², K. Motomura², K. Toriyama¹ (1. Grad. Sch. Agric. Sci., Tohoku Univ. 2. Fac. Agric., Univ. Ryuku)
- 422** Analysis of the nucleotide sequence of the *atp1* and *cox2* mRNA expressed in the alloplasmic cytoplasmic male sterile (CMS) lines of the eggplant
Y. Kitamura⁴, M. Yoshimi¹, K. Yasumoto¹, T. Saitou², S. Isshiki³, T. Terachi¹, H. Yamagishi¹ (1. Fac. Eng. Kyoto Sangyo U. 2. National institute of vegetable and tea science 3. Fac. Agric., Saga U. 4. Fac. Agric., Shinshu U.)
- 423** The third fertility restoration gene for the Ogura male sterility observed in Japanese wild radish
H. Yamagishi, A. Tsutsumi, Y. Matsumoto, K. Yasumoto (Fac. Eng., Kyoto Sangyo U.)
- 424** A pentatricopeptide repeat protein encoded by a restorer of fertility gene interacts with a transcript of cytoplasmic male sterility inducing locus, *orf125*.
T. Kobayashi¹, K. Hisano⁴, K. Kobayashi², K. Matsuoka^{2,4}, J. Imamura¹, T. Nakamura^{2,3}, N. Koizuka¹ (1. Fac. Agr., Tamagawa U. 2. Fac. Agr., Grad. Sch., Kyushu Univ. 3. PRESTO, Japan Science and Technology Agency 4. Fac. Agr., Grad. Sch., Kyushu Univ.)
- 425** Genetic study of sterile gene from *O. glaberrima* S. in upland NERICA varieties
Y. Fukuta, S. Yanagihara (JIRCAS)
- 426** Estimation of outcrossing rate of Asian wild rice, *Oryza rufipogon*, under field condition
D. Phan, H. Kageyama, R. Ishikawa, T. Ishii (Graduate School of Agricultural Science, Kobe University)
- 427** Functional analysis of a rice synaptonemal complex protein ZYP1
N. Komeda^{1,2}, K. Nonomura^{1,2} (1. Exp. Farm, Natl. Inst. Genet. 2. Dept. Life Sci., Grad. Univ. Adv. Studies [SOKENDAI])
- 428** Genetic analysis of substoichiometric shifting in the radish mitochondrial genome.
Y. Odake, E. Tomioka, H. Yamagishi, T. Terachi (Fac. Eng., Kyoto Sangyo U.)
- 501** *LMS1* gene is involved in the increase of root branching under osmotic stress condition in rice
S. Nakamura, T. Deguchi, Y. Kitomi, A. Yamauchi, Y. Inukai (Grad. Sch. Bioagr. Sci., Nagoya U.)
- 502** *CROWN ROOTLESS5* gene regulates crown root formation in rice.
Y. Kitomi¹, H. Kitano², Y. Inukai¹ (1. Grad. Sch. Bioagr. Sci., Nagoya U. 2. Bioci. Biotech. Cen., Nagoya U.)

- 503** Control of rice tiller growth by strigolactone
K. Minakuchi¹, H. Kameoka¹, N. Yasuno¹, L. Luo¹, M. Umehara², A. Hanaoka², S. Yamaguchi², J. Kyo-zuka¹ (1. Grad. Sch. Agric. Life Sci., U. Tokyo 2. Riken PSC)
- 504** Analysis of a gene that controls the development of the spikelets in rice and other grasses.
A. Yoshida, H. Hirano (Department of Biological Science, University of Tokyo, Tokyo, Japan)
- 505** Analysis of the rice *slender leaf* mutant
T. Yoshikawa, E. Ono, J. Ito, Y. Nagato (Grad. Sch. Agric. Life Sci., U. Tokyo)
- 506** *NARUTOMAKI* gene affects the leaf rolling and viability of rice
C. Yew, J. Itoh, Y. Nagato (Grad. Sch. Agric. Life Sci., U. Tokyo)
- 507** *SEGMENTED EMBRYO* gene associated with Mevalonic acid pathway suppresses partition of embryo in rice
Y. Takashina, J. Ito, Y. Nagato (Grad. Sch. Agric. Life Sci., U. Tokyo)
- 508** Genic interactions between mutant genes related to morphogenesis of rice spikelet.
-epd(OsMADS6) and two genes [*lhs(OsMADS1)*, *dp1-dbl*]-
I. Takamura¹, R. Nakai¹, M. Takahashi¹, Y. Sano¹, R. Ishikawa² (1. Grad. Sch. Agr., Hokkaido U. 2. Fac. Agric. and Life Sci., Hirosaki U.)
- 509** Analysis of inflorescence identity genes controlling the panicle branching in rice
N. Yasuno¹, M. Sasao¹, Y. Kitaguchi¹, M. Maekawa², J. Kyo-zuka¹ (1. Graduate school of Agriculture and Life Sciences, University of Tokyo 2. Research Institute for Bioresearch, Okayama University)
- 510** Functional characterization of a novel G β -interacting protein VIP1 in Arabidopsis.
D. Tsugama¹, T. Itoh², Y. Takahashi², T. Takano¹ (1. ANESC., U. Tokyo 2. Grad. Sch. Sci., U. Hiroshima)
- 511** Role of abscisic acid metabolism in dormancy maintenance of preharvest sprouting hyper-resistant wheat grains imbibed at low temperature
Y. Kashiwakura¹, D. Kobayashi¹, Y. Jikumaru², M. Seo², E. Nambara^{2,3}, Y. Kamiya², N. Kawakami¹ (1. Sch. Agric., Meiji U. 2. RIKEN Plant Sci. Center 3. Dep. Cell & Systems Biol., U. Toronto)
- 512** Toward the map base cloning of *Sdr7*, a QTL controlling seed dormancy of rice.
S. MARZOUGUI^{1,2}, K. Sugimoto², Y. Takeuchi³, M. Yano^{1,2} (1. Grad. Sch. Life Env. Sci., U. Tsukuba 2. Natl. Inst. Agrobiol. Sci. 3. Natl. Inst. Crop Sci.)
- 513** QTL analysis for spikelet opening time using backcross inbred lines between *Oryza sativa* Nipponbare and *O. rufipogon*
T. Pham, D. Phan, R. Ishikawa, T. Ishii (Graduate School of Agricultural Science, Kobe University)
- 514** Analyses of heading traits and flowering-time gene expression in the alloplasmic wheat lines showing late-heading compared with the euplasmic line
S. Shimada, Y. Fujiwara, K. Murai (Dep. Biosci., Fukui Pref. U.)
- 515** Alteration of *Wheat FLOWERING LOCUS T (WFT)* homoeologous gene expression caused by the interaction between A, B and D genomes in synthetic hexaploid wheats
Y. Fujiwara¹, S. Shimada¹, S. Takumi², K. Murai¹ (1. Dep. Biosci., Fukui Pref. U. 2. Grad. Sch. Agric. Sci., Kobe U.)

- 516** Nucleotide diversities of two CONSTANS homologs in wild wheat progenitor *Aegilops tauschii*
 ○E. Okamoto,H. Hatano,Y. Okumura,S. Takumi(Grad.Sch.Agric.Sci., Kobe U.)
- 517** Structure and function of clystomany gene *cly1* in barley
 ○T. Komatsuda(NIAS)
- 518** Molecular mapping of the BARLEY PALEA-LESS (BPL), which controls the palea and lodicle development in barley.
 ○N. Shitsukawa,Y. Yamashita,S. Taketa(Res. Inst. Bioresour., Okayama U.)
- 519** Utility of senescence-associated genes as developmental markers in common wheat
 ○T. Kajimura,N. Mizuno,S. Takumi(Grad.Sch.Agric.Sci., Kobe U.)
- 520** Functional analysis of wheat *Q* gene using transformed rice
 ○I. Ishiguro,K. Kawaura,Y. Ogihara,T. Muranaka,M. Isshiki(KIBR. Yokohama City U.)
- 521** The progress and perspectives of erect panicle type on rice
 ○z. xu1,2(1.Graduate School of Agriculture Kyoto University2.Shenyang Agriculture University)
- 522** Yield evaluation of Sasanishiki pyramiding Habataki QTLs for grain number
 ○A. Ohsumi1,T. Takai2,T. Yamamoto3,Y. Arai2,M. Yano3,T. Ando4,M. Kondo2(1.NARO, NARC2.NARO, NICS3.NIAS4.STAFF Inst.)
- 523** Fine mapping of a quantitative trait locus for SPAD value and its contribution to leaf photosynthesis in rice
 ○T. Takai1,M. Kondo1,A. Ohsumi2,M. Yano3,T. Yamamoto3(1.National Institute of Crop Science2.National Agricultural Research Center3.National Institute of Agrobiological Sciences)
- 524** Analysis of plant type of rice by P-type Fourier descriptors. 4. Analysis of plant type related genes
 ○K. Suzuki,K. Aoi,Y. Hirata(Plant.Genet.Biotech.Lab., TAT)
- 525** Analysis of rice *d2* mutants. II. Characterization of new alleles.
 ○T. Sakamoto1,H. Kitano2(1.IAR. Nagoya U.2.Biosci. Biotech. Ctr., Nagoya U.)
- 601** Research on flour milling evaluation in Japanese common wheats. 7. Measurement the powder characteristic in high-flour yielding variety "Kitahonami"
 ○H. Nakamura(Nat. Inst. of Crop Sci., NARO.)
- 602** Milling traits and selection for high milling extraction genotypes in progeny lines of wheat variety, 'Kitahonami'.
 ○Y. Yoshimura,T. Nishimura,S. Kobayashi(Kitami Agri. Pref. Exp. Stn.)
- 603** Selection of Fusarium Head Blight resistant wheat under natural infection
 ○H. Jinno1,J. Souma1,N. Ashikaga2,M. Kurushima2,M. Sato1,3,T. Suzuki1,T. Abe1,Y. Yoshimura2,S. Fujita1(1.Hokkaido Pref. Central Agri. Exp. Stn.2.Hokkaido Pref. Kitami Agri. Exp. Stn.3.Present: Sato Professional Engineer's office)
- 604** Effect of rice blast resistance gene *pi21* on yield under different environments
 ○N. Saka1,K. Tomita2,K. Nagano3,T. Kataoka4,I. Ando5,Y. Nagayoshi6,K. Nakagomi7,M. Yamaguchi7,H. Maeda5,H. Sato8,T. Ishii5,T. Terashima1,Y. Mizukami1,S. Fukuoka9(1.Aichi Agric. Res. Ctr. MARI2.Fukui Agric. Exp. Stn.3.Miyagi Furukawa Agr. Exp. Stn.4.KONARC5.NARO6.Miyazaki Agric. Exp. Stn.7.NARCT8.MAFF9.NIAS)

- 605** Agronomic traits of rice carrying the *spw1-cl5* mutation and effect of temperature on the cleistogamy.
 ○S. Ohmori¹, S. Koike², T. Hayashi², T. Yamaguchi², M. Kuroki³, Y. Sato³, M. Yamaguchi², R. Kaji², K. Nakagome², K. Nagano⁴, T. Endo⁴, M. Ohshima⁵, K. Ashida⁶, N. Takamine⁷, H. Tabuchi¹, O. Yatou¹, H. Yoshida¹ (1.Hokuriku Research Center, NARC².NARCT³.NARCH⁴.MFAES⁵.NICS⁶.WeNARC⁷.KONARC)
- 606** Effectiveness of a major QTL, *qPDH1*, for shattering resistance in soybean in Hokkaido
 ○S. Hagihara¹, S. Fujita², Y. Tanaka¹, H. Funatsuki³, M. Ishimoto³ (1.Hokkaido Pref. Tokachi AES².Hokkaido Pref. Central AES³.NARCH)
- 607** A new common bean cultivar "Toiku No.B78" with Soybean dwarf virus resistance selected by molecular markers
 ○M. Okuyama¹, T. Takeuchi², S. Ebe³, H. Sato¹, H. Shimada¹ (1.Hokkaido Tokachi Agr. Exp. Stn.².Hokkaido Central Agr. Exp. Stn.³.Hokkaido Kitami Agr. Exp. Stn.)
- 608** Selection of lines with resistance for low temperature-induced seed coat discoloration and SCN race1 in soybean.
 ○C. Suzuki¹, T. Takeuchi², T. Kiguchi², N. Yamaguchi¹, T. Miyoshi¹, S. Ohnishi² (1.Hokkaido Pref. Tokachi Agri. Exp. Stn.².Hokkaido Pref. Central Agri. Exp. Stn.)
- 609** Breeding of a starch material potato "Hokuiku 13" which can produce high quality starch at the same level as "Benimaru".
 ○S. Iketani¹, K. Senda¹, R. Fujita¹, S. Ebe¹, M. Iritani², S. Tanaka¹, M. Ohnami³, K. Furukawa¹ (1.Hokkaido Kitami Agr. Exp. Stn.².Hokkaido Central Agr. Exp. Stn.³.Hokkaido Tokachi Agr. Exp. Stn.)
- 610** Breeding of a new taro cultivar "Himekaguya"
 ○H. Asaumi, H. Ishiishikawa, F. Itou (Ehime Research Institute of Agriculture, Forestry and Fisheries)
- 611** Breeding of Chinese cabbage F1 commercial cultivar with high clubroot resistance by marker assisted selection.
 ○S. Matsumoto¹, T. Miyazaki², K. Hatakeyama¹, S. Takashita², T. Kato^{1,3}, N. Fukino¹, T. Kondo² (1.Natl. Inst. Veg. Tea Sci.².Nippon Norin Seed Co.³.Grad. Sch. Bioresour., Mie)
- 612** Development of DNA Markers Linked to Clubroot Resistance in Chinese cabbage, cultivar *Akiriso*.
 ○T. Kato^{1,2}, S. Matsumoto¹, K. Hatakeyama¹, N. Fukino¹ (1.Natl. Inst.Veg.Tea Sci.².Grad.Sch.Bioresour.,Mie)
- 613** On the usefulness of quantitative trait selection based on unvalidated DNA markers: Population improvement in outcrossing crop plants
 ○T. Ishii¹, K. Yonezawa², K. Yano³, T. Hayashi⁴, H. Iwata⁵ (1.Natl. Inst. Crop Sci.².Fac Engin., Kyoto Sangyo Univ.³. Bioinfor., Fac. Agri., Meiji U.⁴.Natl.Inst.Agrobiological Sci.⁵.Natl.Agr.Res.Cent.)
- 614** Optimization of selection procedures for quantitative traits: On the most important determinant of the achievement by selection
 ○K. Yano¹, T. Ishii², K. Yonezawa³ (1.Bioinfor., Fac. Agri., Meiji U.².Natl. Inst. Crop Sci.³.Fac. Engin., Kyoto Sangyo Univ.)

- 615** Rapid selection method for the sporeless trait in *Pleurotus pulmonarius* breeding using real-time PCR
 ○Y. Okuda¹, T. Matsumoto¹, K. Ninomiya² (1. Fac. Agric., Tottori Univ. 2. Shimadzu Corp.)
- 616** Efficient application of marker-assisted selection for recurrent backcrossing in wheat breeding programs
 ○M. Saito^{1,2}, T. Shimbata¹, H. Ito², C. Otobe³, N. Ishikawa⁴, M. Fujita⁵, G. Ishikawa², T. Nakamura² (1. Nippon Flour Mills Co., Ltd. 2. NARCT, NARO 3. NICS, NARO 4. WeNARC, NARO 5. KONARC, NARO)
- 617** Fusarium Head Blight resistant spring wheat lines developed by marker-assisted backcrossing.
 ○N. Ashikaga¹, T. Suzuki², M. Kurushima¹, K. Nakamichi³, Y. Yoshimura¹ (1. Hokkaido Pref. Kitami Agri. Exp. Stn 2. Hokkaido Pref. Central Agri. Exp. Stn 3. Hokkaido Pref. Kamikawa Agri. Exp. Stn)
- 618** A new hard red wheat cultivar "Chikushi-W2" for tonkotsu-ramen noodle.
 M. Furusho¹, M. Tsukazaki¹, Y. Matsue¹, Y. Uchimura¹, O. Yamaguchi², ○T. Baba¹, K. Takata¹, M. Miyazaki¹, Y. Hamachi¹ (1. Fukuoka Agric. Res. Cent. 2. Hokuriku Res. Cent., NARC.)
- 619** Breeding of A New Two-Rowed Hull-less Barley Cultivar "Shikoku-hadaka-mochi119" with good eating quality and reducing the browning in boiled pearled barley
 ○T. Yanagisawa¹, T. Nagamine¹, A. Takahashi¹, T. Takayama², Y. Doi³, H. Matsunaka⁴, M. Fujita⁴ (1. WeNARC 2. Tochigi Pref. Agric. Exp. Stn. 3. Ex WeNARC 4. KONARC)
- 620** Breeding of Sake-brewing cultivar by somaclonal variation and Sake-brewing test.
 ○T. Abe (Fac. Agr. Yamagata U.)
- 621** Breeding of New Rice Variety 'Genkitsukushi' with Strong Tolerance to High Temperature during Maturity Period and High Eating Quality
 ○T. Wada, M. Tsubone, T. Ogata, Y. Hamachi, Y. Matsue, T. Inoue, K. Oosato, T. Yasunaga, Y. Kawamura (Fukuoka Agric. Res. Cent.)
- 622** A early maturing rice variety 'Makimizuhō' adaptable various cropping systems for whole crop silage.
 ○Y. Tamura¹, M. Sakai¹, K. Tamura¹, T. Kataoka¹, M. Okamoto¹, H. Hirabayashi², R. Mizobuchi³, R. Kaji⁴, S. Fukaura⁵ (1. KONARC, NARO 2. NICS, NARO 3. NIAS 4. NARCT, NARO 5. Kumamoto. Pref.)
- 623** "Ruriaoba", A New Rice Variety for Whole Crop Silage Use Shows Superior Productivity under Double Harvest Cultivation using Ratooning Crop.
 ○M. Sakai¹, H. Nakano¹, Y. Tamura¹, M. Okamoto¹, R. Kaji², K. Tamura¹, T. Kataoka¹, R. Mizobuchi³ (1. Natl. Agr. Res. Ctr. Kyushu Okinawa Reg., NARO 2. Natl. Agr. Res. Ctr. Tohoku Reg., NARO 3. NIAS)
- 624** A High Yielding Rice Variety with Superior Lodging resistance for Multi-purpose Use "Mizuhochikara".
 M. Sakai¹, ○T. Katataoka¹, R. Kaji², M. Okamoto¹, H. Hirabayashi³, Y. Tamura¹, K. Tamura¹, R. Mizobuchi⁴, T. Yagi¹, M. Nishimura⁴, S. Fukaura⁵, H. Yamashita¹, H. Nishiyama¹, H. Motomura¹, T. Takita⁶, S. Kawasaki⁷ (1. KONARC, NARO 2. NARCT, NARO 3. NICS, NARO 4. NIAS 5. Kumamoto. Pref. 6. JIRCAS 7. Kumamoto Flour Milling co., Ltd.)

- 625** A high yielding rice variety 'Mogumoguaoba' with superior lodging resistance for whole crop silage and feeding grain.
Y. Tamura¹, M. Sakai¹, K. Tamura¹, T. Katataoka¹, M. Okamoto¹, H. Hirabayashi², R. Mizobuchi³, R. Kaji⁴, S. Fukaura⁵ (1.KONARC, NARO 2.NICS, NARO 3.NIAS 4.NARCT, NARO 5.Kumamoto. Pref.)
- 626** a rice line 'Seinan 130' with better grain quality even under the low solar radiation during the ripening
o. ohuchida, a. tanaka, m. sato (Kagoshima Pref. Inst. Agr. Dev.)
- 701** QTL analysis for field resistance to blast using Nipponbare/Koshihikari backcross inbred and chromosome segment substitution lines in rice.
o. S. Fukuoka¹, N. Saka², R. Mizobuchi¹, K. Hori¹, M. Yano¹ (1. Natl. Inst. Agrobiol. Sci. 2. MARI, Aichi. Agric. Res. Ctr.)
- 702** Isolation and Characterization of the Field Resistance Related Gene XC20 against Bacterial Blight Disease from the Mutant Series of Rice.
o. H. Aoki¹, T. Yamamoto¹, A. Miyao², H. Hirochika², O. Yatou¹ (1. NARC 2. NIAS)
- 703** A set of near-isogenic lines of an Indica-type rice variety, CO 39 used as differential varieties for blast resistance
o. M. Telebanco-Yanoria¹, Y. Koide^{1,2}, Y. Fukuta², T. Imbe³, H. Tsunematsu⁴, H. Kato⁴, L. Ebron¹, N. Nguyen⁵, N. Kobayashi^{1,2} (1. International Rice Research Institute 2. Japan International Research Center for Agricultural Sciences 3. National Agricultural Research Center for Kyushu Okinawa Region 4. National Institute of Crop Science, National Agriculture and Food Research Organization 5. Agricultural Genetics Institute)
- 704** Analysis of protein interaction of rice membrane-bound ubiquitin ligase EL5 in response to N-acetylchitooligosaccharide elicitor
o. K. Kondo, H. Koiwai, S. Mochizuki, K. Kishimoto, E. Kato, E. Minami, Y. Nishizawa (Natl. Inst. Agr. Sci.)
- 705** Relationship between anther extrusion and resistance to infection of Fusarium head blight in wheat
o. K. Kubo¹, N. Kawada¹, M. Fujita¹, K. Hatta¹, H. Matsunaka¹, S. Oda², T. Ushiyama³, K. Nakamura⁴, T. Nakajima¹ (1. KONARC/NARO 2. NICS/NARO 3. Nagano Agric. Exp. Sta. 4. NARCT/NARO)
- 706** Screening of resistance cultivars to wheat yellow mosaic virus III strain with sap inoculation method.
o. K. Hatta¹, M. Fujita¹, S. Oda² (1. Natl. Agric. Res. Cnt. Kyushu-Okinawa 2. Natl. Inst. Crop Sci.)
- 707** Genetic analysis of resistance to barley scald using F2 population and doubled haploid lines.
o. O. Yamaguchi, S. Ito (Hokuriku Res. Cent., NARC)
- 708** Barley Yellow Mosaic disease Occurrence and its characteristic
o. T. Takayama¹, A. Takahashi², K. Nomiya², T. Yanagisawa², K. Ishikawa² (1. Tochigi Pref. Agr. Stn 2. WeNARC)
- 709** An alternative method for race identification of powdery mildew of melon (*Podosphaera xanthii*) using commercial cultivar.
o. Y. Izumikawa, M. Miyagi (Plant Biotech. Inst., Ibaraki Agric. Cent.)

- 710** Half diallel analysis for *Rhizoctonia* root rot of sugar beet (*Beta Vulgaris* L.)
 ○K. Taguchi, K. Okazaki, H. Takahashi, Y. Kuroda, H. Abe (Natl. Agr. Res. Cent. Hokkaido)
- 711** Screening of resistant tree to pine wood nematode based on conventional breeding and marker assisted selection
 ○A. Watanabe¹, T. Hirao¹, T. Iki¹, K. Isoda² (1.FFPRI, Forest Tree Breeding center 2.FFPRI, FTBC, Kansai Regional office)
- 712** Varietal difference in soybean cyst nematode parasitism of Adzuki bean
 ○A. Tazawa¹, S. Aoyama², H. Sato¹, H. Shimada¹ (1.Hokkaido Tokachi Agr. Exp. Sta. 2.Hokkaido kamikawa Agr. Exp. Sta.)
- 713** Resistance of soybean lines having three resistance genes against soybean rust
 ○N. Yamanaka¹, N. Lemos^{1,2}, K. Suenaga¹ (1.JIRCAS 2.Maringa State University)
- 714** Characterization of resistance genes, *Rpp2*, *Rpp4*, and *Rpp5* against soybean rust based on QTL analysis
 ○N. Lemos^{1,2}, A. Braccini², R. Abdelnoor³, K. Suenaga¹, N. Yamanaka¹ (1.JIRCAS 2.Maringa State University 3.EMBRAPA Soybean)
- 715** Host plant resistance of near isogenic lines carrying resistance gene(s) for brown planthopper against the Asian brown planthopper strains in rice.
 ○H. Yasui¹, . Myint¹, M. Matsumura², A. Yoshimura¹ (1.Fac. Agr., Grad. Sch., Kyushu Univ. 2.NARC Kyushu-Okinawa Region)
- 716** Analysis of quantitative trait loci for low temperature tolerance at booting stage in rice and delimiting the candidate genomic region
 ○S. Shiokai¹, T. Endo², K. Nakagomi³, M. Yamaguchi³, T. Nishio¹ (1.Grad. Sch. Agr. Sci., Tohoku 2.Miyagi Pref. Furukawa Agr. Exp. Stn. 3.Natl. Agr. Res. Ctr. Tohoku)
- 717** Transcriptional profiling of root hypodermal tissues during formation of a barrier to radial O₂ loss in rice (*Oryza sativa* L.)
 ○K. Shiono^{1,2}, M. Al Imran³, S. Yamazaki¹, N. K. Nishizawa^{1,4}, Y. Nagamura⁵, N. Tsutsumi¹, T. D. Colmer³, M. Nakazono¹ (1.Grad.Sch.Agric.Life Sci., U.Tokyo 2.JSPS Res.Fellow 3.Fac.Nat.Agric.Sci., U.Western Australia 4.Res.Inst.Bioresource Biotech., Ishikawa Pref.U. 5.Natl.Inst.Agrobiol.Sci.)
- 718** Rice varietal difference of photoinhibition tolerance
 ○I. Kasajima¹, K. Takahara¹, M. Kawai², H. Uchimiya^{1,2,3} (1.Inst. Mol. Cell. Biosci., U. Tokyo 2.Inst. Environ. Sci. & Tech., Saitama U. 3.Iwate Biotech. Res. Cen.)
- 719** Mechanisms of soil waterlogging tolerance in soybean line 'Shoku-kei32'.
 ○F. Kousaka, S. Ohnishi, S. Fujita (Hokkaido Pref. Central AES)
- 720** Characterization relating to waterlogging tolerance in Teosinte (*Zea nicaraguensis*)
 ○T. Abiko¹, Y. Mano², K. Shiono^{1,3}, N. Tsutsumi¹, M. Nakazono¹ (1.Grad.Sch.Agric.Life Sci., U.Tokyo 2.NARO 3.JSPS Res.Fellow)
- 721** Functional analysis of tasiRNA under temperature fluctuation in *Arabidopsis*.
 ○K. Kume, K. Tsutsumi, Y. Saitoh (Iwate Univ., Fac. Agri., CRC)

- 722** Variation in ploidy level and vegetative growth of common reed (*Phragmites australis*)
 ○T. Araki¹, N. Ohmido², A. Shimizu¹, H. Hasegawa¹ (1.Sch. Environ. Sci., Univ. Shiga Pref. 2.Grad. Sch. Human Develop. Environ., Kobe Univ.)
- 723** Development of molecular marker for diversity analysis on Japanese *Elymus* species and its utilization
 ○T. Sasanuma¹, A. Izumizawa¹, T. Abe¹, K. Takata², K. Kawaguchi³, A. Oyanagi³ (1.Fac. Agr., Yamagata U. 2.WeNARC 3.NICS)
- 724** Genetic diversity in Chinese Hami melon based on the analysis of nuclear and cytoplasmic genomes and their relationship with Inodorus melon
 Y. Aierken¹, ○Y. Akashi¹, K. Tanaka², H. Nishida¹, K. Kato¹ (1.Grad. Sch. Natural Sci. Tech., Okayama U. 2.RIHN)

Poster presentations

- P001** The Sensitive Cultivar and Line to Paddy Herbicide Benzobicyclon Exists in Whole Crop Silage and High Yield Rice Varieties
 K. Sekino, ○A. Yamazaki, Y. Yamada, H. Koyanagi (SDS Biotech K.K.)
- P002** Breeding of a new rice cultivar "Musashino No. 20" of yellow endosperm by natural mutation
 ○N. Ooka¹, M. Arakawa¹, K. Yagasaki¹, T. Minoda¹, S. Noda², M. Arai³ (1.Saitama Pref.Agr.Fores.Res.Ctr., Crops and Field Lab., 2.Saitama Pref.Agr.Fores.Res.Ctr., 3.Saitama Pref.Agr.Fores.Res.Ctr., Green Tea and Local Products Lab.,)
- P003** Development of new barley lacking B-glucan
 ○T. Sotome^{1,3}, M. Oozeki¹, N. Haruyama¹, T. Nagamine², N. Ishikawa², T. Takayama¹, H. Watanabe¹, T. Okiyama¹ (1.Tochigi Pref.Agr.Exp.Stn, Tochigi Brn. 2.NARO WeNARC 3.United Grad. Sch. of Agr. Coll., Tokyo Univ. of Agr. and Tech.)
- P004** Developing a simple assay to estimate lipoxygenase(LOX)-2 activity in barley
 ○M. Oozeki¹, T. Sotome¹, N. Haruyama¹, T. Nagamine^{1,2} (1.Tochigi Pref.Agr.Exp.Stn.Tochigi.Brn 2.NARO WeNARC)
- P005** Development of back-cross lines with shattering resistant gene for leading varieties of soybean in Japan
 ○T. Yamada¹, M. Hajika¹, H. Funatsuki², N. Yamada¹, K. Takahashi³, N. Oki⁴ (1.Natl.Inst.Crop Sci. 2.Natl.Agr.Res.Ctr.Hokkaido 3.Nagano Pref.Vegetable and Ornamental Crops Exp.Stn. 4.Natl.Agr.Res.Ctr.Kyushu Okinawa Reg.)
- P006** Development of highly resistant wheat lines to Fusarium head blight derived from Chinese germplasm Fujian5114
 ○Y. Kawanishi, I. Tsutsui, H. Ohta, M. Ogasawara, M. Hayashi, E. Nishii (HOKUREN Agricultural Reserch Institute)
- P007** Shattering degree of shattering resistant line in common buckwheat.
 ○T. Suzuki, Y. Mukasa, T. Morishita, T. Noda, S. Takigawa, N. Hashimoto, C. Endo, H. Yamauchi (National Agricultural Research Center for Hokkaido Region,)

- P008** Breeding of a new sweetpotato cultivar "Hoshikirari" for high quality steamed and cured slices of sweetpotato
 ○T. Kuranouchi, Y. Nakamura, A. Takada, S. Tamiya, M. Nakatani, T. Kumagai (Natl. Agric. Res. Org., Natl. Inst. of Crop Sci.)
- P009** Breeding of tea clone "Makurazaki30gou" with resistance to Anthracnose and Gray blight
 K. Yoshida, ○A. Nesumi, J. Tanaka, F. Taniguchi, A. Ogino, T. Saba, A. Matsunaga (NARO NIVTS)
- P010** Attempt of digitalization of food taste criterion using sadowara egg plant as a model. I consistency of analysis of nutritional elements and sense test.
 ○S. Ishii¹, H. Tominaga³, L. Chen^{1,2} (1. Grad. Sch. Hort Food Sci., Minamikyushu U. 2. Fac. Hort. Minamikyushu U. 3. Miyazaki pref. agric. exp. sta)
- P011** Breeding of 'Itomaki-daikon' by selection method to promote Miyazaki Pref conventional vegetable. I. Analysis used morphological and RAPD-PCR methods
 ○Y. Tanaka¹, K. Kumamoto², H. Tominaga³, L. Chen^{1,2} (1. Grad. Sch. Hort and Food Sci., Minamikyushu U. 2. Fac. Hort. Minamikyushu U. 3. Miyazaki Pref. Agric. Exp. Sta.)
- P012** Variety identification of Radish "Daikon" using Dot-blot-SNP assay.
 ○S. Okamoto¹, K. Sakamoto¹, A. Saito¹, H. Kitashiba², T. Nishio² (1. Takii Seed & Co. Ltd. Plant Breed. & Exp. Stn. 2. Grad. Sch. Agric. Sci. Tohoku Univ.)
- P013** Screening for resistant lines to two potyviruses in konjak.
 ○H. Iizuka¹, J. Shimoyama¹, K. Hanada² (1. Konnyaku and Regional Crops Research Center, Gunma Agricultural Research Center 2. National Agricultural Research Center)
- P014** Agrobacterium-mediated Transformation of Freesia and Regeneration of Transgenic Plants
 E. Hama^{1,2}, ○H. Yoshiaki¹, T. Arite^{1,3}, M. Murahama¹, M. Komaki¹ (1. Ishikawa Agricultural Research Center 2. Ishikawa Prefectural Office 3. Industrial Research Institute of Ishikawa)
- P015** Analysis of ER stress in developing rice endosperm accumulating β -amyloid peptide
 ○Y. Oono, Y. Wakasa, S. Hirose, L. Yang, C. Sakuta, F. Takaiwa (National Institute of Crop Science)
- P016** A genome analysis for closely-related rice species using an automatic read annotation pipeline for the Next Generation Sequencing data
 ○T. Nagata¹, E. Kaminuma², H. Ohyanagi³, T. Mochizuki^{1,2}, Y. Nakamura², T. Aizu⁴, A. Fujiyama⁴, A. Toyoda⁴, N. Kurata¹ (1. Plant. Genet. Natl. Inst. Genet 2. Gene-Product Informatics. Natl. Inst. Genet 3. Software. Mitsubishi 4. Comparative Genomics. Natl. Inst. Genet)
- P017** Studies on proteins of rice seeds using software developed for analysis of images on 2D electrophoresis gels.
 ○S. Hashimoto¹, T. Tanabata², K. Hamada¹, T. Yamada¹, M. Kanekatsu¹ (1. Grad Sch Agr., Tokyo U. Agr. Tec. 2. NIAS)
- P018** Construction of gene expression networks in rice
 ○K. Hamada¹, N. Yamamoto¹, T. Mochizuki², K. Suwabe³, N. Kurata², K. Yano¹ (1. Bioinf., Fac. Agri., Meiji Univ. 2. Natl. Inst. Genet. 3. Bioresources, Mie Univ.)

- P019** Improvement and Use of EvoTree to assist in both drawing the pedigree trees and tracing the inheritable trait
○A. Takezaki¹, T. Ban², M. Katsuta³, H. Okuizumi⁴, M. Hajika⁵ (1.NARC2.Kihara Institute for Biological Research, YCU3.Tsukuba office, AFFRC, MAFF4.NIAS5.NICS)
- P020** Mutation analysis of a gene controlling sugar chain composition at the C-22 position of group A saponins in soybean genetic resources
○H. Sasama¹, T. Sayama¹, T. Suwama¹, K. Komatsu¹, C. Tsukamoto², M. Ishimoto¹ (1.NARCH2.Grad. Sch. Agric, Iwate U.)
- P021** The genetic classification of the black soybean landraces originated from the Tanba area and neighboring regions
○S. Yoshida¹, T. Hirota¹, T. Sayama², H. Sasama², M. Ishimoto² (1.Hyogo Pref. Agr. Res. Center2.Nat. Agr. Res. Center. For Hokkaido region)
- P022** Phylogenetic differentiation in soybean landraces Dadacha-mame.
○S. Konishi, T. Sasanuma, T. Abe (Fac. Agr. Yamagata U.)
- P023** Modern einkorn wheat: Back to cultivation
○N. Watanabe, H. Md. Anowarul, I. Kita, K. Kosuge, T. Kuboyama (College Agr., Ibaraki U.)
- P024** Proteome Variation in Wild Relatives of Wheat: Functional Analysis of Grain using LCQ Mass Spectrometry
○k. kim¹, . Kamal¹, . Shin¹, . Oh¹, H. Tsujimoto², C. Park³, H. Heo⁴, S. Woo¹ (1.Dept.of Crop Science, Chungbuk National University, Cheong-ju 361-763, Korea2.Lab. of Plant Genetics and Breeding Science, Tottori University, Tottori 680-8553, Japan3.Honam Agricultural Research Institute, National Institute of Crop Science, Iksan 570-080, Korea4.Breeding Resource Development, National Institute of Crop Science, Suwon, 441-857, Korea)
- P025** Influences of Allelic Variations in Glutenin on Quality of Pan Bread and White Salted Noodles from Korean Wheats
○C. Park¹, C. Kang¹, S. Cho¹, J. Jeung², . Cheong¹, . Woo³ (1.Development of Rice and Winter Cereal Crop, National Institute of Crop Science, Iksan 570-080, Korea2.Rice Research Division, National Institute of Crop Science, Suwon, 441-857, Korea3.Dept. of Crop Science, Chungbuk National University, Cheong-ju 361-763, Korea)
- P026** Proteomics of the Chloroplast: Systematic Investigation and Analysis of Sub-compartment in Wheat
○a. kamal¹, D. Kim¹, N. Uozumi², J. Choi³, K. Cho⁴, S. Woo¹ (1.Dept. of Crop Science, Chungbuk National University, Cheong-ju 361-763, Korea2.Dept. of Biomolecular Engineering, Graduate School of Engineering, Tohoku University, Sendai 980-8579 Japan3.Proteome Research Team, Korea Basic Science Institute, Daejeon 305-333, Korea4.Mass Spectrometry Research Center, Korea Basic Science Institute, Chungbuk 863-883, Korea)
- P027** Association of Puroindoline Genotypes and Grain Properties, Milling Performances and Physical Properties of Flour in Korean Wheats
○C. Park¹, C. Kang¹, J. Jeung², Y. Cheong¹, S. Woo³ (1.Development of Rice and Winter Cereal Crop, National Institute of Crop Science, Iksan 570-080, Korea2.Rice Research Division, National Institute of Crop Science, Suwon, 441-857, Korea3.Dept. of Crop Science, Chungbuk National University, Cheong-ju 361-763, Korea)

- P028** Genetic variation and regional distribution in domesticated tetraploid wheat (*Triticum turgidum* L.) around Abyssinian Highland
 ○S. Takenaka¹, N. Mori², T. Kawahara¹ (1. Grad. Sch. Agr., Kyoto U. 2. Grad. Sch. Agr., Kobe U.)
- P029** Diversity of spring-winter growth habit in south and east Asian subset of barley core collection.
 ○M. Ishii, K. Sato (Res. Inst. Biores., Okayama U.)
- P030** A new method for constructing core collection of germplasm based on gene diversity: an application to foxtail millet and relation with morphological diversity
 ○R. Hirano¹, H. Iwata², K. Fukunaga³, K. Watanabe¹, M. Kawase⁴ (1. Grad. Sch. Life and Env. Sci., U. Tsukuba 2. NARC 3. Fac. Life Env. Sci., Pref. U. Hiroshima 4. NIAS)
- P031** Molecular evolution of foxtail millet genes based on the genome sequence -Homologs of *PPO* and *HD1* genes
 ○K. Fukunaga¹, T. Inoue¹, T. Hachiken¹, H. Ito¹, T. Hasegawa¹, K. Ichitani², M. Kawase³ (1. Fac. Life and Environ. Sci., Pref U. Hiroshima 2. Fac. Agri., Kagoshima U. 3. NIAS)
- P032** Phylogenetic differentiation of foxtail millet as revealed by nucleotide sequence polymorphism of *Waxy* gene.
 ○T. Hachiken¹, T. Hasegawa¹, K. Ichitani², M. Kawase³, K. Fukunaga¹ (1. Fac. Life and Environ. Sci., Pref U. Hiroshima 2. Fac. Agr., Kagoshima U. 3. NIAS)
- P033** Diversity of the S haplotype of local turnip varieties in Nagano, Japan
 ○S. Ozawa¹, K. Nemoto¹, M. Minami¹, K. Matsushima¹, Y. Park², T. Nishikawa³, Y. Nishikawa⁴ (1. Grad. Sch. Agric., Shinshu U. 2. Interdisipl. Grad. Sch. Sci. & Technol., Shinshu U. 3. Nat. Inst. Agrobiol. Sci. 4. Grad. Sch. Intern. Development, Nagoya U.)
- P034** Molecular diversity of mitochondrial minisatellites in leaf beet
 D. Cheng¹, Y. Yoshida¹, K. Kitazaki¹, S. Negoro¹, H. Takahashi², ○T. Kubo¹, T. Mikami¹ (1. Res. Fac. Agr., Hokkaido U. 2. NARCH)
- P035** Temporal differentiation of juvenile-adult phase change between indica and japonica rice.
 ○E. Arakawa, T. Yoshikawa, J. Itoh, Y. Nagato (Grad. Sch. Agric. Life Sci., U. Tokyo)
- P036** Development of biodiversity risk assessment methods on transgenic sweet potato. II. DNA marker for evaluation of hybridity on *Ipomoea* species and sweet potato.
 ○Y. Okada, Y. Takahata, M. Tanaka, M. Yoshinaga (KONARC)
- P037** Identification of chestnut cultivars by using nuts tissues with SSR markers
 ○T. Yamamoto, S. Terakami, F. Hosaka, S. Nishio, H. Yamashita, N. Takada, Y. Sawamura, T. Saito, C. Nishitani, T. Imai, H. Fujii (National Institute of Fruit Tree Science)
- P038** LET-dependent effects on DNA mutations in *Arabidopsis thaliana* (1)
 ○Y. Kazama¹, T. Hirano¹, K. Nishihara¹, Y. Liu^{1,2}, S. Ohbu¹, Y. Hayashi¹, Y. Hayashi¹, T. Matsuyama³, T. Abe¹ (1. RIKEN Nishina Center 2. Inst. Modern Phys., Chin. Acad. Sci 3. RIKEN ASI)
- P039** Effect of LET value of heavy-ion beam on mutation induction in rice
 ○Y. Hayashi¹, T. Shibukawa¹, Y. Kazama¹, T. Hirano¹, S. Ohbu¹, H. Tokairin¹, T. Sato², T. Abe¹ (1. RIKEN, Nishina Cent. 2. Grad. Sch. Life Sci., Tohoku U.)

- P040** Whole-genome sequencing of salt-tolerant mutant of rice induced by C-ion beam irradiation
○T. Hirano¹, T. Shibukawa¹, E. Arner², H. Ichida^{1,3}, H. Takehisa^{1,4}, Y. Hayashi¹, R. Manabe², J. Kawai², T. Sato⁵, T. Abe¹ (1. RIKEN Nishina Center 2. RIKEN LSA system development group 3. Fac. Agric., Meiji U. 4. Genome Resource Center, National Institute of Agrobiological Sciences 5. Grad. sch. Life Sci., Tohoku U.)
- P041** Developing Amylorice and studies on the starch properties (2)
○K. Abe¹, A. Sekikawa¹, K. Idichi², I. Hanashiro³, T. Minemura⁴, K. Satoh⁴, S. Akuzawa⁴, N. Fujita⁵, T. Mitsui⁶, K. Itoh¹ (1. Grad. Sch. Sci. Tech., Niigata U. 2. Grad. Sch. Agric., Kagoshima U. 3. Fac. Agric., Kagoshima U. 4. Tohkyo U. Agric., Fac. Appl. Biosci. Nutri. Sci. 5. Dept. Biol. Produc., Akita Pref. U. 6. Fac. Agric., Niigata U.)
- P042** Characterization of transgenic rice overexpressing RSOsPR10 protein induced by environmental stress.
○K. Ohta¹, H. Hasegawa¹, S. Komatsu², T. Koshihara³, T. Terakawa¹ (1. Hokko Chem. Industry 2. NICS 3. Tokyo Metro. U.)
- P043** A systematic analysis of rice transcription factors based on altered phenotypes of transgenic rice plants overexpressing individual transcription-factor cDNAs
○A. Horikawa¹, K. Iida-Okada¹, T. Tsuchida-Mayama¹, A. Miyao¹, T. Nagata¹, A. Hosaka¹, S. Kikuchi¹, N. Mitsuda², Y. Takiguchi², K. Matsui^{2,3}, M. Ohme-Takagi², Y. Nagamura¹, H. Ichikawa¹ (1. NIAS 2. AIST 3. GreenSogna, Inc.)
- P044** Effect of high-temperature conditions on pollen-tube growth in interspecific crosses between *Cucumis melo* and wild *Cucumis* species.
○Y. Matsumoto^{1,2}, M. Miyagi¹, N. Watanabe^{2,3}, T. Kuboyama^{2,3} (1. Plant Biotech. Inst., Ibaraki Agr. Cent. 2. Grad. Sch. Agr., Tokyo U. Agr. Tec. 3. Sch. Agr. Ibaraki U.)
- P045** Production of interspecific hybrids between *Brassica* wild species and *B. oleracea*
○s. Shim, w. Yamada, s. Bang, y. Kaneko (Fac. Agri., U. Utsunomiya)
- P046** Seed shattering observed in interspecific hybrid between tartary buckwheat and common buckwheat
○M. Minami¹, S. Orapin¹, H. Yamamoto², A. Kawamura¹, N. Hayashi², K. Matsushima¹, K. Nemoto¹ (1. Grad. Sch. Agric., Shinshu U. 2. Fac. Agric., Shinshu U.)
- P047** Inheritance and agronomic characteristics of the semidwarf mutants of Tartary buckwheat induced by gamma rays and ion beams irradiation
○T. Morishita¹, Y. Mukasa¹, T. Suzuki¹, A. Shimizu², H. Yamaguchi³, K. Degi⁴, J. Aii⁵, Y. Hase⁶, N. Shikazono⁶, A. Tanaka⁶, Y. Miyazawa⁷, Y. Hayashi⁸, T. Abe⁸ (1. NARCH 2. NIAS 3. NIFS 4. OPARC 5. NUPALS 6. JAEA 7. Tohoku U 8. RIKEN)
- P048** Production and characterization of the seeds obtained by the intergeneric crosses between *Cymbidium* and *Lycate*
○H. Shiota¹, A. Hayashi¹, M. Abou², J. Kato¹, S. Ichihashi¹ (1. Dep. Biol., Aichi U. Educ. 2. Abou Orchids Co., Ltd)
- P049** Production of ever flowering Ornamental Allium specie by inter specific cross using Chinese chive cultivar for flower stem
○Y. Matsuda, Y. Otomaru, T. Murata (Sch. Agri., Tokai U.)

- P050** Hybrid lethality expressed in hybrids between *Nicotiana tabacum* and 50 lines of 21 wild species in section *Suaveolentes*
 ○T. Iizuka¹, M. Oda², T. Tezuka² (1.Sch. Life Envi. Sci., Osaka Pref. U. 2.Grad. Sch. Life Envi. Sci., Osaka Pref. U.)
- P051** Molecular cloning and expression analysis of the hybrid lethality related gene *HLR104* from *Nicotiana tabacum* and *N. suaveolens*
 ○S. Nomura¹, T. Yamada², M. Kanekatsu², W. Marubashi¹ (1.Sch. Agr., Meiji U. 2.Grad. Sch. Agr., Tokyo U. Agr. Tec.)
- P052** Research support for production of transgenic soybeans by the Transformation Network (TRASNET)
 ○M. Ohashi¹, A. Hirose¹, K. Takagi¹, M. Matsui², M. Ishimoto¹ (1.NARCH 2.RIKEN-PSC)
- P053** QTL analysis of induction and proliferation of somatic embryos in soybean
 ○A. Hirose¹, T. Sayama¹, K. Komatsu¹, M. Takahashi², M. Ishimoto¹ (1.NARCH 2.KONARC)
- P054** Feature of gene silencing manifestation by siRNA signal transported long-distantly through sieve tube.
 ○A. Kanehira, K. Yamada, A. Kasai, T. Harada (Grad.Sch.Agric.Life Sci., U.Hirosaki)
- P055** Gentian nuclear factors that bind to enhancer of CaMV 35S promoter are involved in *de novo* DNA methylation.
 ○S. Yamasaki¹, M. Oda¹, N. Koizumi¹, T. Nakatsuka², M. Nishihara² (1.Grad. Sch. Life & Env. Sci., Osaka Pref. Univ. 2.Iwate Biotech. Res. Ctr.)
- P056** Transformation of somatic embryos and multiple shoots in tea tree (*Camellia sinensis*).
 ○K. Furukawa¹, N. Kageyama¹, H. Ono¹, M. Shiratori¹, M. Kato¹, A. Yamada², A. Yanagida², T. Tsuneyoshi³ (1.Numazu National College of Technology 2.Suzuki Motor Corporation 3.Shizuoka Institute of Science of Technology)
- P057** Varietal Difference in Ability of Callus formation and Susceptibility to *Agrobacterium-tumefaciens* in Sorghum Core Collection
 ○K. Miyahara (National Institute of Agrobiological Sciences)
- P058** Evaluation of blast resistance in near isogenic lines with US-2 genetic back ground as differential varieties
 ○A. Kawasaki^{1,2}, M. Telebanko-Yanoria³, Y. Koide³, N. Kobayashi^{1,3}, N. Hayashi⁴, S. Santos⁵, X. Phetmanyseng⁶, T. Jennifer⁷, T. Ha⁸, Y. Fukuta¹ (1.JIRCAS 2.Uni. Grad. Sch. Agri. Sci., U. Tottori 3.IRRI 4.NIAS 5.ICRR 6.R&CCRC 7.PhilRice 8.CLRR)
- P059** Characterization of pyramided lines carrying resistance genes to green rice leafhopper (*Nephotettix cincticeps* Uhler) in rice (*Oryza sativa* L.).
 D. Fujita^{1,2}, A. Yoshimura¹, ○H. Yasui¹ (1.Fac. Agr., Grad. Sch., Kyushu Univ. 2.International Rice Research Institute)
- P060** Cold tolerance assessment of the rice lines with cold tolerance QTLs in a phytotron
 ○K. Saito, S. Matsuba, M. Kuroki, Y. Sato (Natl. Agr. Res. Ctr. Hokkaido, NARO)

- P061** Chilling tolerance and agronomic traits of the transgenic rice overexpressing the heat shock protein gene, *sHSP17.7*
 ○Y. Sato¹, Y. Masuta¹, S. Murayama¹, K. Ozawa²(¹.National Agricultural Research Center for Hokkaido Region².National Institute of Agrobiological Sciences)
- P062** Cool temperature tolerance at booting stage of NILs with culm length and heading in rice
 ○K. Nagano¹, K. Wagatsuma¹, M. Murai²(¹.Miyagi Pref.Agric.Exp.Sta.².Fac.Agric.Kochi U.)
- P063** Evaluation of cold tolerance at the booting stage in F₂ population introduced QTLs by the cool-water irrigation method
 ○S. Matsuba, M. Kuroki, K. Saito, N. Yokogami, Y. Sato, H. Shimizu(Natl. Agr. Res. Cent. Hokkaido, NARO)
- P064** Contribution of rice ABC transporter RCN1 to oxidation of rhizosphere in waterlogged soil
 ○Y. Matsuo¹, M. Nakamura¹, K. Shiono¹, M. Ando¹, K. Ranathunge², N. Shitan³, M. Fujimoto⁴, H. Takahashi¹, I. Takamura⁵, K. Yazaki³, L. Schreiber², N. Tsutsumi¹, M. Nakazono¹, K. Kato⁶(¹.Grad. Sch. Agric. Life Sci., U. Tokyo².U. Bonn, Dept. Ecophysiol., Inst. Cellular & Mol. Bot.³.RISH., Kyoto⁴.Grad. Sch. Sci., U. Tokyo⁵.Grad. Sch. Agr., U. Hokkaido⁶.Obihiro U. Agr. & Vet. Med.)
- P065** Global expression analysis of genes related to the inducible aerenchyma formation in rice roots
 ○T. Yamauchi¹, K. Shiono^{1,2}, T. Abiko¹, I. Rajhi¹, I. Takamura³, Y. Nagamura⁴, N. Tsutsumi¹, M. Nakazono¹, K. Kato⁵(¹.Grad.Sch.Agric.Life Sci., U.Tokyo².JSPS Research Fellow³.Grad.Sch.Agr., U.Hokkaido⁴.Genome Resource Center, Natl.Inst.Agr.Sci.⁵.Obihiro Univ.Agric.&Vet.Med.)
- P066** Micro Array analyses of rice over-expressing three different types of genes related to Cd accumulation
 ○H. Kumooka^{1,2}, S. Hashida², K. Shoji², F. Goto², H. Shimada¹, T. Yoshihara²(¹.Dept.Biol.Sci&Tec., Tokyo Univ. of Sci.².Lab.Environment.sci., CRIEPI.)
- P067** The comparison of salt tolerance of *Chloris gayana* and its close relative, *Chloris virgata* with rice
 ○K. Fujihara¹, S. Nishiuchi¹, S. Liu², T. Takano¹(¹.ANESC, U. Tokyo².Northeast Forestry University, China)
- P068** Relationship between grain shape and occurrence of white-back kernels of rice
 ○K. Tomita, A. Kobayashi(Fukui Agr.Exp.Stn.)
- P069** The subcellular localization and functional analysis of chloride channel (OsCLC) in rice
 ○X. Li¹, D. Tsugama¹, S. Nishiuchi¹, S. Liu², T. Takano¹(¹.ANESC, U. Tokyo².Northeast Forestry University)
- P070** Changes and varietal differences of metabolites in rice plants against high temperature stress
 ○T. Sano¹, H. Goto², A. Oikawa³, T. Hayasaka¹, H. Fujii⁴(¹.Yamagata Int. Agr. Res. Cent., Rice Breeding and Crop Sci. Exp. Stn.².Inst. for Adv. Biosci., Keio Univ.³.RIKEN Plant Sci. Cent.⁴.Fac. of Agr., Yamagata Univ.)
- P071** Expression of nitrate uptake-related genes in rice coleoptiles
 ○S. Takayanagi¹, T. Shiraiwa², A. Shimizu³, H. Hasegawa³(¹.Grad. Sch. Environ. Sci., Univ. Shiga Pref.².Grad. Sch. Agr., Kyoto U.³.Sch. Environ. Sci., Univ. Shiga Pref.)

- P072** Inheritance patterns for sensitivity of high-yielding rice varieties to benzobicyclon, a 4-HPPD inhibitor
○M. Akasaka, H. Watanabe(NARC)
- P073** Field-test evaluation of partial resistance to *Phytophthora sojae* in soybean
○Y. Yamashita¹, A. Tazawa², M. Minami¹(1.Hokkaido Central Agr. Exp. Sta.2.Hokkaido Pref. Tokachi Agr. Exp. Sta.)
- P074** Antixenotic effect of soybean pubescence density on common cutworm (*Spodoptera litura*)
○N. Oki¹, K. Komatsu², M. Takahashi¹, M. Takahashi¹, M. Hajika³, M. Ishimoto²(1.Natl. Agr. Res. Ctr. for Kyushu Okinawa Region2.Natl. Agr. Res. Ctr. Hokkaido3.Natl.Inst.Crop Sci.)
- P075** Mapping of QTL for Fusarium head blight resistance in winter wheat cultivars "Yumehikara" and "Kitahonami."
○Z. Nishio¹, C. Onoe^{1,2}, A. Hayata¹, M. Ito¹, T. Tabiki¹, K. Nagasawa¹, H. Yamauchi¹, H. Miura²(1.Natl. Agr. Res. Ctr. Hokkaido Region2.Obihiro Univ. Agr. & Vet. Med.)
- P076** Evaluation of the Thatcher near-isogenic lines carrying the wheat leaf rust resistance genes in the field
○H. Ito, K. Nakamura, M. Taira, Y. Taniguchi(Tohoku Natl. Agr. Res. Cent. NARO.)
- P077** Cloning and expression analysis of WRKY45 gene in wheat.
○I. Bahrini^{1,2}, R. Kikuchi², T. Ogawa², H. Kawahigashi², H. Handa^{1,2}(1.Grad. Sch. Life & Env. Sci., U. Tsukuba2.NIAS)
- P078** Relationship between DON accumulation QTL and MRP gene in wheat
○R. Kikuchi, H. Handa(NIAS)
- P079** Raffinose accumulation under abiotic stress conditions in wheat seedlings
○E. Shimosaka, S. Murayama(Natl.Agr.Res.Cent.Hokkaido., NARO)
- P080** Improvement of the resistance to tomato yellow leaf curl virus (TYLCV) in tomato plants homozygous for TYLCV-resistant gene(s)
○A. Saito, T. Saito, H. Matsunaga(NIVTS, NARO)
- P081** Efficacy of insect-resistant GM maize (Bt11 sweet) against Oriental corn borer (*Ostrinia furnacalis*) under Japanese field conditions
○T. Ugajin¹, Y. Sasakawa², E. Domon², T. Ishikawa², T. Uchida², T. Morimoto¹, T. Manabe³, Y. Tabei²(1.Syngenta Japan K.K.2.National Institute of Agrobiological Science3.Syngenta Seeds K.K.)
- P082** Salt and heavy metal tolerance of Arabidopsis transformed with genes from mangrove plant, *Bruguiera gymnorhiza*
○Y. Tada(Sch. Biosci. Biotechnol., Tokyo Univ. of Technol.)
- P083** Analysis of the Arabidopsis transformed with *Bruguiera gymnorhiza* genes which selected by Agrobacterium salt-tolerance screening
○S. Sawai, Y. Tada(Tokyo Univ. of Technol.Grad. Sch. of Bionics)
- P084** Improvement of eating quality of early-maturing lines by reducing protein content of rice.
○A. Kobayashi, K. Tomita, M. Tanoi, T. Hayashi(Fukui Agr. Exp. Stn.)

- P085** Gelatinization properties of endosperm starches in waxy mutants from an indica cv. IR36 and a japonica cv. Kinmaze by urea solution
 ○V. Hoang¹, T. Tran¹, A. Nishi¹, K. Ohtsubo², Y. Takemoto³, H. Satoh¹ (1. Fac. Agr., Kyushu U. 2. Fac. Agr., Niigata U 3. Nat. Inst. of Crop Sci.)
- P086** The evaluation of stability for grain quality of recent rice cultivars in Niigata Prefecture, Japan
 T. Kanbe, T. Matsui, K. Nabata, E. Nara, ○K. Ishizaki (Niigata Crop Res. Center)
- P087** Effect of Varietal difference on cracked rice kernel
 ○T. Hayashi (Fukui Agric. Exp. Sta.)
- P088** Evaluation of fresh-pasta making qualities of hard wheat varieties grown in the Hokkaido region.
 ○M. Ito, Z. Nishio, K. Nagasawa, W. Funatsuki, T. Tabiki, H. Yamauchi (Natl. Agr. Res. Ctr. Hokkaido Region)
- P089** Excellent milling properties introducing from Hokkaido wheat cultivar "Kitahonami".
 ○M. Fujita¹, K. Hatta¹, Y. Ichinose², S. Oda², K. Kubo^{1,2}, H. Matsunaka¹ (1. KONARC/NARO 2. NICS/NARO)
- P090** Effect of variant Wx proteins on amylose of wheat flour
 ○M. Yamamori (Nat. Inst. Crop Sci.)
- P091** A New High Yielding Pigmented Waxy Rice Cultivar Cheongpungheuk chal
 ○S. Lee¹, Y. Lee¹, J. Lee¹, D. Han¹, J. Ahn², C. Rho¹, J. Park¹, S. Hong¹, J. Ji¹, Y. Kim¹, T. Yun¹, K. Min¹, S. Woo² (1. Chungbuk Agricultural Research and Extension Service, Cheong-Won, 373-880. Korea 2. College of Agriculture Life and Environment Sciences, Chungbuk National University. Cheong-Ju, 361-763, Korea)
- P092** A New Aromatic Pigmented Waxy Rice Cultivar "Cheongpungheukhyang-chal"
 ○Y. Lee¹, S. Lee¹, J. Lee¹, D. Han¹, S. Joo¹, I. Song¹, T. Yun¹, K. Min¹, S. Woo² (1. Chungbuk Agricultural Research and Extension Service, Cheong-Won, 373-880. Korea 2. College of Agriculture Life and environment Sciences, Chungbuk National University. Cheong-Ju, 361-763, Korea)
- P093** Genetic Analysis of variation in sugar chain compositions at the C-3 position of saponins in soybean seed.
 ○Y. Takada¹, I. Tayama², T. Sayama³, H. Sasama³, M. Saruta¹, A. Okabe¹, A. Kikuchi⁴, C. Tsukamoto², M. Ishimoto³ (1. WeNARC 2. Grad. Sch. Agr. Iwate U. 3. NARCH 4. NARCT)
- P094** Increase of functional polysaccharide content by pyramiding of starch mutant genes in barley.
 ○T. Tonooka^{1,2}, E. Aoki¹, T. Yoshioka¹, C. Kiribuchi-Otobe^{1,2} (1. Natl. Inst. Crop Sci., NARO 2. Grad. Sch. Life Envir. Sci., U. Tsukuba)
- P095** Relation between caffein-less character derived from *Camellia taliensis* and caffeine synthase gene *TCS1*
 ○A. Ogino¹, F. Taniguchi¹, J. Tanaka¹, P. Yamamoto², K. Yamada² (1. Naro NIVTS 2. Grad. Sch. Div. of Sci. and Eng., U. Toyama)
- P096** relationship between seed morphological characteristics and seed components in vegetable-type soybean (Edamame)
 ○N. Oda, S. Honma, T. Sasanuma, T. Abe (Fac. Agr. Yamagata U.)

- P097** Gene expression analysis for *sd1* in rice semidwarf variety Hikarishinseiki developed as Koshihikari-sd.
 ○S. Matsumoto, M. Tomita (Mol. Genet. Lab., Fac. Agr., Tottori U.)
- P098** Mapping for root length of seedlings hydroponically grown in mapping populations
 ○M. Obara¹, A. Abe², R. Terauchi¹, T. Takeda¹ (1. Iwate Biotechnology Research Center 2. Iwate Agricultural Research Center)
- P099** Cloning of cDNAs encoding chloroplast-targeted aminolevulinic acid dehydratase in common wheat and its wild progenitors
 ○Y. Takenouchi, K. Kanamaru, S. Takumi (Grad. Sch. Agric. Sci., Kobe U.)
- P100** Strigolactones negatively regulate the mesocotyl elongation in rice during germination in darkness
 ○Z. Hu¹, H. Yan^{1,2}, J. Yang^{1,3}, S. Yamaguchi⁴, M. Maekawa⁵, I. Takamura⁶, N. Tsutsumi¹, J. Kyojuka¹, M. Nakazono¹ (1. Grad. Sch. Agric. Life Sci., U. Tokyo 2. Coll. Life Sci., Northeast Forestry U., China 3. Coll. Agric. Biotech., Zhejiang U., China 4. RIKEN Plant Science Center 5. Res. Inst. Biores., Okayama U. 6. Grad. Sch. Agr., U. Hokkaido)
- P101** Analysis of *main culm lethal* mutant that shows lethality of main culm in the early vegetative phase
 ○H. Fujii, J. Itoh, Y. Nagato (Grad. Sch. Agric. Life Sci., U. Tokyo)
- P102** Expression of MADS-box genes related to floral form mutation in evergreen azalea
 ○A. Nakatsuka¹, M. Koga¹, M. Ootani¹, K. Cheon², N. Kobayashi¹ (1. Fac. Life Environ Sci., Shimane U. 2. United Grad. Sch. Agric. Sci., Tottori U.)
- P103** Expression analysis of genes for flowering in a late bolting breeding material, Leafy Green Parental Line No.2 (*Brassica rapa*)
 ○N. Kitamoto¹, S. Yui², Y. Takahata¹, S. Yokoi¹ (1. Faculty of Agri., U. Iwate 2. NARCT)
- P104** Analysis of genes expressed in ovules hybridized between *Brassica napus* and its parental species (*B. rapa* and *B. oleracea*).
 S. Tamada, K. Fukushima, ○S. Yokoi, Y. Takahata (Fac. Agri., Iwate U.)
- P105** Morphological and anatomical observations of roots during the phase of thickening in radish (*Raphanus sativus*) plants
 ○H. Zaki, S. Kato, S. Yokoi, Y. Takahata (Fac. of Agri., Iwate U.)
- P106** Physiological analysis in Arabidopsis flowering mutant under salt stress.
 ○T. Kubo, S. Kawai, Y. Takahata, S. Yokoi (Fac. of Agri., Iwate U.)
- P107** Expression of TRT1 and TRT3, Arabidopsis genes promote flowering is regulated by PHYB.
 ○R. Tsuwamoto, T. Harada (Fac. Agric. Life Sci., Hirosaki U.)
- P108** Expression analysis of genes related to desiccation tolerance of microspore-derived embryos of *Brassica napus* L.
 ○A. Goto, S. Hareyama, Y. Takahata, S. Yokoi (Fac. of Agri. Iwate U.)
- P109** Quantification of barriers to pollen tube elongation in interspecific crosses of *Oryza*
 ○M. Shenton, N. Kurata (National Institute of Genetics, Plant Genetics Laboratory)

- P110** CMS gene, *orf125*, was existed as a sublimon in fertility restored plants by *Fr* gene.
 ◦M. Watanabe¹,M. oshima²,N. Koizuka¹,H. Handa³,J. Imamura¹(1.Fac.Agr.Tamagawa U.2.Grad.Sch.Life&Env.Sci.,U.Tsukuba³.NIAS)
- P111** Pollen flow distance in sugar beet as assessed by SSR markers
 ◦Y. Kuroda,H. Takahashi,K. Taguchi,K. Okazaki,H. Abe(NARCH,NARO)
- P112** Cytological analysis and candidate gene expression of pollen development on *Cryptomeria japonica* male sterile mutant ' Soshun'.
 ◦M. Tsubomura¹,M. Kurita²,A. Watanabe¹(1.Forest Tree Breeding Center, Forestry and Forest Products Research Institute².Forest Bio-Research Center, Forestry and Forest Products Research Institute)
- P113** Evaluation of crossability of progeny from crosses between *Fragaria vesca* and *F. x ananassa*: part II.
 ◦T. Kimura¹,K. Sone¹,T. Yanagi²,E. Kitadani¹,M. Okimura¹(1.KONARC/NARO².Fac. Agr., Kagawa U.)
- P114** Fina structural analysis for process of embryo sac formation derived from aposporous initial cell in guinea grass (*Panicum maximum*)
 ◦L. Chen¹,L. Guan²(1.Fac. Hort., Minamikyushu U.².Fac. Edu. & Cult., U. Miyazaki)
- P115** Genetic analysis of morphological traits related with the yield potential in rice
 ◦T. Yamamura¹,Y. Shibata²,K. Doi³,M. Ikeda³,T. Takashi⁴,M. Ashikari⁵,M. Matsuoka⁵,H. Kitano⁵(1.Earth Note Co. Ltd.².Grad. Sch. Educ., Aichi U. Educ.³.Grad. Sch. Bioagr. Sci., Nagoya U.⁴.HRI-JP⁵.Biosci. Biotech. Ctr., Nagoya U.)
- P116** QTL for spikelet number from a high-yielding variety, Hoshiaoba, detected in an introgression line.
 ◦Y. Koide^{1,2},D. Fujita¹,A. Tagle¹,M. Telebanco-Yanoria¹,Y. Fukuta²,N. Kobayashi^{1,2}(1.International Rice Research Institute².Japan International Research Center for Agricultural Sciences)
- P117** Rice breeding for phytoremediation of cadmium-polluted paddy field
 1. QTL analysis of cadmium accumulation in rice grain and straw
 ◦T. Abe¹,F. Taguchi-Shiobara²,Y. Kosjima^{3,4},T. Ebitani³,M. Kuramata¹,S. Mori¹,T. Yamamoto²,M. Yano²,S. Ishikawa¹(1.NIAES².NIAS³.Toyama Pref. Agri. Fores. Fish. Res. Cent.⁴.Takaoka Agri. Fores. Prom. Cent.)
- P118** Mapping of one QTL for amylose content on chromosome 9 in rice
 ◦Y. Takemoto,Y. Takeuchi,H. Hirabayashi,I. Ando(Natl. Inst. Crop Sci.)
- P119** Mapping of a QTL controlling seed dormancy of *O. rufipogon* (RGC-ACC 104812).
 ◦Y. Takeuchi¹,H. Hirabayashi¹,K. Sugimoto²,M. Yano²,I. Ando¹(1.Natl. Inst. Crop Sci.².Natl. Inst. Agrobiol. Sci.)
- P120** QTL analysis for the early-morning flowering character derived from *Oryza officinalis* and the effect of the QTL on the chromosome 3.
 ◦H. Hirabayashi¹,T. Kanbe^{1,2},Y. Takemoto¹,N. Ikeda¹,Y. Takeuchi¹,T. Ogawa³,I. Ando¹(1.Natl. Inst. Crop Sci. ².Niigata Agr. Res. Inst.³.Miyazaki Univ.)
- P121** QTL analysis for seed dormancy in rice respond to seed development environment. 2. Subsequent confirmation of the effects of the QTLs.

○D. Tezuka,R. Shishido,K. Nomura(Coll. Bioresource Sci., Nihon U.)

P122 Linkage analysis of the gene involved in the hybrid breakdown found in the progeny from the cross between the two rice cultivars, Jamaica and IR36.

○K. Iiyama¹,Y. Takemoto¹,S. Taura²,M. Sato¹,K. Ichitani¹(¹.Fac. Agri., Kagoshima U.².Inst. Gene Res., Kagoshima U.)

P123 A bulk method to detect seed contamination using DNA markers to discriminate Niigata rice cultivars.

○H. Tabuchi¹,N. Hashimoto²,K. Hayashi³,H. Yoshida¹(¹.Hokuriku Res. Cen., NARO².Niigata Agr. Res. Ins.³.NARC, NARO)

P124 Cultivar identification of rice based on mPing insertion polymorphisms.

○M. Kishine,K. Suzuki,T. Okunishi(NFRI, NARO)

P125 Root gene expression profiling in rice

○H. Takehisa¹,M. Igarashi¹,Y. Sato¹,T. Abiko²,R. Motoyama¹,B. Antonio¹,Y. Inukai³,M. Nakazono²,Y. Nagamura¹(¹.NIAS².Grad. Sch. Agric. Life Sci., U. Tokyo³.Grad. Sch. Bioagr. Sci., Nagoya U.)

P126 Proteome analysis of RNA binding proteins in embryos of rice seeds.

○T. Hirooka,N. Sano,S. Masaki,T. Yamada,M. Kanekatsu(Tokyo.U.Agr.Tec.Fac.Agr.)

P127 Development of near-isogenic lines for days to heading and spikelet number with genetic background of Indica-type rice variety, IR64

N. Kobayashi^{1,2},D. Fujita¹,A. Tagle¹,M. Telebanco-Yanoria¹,Y. Koide^{1,2},Y. Fukuta²(¹.IRRI².JIRCAS)

P128 Genotyping of wheat cultivars by DNA markers associated with *Wheat Yellow Mosaic Virus* resistant gene, *Ym1b*.

○H. Kojima¹,Z. Nishio²,H. Matsunaka³,M. Seki¹,M. Chono¹,C. Otobe¹,S. Oda¹(¹.Natl. Inst. Crop. Sci.².Natl. Agr. Res. Ctr. for Hokkaido Region³.Natl. Agr. Res. Ctr. for Kyushu Okinawa Region)

P129 Construction of linkage map and QTL analyses for flowering and culm length using recombinant inbred lines of common wheat.

○F. Kobayashi^{1,2},S. Takumi³,H. Handa¹(¹.NIAS².JSPS Research Fellow³.Grad. Sch. Agric. Sci., Kobe U.)

P130 Development of easy and rapid DNA extraction methods with commercialized DNA extraction kit from wheat cakes

○K. Murakami¹,Y. Fujita²,Y. Honda¹(¹.Kagawa Prefectural Agricultural Experiment Station².National Agricultural Research Center for Western Region,National Agriculture and Food Research Organization)

P131 The selection effects of tolerant lines for damaged grain in malting barley using DNA markers.

○H. Kai¹,K. Takata¹,M. Tsukazaki¹,Y. Uchimura¹,O. Yamaguchi²,M. Furusho¹,T. Baba¹(¹.Fukuoka Agric. Res. Cent.².Hokuriku Res. Cent., NARC.)

P132 QTL analysis of seed mottling resistance in soybean

○M. Saruta¹,Y. Takada¹,A. Okabe¹,T. Sayama²,H. Sasama²,M. Ishimoto²(¹.WeNARC².NARCH)

- P133** QTL analysis for paternal inheritance of mitochondrial plasmid in *Brassica napus*.
 ○M. Oshima¹, H. Handa^{1,2} (1. Grad. Sch. Life & Env. Sci., U. Tsukuba². NIAS)
- P134** Fine mapping of a resistance gene *Xa14* to bacterial blight in rice.
 T. Shigeyama¹, K. Ichitani¹, K. Kawabe², M. Sato¹, ○S. Taura² (1. Fac. Agr. Kagoshima U. 2. Inst. Gene Res., Kagoshima U.)
- P135** Fine mapping of *hca1* and *hca2*, the genes causing F2 chlorosis in rice
 ○Y. Takemoto¹, K. Iiyama¹, Y. Shirata¹, S. Taura², M. Sato¹, K. Ichitani¹ (1. Fac. Agri., Kagoshima U. 2. Inst. Gene Res., Kagoshima U.)
- P136** Construction of a SSR-based linkage map in Peanut
 ○Y. Naito¹, S. Suzuki², M. Hasegawa², M. Watanabe², T. Kuboyama³, K. Tooyama³, S. Isobe⁴, S. Sato⁴, K. Shirasawa⁴, S. Sasamoto⁴, S. Tabata⁴ (1. Mitsubishi Chemical Medience Corporation². Chiba Prefectural Agriculture and Forestry Research Center³. College of Agriculture, Ibaraki University⁴. Kazusa DNA Research Institute)
- P137** Radiation hybrid mapping of the suppressor gene *Igc1* to a gametocidal gene in wheat
 ○S. Yamano¹, H. Tsujimoto², M. Nitta¹, T. Endo¹, S. Nashuda¹ (1. Grad. Sch. Agric. Appl. Biol., Kyoto U. 2. Agric., Tottori U)
- P138** AFLP analysis to search for markers linked to the Fusarium wilt-resistance gene in strawberry.
 ○K. Kakeda¹, Y. Yamamoto², Y. Seko¹, K. Ougiyama¹, T. Mori² (1. Grad. Sch. Bioresour., Mie U. 2. Mie Pref. Agr. Res. Inst.)
- P139** Search for genes in the apomixis genomic region in guineagrass.
 ○M. Takahara¹, M. Ebina¹, K. Iimura¹, T. Takamizo¹, H. Nakagawa² (1. NILGS². NIAS)
- P140** Expression analysis of the starch synthase in grain amaranth (*Amaranthus cruentus*) by RT-PCR analysis.
 ○Y. Park¹, K. Nemoto², T. Nishikawa³, K. Matsushima², M. Minami², M. Kawase³ (1. Interdiscipl. Grad. Sch. Sci. & Technol., U. Shinshu 2. Grad. Sch. Agric., U. Shinshu 3. Nat. Inst. Agrobiol. Sci.)