Title of Papers Presented at the 122nd Meeting of The JAPANESE SOCIETY

Oral presentations

101 Full-length cDNA analysis of the model grass Brachypodium distachyon ○Mochida, K.1,2,3, Y. Uehara1, F. Takahashi1,2, T. Yoshida2, T. Sakurai2, K. Shinozaki1,2(1. RIKEN Biomass Engineering Program, 2. RIKEN Plant Science Cneter, 3. Yokohama City University, Kihara Institute for Biological Research)

102 Chromosomal assignment of wheat transcripts using comparative genome analysis ○Mishina, K.1, K. Kawaura1, M. Alagu1, K. Mochida2, K. Igarashi3, K. Yano3, H. Tarui4, J. Kawai4, T. Tanaka5, Y. Ogihara1(1. KIBR, Yokohama City U., 2. RIKEN PSC, 3. Bioinf., Sch. of Agri., Meiji Univ., 4. RIKEN OSC, 5. NIAS)

103 Application of nested association mapping to rice ○Abe, A., H. Takagi, H. Utsushi, A. Uemura, Y. Ochiai, R. Terauchi(Iwate Biotechnology Research Center)

104 Identification of the candidate of rice blast resistance gene, Pii by MutMap ○Takagi, H.1,2, A. Abe1, H. Yaegashi1, S. Natsume1,2, C. Mitsuoka1, R. Terauchi1(1. Iwate Biotechnology Research Center, 2. United Grad. Sch. Agric. Sci., Iwate U.)

105 Evolutionary force of AT-repeats that trap virus-like sequences and junk DNAs in the rice genomes ○Liu, R.1, S. Chen1, K. Koyanagi2, Y. Kishima1(1. Laoratory of Plant Breeding, Graduate School of Agriculture Hokkaido University, 2. Information Science and Technology Hokkaido University)

106 Identification of chromosome regions activating transposition of transposon mPing in rice ○Yoshida, Y.1, T. Tsukiyama1, Y. Monden2, M. Teraishi1, T. Tanisaka1, Y. Okumoto1(1. Grad. Sch. Agric., Univ. Kyoto, 2. Grad. Sch. Env. Life Sci., Univ. Okayama)

107 An active rice transposon mPing facilitates a quick isolation of mutant genes induced in Gimbozu ○Xu, Q., T. Asami, H. Saito, M. Kamal, Y. Yoshitake, T. Yokoo, S. Ayesha, Y. Imamura, Y. Okumoto(Graduate school of agriculture, kyoto university)

108 QTL analysis for the mutated traits of rice mutants with low nitrate uptake ability ○Asano, Y.1, S. Teramoto2,3, A. Shimizu1,2, Y. Okumoto3, H. Hasegawa1,2(1. Grad.Sch.Environ.Sci., Univ.Shiga Pref., 2. Sch.Environ.Sci., Univ.Shiga Pref., 3.

109 A SNP set for the analysis of genome structure in the high-biomass Japanese rice cultivars bred from japonica and indica crosses ☆Mizobuchi, R., J. Yonemaru, T. Yamamoto, E. Yamamoto, K. Ebana, M. Yano(Natl.Inst.Agrobiol.Sci.)

110 QTL mapping of biomass-related traits and chemical components by using RILs from a cross between high-yielding varieties 'Tachisugata' and 'Hokuriku 193' ○Matsubara, K.1, J. Tanaka1, H. Tsunematsu1, N. Kobayashi1, M. Amari2, O. Matsumura3, T. Yamamoto4, J. Yonemaru4, R. Mizobuchi4, E. Yamamoto4, M. Yano4, H. Kato1(1. NICS, 2. NILGS, 3. NARO/WARC, 4. NIAS)

111 Development of the reciprocal chromosome segment substitution lines between rice varieties, Koshihikari and Takanari toward genetic analysis of yield ☆Takai, T.1,2, T. Ikka2,3, K. Kondo2, Y. Nonoue4,5, N. Ono4, Y. Arai1, N. Iwasawa1, S. Yoshinaga1, M. Yano2, M. Kondo1, T. Yamamoto2(1. NARO Institute of Crop Science, 2. National Institute of Agrobiological Sciences, 3. Shizuoka Univ., 4. STAFF Institute, 5. Iwate Agricultural Research Center)

112 Genetic analysis of stomatal density of flag leaf by using rice crossed populations between high yield cultivar, Takanari, and Koshihikari Kondo, K.1, T. Tanabata1, T. Takai2, T. Ikka1,3, M. Yano1, ○T. Yamamoto1(1. National Institute of Agrobiological Sciences, 2. NARO Institute of Crop Science, 3. Shizuoka Univ.)

113 Selection Effect of QTL for grain cracking resistance of rice derived from indica variety "YANXUAN203" ☆Nakagomi, K.1, H. Ohta2, A. Fukushima2, R. Kaji2(1. West.Reg.Agr.Res.Cent, 2. Tohoku.Agr.Res.Cent.)

114 Analysis of dwarf genes that are used in sorghum breeding Ito, Y.1, R. Nagae1, K. Shinohara-ohmae1, S. Kasuga2, J. Yonemaru3, R. Ordonio1, T. Tokunaga4, H. Kitano1, M. Matsuoka1, ☆T. Sazuka1(1. Biosci. and Biotech. Center, Nagoya Univ., 2. AFC, Faculty of Agri., Shinshu Univ., 3. NIAS, 4. Earth Note co.ltd.)

115 Molecular genetic analysis of the QTLs involved in the domestication of emmer wheat ○Phan, T.1, C. Vladutu1, S. Kianian2, T. Ishii3, T. Pham3, S. Nasuda4, M. Nitta4, N. Mori1(1. Lab. Plant Genet., Grad. Sch. Agr. Sci., Kobe Univ., 2. Dept. Plant Sci., North Dakota State Univ., 3. Lab. Plant Breed., Grad. Sch. Agr. Sci., Kobe Univ., 4. Lab. Plant Genet., Grad. Sch. Agr., Kyoto Univ.)

116 Development and evaluation of ISBP (Insertion Site Based Polymorphism)-based markers specific for chromosome 6B of wheat (Triticum aestivum) ○Kaneko, S.1, C. Abe2, K. Hayakawa2, F. Kobayashi3, H. Handa3, T. Tanaka3, H. Sakai3, T. Itoh3, R. Ohno4, S. Takumi4, S. Nasuda1(1. Grad. Sch. Agri., Kyoto Univ., 2. Nisshin Flour Milling Inc., 3. NIAS, 4. Grad. Sch. Agri., Kobe Univ.)

117 Radiation Hybrid (RH) mapping in 6B chromosome of common wheat ○Watanabe, S.1, M. Nitta1, G. Ishikawa2, M. Saito2, T. Nakamura2, T. Shinhata3, R. Takashi1, S. Nasuda1(1. Grad. Sch. Agri., Kyoto Univ., 2. NARO/TARC, 3. Nippon Flour Mills Co. Ltd.,

118 Production of deletion lines in chromosome of common wheat using the gametocidal system ○Sakaguchi, T.1, S. Watanabe1, S. Takumi2, T. Shinhata3, G. Ishikawa4, M. Saito4, T. Nakamura4, T. Endo1, S. Nasuda1(1. Grad. Sch. Agri., Kyoto Univ., 2. Grad. Sch. Agri. Sci., Kobe Univ., 3. Nippon Flour Mills Co. Ltd., Central Lab., 4. NARO/TARC)

119 Construction of the BAC physical map on wheat chromosome 6B for its genome sequencing ○Kobayashi, F.1, S. Katagiri1, W. Karasawa1, Y. Hanawa1, H. Kanamori1, S. Kaneko2, S. Watanabe2, S. Nasuda2, K. Hayakawa3, C. Abe3, S. Takumi4, H. Fujisawa1, Y. Ito1, Y. Mukai1, J. Dolezel5, K. Kawaura6, Y. Ogihara6, T. Matsumoto1, Y. Katayose1, J. Wu1, H. Handa1(1. NIAS, 2. Grad. Sch. Agric., Kyoto Univ., 3. Nisshin Flour Milling Inc., 4. Grad. Sch. Agric. Sci., Kobe Univ., 5. Institute of Experimental Botany, Czech Republic, 6. KIBR, Yokohama City Univ.)

120 BAC-based sequencing of wheat chromosome 6B with Next-Generation Sequencer ○ Hiroyuki, K.1, K. Kurita1, F. Kobayashi1, S. Katagiri1, H. Fujisawa1, W. Karasawa1, Y. Hanawa1, M. Hamada1, M. Shibata1, M. Shimomura2, N. Namiki3, H. Ikawa3, T. Matsumoto1, Y. Katayose1, J. Wu1, H. Handa1(1. NIAS, 2. NAT, 3. MSS)

201 Isolating Mutation in Multi-Organ Gigantism Gene ○Naito, K.1, K. Hirano1, A. Kaga1, K. Shirasawa2, S. Isobe2, N. Tomooka1(1. National Institute of Agrobiological Sciences, 2. Kazusa DNA Research Institute)

202 Development of SSR markers for variety identification in edamame Honda, N.1, ☆Y. Tsubokura1, H. Kanamori2,4, T. Ando2,4, H. Minami2,5, K. Ikawa2,5, T. Suzuki3, A. Izumida3, O. Yamakawa2, S. Matsui1(1. SNOW BRAND SEED CO., LTD., 2. STAFF-Institute, 3. SAKATA SEED CO., 4. NIAS, 5. MSS)

203 Fine mapping of the parthenocarpic fruit 2 (pat-2) locus in tomato ☆Nunome, T.1, I. Honda2, A. Ohyama1, K. Miyatake1, H. Yamaguchi1, H. Fukuoka1(1. NARO Institute of Vegetable and Tea Science, 2. Maebashi Institute of Technology)

204 Development of DNA markers for barley genome breeding by cDNA analysis ☆Sato, K., Y. Motoi(IPSR, Okayama U.)

205 Verification of usefulness as a large scale examination for hybridity using mitochondrial genome marker inherited paternally in Cucumis melo L ☆Watanabe, Y., A. Izumida, K. Katsumata, T. Hiramoto, M. Hasegawa, T. Suzuki(Sakata Seed Corporation)

206 Detection of adaptive genes for local environments and the location on linkage map in Cryptomeria japonica using SNP markers ☆Tsumura, Y., K. Uchiyama, Y. Moriguchi, M. Kimura, S. Ueno, T. Ihara(Forestry and Forest Products Research Institute)

207 Development of an efficient program for detection of mutations using data of next generation sequencing ☆Miyao, A., M. Nakagome, E. Solovieva, Y. Nagamura, T. Itoh(Agrogenomics Res. Cent. NIAS)

208 Simulation of genome structure and power of QTL detection in rice multi-parent advanced intercross lines ○Yamamoto, E., T. Tanabata, R. Mizobuchi, J. Yonemaru, T. Yamamoto, M. Yano(National Institute of Agrobiological Sciences)

209 The Chinese cabbage clubroot resistance gene CRa ○Ueno, H.1, E. Matsumoto2, D. Aruga1, S. Kitagawa3, H. Matsumura4, N. Hayashida5(1. Dep. Biosci. Tex. Tech., U. Shinshu, 2. Nag. Veg. Orna. Crop. Expt. Stn., 3. Dep. Appl. Biol., U. Shinshu, 4. gene. res. ctr., U. Shinshu, 5. Div. Appl. Biol., U. Shinshu)

210 Evolutionary process of aluminum tolerance acquisition in barley ○Saisho, D., M. Fujii, J. Ma, K. Sato(IPSR, Okayama U.)

216 Effect of light condition on conservation and micropropagation of Phalaenopsis PLB cultures. ☆Enoki, S., Y. Takahara(Dept. Bioengn., Nagaoka U. T.)

212 Comparison of mitochondrial mRNAs between a cytoplasmic male sterility line RT98A and fertility restorer line RT98C ○Igarashi, K.1, T. Kazama1, K. Motomura2, K. Toriyama1(1. Graduate School of Agricultural Science, Tohoku University, 2. College of Agriculture, University of the Ryukyus)

213 Molecular analysis of Rf1 allele from wild rice carrying sterile cytoplasms ○Kano, T., T. Kazama, K. Toriyama(Grad. Sch. Agri. Sci., Univ. Tohoku)
214 Analysis for proteins that interact with RF2, a restorer of fertility of LD-type cytoplasmic male sterility in rice ○Fujii, S., T. Kazama, Y. Ito, S. Kojima, K. Toriyama(Grad.Sch. Agri.Sci., Univ.Tohoku)
215 Genetic analysis on Rf2, a novel restorer-of-fertility locus for Owen cytoplasmic male sterility in sugar beet ○Honma, Y.1, K. Taguchi2, H. Hiyama1, R. Yui-kurino1, T. Kubo1, T. Mikami1(1. Grad. Sch. Agr., Hokkaido U., 2. Natl. Agr. Res. Cent. Hokkaido)
211 Two paralogous transcription factors, specifically expressed in inner anther-wall layers, are required for meiosis progression in rice ○Ono, S.1,2, K. Nonomura1,2(1. Exp. Farm, Natl. Inst. Genet., 2. Dep. Life Sci., Gard. Univ. Adv. Study)
217 Cell wall degradation of the pollen mother cell and the tapetum during microsporogenesis ○Matsuo, Y.1, M. Nakajima1, M. Fujimoto2, H. Takanashi3, S. Arimura1, N. Tsutsumi1(1. Grad. Sch. Agric. Life Sci., Univ. Tokyo, 2. Grad. Sch. Sci., Univ. Tokyo, 3. Grad. Sch. Sci., Univ. Nagoya)
218 Interhaplotypic heterogeneity and heterochromatic features at the S locus in apple Wang, S.1,2, H. Kakui3, ☆S. Kikuchi1, T. Koba1, H. Sassa1(1. Grad. Sch. Hort., Chiba Univ., 2. Dep. Hort., Nanjing Agri. Univ., 3. Grad. Sch. Sci., Nagoya Univ.)
219 Interaction between a Cullin1-like protein and MdSBP1 (Malus × domestica S-RNase binding protein1) in apple ○Minamikawa, M., R. Koyano, D. Fujii, H. Sassa(Grad. Sch. Hort., Chiba Univ.)
220 Dynamin-related Protein 2 (DRP2) is related with gametophyte development and pollen tube growth ○Huang, J.1, M. Fujimoto2, H. Takanashi3, S. Arimura1, N. Tsutsumi1(1. Grad. Sch. Agric. Life. Sci., Univ. Tokyo, 2. Grad. Sch. Sci., Univ. Tokyo, 3. Grad. Sch.
301 The functional analysis of soybean Myb genes using a reverse genetic approach ○ Terasawa, Y.1, N. Imai1, S. Akada2, T. Anai1(1. Fac. Agric., Saga U., 2. Gene Res. Center, Hirosaki U.)
302 The prevention of promoter dosage-dependent transcriptional gene silencing by utilization of anti-silencing region isolated from a perennial legume ○Kinoshita, T.1, J. Nagai2, N. Kishimoto3, K. Ueno2, Y. Ohashi3, I. Mitsuhara3(1. Saga Pref. Agr. Res. Cen., 2. Kagoshima Pref. Inst. for Agr. Devel., 3. Natl. Inst. of Agrobiol. Sci.)
303 Proteome analysis through mass spectrometry of rice bran ○Takizawa, T., T. Sasanuma, T. Abe(Fac. Agr. Yamagata U.)
304 Flowering gene analysis and transformation of biofuel plant, Jatropha curcus L ☆ Ohmido, N.1, E. Makigano1, K. Fukui2(1. Graduate School of Human Development and Environment, Kobe Univ., 2. Grad. Sch. Engineering, Osaka Univ.)
305 Storage protein deficiency leads the high capacity for foreign protein production in soybean seeds Takagi, K.1, K. Nishizawa2, H. Hasegawa3, M. Takahashi4, N. Maruyama5, S. Utsumi5, T. Masumura6, T. Terakawa3, ☆M. Ishimoto1(1. NIAS, 2. NICS, 3. Hokko Chemical Industry, 4. NARO/KARC, 5. Gard. Sch. Agr., Kyoto U., 6. Kyoto Pref. Univ.)
306 Comparative analysis of WAP2 homoeogenes function in common wheat ○Sakurai, N., K. Kawaura, I. Ishiguro, M. Isshiki, Y. Ogihara(KIBR, Yokohama City U.)
307 Gene expression profiling of synthetic wheat lines showing phenotypic plasticity responsive to growth temperature ○Matsuda, R., M. Iehisa, S. Takumi(Grad. Sch. Agr.
308 Genetic relationships between pollen fertility and genome-wide transcriptional instability in the rice booting stage ○Ishiguro, S.1, K. Ogasawara1, M. Ezawa1, Y. Sato2, Y. Kishima1(1. Res. Fac. Agric., Hokkaido U., 2. NARCH)
309 A comprehensive comparative analysis of large-scale omics data across multiple plant species ○Igarashi, K.1, H. Tsuchida1, K. Fukazawa1, K. Harada1, T. Takano1, K. Yokoyama1, H. Chiba2, Y. Tada2, A. Shimizu3, K. Yano1(1. Bioinf., Sch. Agri., Meiji Univ., 2. TOHOKU CHEMICAL Co., Ltd., 3. Sch. Environ. Sci., Univ. Shiga Pref.)
310 A network analysis method with multiple omics data Tsuchida, H., K. Harada, K. Fukazawa, K. Igarashi, K. Yokoyama, ○K. Yano(Bioinf., Sch. of Agri., Meiji Univ.)
311 Expression pattern analysis of soybean retrotransposon SORE-1 ○Tsuchiya, M., J. Abe, A. Kanazawa(Res. Fac. Agr., Hokkaido Univ.)
314 The timing of mPing transposition during ontogeny of rice plants ○Teramoto, S., T. Tsukiyama, M. Teraishi, T. Tanisaka, Y. Okumoto(Graduate School of Agriculture, Kyoto University)

313 Application of RNA phloem transport motif for epimutant induction ☆Harada, T., R. Iwashiro, K. Iwamoto, A. Kasai(Fac. Agric. Life Sci., Hirosaki U.)

312 Reversion from co-suppression induced by long-term maintenance of transgenic petunia plants ○Kasai, M., A. Kanazawa(Grad. Sch. Agr., Hokkaido U)

315 Identification of a floral morph-specific gene, S-LOCUS EARLY FLOWERING 3, in buckwheat ☆Aii, J.1, Y. Yasui2, M. Mori3, T. Abe4, S. Sato1, H. Tanaka1, D. Matsumoto2, Y. Hayashi4, O. Ohnishi2, T. Ota5(1. NUPALS, 2. Grad. Sch. Agr., Kyoto Univ., 3. Res. Inst. Bioresour. Biotech., Ishikawa Pref. Univ., 4. RIKEN, Nishina Cent., 5. Sch. Adv. Studies, Grad. Univ. Adv. Studies.)

316 Disruption of S-LOCUS EARLY FLOWERING 3 in selfing plants of the genus Fagopyrum ☆Yasui, Y.1, M. Mori2, J. Aii3, T. Abe4, S. Sato3, H. Tanaka3, D. Matsumoto1, Y. Hayashi4, O. Ohnishi1, T. Ota5(1. Grad. Sch. Agr., Kyoto Univ., 2. Res. Inst. Bioresour. Biotech., Ishikawa Pref. Univ., 3. NUPALS, 4. Nishina Cent., RIKEN, 5. Dep. Evol. Stud.

317 Analysis of the high anthocyanin accumulation in Tartary buckwheat cultivar 'Hokkai T10' ○Funaki, T.1, H. Tanabe1, N. Kumagai1, S. Ichiba1, T. Suzuki2, T. Morishita2, J. Aii1, H. Tanaka1(1. NUPALS, 2. NARCH)

318 Analysis of a semidwarf mutant (sda) in Tartary buckwheat ○Nakano, A.1, M. Komori1, T. Morishita2, T. Suzuki2, A. Shimizu3, J. Aii1, H. Tanaka1(1. NUPALS, 2. NARCH, 3. IRB,

319 Analysis of a dwarf mutant in Buckwheat Sakurai, M.1, ○Y. Sato1, M. Nagano2, C. Campbell2, J. Aii1, H. Tanaka1(1. NUPALS, 2. CBI)

401 Efficiency of genomic selection in Japanese rice breeding: simulation-based evaluation ○Yabe, S.1, M. Yamasaki2, K. Ebana3, H. Iwata1(1. Grad.Sch.Agric.Life Sci., U.Tokyo, 2. Food Resources Education and Research Ctr., Grad.Sch.Agric.Sci.,Kobe U., 3. Natl.Inst.Agrobiological Sci.)

402 A trial for building genomic selection prediction models using tomato commercial F1 varieties ○Suzuki, A.1, H. Matsunaga2, A. Ohyama2, H. Fukuoka2, H. Iwata1(1. Grad. Sch. Agr. Life Sci., Univ. of Tokyo, 2. NIVTS)

403 Accuracy of genomic selection using estimated haplotype information: verification on Japanese pear data ☆Iwata, H.1, T. Hayashi2, S. Terakami3, N. Takada3, T. Saito3, T. Yamamoto3(1. Grad. Sch. Agr. Life Sci., Univ. Tokyo, 2. Natl. Agr. Res. Cntr., 3. Natl. Inst. Fruit Tree Sci.)

406 Boosting of phenotype prediction for genomic selection of red clover quantitative traits ☆Nakaya, A.1, H. Hirakawa2, K. Shirasawa2, B. Boller3, I. Klimenko4, R. Kolliker3, J. Rana5, T. Sharma6, S. Isobe2(1. Niigata University, 2. Kazusa DNA Research Institute, 3. Swiss Federal Research Station for Agroecology and Agriculture, Switzerland, 4. All-Russian Williams Fodder Crop Research Institute, Russia, 5. National Bureau of Plant Genetic Resources, India, 6. CSK Himachal Pradesh Agricultural University, India)

405 Enhancement and utilization of an infrastructure for gene expression information in rice ○Sato, Y.1, H. Takehisa1, B. Antonio1, N. Namiki2, K. Kamatsuki2, H. Minami2, H. Ikawa2, H. Ohyanagi2, K. Sugimoto1, J. Itoh3, Y. Nagamura1(1. NIAS, 2. MSS, 3. Grad. Sch. Agric. Life Sci., U. Tokyo)

404 Estimation of causal relationships among traits using a structural equation model (SEM): decomposition into direct and indirect effects of heading date genes ○Onogi, A.1, O. Ideta2, K. Ebana3, T. Yoshioka4, M. Yamasaki4, H. Iwata1(1. Grad. Sch. Agric. Life Sci., U. Tokyo, 2. Natl. Agr. Res. Ctr., Western Region, 3. Natl. Inst. Agrobiological Sci., 4. Food Resources Education and Research Ctr., Grad. Sch. Agric. Sci., Kobe U.)

407 Quantitative evaluation by standard image method for occurrence of chalky grain caused by high temperature during the ripening period in rice ○Hamamura, S.1, K. Ishizaki2, Y. Takahara1(1. Nagaoka University of Technology, Department of Bioengineering, 2. Niigata Agricultural Research Institute Crop Research Center)

408 New allele of waxy gene (GBSS gene) in glutinous sorghum landraces of East Asia ☆ Kawahigashi, H.1, M. Ohshima1, T. Nishikawa1, S. Kasuga2, H. Okuizumi1, J. Yonemaru1(1. NIAS, 2. Shinshu-University)

409 Characterization of Afghan wheat landraces based on diagnostic markers of vernalization, photoperiod and grain colour Naruoka, Y., K. Komatsu, ○M. Alagu, T. Suzuki, B. Tomohiro(Kihara Institute for Biological Research)

410 Reconstruction of Wheat Breeding in Afghanistan: I. Strategy and pilot study ☆Alagu, M.1, A. M1, Q. Sohail1, Y. Naruoka1, K. Komatsu1, Y. Kondo2, T. Ban1(1. Kihara Institute for Biological Research, 2. Plant Science Center, RIKEN)

411 Analysis of the origin of Triticum aestivum ssp. sphaerococcum using genome-specific STS markers ☆Asakura, N.1, N. Mori2, C. Nakamura2, I. Ohtsuka1(1. Lab. Biol. Fac. Engin. Kanagawa Univ., 2. Lab. Plant Genet., Grad. Sch. Agric. Sci., Kobe Univ.)

412 Evolution of tetraploid wheat based on the variations of 5' UTR regions of Ppd-A1 - evidences of gene flow between T. turgidum and T. timopheevi - ○Takenaka, S., T. Kawahara(Grad. Sch. Agric., Kyoto U.)

413 New Two-rowed Malting Barley Cultivar "Asuka Golden" which is resistant to barley yellow mosaic virus and has the proper Kolbach index in malting quality ○OOZEKI, M.1, T. Sotome1, T. Kato1,2, T. Nagamine1,3, N. Haruyama1,4, M. Yamaguchi1, T. Takayama1,5, T. Iida1, Y. Suzuki1(1. Tochigi Prefectural Agricultural Experiment Station, 2. Tochigi Prefectural Department of Agriculture, 3. NARO NARCT., 4. Tochigi Prefectural Sustainable Agriculture Extension Center, 5. NARO Natl.Inst.Crop.Sci.)

414 Development of high-yielding strains of Hokkaido with high-tillering ability and its developmental plasticity derived from wild rice of the tropics ☆Shimizu, H., Y. Itoh(NARO Hokkaido Agricultural Research Center)

415 Evaluation of seedling establishment in the near isogenic lines with qPHS3-2, using a direct seeding method in rice ☆Nonoue, Y.1, A. Abe2, H. Sugawara1, S. Kawadai1, T. Kodate1, T. Osato1, T. Sasaki1(1. Iwate Agric. Res. Ctr., 2. Iwate Biotech. Res. Ctr.)

416 Development of InDel markers useful to discriminate genome types of wild Oryza species Yamaki, S.1, H. Ohyanagi1,2, M. Yamasaki3, T. Miyabayashi4, M. Eiguchi4, T. Kubo1,5, N. Kurata1,5, ☆K. Nonomura4,5(1. Plant Genet., Natl. Inst. Genet., 2. Mitsubishi Space Software Co., 3. Food Res. Edu. Res. Center, Grad. Sch. Agr. Sci., Kobe U., 4. Exp. Farm, Natl. Inst. Genet., 5. Life Sci., SOKENDAI)

417 Development of new tomato genetic resources for analysis of fruit differentiation ○ Ariizumi, T.1, A. Kimura1, S. Hao1, K. Mori2, K. Ezura1, Y. Okabe1, Y. Shinozaki1, J. Masuda1, Y. Suzuki3, T. Saito4, S. Kuhara2, K. Aoki5, H. Ezura1(1. Fac. of Life Env. Sci., Univ. of Tsukuba, 2. Fac. of Agri., Kyushu Univ., 3. Grad. Sch. of Fro. Sci., Univ. of Tokyo, 4. Meiji Univ., 5. Grad. Sch.Life Env. Sci., Osaka Prefectural Univ.)

418 Phylogenetic analysis on genus Carthamus using Asteraceae universal marker ☆ Sasanuma, T., T. Iizuka, A. Endo, T. Abe(Fac. Agr., Yamagata U.)

419 Assessment of genetic diversity in tea (Camellia sinensis) germplasm collection using SSR markers ○Taniguchi, F.1,3, T. Saba1, A. Ogino1, J. Tanaka2,3(1. NARO NIVTS, 2. NARO NICS, 3. Grad. Sch. Life Envi. Sci., U. Tsukuba)

420 Origin ofIrissetosavar.nasuensisandI.setosavar.hondoensis ☆Yabuya, T., A. Hanazaki, T. Tomita, K. Inoue(Fac. Agr., Univ. Miyazaki)

501 Influence of the grain color on grain dormancy in barley proanthocyanidin-free mutants (ant mutants) ○Himi, E., S. Taketa, M. Maekawa(Inst. Plant Sci. Res., Okayama Univ.)

502 Structure and expression analyses of genes controling compound leaf development in Trifolium repens L Segawa, K., K. Tsutsumi, ☆Y. Saitoh(Cryobiofrontier Research Center, Faculty of Agriculture., Univ. Iwate)

503 The function of OsGLU3 on tiller development in rice ○Takahashi, M.1, A. Yoshida1, W. Li1, Y. Inukai2, H. Kitano3, J. Kyozuka1(1. Grad.Sch.Agric.Life Sci., U.Tokyo, 2. Grad.Sch.BioAgr.Sci., Nagoya U., 3. Biosci.Biotech.Ctr., Nagoya U.)

504 Control of Tiller Growth of Rice by OsSPL14 and Strigolactones, which Work in Two Independent Pathways ○Luo, L.1, W. Li1, K. Miura2, M. Ashikari3, K. Junko1(1. Grad. Sch.of Agri. and Life Sci., Univ. of Tokyo, 2. Dep. of Biosci., Fukui Prefectural Univ., 3. Biosci. and Biotech.Center, Nagoya Univ.)

505 Analysis of a receptor like kinase governing organogenesis during rice embryogenesis ○Yagi, H., K. Ishimoto, Y. Sato(Grad. Sch. Bioagri. Nagoya Univ.)

506 Allelism test between rp (retarded panicle) showing temperature sensitivity and asp1 ○ Oshima, K., K. Shioaku, I. Takamure(Grad. Sch. Agr., Hokkaido U.)

507 Subfunctionalization of HD-ZIP I class transcription factors involved in suppression of lateral floret in barley ○Sakuma, S.1,2, M. Pourkheirandish1, H. Goetz3, K. Jochen3, S. Nils3, W. Thomas4, A. Tagiri1, H. Kanamori1, T. Matsumoto1, N. Yamaji5, J. Ma5, T. Komatsuda1,2(1. NIAS, 2. Grad. Sch. Hort., Chiba U., 3. IPK, 4. University of Zurich, 5.

508 The site of auxin action in early nodule development ○Suzaki, T.1,2, K. Yano1, M. Ito1, Y. Umehara3, N. Suganuma4, M. Kawaguchi1,2(1. NIBB, 2. SOKENDAI, 3. NIAS, 4. Aichi Univ. Edu.)

509 Positional cloning of a short awn gene lks2 in barley ○Yuo, T.1, H. Kanamori2, T. Matsumoto2, U. Lundqvist3, K. Sato1, M. Ichii4, S. Jobling5, S. Taketa1(1. Institute of Plant Science and Resources, Okayama University, 2. National Institute for Agrobiological Sciences, 3. Nordic Genetic Resource Center, 4. Faculty of Agriculture, Kagawa University, 5. CSIRO)

510 Alteration of lodicule morphology by manipulation of B-class genes in rice Yao, S.2, M. Kimizu2, S. Ohmori2, ☆H. Yoshida1(1. NICS, 2. Hokuriku Research Center, NARC)

511 A transcription factor WRKY60 determines the inflorescence architecture of rice ○ Ding, C., M. Yoda, N. Yasuno, K. Kobayashi, J. Kyozuka(Grad. Sch. of Agric. and Life Sci., Univ. of Tokyo)

512 Combined effects of early and late mutant genes provide a novel regulation system of flowering-time in rice ○Saito, H., Y. Yoshitake, T. Yokoo, Q. Xu, K. Mustafa, A. Siddika, T. Tanisaka, Y. Okumoto(Grad. Sch. Agr., Univ. Kyoto)

513 A novel photoperiodic response gene HvPhyC linked by vernalization requirement gene Vrn-H1 in barley ☆Nishida, H.1,2, T. Kaneko1, D. Ishihara1, H. Kawahigashi3, H. Handa3, M. Ishii4, D. Saisho4, Y. Akashi1, K. Takeda4, K. Kato1,2(1. Grad. Sch. Nat. Sci. Tech., Okayama U., 2. Grad. Sch. Environ. Life Sci., Okayama U., 3. NIAS, 4. IPSR, Okayama U.)

514 Genetic analysis of heading time genes by using RILs population derived from a cross of barley varieties "Misato Golden" and "Golden Melon" ○Kaneko, T.1, H. Nishida1,2, M. Taira3, E. Aoki3, T. Yanagisawa3, K. Kato1,2(1. Grad. Sch. Nat. Sci. Tech., Okayama U., 2. Grad. Sch. Environ. Life Sci., Okayama U., 3. Natl. Inst. Crop Sci., NARO)

515 A HvPhyC-Vrn-H1 gene block contributed to the establishment of the Japanese early heading barley cultivars ☆Kato, K.1,2, M. Tsuchiya1, M. Ishii3, M. Taira4, E. Aoki4, T. Yanagisawa4, K. Takeda3, H. Nishida1,2(1. Grad. Sch. Nat. Sci. Tech., Okayama U., 2. Grad. Sch. Environ. Life Sci. Okayama U., 3. IPSR, Okayama U., 4. Natl. Inst. Crop Sci.,

516 A putative rice chloride channel (OsCLC4) exhibited anion channel activity and enhanced the sensitivity to low R: FR ratio in transgenic Arabidopsis ☆Li, X.1, D. Tsugama1, S. Liu2, T. Takano1(1. ANESC,Unvi.Tokyo, 2. Univ.Northeast Frestry, China)

517 Classification of early-maturing soybean cultivars based on DNA polymorphism of four major maturity genes and variation in post-flowering photoperiod response ○Xu, M.1, Z. Xu2, Y. Tsubokura3, S. Watanabe3, Z. Xia2, F. Kong2, B. Liu2, K. Harada3, T. Yamada1, J. Abe1(1. Research Faculty of Agriculture,Hokkaido University, 2. Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, 3. National Institute of Agrobiological Sciences)

518 Characterization of VIP1 as a regulator of osmosensory signaling in Arabidopsis ○ Tsugama, D., T. Takano(ANESC., U. Tokyo)

519 Identification of QTLs involved in the timing of juvenile-adult phase changes between japonica and indica varieties of rice ○Yoshikawa, T., E. Arakawa, K. Hibara, J. Ito, Y. Nagato(Grad. Sch. Agric. Life Sci., U. Tokyo)

520 Identification and analysis of PRECOCIOUS gene associated with juvenile-adult phase change in rice ○Isono, M., K. Hibara, J. Ito, Y. Nagato(Grad.Sch.Agric.Life Sci.,U.Tokyo)

601 Induction of glutinous rice through somaclonal variation of Sasanishiki and identification of GBSS mutation ○Hyogo, T., T. Suzuki, T. Sasanuma, T. Abe(Fac.Agr.Yamagata U.)

602 Genetic analysis of ion-beam induced extremely late-heading mutants in rice ☆ Ichitani, K.1, D. Yamaguchi1, S. Taura2, Y. Fukutoku3, M. Onoue1, K. Shimizu1, F. Hashimoto1, Y. Sakata1, M. Sato1(1. Fac. Agri., Kagoshima Univ., 2. Inst. Gene Res., Kagoshima Univ., 3. Radioisotope Center, Kagoshima Univ.)

603 Development of a large-scale mutant panel in einkorn wheat and its utilization for flowering mutant screening ○Nishiura, A.1, Y. Kazama2, T. Abe2, M. Nitta3, S. Nasuda3, K. Murai1(1. Dep. Biosci., Fukui Pref. Univ., 2. Nishina Center, Riken, 3. Grad. Sch. Agr.,

604 Apparent quality of brown rice at different spikelet positions on panicle under high temperature stress during ripening period ☆Kobayashi, A.1, K. Sugimoto2, N. Iwasawa3, M. Kondo3, K. Tomita1(1. Fukui Agr. Exp. Stn, 2. National Institute of Agrobiological Sciences, 3. National Institute of Crop Science)

608 Identification of QTLs underlying important agronomic traits for low input adaptability in LIA-1, derived from a cross between Oryza longistaminata and T-65 ○Gichuhi, E.1,2, E. Himi1, H. Takahashi3, M. Maekawa1(1. Institute of Plant Science and Resources, Okayama University, 2. Graduate School of Natural Science and Technology, Okayama University, 3. Fac. Biores. Sci., Akita Pref. Univ.)

606 Expression analysis of various enzymes by hot water treatment of polished rice grains ○Ootake, R., T. Sasanuma, T. Abe(Fac.Agr.Yamagata.U)

607 Oxidative stability and flavor characteristics of Koshihikari NILs rice grain with and without lipoxgenase-3 ☆Suzuki, Y.1, K. Suzuki1, S. Hamada1, K. Shirasawa1,2, A. Shigemune3, H. Sasahara3, H. Ohta1,4, Y. Uehara3, K. Miura3(1. NARO, Inst. Crop Sci., 2. Kazusa DNA Res. Inst., 3. NARO, Agirc. Res. Cent., 4. NARO, Tohoku Agirc. Res. Cent.)

605 The factor on the morphology of starch granules ☆Fujita, N.1, Y. Toyosawa1,2, R. Matsushima3, Y. Kawagoe4, Y. Nakamura1(1. Facult Biores. Sci., Akita Pref. Univ., 2. Facult Agricult., Kyushu Univ., 3. Inst. Plant Sci. Res., Okayama Univ., 4. NIAS)

609 Introduction of high-molecular-weight glutenin subunit genes from Thinopyrum elongatum associated with strong dough into commercial varieties of common wheat ☆Tanaka, H.1, C. Nabeuchi1, H. Tsujimoto2(1. Fac. Agr., Tottori U., 2. ALRC, Tottori U.)

610 The relationship between sugar content of soybean and seed traits,round and wrinkled ○Enoki, Y., N. Oda, T. Sasanuma, T. Abe(Fac.Agr.Yamagata.U)

611 Treatment for the eleveation of GABA concentration and analysis of GAD expression in vegetable-type soybean ○Takahashi, Y., T. Sasanuma, T. Abe(Fac.Agr.Yamagata U.)

612 Varietal variation of sugar and protein in vegetable immature seeds and mature seeds of vegetable-type Dadacha beans ☆Abe, T., N. Oda, E. Komatsu, T. Sasanuma(Fac. Agr.Yamagata U.)

613 Temperature effects during seed filling on expression level of flavonoid biosynthetic genes in soybean ○Torii, A.1, K. Kanamaru1, H. Funatsuki2, K. Kitamura1, J. Abe1, T. Yamada1(1. Grad. Sch. Agric.,Hokkaido U., 2. Nat. Agri. Res. Cent. Hokkaido Reg.)

614 The relationship between GmSGR1 gene mutation and chlorophyll composition in stay-green soybean ○Kobayashi, H.1, J. Abe1, E. Oohashi1, K. Kitamura1, M. Kusaba2, T. Yamada1(1. Grad.Sch.Agric.,Univ.Hokkaido, 2. Grad.Sch.Sci.,Univ.Hiroshima)

615 Analysis of candidate genes involved in rhamnosylation of DDMP saponin in soybean ○ Katsuki, R.1, S. Kawasaki2, Y. Yamashita2, C. Tsukamoto3, K. Kitamura2, J. Abe2, T. Yamada2(1. Fac.Agric.,Hokkaido U., 2. Grad.Sch.Agric.,Hokkaido U., 3. Grad.Sch.Agric.,Iwate U.)

616 Variation for seed characters in black soybean landraces originated from Tanba region ☆Hirota, T.1,2, K. Nagai1, S. Yoshida1,2(1. Hyogo Pref. Agri. Res. Center, 2. Grad. Sch. Agric. Sci., Kobe U.)

617 Effect of growing seasons on sugar content and Angiotensin-I converting enzyme inhibitory activity of F1 varieties of Yamato-mana ☆Asao, H., A. Sugimoto, T. Nishimoto(Nara Pref. Agri.Center)

701 Production and characterization of autoplasmic or alloplasmic Brassica rapa added B-genome chromosomes ○Kato, M.1, M. Takashima1,2, S. Bang1, Y. Kaneko1(1. Fac. Agric., Univ. Utsunomiya, 2. Unit. Grand Sch. Agric., Tokyo U. Agric. Tech.)

702 Functional analysis of HWC1, a causal gene of hybrid weakness in rice, using transient expression and attempt to obtain mutants of HWC1 by TILLING ○Okiyama, Y.1, K. Ichitani2, T. Kumamaru3, N. Watanabe1, T. Kuboyama1(1. Col. Agri., Univ. Ibaraki, 2. Fac. Agri., Univ. Kagoshima, 3. Fac. Agric., Univ. Kyushu)

703 A mutant derived from γ -ray irradiated zygote suppressing a hybrid-weakness of rice between Nipponbare and Jamaica Takeda, J.1, C. Igarashi1, Y. Okiyama1, M. Nishimura2, K. Ichitani3, N. Watanabe1, ☆T. Kuboyama1(1. Col. Agri., Ibaraki U., 2. NIAS. IRB, 3. Fac. Agri., Kagoshima U.)

704 Development of nDart1-0 tagging line in Koshihikari ☆Nishimura, H.1, E. Himi1, S. Iida2, K. Tsugane3, M. Maekawa1(1. Inst. Plant Sci. Res., Okayama U., 2. Grad.Sch.Nutr.Envir.,U.Shizuoka, 3. Natl. Inst. Basic Biol.)

705 Activation and epigenetic regulation of DNA transposon nDart1 in rice ☆Tsugane, K.1, C. Eun1, K. Takagi1, M. Tsugane1, S. Iida1,2, M. Maekawa3(1. Natl.Inst. Basic Biol., 2. Grad.Sch. Int. Pharm. Nutrit. Sci., Univ. Shizuoka, 3. Inst.Plant Sci.Res.,Okayama Univ.)

706 Production of human IL-10 in transgenic rice seed and its efficacy on allergic symptoms by oral administration ☆Takaiwa, F.1, L. Yang1, S. Hirose2, H. Takagi1, H. Takahashi1, T. Kawakatsu1(1. National Institute of Agrobiological Sciences, 2. National Institute of Crop Sciences)

707 Efficient transformation method of switchgrass ☆Ogawa, Y.1, M. Honda1, Y. Kondo1, I. Hara-nishimura2(1. Kazusa U., HRI-JP, 2. Grad. Sch. Sci., Kyoto Univ.)

708 Expression of OsBiP4 and OsBiP5 is highly correlated with the endoplasmic reticulum stress response in rice ○Wakasa, Y., S. Hayashi, F. Takaiwa(NIAS)
709 Title Functional analysis of a nuclear zinc finger AtC3H4 ☆Liu, H.1, D. Tsugama1, S. Liu2, T. Takano1(1. ASNESC, U Tokyo, 2. NEFU, China)
710 The Arabidopsis Adaptor Protein AP-3μ interacts with the G protein β subunit AGB1 and is involved in ABA signaling ○Kansup, J., D. Tsugama, T. Takano(ANESC, U.Tokyo)
711 Development of testing method for split open cotyledons caused by chilling temperature in soybean ○Yamaguchi, N.1, H. Yamazaki1,2, S. Ohnishi1,3, C. Suzuki1,3, S. Hagihara1, T. Miyoshi1(1. Tokachi Agr. Exp. Sta., HRO, 2. Agr. Res. Dep., HRO, 3. Central Agr. Exp. Sta., HRO)
712 The seed-flooding tolerance of the soybean variety 'Enrei' is originated from 'Norin 2' ○Sakurai, H.1, R. Shirai1, K. Hirata1,2, T. Sayama3, M. Ishimoto3, T. Tsukiyama1, M. Teraishi1, Y. Okumoto1(1. Grad. Sch. Agr., Kyoto U., 2. NICS, 3. NIAS)
713 Overexpression of RINO1 improves salt-tolerance and increases biomass in rice ○ Kusuda, H., W. Koga, K. Yoshida(Laboratory of Conservation ecology ,Grad. Sch. Agricultural and Life Sciences., Univ. Tokyo)
714 Mapping of a QTL controlling seed dormancy located on chromosome 2 in rice, associated with decreased germination rate in Habataki allele ○Yamaguchi, T.1, K. Murata1, Y. Iyama1, K. Sugimoto2, T. Ebitani1(1. Toyama Pref.Agr.Forest.Fish.Res.Cent.,
715 Evaluation of tolerance to waterlogging and the aerenchyma formation of roots in common wheat ○Yamauchi, T.1, K. Watanabe1, H. Takahashi1, F. Abe2, K. Kawaguchi2, A. Oyanagi2, M. Nakazono1(1. Grad. Sch. Bioagr. Sci., Nagoya U., 2. NARO Inst. Crop
716 Analysis of gene expression related to the ethylene-inducible aerenchyma formation in maize roots ○Takahashi, H.1, T. Yamauchi1, I. Rajhi2, Y. Nagamura3, N. Tsutsumi2, N. K. nishizawa2,4, M. Nakazono1(1. Grad. Sch. Bioagric Sci., Nagoya U., 2. Grad. Sch. Agric. Life Sci., U.Tokyo, 3. Nat. Inst. Agrobio. Sci., 4. Res. Insti. Biores. Biotech., Ishikawa Prefectural U.)
717 Accumulation effect of Crr1b and Crr2 for clubroot resistance in Chinese cabbage (Brassica rapa) ☆Matsumoto, S.1, T. Kato1,2, K. Hatakeyama1(1. NIVTS, 2. Grad. Sch. Bioresour.)
718 Characterization of NBS-LRR motif genes between S11 and R09 by RNA sequencing in Brassica rapa ○Shimizu, M.1,2, Y. Ebe1, R. Fujimoto1, T. Kawanabe3, H. Ying4, M. Kaji3, E. Dennis4, K. Okazaki1(1. Grad. Sch. Sci. Tech.,U. Niigata, 2. JSPS Resarch Fellow, 3. Watanabe Seed Co., Ltd, 4. CSIRO Plant Industry)
719 Development of near-isogenic lines of rice carrying sheath blight resistant QTL ☆ Taguchi-Shiobara, F.1, H. Ozaki2, H. Sato3, H. Maeda2, Y. Kojima2, T. Ebitani2, M. Yano1(1. NIAS, 2. Toyama Pref. Agr. Forest. Fish.Res. Cent., 3. NICS)
720 A discussion on the durability of field resistance to rice blast conferred by a major gene ☆Fujii, K.(Agricultural Production Division, Aichi Prefectural Government)
721 Diversity analysis of blast races based on the reaction patterns to international differential varieties in Asia and Africa Fukuta, Y.1,2, ☆A. Tanaka-kawasaki1,2, I. Koga1, N. Hayashi3, Y. Sere4, M. Khan5, M. Mia5, M. Ali5, M. Monsur5, H. Yadana6, K. Sathya6, T. Ung6, C. Lei7, C. Li8, J. Li9, A. Anggiani10, S. Santoso10, S. Suwarno10, S. Yanagihara1, Y. Koide1, N. Kobayashi15, P. Xangsayasane11, P. Inthapanya11, O. Theophile12, F. Dela pena13, J. Tagubase-niones13, L. Perez13, T. Padolina13, M. Telebanco-yanoria15, L. Loan14, L. Chau14, H. Pham thi thu14, L. Nguyen thi14, P. Du14(1. JIRCAS, 2. Uni. Grad. Sch. Agri. Sci., U. Tottori, 3. NIAS, 4. Africa Rice, 5. BRRI, 6. CARDI, 7. Inst. Crop Sci., Chinese Acad. Agri. Sci., 8. Yunnan Agri. U., 9. Inst. Agri. Env. & Res., Yunnan Acad. Agri. Sci., China, 10. ICRR, 11. RCCRC, 12. Univ. Abomey-

Poster presentations

P001 Effects of the Selection of grain ash in wheat breeding ☆Fujita, M., H. Matsunaka, K. Hatta, K. Kubo(NARO/KARC)

P002 Application of immature embryo culture technique to rapid production of homozygous wheat transformants ○Mori, M., F. Abe, M. Emdadul haque, K. Kawaguchi, A. Oyanagi(NARO Inst. of Crop Sci.)

P003 Genome Information Database System for Innovation of Crop and Livestock Production 2 Develop a common infrastructure for genome analysis ○Solovieva, E., Y. Teramoto, Y. Nagamura, T. Ito, A. Miyao(Agrogenomics Res. Cent., NIAS)

P004 Utilization of legacy data from yield test in soybean breeding program ☆Yamada, T., M. Hajika, K. Takahashi, K. Hirata(NICS, NARO)

P005 TOMATOMICS: An integrated omics database in tomato ○Tsuchida, H.1, K. Igarashi1, K. Yokoyama1, T. Kuchiki1, K. Fujita1, Y. Sasaki1, T. Suzuki1, K. Aoki2, K. Yano1(1. Bioinf., Sch. of Agri., Meiji Univ., 2. Grad. School of Life Environ. Sci., Osaka Pref. Univ.)

P006 Development of Brassica rapa cDNA resources, suspension cell cultures and its analyses system ☆ABE, H.1, M. Sugawara1, I. Sasaki1, K. Hatakeyama2, Y. Narusaka3, M. Kobayashi1(1. RIKEN BioResource Center, 2. National Institute of Vegetable and Tea Science, 3. Research Institute for Biological Sciences)

P007 Evaluating resistance of genetic resources and a new breeding line of barley to higher pathogenic scald ☆Seki, M.1, O. Yaguchi2, T. Nagamine1, S. Ito1, M. Arai1(1. NARC,NARO, 2. Chikugo branch, Fukuoka Agric. Res. Cent.)

P008 Breeding of a new hull-less barley cultivar "Haruhimeboshi" with low glassiness and good pearling quality ☆Yoshioka, T.1, A. Takahashi1, T. Yanagisawa1,2, T. Nagamine1,3, T. Takayama1,2, Y. Doi1, H. Matsunaka1,4, M. Fujita1,4, E. Domon1,5, M. Sugiura1, M. Ito1(1. NARO/WARC, 2. NARO/NICS, 3. NARO/ARC, 4. NARO/KARC, 5. NIAS)

P009 Breeding of a new wheat line "Toukai104" for making bread and Chinese noodle ☆ Yoshida, T.1, Y. Nakazima1, K. Itou1, K. Kataoka1, H. Hasizume1, T. Nonoyama1, C. Kuno1, T. Tsuji1, K. Fujii1,2, T. Izawa1(1. Aichi Agr. Res. Cent., 2. Aichi Pref. Gov.)

P010 Breeding of a new sweetpotato cultivar"Koganemasari"for Shochu with high starch content and resistance to nematodes ☆Sakai, T.1, K. Katayama2, A. Kobayashi1, Y. Kai1, T. Kumagai3, Y. Nakazawa1, M. Yoshinaga1(1. NARO/KARC, 2. NICS, 3. NARO)

P011 Development of barley line for feed use with high dry weight at yellow-ripe stage ☆ Yanagisawa, T.1, E. Aoki1, M. Taira1, T. Yoshioka2, O. Matsumura2, M. Amari3, T. Tonooka4(1. NARO/NICS, 2. NARO/WARC, 3. NARO/NILGS, 4. MAFF)

P012 Plant breeding strategies for the promising bioenergy crop, Erianthus (Erianthus arundinaceus), toward improving bioenergy feedstock production ○Uwatoko, N.1, Y. Terajima2, M. Kobayashi3, S. Ando2, A. Sugimoto2, M. Gau1(1. NARO Kyushu Okinawa Agricultural Research Center, 2. Japan International Research Center for Agricultural Sciences, 3. Institute of Livestock and Grassland Science)

P013 Genetic diversity of wild emmer wheat in the natural populations in southern Turkey revealed by microsatellite analysis of chloroplast DNA ○Shizuka, T.1, N. Mori1, S. Ohta2, H. Ozkan3(1. Grad. Sch. Agric.Sci., Kobe U., 2. Dep. Biosci., Fukui Pref. U., 3. Fac. Agric., Cukurova U., Turkey)

P014 Cultivation and utilization of rye, Secale cereale L., at sand dune fields along the Japan Sea coast in Fukui and Ishikawa Prefectures ☆Ohta, S., R. Iwasaki, K. Fujisawa(Dep. Biosci., Fukui Pref. U.)

P015 Diversity of coconut palm in a homegarden in Mindanao Island, Phillipine ☆Yamaguchi, H.1, A. Kimoto2(1. Tokyo Univ. Agric., Fac. Agric., 2. Osaka Pref. Univ., Fac. Biol. Env.

P017 The Genetic diversity of maintainer lines against Owen type CMS in Japanese sugar beet breeding ☆Taguchi, K., Y. Kuroda(NARO Hokkaido Agricultural Research Center

P018 6bp insert variation of polyphenol oxidase(PPO) gene in foxtail millet and its geographical distribution ○Inoue, T.1, T. Ohta2, T. Yuo3, S. Taketa3, K. Ichitani4, M. Kawase5, K. Fukunaga2(1. Grad. Sch. Comprehensive Scientific Research ,Pref. Univ. Hiroshima, 2. Fac. Life Environ. Sci., Pref. Univ. Hiroshima, 3. IPSR, Okayama Univ., 4. Fac.Agr.,Kagoshima Univ., 5. NIAS)

P019 Origin of wx mutation caused by retrotransposon in Japanese rice ○Kishine, M., T. Okunishi(NFRI, NARO)

P020 Analysis on genetic variation of fruit color related genes in color sweet pepper ○Inaba, Y., T. Abe, T. Sasanuma(Fac. Agr., Yamagata U.)

P021 Evaluation on morphological genetic diversity of Asian safflower genetic resources ○Takahashi, Y., K. Wada, T. Abe, T. Sasanuma(Fac. Agr., Yamagata U.)

P022 Genetic diversity and origin of emmer wheat and Indian dwarf wheat in Indian subcontinent revealed by chloroplast and nuclear DNA markers ○Niimi, Y.1, N. Mori1, S. Ohta2, H. Chiba3, S. Vasant4, T. Osada5(1. Grad. Sch. Agric. Sci., Kobe U., 2. Dep. Biosci., Fukui Pref. U., 3. Tohoku Gakuin U., 4. Decan College, Post-Grad. & Res. Inst., 5. Res. Inst. Humanity & Nature)

P023 Genetic diversity of Aegilops speltoides Tausch based on nuclear genes, Waxy and Pgk1 ○Karashima, N., T. Kawahara(Grad. Sch. Agri., Kyoto Univ.)

P024 Genetic diversity of Capsicum species based on EST-SSRs and chloroplast sequences ☆Shirasawa, K.1, K. Ishii2, C. Kim2, T. Ban2, M. Suzuki3, T. Ito3, T. Muranaka3, M. Kobayashi4, N. Nagata4, S. Isobe1, S. Tabata1(1. Kazusa DNA Res. Inst., 2. Kihara Inst. Biol. Res., Yokohama City U., 3. Grad. Sch. Eng., Osaka U., 4. Facl. Sci., Japan Women's

P026 Isolation and Characterization of Tomato Mutants Associated with Drought Sensitivity and Effect of this Mutation on Fruit Development ○Pulungan, S., T. Ariizumi, H. Ezura(University of Tsukuba)

P027 Isolation and cytological characterization of tomato bubble fruit mutants ○KIMURA, A., T. Ariizumi, Y. Okabe, T. Saito, E. Asamizu, H. Ezura(University of Tsukuba)

P028 Production and characterizations of CMS Brassica napus carrying Brassica oxyrrhina cytoplasm Shim, S., ☆S. Bang, Y. Kaneko(Utsunomiya University)

P029 Chromosome related to allyl isothiocyanate production using Brassica napus-B genome chromosome additoin lines (MAL) ○Takashima, M.1,2, Y. Uda1, S. Bang1, Y. Kaneko1(1. Fac. Agric., Univ. Utsunomiya, 2. Unit. Grand Sch. Agric., Tokyo U. Agric. Tech.)

P030 Production and characterization of autoplasmic or alloplasmic Chinese Kale (B. alboglabra) added B. nigra chromosomes ○Kanno, H.1, M. Takashima1,2, S. Bang1, Y. Kaneko1(1. Fac. Agric., Univ. Utsunomiya, 2. Unit. Grand Sch. Agric., Tokyo U. Agric.

P031 Application of laser microdissection to rice shoot meristem for characterization of TIFY gene-targeted growth promoting factors ○Hakata, M.1,2, T. Hirose1, H. Nakamura2,3, H. Ichikawa2, H. Nakashita4, H. Yamakawa1(1. NARC, 2. NIAS, 3. Univ. of Tokyo, 4. Tokyo Univ. Agri.)

P032 High-level production of a soybean storage protein in rice seed ☆Kuroda, M.1, Y. Saitoh2, T. Shigemitsu2, T. Masumura2, S. Nagaoka3, F. Takaiwa4, S. Utsumi5, N. Maruyama5(1. NARO-Agriculutural Research Center, 2. Kyoto Prefectural University, 3. Gifu University, 4. National Institute of Agrobiological Sciences, 5. Kyoto University)

P033 Development of rice producing various flavonoids in seed ○Ogo, Y., K. Ozawa, F. Takaiwa(NIAS)

P034 Production and characterization of transplastomic tobacco plants containing a gene encoding glutathione synthase (GS) in the chloroplast genome ○Fukunaga, a.1, T. Tsujimura1, T. Sugashira3, K. Uemura2, T. Terachi2(1. Grad.Sch.Fac.Eng.,Univ.Kyoto Sangyo, 2. Fac.Life Sci.,Univ.Kyoto Sangyo, 3. Fac.Eng.,Univ.Kyoto Sangyo)

P035 Functional analysis of apomixis specific gene-Production of transgenic Arabidopsis plants transformed with hsp::ASG-1::GFP- ☆Nishimura, Y.1, T. Tetsumura2, K. Yoshida3, W. Siguta4, R. Nagata4, D. Kurihara5, T. Higashiyama5, L. Chen1(1. Fac. Environ. & Hort. Minamikyushu U., 2. Fac. Agri. U. Miyazaki, 3. Fac. Agri. U. Tokyo, 4. Miyazaki Pref. Agri. Exper. Sta., 5. Fac. Sci. Nagaya U.)

P036 Functional analysis of apomixis specific gene - Morphological and molecular analysis of Arabidopsis-transformed with ASG-1- ○Umeki, K.1, Y. Nishimura1, T. Tetsumura2, W. Sugita3, R. Nagata3, L. Chen1(1. Fac. Environ. & Hort. Minamikyushu U., 2. Fac. Agri. U. Miyazaki, 3. Miyazaki Pref. Agri. Experi. Sta.)

P037 Production of self-pollinated tetraploid Lotus japonicus and interspecific hybridization with new bird's foot trefoil (L. corniculatus) ☆Hashiguchi, M.1, Y. Suematsu2, R. Aashi1,3(1. Frontier Science Research Center, University of Miyazaki, 2. Graduate School of Agriculture, University of Miyazaki, 3. Faculty of Agriculture, University of

P038 Contents and methods of providing information of genetically engineered crops for high school students ☆Sasakawa, Y., Y. Tabei(National Institute of Agrobiological Sciences)

P039 Involvement of SA signaling in the plant immunity mediated by BROAD-SPECTRUM RESISTANCE 1 in rice ○Maeda, S., S. Sugano, M. Nakagome, A. Miyao, C. Jiang, H. Takatsuji, M. Mori(National Institute of Agrobiological Sciences)

P040 Analysis of resistance to Fusarium head blight in wheat cv. Nobeokabouzu-komugi using linkage disequilibrium marker ○Ando, M., R. Kikuchi, T. Ban(KIBR. Yokohama City U.)

P041 Effect of TaMRP-D1 gene overexpression on mycotoxin accumulation in wheat ○Sugisawa, M.1, R. Kikuchi1, T. Ogawa2, H. Handa2, T. Ban1(1. Kihara Inst. Bio. Res., Yokohama City U., 2. NIAS)

P042 Evaluation of Fusarium head blight resistance for wheat germplasm collection in Japan ○Niwa, S.1, R. Kikuchi1, K. Kubo2, J. Lewis3, M. Nitta4, S. Nasuda4, H. Handa5, T. Ban1(1. Kihara Inst. Bio. Res., Yokohama City U., 2. NARO/KARC, 3. Bayer CropScience, 4. Grad. Sch. Agric., Kyoto U., 5. NIAS)

P043 Difference in mycotoxin accumulation caused by Fusarium head blight among wheat varieties bred in west Japan ☆Kubo, K.1, N. Kawada1, T. Nakajima2, K. Hirayae1, M. Fujita1(1. NARO/KARC, 2. NARO/Headquarters)

P044 Clubroot resistance of transgenic Brassica rapa plants harboring Crr1a cDNA ☆Hatakeyama, K., T. Kato, S. Matsumoto(NIVTS)

P045 Screening and QTL analysis of stone leek leafminer (Liriomyza chinensis) resistance in bunching onion (Allium fistulosum) ☆Tsukazaki, H.1, M. Takeda1, T. Sueyoshi2, S. Sato3, S. Yaguchi1, K. Yamashita1, T. Wako1(1. NIVTS, NARO, 2. Fukuoka Agric. Res. Cent., 3. Kazusa DNA Res.)

P046 Development of isogenic lines for blast resistance with an Indica-type variety IR64 genetic background ☆Telebanco-Yanoria, M.1, Y. Fukuta1, Y. Koide1, N. Kobayashi2(1. Japan International Research Center for Agricultural Sciences, 2. NARO National Institute of Crop Science)

P047 QTL analysis for phosphorous-deficiency tolerance in New Rice for Africa (NERICA) varieties ○Koide, Y., J. Pariasca tanaka, T. Rose, S. Yanagihara, M. Wissuwa, Y. Fukuta(Japan International Center for Agricultural Sciences)

P048 QTL analysis for drought tolerence using a RIL populationderiveing from synthetic breat wheat ☆Xu, D.1, M. Mori1,2, M. Inagaki3, M. Nachit3(1. Japan International Research Center for Agricultural Sciences, 2. National Institute of Crop Science, 3. International Center for Agricultural Research in the Dry Areas (ICARDA))

P049 Functional analysis of the C-terminal region of the rice OsHMA3 in transporting cadmium ○Kumagai, S.1, T. Suzuki2, N. Satoh-nagasawa2, H. Takahashi2, K. Sakurai2, A. Watanabe2, H. Akagi2(1. Grad. Sch. Biores. Sci. Akita Pref. Univ., 2. Akita Pref. Univ.)

P050 The contribution of a NAM transcriptional factor OsNAC34 to suberin biosynthesis in rice ○Nishiuchi, S.1, K. Watanabe1, K. Shiono2, T. Tsuchida-mayama3, N. Mitsuda3, M. Ohme-takagi4, H. Ichikawa3, M. Nakazono1(1. Grad. Sch. Bioagri. Sci., Nagoya Univ., 2. Fukui Prefectural Univ., 3. NIAS, 4. AIST)

P051 Detailed analysis of genes involved in suberin-biosynthesis in rice root ○Watanabe, K., S. Nishiuchi, M. Nakazono(Grad. Sch. Bioagri. Sci., Nagoya Univ)

P052 Identification of genes expressed in the secondary aerenchyma and secondary meristem of soybean ○Yanagawa, A.1, H. Takahashi1, S. Hiraga2, S. Shimamura3, M. Nakazono1(1. Grad. Sch. Bioagric Sci., Univ. Nagoya, 2. Nat. Inst. Crop. Sci., 3. Nat. Agr.

P053 Expression of gibberellin biosynthetic genes during seed germination at low tempareture in Raphanus sativus Kawakami, S., M. Saito, T. Ito, T. Sada, J. Nakamura, Y. Yoshino, A. Tateishi, S. Kubota, ☆K. Nomura(Coll. Bioresource Sci., Nihon U.)

P054 Effect of salinity on germination, growth, photosynthesis, and ion accumulation in genotypes of Miscanthus sinensis Andersson ☆Sun, Q.1, T. Yamada2, T. Takano1(1. ANESC U. TOKYO, 2. Field Science Center for Northern Biosphere, Hokkaido

P055 Effect of wetting and drying condition on cracking rice kernel occurrence and varietal difference of resistance to cracking ○Hayashi, T., A. Kobayashi, K. Tomita(Fukui Agr. Exp. Sta.)

P056 Standard cultivars of the tolerance test to high temperature in ripening period for rice breeding in Kyushu region ☆Sakai, M.1, T. Wada2, M. Tsubone2, S. Tokuda3, K. Yoshida3, J. Koga4, Y. Fujii5, M. Mitsukawa5, Y. Shimizu6, W. Hasegawa6, M. Shiraishi6, Y. Nagayoshi7, S. Matsuura7, M. Sato8, J. Sonoda8, K. Mori8(1. NARO, KARC, 2. Fukuoka Pref., 3. Saga Pref., 4. Nagasaki Pref., 5. Kumamoto Pref., 6. Oita Pref., 7.

P057 Proteomic analysis of heat stress tolerance in rice embyos during ripening under treatment of hot water disinfection ○Mitamura, Y., N. Sano, K. Izumikawa, T. Yamada, M. Kanekatsu(Grad.Sch.Agr.,Tokyo U.Agr.Tec.)

P058 Analysis of Tolerance to Heat Stress in Rice Seeds under Hot Water Disinfection Treatment Using Koshihikari / Habataki Chromosome Segment Substitution Lines ○kashiwagi, M.1, K. Murata2, T. Ebitani2, Y. Mitamura1, T. Yamada1, M. Kanekatsu1(1. Grad. Sch. Agr., Tokyo U. Agr. Tec., 2. Toyama Pref. Agr. Forest. Fish. Res. Cen.)

P059 Identification of the genes involved in seedling vigor under cold conditions in rice by comprehensive gene expression analysis ☆Sato, Y.1, M. Ohashi1, N. Iwata2(1. NARO Hokkaido Agricultural Research Center, 2. Agricultural Research Institute, HOKUREN Federation of Agricultural Cooperatives)

P060 Seedling vigor under low temperature of transgenic rice expressing wheat galactinol synthase gene TaGolS regulated by cold-inducible promoter ☆Shimosaka, E.1, S. Murayama1, K. Ozawa2, Y. Sato1(1. NARO Hokkaido Agr. Res. Cent, 2. Natl. Inst. Agrobiol. Sci)

P061 Varietal difference of wintering ability of rice cultiver in Hokkaido, Japan ☆Ushiki, J., S. Hayashi, S. Miyaura, N. Murakami(Hokkaido Agr. Res. Cent.)

P062 Resistance against PSTVd propagation in a scion on the transgenic stock producing PSTVd siRNAs ○Kasai, A., C. Adkar-purushothama, T. Sano, T. Harada(Fac. Agric. Life Sci., Hirosaki U.)

P063 Metabolome Profile of cooked rice is affected by Ripening Temperature ○Goto, H.1, N. Asanome2, A. Hirayama3, T. Sano1, H. Saito1, Y. Abe1, T. Soga3, M. Chuba1(1. Rice Breeding and Crop Sci. Exp. Stn., Yamagata Integrated Agr. Res. Cent.,, 2. Yamagata Integrated Agr. Res. Cent.,, 3. Inst. Adv. Biosci., Keio Univ.,)

P064 Simple measurment and varietal difference of cooked rice whiteness using a scanner and new software ☆Kogi, Y.1, T. Tanabata2, K. Tomita1, A. Kobayashi1(1. Fukui Agr. Exp. Stn, 2. National Institute of Agrobiological Sciences)

P065 High-level production of lactostatin, a hypocholesterolemic peptide, in transgenic rice using soybean A1aB1b as carrier ○Cabanos, C.1, A. Ekyo1, Y. Amari1, N. Kato1, M. Kuroda2, S. Nagaoka3, F. Takaiwa4, S. Utsumi1, N. Maruyama1(1. Grad. Sch. Agr., Kyoto Univ., 2. Rice Physiol. Res. Team, Natl. Agr. Res. Center, 3. Fac. Appl. Biol. Sci., Gifu Univ., 4. Natl. Inst. Agrobiol. Sci.)

P066 Analysis of molecular structure and properties of peanut seed storage protein Ara h 3 ○Hiramatsu, H.1, A. Tsubouchi1, C. Cabanos1, C. Kuwata2, T. Hirano3, T. Abe3, Y. Okumoto4, R. Urade1, N. Maruyam1(1. Laboratory of Food Quality Design and Development, Graduate School of Agriculture, Kyoto University, 2. Chiba Prefectural Agriculture and Forestry Research Center, 3. RIKEN Innovation Center, 4. Laboratory of Plant Breeding, Graduate School of Agriculture, Kyoto University)

P067 Analysis of factors causing the difference between Indica and Japonica rice cultivars for the rate of starch accumulation in caryopsis during ripening period ☆Inukai, T.(Res. Fac. Agri., Hokkaido Univ.)

P068 Relationship between glassiness and hordoindoline mutation in barley ○Takahashi, A.1, T. Yanagisawa1,2, T. Ikeda1, T. Yoshioka1(1. NARO/WARC, 2. NARO/NICS)

P069 Effect of grain polyphenol oxidase on flour color using near isogenic lines in wheat ☆Yanaka, M., N. Ishikawa, K. Takata(NARO Western Region Agricultural Research Center)

P070 Analysis of functional sterol biosynthesis genes in wheat ○Hamada, S., M. Takashima, J. Tang, Y. Kamiya, K. Kawaura, Y. Ogihara(KIBR,Yokohama City U.)

P071 Selection and characteristics of new sweetpotato lines with high resistant starch contents ☆Katayama, K.1, K. Kitahara2, T. Sakai3, Y. Kai3, M. Yoshinaga3(1. NARO/NICS, 2. Fac. Agri., Kagoshima Univ., 3. NARO/KARC)

P072 Growth characteristics of sweetpotato cultivars for early harvest ☆Fujita, T., A. Takada, T. Kuranouchi, Y. Nakamura, K. Katayama(NARO Inst. of Crop Sci.)

P073 Petal color change in the course of flowering of purple primula cultivars ○Hashimoto, N.1, T. Iwashina2, R. Ohsawa1(1. Grad. Sch. Life and Envi. Sci., U. Tsukuba, 2. Dept. Bot., Natl. Mus. Nature Sci.)

P074 Measurement of barley glassiness by "Barley glassiness tester model RN-840" ☆Maejima, H., Y. Uehara(Nagano Agri. Exp. Sta.)

P075 QTL analysis of biomass produntion in japonica and indica cross of rice Matsuma, Y.1, H. Wasekura1, T. Kawamoto2, N. Satoh-nagasawa1, K. Sakurai1, A. Watanabe1, H. Akagi1, ☆H. Takahashi1(1. Fac. Biores. Sci., Akita Pref. U., 2. Akita Pref. Agriculture

P076 Non-additive gene regulation in heterotic F1 hybrids of Arabidopsis thaliana and Chinese cabbage Kawanabe, T.2, H. Ying3, J. Taylor3, N. Saeki1, H. Abe1, E. Dennis3, ☆R. Fujimoto1(1. Grad. Sch. Sci. Tech., Niigata U., 2. Watanabe Seed Co., Ltd, 3. CSIRO Plant Industry)

P077 Distribution of the mutated form of Mother of FT and TFL1 and its effect on seed dormancy in Japanese wheat cultivars ☆Chono, M.1, H. Matsunaka2, M. Seki3, M. Fujita2, C. Kiribuchi-otobe1, S. Taya1, S. Oda1, H. Kojima1, S. Nakamura1, I. Ashikawa1(1. NARO Institute of Crop Science, 2. NARO Kyushu Okinawa Agricultural Research Center, 3. NARO Agricultural Research Center)

P078 Analysis of QHB gene involved in elongation growth of seminal root and differentiation of crown and lateral roots in rice ○Shibata, K., Y. Inukai(Graduate School of Bioagricultural Sciences, Nagoya University)

P079 Analysis of onion2, a mutant of very-long-chain fatty acid elongase gene of rice ○ Akiba, T.1, M. Isibasi1, C. Moriya2, K. Tsuda3, N. Kurata3,4, Y. Ito1(1. Grad. Sch. Agri., Univ. Tohoku, 2. Sendai Sirayuri Gakuen High School, 3. Plant. Genet. Lab., Natl. Inst. Genet, 4. Life Sci., Sokendai)

P080 Approach to establishments of isolation and collection of protoplasts with different sizes from ovaries of apomictic guinea grass (Panicum maximum) ☆Chen, L., Y. Nishimura(Fac. Environ. & Hort. Minamikyushu University)

P081 Identification of a novel mutant that shows developmental defects from rice ○Li, W.1, A. Yoshida1, M. Takahashi1, H. Sakakibara2, M. Kojima2, J. Kyozuka1(1. Laboratory of Crop Ecology and Morphology, Dept of Agricultural and Environmental Biology, University of Tokyo, 2. Plant Productivity Systems Research Group, RIKEN Plant

P082 Leaf Morphogenesis by Flowering Signal ○Yamazaki, R., J. Kyozuka(Graduate School of Agricultural and Life Sciences, The University of Tokyo)

P083 Seasonal expression pattern of florigen gene (CsFT1) in tea plants ○Yamada, M., K. Kato, S. Katagawa, K. Murai(Dep. Biosci., Fukui Pref. Univ.)

P084 QTL analysis of heading and flowering time in the D genome of synthetic hexaploid wheat ☆Nguyen, T.1, T. Kajimura1, K. Murai2, S. Takumi1(1. Grad. Sch. Agr. Sci., Kobe Univ., 2. Dept. Biosci., Fukui Pref. Univ.)

P085 Growth properties of near-isogenic wheat lines for chilling requirement influenced by sowing time ○Matsuyama, H.1, M. Seki1, Y. Shimazaki1, H. Kojima2, C. Kiribuchi-otobe2, T. Takayama2, M. Fujita3, S. Oda2, K. Kato4(1. National Agricultural Research Center, 2. National Institute of Crop Science, 3. National Agricultural Research Center for Kyushu Okinawa Region, 4. Graduate School of Environmental and Life Science, Okayama University)

P086 Relationships between cleistogamous flowering and floral organ morphology in Hordeum ○Tomokazu, M.1, K. Ishigaki1, N. Wang2, T. Komatsuda2, K. Kakeda1(1. Fac.Bioresour., Mie U., 2. NIAS)

P087 Gene expression analysis of phytochrome genes and bulb formation induced by changing day length in wild barley Hordeum bulbosum L ○Kobayashi, Y., M. Furukawa, E. Sagata, N. Asama, Y. Motoshima, T. Ban(Kihara Inst. Bio. Res., Yokohama City U.)

P088 Specific properties of bulb structure in wild barley Hordeum bulbosum L ○Asama, N.1, Y. Kobayashi1, Y. Motoshima1, F. Sawaki2, M. Kobayahsi2, N. Nagata2, T. Ban1(1. Kihara Inst. Bio. Res., Yokohama City U., 2. Department of Science, Japan Women's U.)

P089 Effect of day length and light intensity on bulb formation of wild barley Hordeum bulbosum L ○Motoshima, Y.1, S. Karato1, Y. Kobayashi1, N. Asama1, Y. Iizuka2, M. Kusano2, T. Ban1(1. Kihara Inst. Bio. Res., Yokohama City U., 2. RIKEN PSC)

P090 Molecular characterization of ssg4, a large amyloplast mutant of rice ○Matsushima, R.1, M. Maekawa1, N. Fujita2, W. Sakamoto1(1. Institute of Plant Science and Resources, Okayama University, 2. Department of Biological Production, Akita Prefectural

P091 Further characterization of rice mutant reduced biomass production ○Abiko, T., M. Obara(JIRCAS)

P092 Morphological and physiological characterization of new rice mutant exhibiting aberrant shoot organization ○Satoh-Nagasawa, N.1, Y. Katayose1, K. Sakurai1, H. Takahashi1, A. Watanabe1, Y. Nagato2, H. Akagi1(1. Fac. Biores. Sci., Akita Pref. U., 2. Grad. Sch. of Agric. Life Sci., U. Tokyo)

P093 Callus formation from rice anthers transferred to grooves within gellan gum-solidified media ☆Okamoto, Y., T. Wagatsuma(Rakuno Gukuen U.)

P094 Effect of liquid preculture medium on anther culturability of rice ☆Kobayashi, M., Y. Okamoto, T. Wagatsuma(Rakuno Gakuen Univ. Grad. Sch.)

P095 In vitro pollen bioassay of the pistil S protein candidate in a wild self-incompatible species of barley, Hordeum bulbosum ○Hashimoto, S.1, M. Iwano2, K. Kakeda1(1. Grad.Sch.Biores., Mie U., 2. Grad.Sch.Biol.Sci., NAIST)

P096 S genotyping in Japanese plum and sweet cherry by allele-specific hybridization using streptavidin-coated magnetic beads ☆Wang, C., Z. Zhang, H. Kitashiba, T. Nishio(Laboratory of Plant Breeding and Genetics, Graduate School of Agricultural Science, Tohoku University)

P097 Mutational insertions in SP11 from A genome commonly found in all accessions revealed by S haplotype analysis of Brassica juncea ○Kanezawa, H., S. Itou, H. Kitashiba, T. Nishio(Grad. Sch. Agri. Sci., Tohoku Univ.)

P098 Promoter analysis of the pollen fertility restorer gene Rf1 for Owen cytoplasmic male sterility in sugar beet ○Kagami, H.1, K. Taguchi2, T. Kubo1, T. Mikami1(1. Grad. Sch. Agr., Univ. Hokkaido, 2. NARCH)

P100 Identification of transcription initiation and processing sites of a mitochondrial atp8 locus in Raphanus sativus L. ○Torizuka, Y., J. Imamura, N. Koizuka(Fac.Agr.Tamagawa

P102 Study on biological traits of Brassica juncea for risk assessment of biodiversity based on Cartagena law ☆Tabei, Y.1, M. Tsuda1, K. Matsuo2(1. NIAS, 2. NIAES)

P103 Genetic analysis of a Ne1 weak allele in a common wheat cultivar Chinese Spring ☆ Takumi, S.(Grad. Sch. Agr. Sci., Kobe Univ.)

P104 Genome-wide genotyping in recombinant inbred lines of rice by RAD-tag sequencing analysis ○Otogawa, S.1, A. Abe2, R. Terauchi2, H. Matsumura3(1. Grad.Sch. Sci. Tech., Shinshu.U, 2. Iwate Biotech. Res. Ctr., 3. Gene Res.Ctr.,Shinshu.U)

P106 Nuclear genetic diversity in Triticum araraticum Jakubz ○Saito, K., T. Kawahara(Laboratory of Crop Evolution Plant Germ-plasm Institute Graduate School of Agriculture Kyoto University)

P107 Isolation and comparison of lignin biosynthesis genes between Miscanthus sinensis and M. sacchariflorus ○Dwiyanti, M.1,2, A. Nishiwaki3, J. Stewart2,4, T. Yamada1(1. Field Science Center for Northern Biosphere, Hokkaido U., 2. EBI, U. of Illinois, 3. Fac. of Agr., U. of Miyazaki, 4. Brigham Young U.)

P108 Genetic analysis of hybrid seed formation ability of Brassica rapa in intergeneric hybridization with Raphanus sativus ○Tonosaki, K.1, H. Kitashiba1, Y. Kaneko2, T. Nishio1(1. Grad. Sch. Agric. Sci., Tohoku Univ., 2. Fac. Agric., Utsunomiya U.)

P109 Identification of candidate genes control 4-methylthio-3-butenyl glucosinolate contents in roots of radish ☆ZOU, Z.1, M. Ishida2, F. Li1, T. Kakizaki2, S. Suzuki1, H. Kitashiba1, T. Nishio1(1. Grad. Sch. Agric. Sci. Tohoku Univ., 2. National Institute of Vegetable and Tea Science (NIVTS))

P110 Analysis of several agronomic characters and QTL analysis of bolting time in radish (Raphanus sativus L.) ☆Yokoi, S., Y. Furuyama, M. Takahashi, W. Aoki, Y. Takahashi, N. Mimida, Y. Takahata(Fac. of Agri., Iwate Univ.)

P111 Effect of a elongated-glume gene P1 on grain shape in tetraploid wheat ○Okamoto, Y., S. Takumi(Grad. Sch. Agr. Sci., Kobe Univ.)

P112 QTL analysis for hardness of boiled soybean ☆Hirata, K., R. Masuda, Y. Tsubokura, K. Takahashi, T. Yamada, H. Hajika(NICS)

P113 Genetic linkage map based on SSR markers and mapping candidate QTLs controlling the maturity of mycelium in shiitake, Lentinula edodes ○Hanakawa, Y.1, Y. Ueda2, C. Egashira2, Y. Okuda2, T. Matsumoto2(1. Grad. Sch. Sci., Univ. Tottori, 2. Univ. Tottori)

P114 Construction of a linkage map and mapping of spikelet-tipped bristle1(stb1) in foxtail millet(Setaria italica (L.) P. Beauv.) ○Mukainari, Y.1, K. Sato1,2, K. Naito3, K. Fukunaga1(1. Fac.Life and Environ.Sci.,Pref.Univ.Hiroshima, 2. Fac. Agr., Hokkaido Univ., 3. Natl.Inst.Agrobiol.Sci.)

P115 Application of sativa-originated SNPs to wild Oryza ILs ☆Ebana, K.1, H. Hirabayashi2(1. NIAS, 2. NICS)

P116 Mapping of the two sex-determination loci in Spinacia oleracea L ○Oda, Y., A. Haseda, H. Hori, Y. Onodera, T. Mikami(Grad. Sch. Agr., Hokkaido U.)

P117 Mapping of male sterile genes, ms-1 and ms-2 in Cryptomeria japonica ○Moriguchi, Y.1, T. Ihara1, K. Uchiyama1, M. Saito2, Y. Higuchi3, S. Itoo3, D. Miyajima4, A. Matsumoto1, N. Futamura1, K. Shinohara1, Y. Tsumura1(1. FFPRI, 2. Toyama For. For. Prod. Res., 3. Ex. Niigata For. Res. Cent., 4. Niigata For. Res. Cent.)

P118 Development of DNA marker linked to PSV resistance locus Rpsv1 in soybean ☆Saruta, M.1, Y. Takada1, K. Takahashi2, S. Kato3, K. Komatsu4, T. Sayama5, M. Ishimoto5(1. NARO/WARC, 2. NICS, 3. NARO/TARC, 4. NARO/HARC, 5. NIAS)

P119 'DNA marking' of Cymbidium cultivars irradiated by physical mutagens ☆Furukawa, K.1, H. Iwasawa1, T. Abe2, S. Tabata3, T. Matsuyama4(1. Mukoyama Orchids Co., Ltd., 2. Nishina Center, Riken, 3. Kazusa DNA Research Inst., 4. Advanced Science Inst., Riken)

P120 Development of the DNA marker set to identify recommended rice varieties of Kagawa prefecture using mainly an SNP-PCR method ☆Murakami, K.1, H. Tabuchi2, T. Murakami1, S. Takebayashi3(1. Kagawa Pref. Agr.Exp.Stn., 2. Hokuriku Res. Cen.,NARO, 3. Seisan Reg. Agr. Ext. Cen.)

P121 Usefulness of SNP markers derived from the Aegilops tauschii transcripts for analysis of the hexaploid wheat genome ☆Iehisa, M., R. Matsuda, R. Nishijima, S. Takumi(Grad. Sch. Agr. Sci., Kobe Univ.)

P122 Detection of SNPs by RNA-seq method in Einkorn wheat ○Mizuno, N.1,2, A. Shimizu3, K. Sato4, S. Takumi5, M. Nitta1, S. Nasuda1(1. Grad.Sch.Agric.Sci., Kyoto U., 2. JSPS Research Fellow, 3. Sch. Environ. Sci., U. Shiga Pref., 4. IPSR, Okayama U., 5. Grad.Sch.Agric.Sci., Kobe U.)

P123 Functional analysis of genes based on large-scale SNP genotyping data in tomato ☆Hirakawa, H.1, K. Shirasawa1, A. Ohyama2, H. Fukuoka2, K. Aoki3, C. Rothan4, S. Sato1, S. Isobe1, S. Tabata1(1. Kazusa DNA Research Institute, 2. NARO Institute of Vegetable and Tea Science (NIVTS), 3. Osaka Prefecture Univ., 4. Institut National de la Recherche Agronomique (INRA Bordeaux))

P124 Selective mapping of next generation sequence scaffolds on high-resolution linkage map of Raphanus sativus ○Kawanabe, T., F. Li, Z. Zou, A. Fukushima, H. Kitashiba, T. Nishio(Grad. Sch. Agri. Sci., Univ. Tohoku)

P125 Distribution of CRa in commercial clubroot resistance (CR) cultivars in Chinese cabbage ○Aruga, D.1, H. Ueno1, H. Matsumura2, E. Matsumoto3, N. Hayashida4(1. Dep. Biosci. Tex. Tech., U. Shinshu, 2. gene. res. ctr., U. Shinshu, 3. Nag. Veg. Orna. Crop. Expt. Stn., 4. Div. Appl. Biol., U. Shinshu)

P126 Structure analysis of nuclear genome and chloroplast DNA sequence in Zoysia spp ○Tanaka, H.1, M. Hashiguchi2, H. Hirakawa3, S. Sato3, R. Akashi1,2(1. Grad. Sch. Agr., Univ. Miyazaki, 2. FSRC, Univ. Miyazaki, 3. Kazusa DNA Res. Inst.)

P127 Mapping of QTL controlling low-temperature germinability on chromosome7 from European rice "Arroz Da Terra" (Oryza sativa L.) ○Iwata, N., A. Torada(HOKUREN

P128 Structural analysis of genes encoding photolyase in the genus Oryza ○Makabe, S.1, H. Takahashi2, T. Sato3, I. Nakamura1(1. Grad. Sch. Hort., Chiba U., 2. Bex Co., 3. Grad. Sch. Life Sci., Tohoku U.)

P129 Sequence analysis of PolA1 gene in Wabisuke (Camelia uraku) and related species ○Kato, S.1, S. Makabe1, H. Takahashi2, T. Moriizumi2, I. Nakamura1(1. Grad. Sch. Hort., Chiba U., 2. Bex Co.)

P130 Deletion commonly found in Waxy gene of Japanese and Korean cultivars of Job's tears (Coix lacryma-jobi L.) ☆Fukunaga, K.1, T. Hachiken1, Y. Masunaga1, Y. Ishii1, T. Ohta1, K. Ichitani2(1. Fac.Life and Environ.Sci., Pref.Univ.Hiroshima, 2. Fac.Agr., Kahoshima

P131 Genetic analysis and geographic variation of epidermal cell characters in Brassica rapa L ○Takahashi, Y., S. Yokoi, Y. Takahata(Fac. Agri., Iwate Univ.)

P132 Isolation and some characterizations of the gene encoding chalcone 3-hydroxylase from Cosmos bipinnatus. ○Watanabe, M.1, K. Amamiya2, A. Uehara2, T. Iwashina2,3, J. Imamura1, N. Koizuka1(1. Grad.Sch.Agr.Tamagawa U., 2. United Grad.Sch.Agr.Tokyo U. of Agriculture and Technology, 3. Department of Botany, National Museum of Nature and

P133 Analysis of mitochondrial genome in rapeseed that suppressed of MSH1 expression by RNAi ○Terao, Y., M. Oonishi, S. Oziro, J. Imamura(Grad. Sch. Scibio., Univ. Tamagawa)

P134 Microsatellite analyses of organellar DNAs of Aegilops caudata, alloplasmic wheat with its plasmon and Ae. caudata reconstituted from their genome and plasmon ○Yotsumoto, T.1, N. Mori1, S. Takumi1, K. Tsunewaki2(1. Grad. Sch. Agric. Sci, Kobe U., 2. Prof. Emer., Kyoto U.)

P135 Papilla-specific transcriptome anaysis in Brassicaseae ○Osaka, M.1, T. Matsuda2, T. Fujioka2, S. Sakazono1, H. Takahashi3, M. Nakazono3, M. Iwano4, S. Takayama4, L. Yong pyo5, G. Suzuki6, K. Suwabe2, M. Watanabe1,7(1. Grad. Sch. Life Sci., Tohoku U., 2. Grad. Sch. Biores., Mie U., 3. Grad. Sch. Bioagr Sci., Nagoya U., 4. Grad. Sch. Biol. Sci., Nara Institute of Science and Technology, 5. Dep. Mol. Gen. Gen., Chungnam U., 6. Div. Nat. Sci., Osaka Kyoiku U., 7. Fac. Sci., Tohoku U)

P136 Transcriptome analysis of cadmium stress in rice seedlings by RNA-Seq ○Oono, Y., Y. Kawahara, T. Yazawa, H. Kanamori, H. Sasaki, S. Mori, J. Wu, T. Itoh, T. Matsumoto(National Institute of Agrobiological Sciences)

P137 Comparative analysis of gliadins from common wheat by using two-dimensional gel electrophoresis ○Miura, M., K. Kawaura, H. Kouyama, M. Nakamura, Y. Ogihara(KIBR, Yokohama City U.)

P138 Expression analysis for root specific/stress responsive RSOsPR10 gene in rice and characterization of transgenic rice overexpressing RSOsPR10 protein ☆Terakawa, T.1, Y. Yoshida2, H. Hasegawa1, A. Gyohda2, T. Koshiba2(1. Hokko Chem. Ind., 2. Tokyo

P139 Screening of salt tolerance genes from transgenic Arabidopsis expressing cDNA from Sprobolus virginicus (L) Kunth Kawano, R.2, S. Komatsubara2, ☆Y. Tada1(1. Tokyo Univ. Technol., 2. Grad. Sch. Bionics)

P140 Epimutant induction of an endogenous gene by grafting ○Hojo, H., A. Kasai, T. Harada(Fac. Agric. Life Sci., Hirosaki U.)

P141 A comprehensive analysis of microRNAs expressed during maturing process of male reproductive organ of Cryptomeria japonica ☆Ihara, T., N. Futamura, S. Ueno(Forestry and Forest Products Research Institute)

P142 Association genetics in Cryptomeria japonica -Amount of male strobili and wood property traits (3)- ○Uchiyama, K.1, H. Iwata2, T. Ihara1, S. Ueno1, Y. Moriguchi1, M. Tsubomura3, K. Mishima3, T. Iki3, A. Watanabe3, N. Futamura1, K. Shinohara1, Y. Tsumura1(1. FFPR, 2. Grad. Sch. Agric. Life Sci., U. Tokyo, 3. FTBC, FFPRI)

P143 Mitochondrial Proteomics Analysis in Wheat Root Da-Eun Kim1, Abu Hena Mostafa Kamal2, Kun Cho3, Seong-Woo Cho4, Ki-Hyun Kim5, Cheol-Soo Park6 Jong-Soon Choi3 Keun-Yook Chung7, and Sun-Hee Woo1*(1Department of Crop Science, 7Department of Environmental & Biological Chemistry , Chungbuk National University, Cheong-ju 361-763, Korea, 2Medical Proteomics Research Center, KRIBB, Daejeon 305-806, Korea, 3Mass Spectrometry Research Center, Korea Basic Science Institute, Chungbuk 863-883, Korea, 4 Laboratory of Molecular Breeding, Arid Land Research Center, Tottori University, 5 Chungcheongbuk-Do Garlic Research Institute, Danyang-gun, 395-841, Korea, 6Department of Crop Science and Biotechnology, Chonbuk National University, Jeonju, 561-756, Korea)

P144 Effects of allelic variations in Wx-1, Glu-D1, Glu-B3 and Pinb-D1 loci on flour characteristics and white salted noodle making quality of wheat flour Chul Soo Park1, Chon-Sik Kang2, and Sun-Hee Woo3(1Department of Crop Science and Biotechnology, Chonbuk National University, Jeonju, 561-756, Korea, 2National Institute of Crop Science, RDA, Suwon 441-857, Korea, 3Department of Crop Science, Chungbuk National University, Cheongju 361-763, Korea)