

Title of Papers Presented at the 124th Meeting of The JAPANESE SOCIETY Oral presentations

Oral Presentations

101 Usefulness of SNPs identified in the leaf and spike transcripts of *Aegilops tauschii* for analysis of hexaploid wheat

Iehisa, M.¹, A. Shimizu², K. Sato³, R. Nishijima¹, K. Sakaguchi¹, S. Nasuda⁴, ○S. Takumi¹ (1.Grad. Sch. Agr. Sci., Kobe U., 2.Sch. Environ. Sci., U. Shiga Pref., 3.ISPR, Okayama U., 4.Grad. Sch. Agr., Kyoto U.)

102 Development of novel DNA markers for identifying Japanese rice cultivars using RAD-seq analysis

☆Murayama, Y.¹, S. Otogawa¹, N. Urasaki², K. Taroura², H. Matsumura³ (1.Grad. Sch. Sci. Tech., Univ. Shinshu, 2.Okinawa Pref. Agric. Res. Ctr., 3.Gene Res. Ctr., Univ. Shinshu)

103 Quantitative real time PCR based diagnosis of the homo- or hetero-zygosity at the Tamyb10-D1 locus related to grain color on wheat

☆Himi, E., M. Maekawa, T. Matsuura, S. Taketa (Institute of Plant Science and Resources, Okayama University)

104 Nested Association Mapping in rice

☆Abe, A., H. Takagi, H. Yaegashi, H. Utsushi, A. Uemura, Y. Ochiai, R. Terauchi (Iwate Biotechnology Research Center)

105 Population structure and association analyses of the core-collection of hexaploid wheat accessions conserved by NBRP-Wheat.

☆Takenaka, S., M. Nitta, T. Kawahara, S. Nasuda (Grad. Sch. Agri. Kyoto Univ.)

106 Genetic structure and linkage disequilibrium in natural populations of *Cryptomeria japonica*

○Tsumura, Y. ¹, K. Uchiyama ¹, Y. Moriguchi ², M. Kimura ¹, S. Ueno ¹, T. Ihara ¹

(1.Forestry and Forest Products Research Institute, 2.Graduate School of Science and Technology, Niigata University)

107 Efficient DNA fingerprinting utilizing benchtop high-throughput sequencing platform.

☆Monden, Y. ¹, A. Yamamoto ², A. Shindo ¹, M. Tahara ¹ (1.Grad. Sch. Env. & Life Sci., Univ. Okayama, 2.Fac. Agri., Univ. Okayama)

108 Assignment of draft sequences to a highly density linkage map in *Raphanus sativus* L.

○Kitashiba, H. ¹, F. Li ^{1,3}, H. Hirakawa ², T. Kawanabe ¹, K. Tonosaki ¹, K. Shirasawa ², S. Tabata ², T. Nishio ¹ (1.Grad. Sch. Agri. Sci., Univ. Tohoku, 2.Kazusa DNA Res. Inst., 3.Oil Crops Res. Inst. Chinese Acad. Agri. Sci.)

109 An efficient SNP mapping method by Illumina Hiseq using tag sequences for individual identification

☆kudo, j., A. Sharma, M. Ajiki, H. Kitasiba, T. Nishio (Grad. Sch. Agric. Sci., Tohoku Univ.)

110 Development of DNA markers linked to the Fusarium wilt-resistance gene using octaploid strawberry linkage map

○Hashizume, F. ¹, Y. Hamanaka ², S. Isobe ³, S. Sato ³, A. Fujita ¹, K. Kakeda ², T. Mori ¹ (1.Mie Pref.Agr.Res.Inst., 2.Fac.Bioresour., Mie U., 3.Kazusa DNA Res.Inst.)

111 Validation of DNA markers linked to the Fusarium wilt-resistance gene in strawberry and application to DNA marker-assisted breeding

○Fujita, A. ¹, J. Kohori ¹, Y. Hamanaka ², H. Kitamura ¹, K. Hashimoto ², K. Kakeda ², F. Hashizume ¹, T. Mori ¹ (1.Mie Pref.Agr.Res.Inst., 2.Fac.Bioresour., Mie U.)

112 Construction of genetic linkage maps of cultivated strawberry using array marker technology and development of markers linked to anthracnose resistance gene

○Enoki, H. ¹, Y. Noguchi ², T. Nunome ², S. Nishimura ¹, H. Fukuoka ² (1.Future Project Div., TOYOTA MOTOR CORPORATION, 2.NARO Institute of Vegetable and Tea Science)

113 Genome sequencing of cultivated octoploid strawberry (*Fragaria x ananassa*)

○Hirakawa, H.¹, K. Shirasawa¹, S. Kosugi¹, S. Sato², S. Tabata¹, F. Maeda³, T. Yanagi⁴, L. Qin⁵, S. Isobe¹ (1. Department of Plant Genome Research, Kazusa DNA Research Institute, 2. Graduate School of Life Sciences, Tohoku University, 3. Chiba Prefectural Agriculture and Forestry Research Center, 4. Faculty of Agriculture, Kagawa University, 5. Department of Horticulture, Shanxi Agricultural University)

114 Comprehensive SNP discovery by whole-genome resequencing of Japanese and European commercial F₁ hybrid varieties in tomato.

○Fukuoka, H.¹, A. Ohyama¹, M. Kumagai², R. Itoh^{2,5}, S. Mizuno^{2,6}, S. Negoro¹, T. Nunome¹, K. Miyatake¹, H. Yamaguchi¹, Y. Kobayashi⁴, Y. Katayose², H. Numa², I. Kobayashi³, T. Itoh² (1. NIVTS, NARO, 2. Agrogenomics Res. Cent., NIAS, 3. Div. Plant Func. Genomics, Mie U., 4. Grad. Sch. Regional Innov. Stud., Mie U., 5. DYNACOM Co., Ltd., 6. Sch. Med., Tohoku U. (present affiliation))

115 Analysis of QTL in recombinant inbred lines (RILs) derived from a cross of two F₁ hybrids of tomato.

○Ohyama, A.¹, T. Hayashi², H. Matsunaga¹, H. Iwata³, S. Negoro¹, K. Miyatake¹, H. Yamaguchi¹, T. Nunome¹, H. Fukuoka¹ (1. NARO Institute of Vegetable and Tea Science, 2. NARO Agricultural Research Center, 3. Grad. Sch. Agr. Life Sci., U. Tokyo)

116 Assignment of BAC physical map along wheat chromosome 6B.

☆Kobayashi, F.¹, S. Katagiri¹, W. Karasawa¹, Y. Hanawa¹, H. Kanamori¹, H. Fujisawa¹, T. Tanaka¹, S. Watanabe², T. Sakaguchi², S. Nasuda², R. Ohno³, J. Iehisa⁴, S. Takumi⁴, K. Hayakawa⁵, C. Abe⁵, J. Dolezel⁶, Y. Ogihara⁷, T. Matsumoto¹, Y. Katayose¹, J. Wu¹, H. Handa¹ (1. NIAS, 2. Grad. Sch. Agric., Kyoto Univ., 3. Org. Advanced Sci. & Tech., Kobe Univ., 4. Grad. Sch. Agric. Sci., Kobe Univ., 5. Nissin Flour Milling Inc., 6. Inst. Exp. Bot., Czech Republic, 7. KIBR, Yokohama City Univ.)

117 Finish of the sequencing of MTP BAC clones in wheat chromosome 6B with Next-Generation Sequencer

☆Kanamori, H.¹, K. kurita¹, S. Katagiri¹, H. Fujisawa¹, W. Karasawa¹, Y. Hanawa¹, M. Hamada¹, M. Shibata¹, F. Kobayashi¹, M. Shimomura², N. Namiki², H. Ikawa², T. Matsumoto¹, K. Yuichi¹, W. Jianzhong¹, H. Handa¹ (1. National Institute of Agrobiological Sciences, 2. Mitsubishi Space Software Co., LTD)

118 Whole genome sequence of rice cultivar “Tsuyahime” and the Origin of the locus near the useful gene.

☆Goto, H. ^{1,4}, K. Hori ², J. Yonemaru ², T. Yamamoto ², M. Nishimura ³, T. Nishio ⁴, M. Chuba ¹ (1.Rice Breeding and Crop Sci. Exp. Stn., Yamagata Integrated Agr. Res. Cent., 2.Natl. Inst. Agrobiological Sci., 3.Murayama Area General Branch Administration Office, Yamagata Prefectural Government, 4.Graduate School of Agricultural Science, Tohoku University)

119 Search for active transposons in a hypomethylation rice line

Numa, H. ¹, K. Yamaguchi ², S. Shigenobu ², ○Y. Habu ¹ (1.Agrogenomics Res. Center, NIAS, 2.Functional Genomics, NIBB)

120 Natto soybean varieties conceal genetic factors increasing seeds per pod.

☆Sayama, T. ¹, K. Takagi ^{1,2}, K. Kosuge ³, K. Okano ⁴, K. Komatsu ⁵, H. Sasama ¹, N. Yamaguchi ⁶, C. Suzuki ⁷, A. Kaga ¹, M. Ishimoto ¹ (1.NIAS, 2.NARC, 3.Ibaraki Plant-Biotech. Inst., 4.Ibaraki West. Agric. Office, 5.NARCH, 6.HRO Tokachi Agric. Exp. Stn., 7.HRO Central Agric. Exp. Stn.)

121 Neo-domestication of wild species in *Vigna*

☆Takahashi, Y. ^{1,2}, K. Naito ¹, T. Isemura ¹, C. Muto ¹, H. Sakai ¹, A. Kaga ¹, S. Natesan ³, P. Muthaiyan ³, N. Tomooka ¹ (1.National Institute of Agrobiological Sciences, 2.Research Fellow of the Japan Society for the Promotion of Science, 3.Tamil Nadu Agricultural University)

122 Identification of QTL involving leaf photosynthesis rate in high yielding rice variety, Takanari

○Yamamoto, T. ¹, T. Takai ², S. Adachi ³, F. Taguchi-Shiobara ¹, Y. Sanoh-Arai ², N. Iwasawa ², S. Yoshinaga ², S. Hirose ², Y. Taniguchi ², U. Yamanouchi ¹, J. Wu ¹, T. Matsumoto ¹, K. Sugimoto ¹, K. Kondo ¹, T. Ikka ¹, T. Ando ¹, I. Kono ¹, S. Ito ¹, A. Shomura ¹, T. Ookawa ³, T. Hirasawa ³, M. Yano ¹, M. Kondo ² (1.National Institute of Agrobiological Sciences, 2.NARO Institute of Crop Science, 3.Tokyo University of Agriculture and Technology)

123 Map-based cloning of *CAR8* associated with the rate of leaf photosynthesis in rice

☆Adachi, S. ^{1,2}, U. Yamanouchi ¹, T. Tanabata ³, J. Sun ¹, T. Hirasawa ⁴, T. Yamamoto ¹,
j. Yonemaru ¹ (1.Natl. Inst. Agrobiol. Sci., 2.JSPS research fellow, 3.RIKEN CSRS,
4.Grad. Sch. of Agr., Tokyo Univ. of Agr. and Tech.)

124 QTL analysis of pollen sterility using two BC ₁F ₁ populations derived from backcrossing with both parents, *Oryza sativa* L. and *O. glaberrima* Steud.

☆Win, K., C. Ogata, Y. Yamagata, H. Yasui, A. Yoshimura (Fac. Agr., Grad. Sch., Kyushu Univ.)

125 Development of Japonica rice line with restoring ability of pollen sterility in interspecific cross to *Oryza glaberrima*

☆Yamagata, Y., A. Yoshimura (Fac. Agr., Grad. Sch., Kyushu Univ.)

126 Detection of reproductive barriers between Aus and indica.

○Harushima, Y. ^{1,2}, N. Kurata ^{1,3} (1.Plant Genetics Lab., NIG, 2.TRIC, ROIS,
3.SOKENDAI)

201 A large impact of closed panicles on wild characters in *Oryza rufipogon*

☆Numaguchi, K., T. Htun, P. Thanh, R. Ishikawa, T. Ishii (Lab. Plant Breeding, Grad. Sch. Agric. Sci., Kobe Univ.)

202 Evaluation of diversity in wild rice 3. Genetic diversity in in-situ conservation sites representing different population structure

○Ishikawa, R. ¹, H. Yuki ¹, S. Chotechuen ², U. Pang ³, I. Ashikawa ⁴ (1.Fac. Agri and Life Sci, Hirosaki U., 2.Pathum Thani Rice Res. Cen., Thai Rice Dep., 3.Prachinburi Rice Res. Cen., Thai Rice Dep., 4.NARO Institute of Crop Science)

203 Evaluation of diversity in wild rice 4. Novel perennial strategy of Australian wild rice

☆Sotowa, M. ¹, K. Ichitani ², R. Henry ³, B. Simon ⁴, R. Ishikawa ¹ (1.Fac. Agri and Life Sci, Hirosaki U., 2.Fac. Agri. ,Kagoshima U., 3.QAAFI, 4.Queensland Herbarium)

204 Breeding strategy for the mitigation of heat-induced spikelet sterility in rice in the tropical regions

○Ishimaru, T. ^{1,2}, K. Sasaki ^{1,2}, H. Hirabayashi ³, K. Jagadish ², D. Fujita ^{2,3}, N. Kobayashi ^{1,2,3}, R. Gannaban ², M. Miras ⁵, S. Xaiyalath ⁴, P. Lathvilayvong ⁴, B. Samson

², K. Hayashi ^{1,2} (1.JIRCAS, 2.IRRI, 3.NARO/NICS, 4.Thasano Rice Research and Seed Multiplication Center, 5.UPLB)

205 The tendency and problems of irradiation service by request in IRB

○Takyu, T. (Inst. Breeding Radiation., NIAS)

206 Effects of *Aegilops geniculata* and *Ae. mutica* cytoplasm on heading date and seed fertility in Japanese wheat cultivars

○Murai, K., M. Kurosaka (Dep. Biosci., Fukui Pref. Univ.)

207 Morphological variation in the spikelets and grains of wild diploid and tetraploid wheat collected at their natural populations

Oi, S. ¹, ○S. Ohta ¹, N. Mori ², H. Ozkan ³ (1.Dep. Biosci., Fukui Pref. Univ., 2.Grad. Sch. Agric. Sci., Kobe Univ., 3.Fac. Agric., Univ. Cukurova, Turkey)

208 Genetic diversity and differentiation of chloroplast genome in wild emmer wheat within and among its natural populations

☆Shizuka, T. ¹, N. Mori ¹, S. Ohta ², H. Ozkan ³ (1.Grad. Sch. Agric. Sci., Kobe Univ., 2.Dep. Biosci., Fukui Pref. Univ., 3.Fac. Agric., Univ. Cukurova, Turkey)

209 Transmission of wheat to the eastern part of China and establishment of indigenous landraces

Iida, D. ¹, ○H. Nishida ^{1,2}, S. Ghimire ³, C. Long ⁴, K. Kato ^{1,2} (1.Grad. Sch. Nat. Sci. Tech., Okayama U., 2.Grad. Sch. Environ. Life Sci., Okayama U., 3.Agriculture and Forestry U., 4.Kunming Inst. Bot.)

210 Breeding of new foxtail millet cultivar 'Awa Iwate Mochi 3' with high-yielding ability and brightly yellow grain.

○Nakajo, S. (Kenpoku Agric. Inst., IARC)

211 A new malting barley cultivar 'HARUMIYABI'

Baba, T. ¹, K. Takata ², ○H. Kai ¹, O. Yamaguchi ¹, M. Furusho ¹, M. Tsukazaki ¹, Y. Uchimura ¹ (1.Fukuoka Agric. Res. Cent., 2.Fukuoka Prefectural Office)

212 A new green soybean of tamba black soybean cultivar "Murasaki-zukin-3go" and "Murasaki-zukin-4go" with SMV resistance

○Furutani, N.¹, M. Yamasaki¹, S. Nomura², K. Ohtani², M. Matsui² (1.kyoto pref. Inst. of Agri. Biotech, 2.Kyoto Pref. U)

213 Breeding of the new erucic acid free rapeseed cultivar 'Tohoku 96' adapted in warm region for edible oil

○HONDA, Y.¹, M. KAWASAKI¹, A. KATO², M. YAMAMORI², M. YUI¹, M. ISHIDA³, T. TEZUKA⁴, T. TOHYAMA⁵, I. CHIBA⁵ (1.NARO Tohoku Agricultural Research Center, 2.NARO National Institute of Crop Sciences, 3.NARO National Institute of Vegetable and Tea sciences, 4.NARO Kyushu Okinawa Agricultural Research Center, 5.Retired)

214 Whole genome SNP fingerprinting of barley genetic resource collection

○Sato, K., Y. Motoi (IPSR, Okayama University)

215 Genetic diversity and phylogenetic relationships in Sudanese melon landraces based on RAPD and SSR polymorphisms

☆Tanaka, K.¹, P. Nhi², M. Pitrat³, M. Sugiyama⁴, C. Long⁵, H. Nishida⁶, K. Kato⁶ (1.Fac. Humanit., Hirosaki U., 2.Hue U., Vietnam, 3.I.N.R.A., 4.N.I.V.T.S., 5.K.I.B., P.R.C., 6.Grad. Sch. Environ. Life Sci., Okayama U.)

216 Worldwide core collections of tea (*Camellia sinensis*) based on genome-wide SSR markers

○Taniguchi, F.^{1,4}, T. Saba¹, A. Ogino¹, S. Yamaguchi², K. Kimura², J. Tanaka^{3,4} (1.NARO Institute of Vegetable and Tea Science, 2.Tamagawa Univ., 3.NARO Institute of Crop Science, 4.Tsukuba Univ.)

217 Expression and characterization of the nitrate reductase gene in tea cultivars.

☆Baba, T.¹, H. Katai², Y. Suzuki², A. Morita¹, T. Ikka¹ (1.Grad. Sch. Agr., Shizuoka Univ., 2.Tea Res. Cent., Shizuoka Pref.)

218 Genetic studies on Bambuseae species in Japan. XXXIV. Introduction of large bamboo species to ancient Japan and the origin of *Hibanobambusa tranquillans*.

○Muramatsu, M. (None, Professor emeritus Okayama Univ.)

219 Origin of *Iris setosa* var. *nasuensis* and *I. setosa* var. *hondoensis* (2)

○Yabuya, T.¹, T. Tomita², K. Inoue³ (1.Fac. Agr., Univ. Miyazaki, 2.Fac. Agr., Univ. Miyazaki, 3.Fac. Agr., Univ. Miyazaki)

220 Analysis of the evolutional process of autopolyploid genome by hybridization: The difference in behavior of *NCED3a* and *NCED3b* genes in *Chrysanthemum*.

Motohara, K.¹, N. Yamane¹, ○K. Taniguchi¹, J. Han², M. Nakata³, T. Sera⁴, N. Inoue⁴, R. Chen⁵, H. Na⁶, M. Sulaiman⁷, L. Chen⁵, G. Liang⁸, X. Li⁸, H. Deng⁸, M. Kusaba¹ (1.Grad. Sch. Sci., Hiroshima Univ., 2.Accenture (DaLian) , 3.Bot. Gard. Toyama, 4.Hiroshima Bot. Gard., 5.Coll. Life Sci., Nankai Univ., 6.Coll. Life Sci., Sichuan Univ., 7.Xingjiang Univ., 8.Hort. Landscpe Coll., Southwest Univ.)

221 Seed formation in triploid loquat caused by cross pollination with pollen of diploid cultivars.

○Kikuchi, S.¹, M. Iwasuna¹, A. Kobori¹, Y. Tsutaki², A. Yoshida², H. Sassa¹, T. Koba¹ (1.Grad. Sch. Hort., Chiba Univ., 2.Chiba Agr. Cent.)

222 Qualitative and quantitative relationship between the QTL of photoperiod sensitivity and differentiation of ecotypes in common buckwheat.

☆Hara, T., R. Ohsawa (Grad. Sch. Life & Env. Sci., Univ. Tsukuba)

223 Gene expression analysis associated with chloroplast development of temperature sensitive chlosis mutant in rice

○Kubo, A., Y. Takahara (nagaoka university of technology)

224 Genetic analysis of a zebra necrosis mutant in rice

☆Fukuroi, K., Y. Nara, A. Nakada, Y. Kishima, I. Takamure (Grad. Sch. Agr., Hokkaido U.)

225 An *MSH4* homolog, *stpp1*, from *Pleurotus pulmonarius* is a "Silver Bullet" for resolving problems caused by spores in cultivated mushrooms

☆Okuda, Y.¹, S. Murakami², Y. Obatake³, H. Muraguchi⁴, Y. Honda⁵, T. Matsumoto¹ (1.Tottori Univ., 2.Tottori Mycol. Inst., 3.Nara Forest Res. Inst., 4.Akita Pref. Univ., 5.Grad. Sch. Agric. Kyoto Univ.)

301 Reverse genetics system using gene-tagging line promoted by DNA transposon *nDart* in rice.

○Tsugane, K.¹, M. Tsugane¹, K. Yamaguchi¹, S. Shigenobu¹, H. Nishimura², M. Maekawa² (1.Natl. Inst. Basic Biol., 2.Inst. Plant Sci. Res., Okayama Univ.)

302 Next-generation sequencing and analysis of flanking sequences of 3D-DNA pool for mutant panel screening.

Nakagome, M., H. Hirochika, ○A. Miyao (Genome Resource, NIAS)

303 Genome reconstruction and a heat-induced retrotransposon in Brassica

☆Ito, H.^{1,2}, Y. Masuta¹, W. Matsunaga³, S. Masuda³, A. Kato¹ (1.Hokkaido University, 2.JST PRESTO, 3.Hokkaido University)

304 Diversity in the complexity of phosphate starvation transcriptomes among rice cultivars based on RNA-Seq profiles

○Oono, Y., T. Yazawa, Y. Kawahara, H. Kanamori, H. Sasaki, S. Mori, J. Wu, H. Handa, T. Itoh, T. Matsumoto (NIAS)

305 Comparison of volatiles emitted from two rice cultivars at flowering stage.

☆Sugaya, K., M. Hori, K. Toriyama, T. Kazama (Grad. Sch. Agri. Sci., Tohoku Univ.)

306 A comprehensive comparisons of gene expression networks in model plants.

☆Kobayashi, M.¹, T. Takano¹, K. Kikue¹, T. Suzuki¹, Y. Sasaki¹, S. Terashima¹, H. Matsumura¹, Y. Yoshioka¹, K. Morimoto¹, M. Kanno¹, K. Yokoyama¹, Y. Yoshida¹, H. Chiba², Y. Tada², A. Shimizu³, K. Aya⁴, M. Matsuoka⁴, M. Watanabe⁵, K. Suwabe⁶, K. Yano¹ (1.Bioinf., Sch. Agri., Meiji Univ., 2.TOHOKU CHEMICAL Co., Ltd., 3.Sch. of Environmental Sci., Univ. of Shiga pref., 4.Bioscience and Biotechnology Center, Nagoya Univ., 5.G. Sch. of Life Sci., Tohoku Univ., 6.G. Sch./Fac. of Bioresources, Mie Univ.)

307 Metabolomic analysis of soybean genetic resources using CE / TOF-MS

☆Terasawa, Y., S. Watanabe, M. Haque, T. Anai (Fac. Agric., Saga Univ.)

308 Transposition of *SORE-1* retrotransposon accompanied by gene disruption during differentiation of cultivated soybean in the Hokkaido area of Japan

☆Tsuchiya, M., H. Yuan, M. Sato, M. Kasai, J. Abe, A. Kanazawa (Res. Fac. Agr., Hokkaido Univ.)

309 Factors that restrict the spread and transmission of transgene silencing in soybean.

☆Mori, A., T. Yamada, A. Kanazawa (Res.Fac.Agr.,Hokkaido Univ.)

310 *mPing* transposition is accompanied by temporal and spatial up-regulation of *Ping* in a rice cultivar, Gimbozu

☆Teramoto, S. ¹, T. Tsukiyama ¹, M. Teraishi ¹, T. Tanisaka ^{1,2}, Y. Okumoto ¹ (1.Grad. Sch. Agric., Kyoto Univ., 2.Dep. Agric. Regional Reclamation., Kibi Int. Univ.)

311 Rice ubiquitin-related modifier RURM1 involves in translational efficiency through tRNA thiolation in rice

☆Hamamoto, Y. ¹, T. Tsukiyama ¹, A. Shimizu ², M. Teraishi ¹, T. Tanisaka ^{1,3}, Y. Okumoto ¹ (1.Grad. Sch. Agric., Kyoto Univ., 2.Sch. Environ. Sci., Univ. Shiga Pref, 3.Dep. Agric. Regional Reclamation., Kibi Int. Univ)

312 Trial of screening by TILLING for gene disruption lines in a rice bacterial blight resistance gene

☆Arima, K. ¹, h. Tsuneyoshi ¹, k. Kawabe ², K. Ichitani ¹, S. Taura ² (1.Faculty of agriculture, Kagoshima University, 2.Institute of Gene Research, Kagoshima University)

313 Construction and evaluation of an EMS induced mutant library of the soybean cultivar, Enrei.

○Kaga, A. ¹, T. Anai ², S. Watanabe ^{1,2}, M. Nishimura ^{1,3}, N. Yamada ⁴, T. Sayama ¹, K. Takagi ^{1,5}, T. Shimizu ¹, K. Machita ¹, S. Mori ¹, H. Sasaki ¹, H. Kanamori ¹, Y. Katayose ¹, M. Ishimoto ¹ (1.NIAS, 2.Saga University, 3.Niigata University, 4.Nagano vegetable and ornamental crops exp.stn., 5.NARC)

314 Production of *Iris puseudacorus* lines added *I. ensata* chromosomes

☆Kawachi, Y. ¹, K. Kitahara ^{1,2}, S. Bang ¹, Y. Kaneko ¹ (1.Fac. Agric., Utsunomiya U., 2.Unit. Grad. Sch. Agric., Yokyo U. Agric. Tech.)

315 Production and characterization of *Brassica rapa* - *B. nigra* monosomic addition lines

☆Kato, M., S. Bang, Y. Kaneko (Fac, Agric., Utsunomiya U.)

316 Production and characterization of interspecific hybrids and first backcross plants from crossing between diploid *B. ruziziensis* x tetraploid *B. decumbens*

○Ishigaki, G. ¹, K. Suenaga ², R. Akashi ¹ (1.Agr., Univ. Miyazaki, 2.Tsukuba., JIRCAS)

317 An analysis of bending dwarf (*bdw*) mutants of sorghum: Gibberellin-controlled symmetrical cell division in the culm and its influence on sorghum breeding.

☆Ordonio, R. ¹, Y. Ito ², A. Hatakeyama ¹, K. Shinohara-Ohmae ², X. Song ², S. Kasuga ³, J. Yonemaru ⁴, H. Mizuno ⁴, T. Tokunaga ⁵, H. Kitano ², M. Matsuoka ², T. Sazuka ² (1.Grad. Sch. of Bioagric. Sci., Nagoya Univ., 2.Biosci. Biotech. Ctr., Nagoya Univ., 3.Edu. Res. Ctr. of Alp. Field Sci., Fac. of Agr. Shinshu Univ., 4.Natl. Inst. Agrobiol. Sci., 5.4Earth Note Co. Ltd.)

318 Hormone analysis of the calli derived from different organs in barley

☆Hisano, H., T. Matsuura, I. Mori, M. Yamane, K. Sato (Institute of Plant Science and Resources, Okayama Univ.)

319 Characterization of the *OsABCC13* gene involved in a low phytic acid grain in rice

☆Usui, Y. ¹, T. Matsubara ¹, O. Yato ², K. Yoshida ¹ (1.Grad. Sch. Agr. Life Sci., Univ. Tokyo, 2.NARC)

320 Induction of embryogenic callus and production of transgenic plants in napiergrass (*Pennisetum purpureum* Schumach.)

○Gondo, T. ¹, N. Umami ², G. Ishigaki ³, R. Akashi ³ (1.Frontier Science Research Center, University of Miyazaki, 2.Faculty of Animal Science, Gadjah Mada University, 3.Faculty of Agriculture, University of Miyazaki)

321 One- or two-step procedure for generating plant artificial ring chromosomes.

○Murata, M., A. Kanatani, F. Shibata, K. Nagaki (Inst. Plant Sci. Res., Okayama Univ.)

322 Characterization of transplastomic tobacco with enhanced glutathione level.

☆Fukunaga, A. ¹, K. Uemura ², T. Terachi ² (1.Grad.Sch.Fac.Eng.,Kyoto Sangyo U., 2.Fac.Life Sci.,Kyoto Sangyo U.)

323 Characterize of transplastomic tobacco lines containing a glutamate dehydrogenase gene (*gdh1*) in their chloroplast genome.

☆Ohya, Y.¹, T. Terachi² (1.Grad. Sch. Eng., Kyoto Sangyo U., 2.Fac. Life Sci., Kyoto Sangyo U.)

324 Analysis of the progeny of a transplastomic lettuce showing high-level expression of ferritin in chloroplast

☆Inoue, R.¹, K. Uemura², T. Terachi² (1.Grad.Fac.Eng.,Kyoto Sangyo U., 2.Fac.Life.Sci.,Kyoto Sangyo U.)

325 Artificial regulation of flowering by the direct rice florigen protein transduction into the plant cells using cell penetrating peptides

☆Washida, H., H. Tsuji, I. Ohki, K. Taoka, K. Shimamoto (Grad. Sch. Bio. Sci., NAIST)

326 Analysis of progenies from dominant male sterile rice by tapetum-specific expression of barnase

☆Oshima, M.¹, k. Abe¹, A. Okuzaki^{1,2}, J. Tanaka³, Y. Taniguchi³, F. Hirose¹, M. Tsuda¹, Y. Tabei¹ (1.NIAS, 2.Humboldt Univ. of Berlin, 3.NARO)

401 Distinction of rice stripe resistance by a genetic marker specific to the Stvb locus.

○Hayano-Saito, Y.¹, K. Hayashi¹, H. Maeda² (1.NARO Agricultural Research Center (NARO/ARC), 2.NARO Institute of Crop Science (NICS))

402 Genetic and genomic analysis of supreme salt tolerance in wild Vigna species

○Naito, K.^{1,2}, S. Chankaew^{1,3}, E. Ogiso¹, K. Iseki¹, Y. Takahashi^{1,4}, H. Sakai¹, A. Kaga¹, N. Tomooka¹ (1.National Institute of Agrobiological Sciences, 2.JST PRESTO, 3.Kasetsart University, 4.JSPS PD)

403 Identification of inositol hexakisphosphate kinases in plants

☆Morishita, N., Y. Kitamura, G. Hayakawa, K. Yoshida (Graduate School of Agricultural and Life Sciences., Univ. Tokyo)

404 A rice Major Facilitator Superfamily protein, OsSIM1, is involved in regulating cellulose biosynthesis of the cell wall under osmotic stress

○Li, X., t. takano (Asian Natural Environmental Science Center)

405 Study of photosynthetic electron transport in *Arabidopsis POPEYE* mutant

☆Araki, R., T. Shikanai (Grad. Sch. Sci., Kyoto Univ.)

406 Association of seed flood tolerance and novel flowering time QTL in soybean

☆Shirai, R. ¹, H. Sakurai ¹, M. Teraishi ¹, K. Seki ², N. Yamada ², T. Tsukiyama ^{1,2}, Y. Okumoto ¹ (1.Grad. Sch. Agr., Kyoto Univ., 2.Nagano Vegetable and Ornamental Crops Exp. Stn.)

407 Improvement of tolerance to heat stress given during hot water disinfection of rice seeds by reducing their water contents

○Kanekatsu, M. ¹, Y. Mitamura ¹, N. Okazaki ¹, S. Ohishi ¹, M. Kashiwagi ¹, N. Sano ¹, T. Yamada ¹, K. Murata ² (1.Fac. of Agr., Tokyo Univ. of Agr. and Tech., 2.Toyama Pref. Agr. Fores. Fish. Res.Cent.)

408 Isolation and functional analysis of phosphorus deficiency-induced acid phosphatase, PiACP-8 in rice.

☆Sasaki, E. ¹, K. Ochiai ², T. Matoh ², A. Shimizu ¹ (1.Grad. Sch. Environ. Sci., Univ. Shiga Pref., 2.Grad. Sch. Agr. Kyoto Uni.)

409 A rice transcription factor PiTF-6 is involved in root elongation and expression of phosphorus deficiency-induced genes

☆Kokaji, H. ¹, T. Tsuchida ², H. Ichikawa ², N. Mitsuda ³, M. Takagi ³, T. Matoh ⁴, A. Shimizu ¹ (1.Grad.Sch. Environ. Sci., Univ. Shiga Pref., 2.NIAS, 3.AIST, 4.Grad. Sch. Agr. Kyoto Univ.)

410 Dissecting the plant heat stress response network

☆Suzuki, N., R. Mittler (University of North Texas)

411 Fine mapping of qESS11b, derived from Awa-akamai, improved to Low-temperature tolerance of seedling establishment in rice.

☆Yamaguchi, T. ¹, m. Omoteno ², Y. Iyama ¹, M. Morikawa ³, T. Ebitani ¹ (1.Toyama Pref. Agr. Forest. Fish. Res. Cent., 2.Toyama Pref. Takaoka Agr. Forest. Prom. Cent., 3.Toyama Pref. Takaoka Agr. Food. Prod. Div.)

412 Pyramiding of quantitative trait loci for culm strength in the genetic background of rice cultivar Koshihikari

☆Maruyama, M. ¹, Y. Iyama ², T. Ebitani ², T. Kobayashi ¹, T. Hirasawa ¹, T. Ookawa ¹
(1.Grad. Sch. of Agr., Tokyo Univ. of Agr. and Tech., 2.Toyama Pref. Agr., Forest. and Fish. Res. Cent.)

414 Parallel breeding with recurrent genomic selection: simulations in rice

☆Yabe, S. ¹, M. Yamasaki ², K. Ebana ³, T. Hayashi ⁴, H. Iwata ¹ (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., 4.NARO/NARC)

415 Genome-wide prediction of phenotypic values in rice agronomic traits: comparison among methods

☆Onogi, A. ¹, O. Ideta ², K. Ebana ³, T. Yoshioka ⁴, M. Yamasaki ⁴, H. Iwata ¹ (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.)

416 Development of web tool to define haplotypes in chromosomal region of rice.

○Yonemaru, J., K. Ebana, M. Yano (National Institute of Agrobiological Sciences)

417 Utilization of STAmP (Spontaneous Transposition of an Active rice transposable element *mPing*) database.

☆Yasuda, K. ¹, T. Tsukiyama ¹, H. Saito ¹, K. Naito ², M. Teraishi ¹, T. Tanisaka ¹, Y. Okumoto ¹ (1.Grad. Sch. Agri., Univ. Kyoto, 2.Nat. Inst. Agrobiological Sci.)

418 Tailor-made breeding of Sorghum by using RAD-seq

○Takanashi, H. ^{1,6}, T. Abe ¹, H. Ohyanagi ^{2,6}, M. Kobayashi ^{2,6}, K. Yano ^{2,6}, H. Tainaka ^{1,6}, A. Nagano ^{3,7}, T. Tokunaga ^{4,6}, T. Sazuka ^{5,6}, H. Iwata ^{1,6}, N. Tsutsumi ^{1,6} (1.Grad. Sch. Agr. Life Sci., Univ. Tokyo, 2.Fac. Agr., Meiji Univ., 3.Cent. Ecol. Res., Kyoto Univ., 4.EARTHNOTE Co., Ltd., 5.Biosci. Biotech. Cent., Nagoya Univ., 6.JST CRREST, 7.JST PRESTO)

419 Research and development of bioinformatics methods for high-throughput genotyping of bioenergy crop, *Sorghum bicolor*

○Ohyanagi, H. ^{1,2,3}, M. Kobayashi ^{1,2}, H. Toyoshima ^{1,2}, T. Takano ¹, H. Takanashi ^{2,4}, A. Nagano ^{5,6}, H. Tainaka ^{2,4}, T. Tokunaga ^{2,7}, T. Sazuka ^{2,8}, H. Iwata ^{2,4}, N. Tsutsumi ^{2,4}, K. Yano ^{1,2} (1.Sch. of Agri., Meiji Univ., 2.CREST, JST, 3.Mitsubishi Space Software Co., Ltd., 4.G. Sch. of Agricultural and Life Sci., The Univ. of Tokyo, 5.Center for Ecological Research, Kyoto Univ., 6.PRESTO, JST, 7.Earth Note Co. Ltd., 8.Bioscience and Biotechnology Center, Nagoya Univ.)

420 Genetic diversity assessment of sorghum germplasm using genome-wide SNP markers

☆Abe, T. ¹, H. Takanashi ^{1,6}, A. Nagano ^{3,7}, H. Ohyanagi ^{2,6}, M. Kobayashi ^{2,6}, H. Tainaka ^{1,6}, A. Sasaki ⁴, T. Tokunaga ^{4,6}, T. Sazuka ^{5,6}, K. Yoshimura ¹, K. Yano ^{2,6}, H. Iwata ^{1,6}, N. Tsutsumi ^{1,6} (1.Grad. Sch. Agr. Life Sci., Univ. Tokyo, 2.Fac. Agr., Meiji Univ., 3.Cent. Ecol. Res., Kyoto Univ., 4.EARTHNOTE Co., Ltd., 5.Biosci. Biotech. Cent., Nagoya Univ., 6.JST CREST, 7.JST PRESTO)

421 A high-throughput phenotyping system for supporting genomic breeding of crop plants

○Iwata, H. ^{1,2}, A. Sasaki ^{2,3}, M. Kobayashi ^{2,4}, H. Ohyanagi ^{2,4,5}, K. Yano ^{2,4}, T. Sazuka ^{2,6}, T. Tokunaga ^{2,3}, N. Tsutsumi ^{1,2} (1.Grad. Sch. Agr. Life Sci., Univ. of Tokyo, 2.JST, CREST, 3.Earth Note Co., Ltd., 4.Dept. Life Sci., Meiji Univ., 5.Mitsubishi Space Software Co., Ltd., 6.Biosci. Biotech. Cntr., Nagoya Univ.)

422 Large scale phenotyping of barley germplasm using "FieldBook" system

☆Ito, H. ¹, S. Okada ², A. Garcia ³, M. Ishii ¹, T. Ito ⁴, H. Yamamoto ⁴, M. Yamasaki ², D. Saisho ¹, K. Sato ¹ (1.IPSR, Okayama Univ., 2.Food Resources Education and Research Ctr., Grad. Sch. Agric. Sci., Kobe U., 3.USDA-ARS, 4.FCR&BIO CO., LTD.)

423 Production of unreduced male and female gametes in hybrid lilies by high temperature treatment.

☆Hasegawa, Y., S. Nukui, K. Okazaki (Grad. Sch. Sci and Tech., Univ. Niigata)

501 QTL analysis for high isoflavone content in a soybean mutant

☆Ishii, R. ¹, M. Teraishi ¹, M. Terai ², H. Kosaka ², T. Toda ², T. Yoshikawa ¹, T. Tsukiyama ¹, H. Saito ¹, T. Tanisaka ¹, Y. Okumoto ¹ (1.Grad. Sch. Agr., Kyoto Univ., 2.Fujicco Co., Ltd.)

502 Evaluation of characteristics and determination of harvest maturity in immature black soybean seeds

○Hirota, T. ^{1,2}, S. Yoshida ^{1,2}, K. Nagai ¹ (1.Hyogo Pre. Agr. Res. Cent., 2.Grad. Sch. Agr., Kobe U.)

503 Carbon and nitrogen contents in soybean and wild soybean seeds.

Yasue, K. ¹, Y. Mori ², S. Watanabe ³, K. Harada ⁴, J. Abe ², ○T. Yamada ² (1.Fac. Agric., Hokkaido U., 2.Grad. Sch. Agric., Hokkaido U., 3.Fac. Agric., Saga U., 4.NIAS)

504 Identification of a gene involved in rhamnosylation of DDMP saponin in soybean seeds

☆Katsuki, R. ¹, S. Kawasaki ¹, Y. Yamashita ¹, C. Tsukamoto ², K. Kitamura ¹, J. Abe ¹, T. Yamada ¹ (1.Grad.Sch.Agric.,Hokkaido U., 2.Fac.Agric.,Iwate U)

505 Analysis of *d1d2*genes in stay green soybeans.

☆Kobayashi, H. ¹, E. Oohashi ¹, J. Abe ¹, K. Kitamura ¹, M. Kusaba ², T. Yamada ¹ (1.Grad.Sch.Agric.,Univ.Hokkaido, 2.Grad.Sch.Sci.,Univ.Hiroshima)

506 Isolation of rice mutant with reduced level of linoleic acid in seeds and development of DNA marker for the responsible gene

○Suzuki, Y. ¹, S. Hamada ^{1,2}, K. Suzuki ¹, Y. Akita ^{1,3}, T. Anai ⁴ (1.NARO, Inst. Crop Sci., 2.Fac. Agri. and Life Sci., Hirosaki Univ., 3.Fac. Techno., Saitama Inst. Technol., 4.Fac. Agri., Saga Univ.)

507 Rice cultivar selection for rice flour production based on milling property analysis using jet mill.

○Suzuki, K. ¹, S. Hamada ^{1,2}, E. Araki ¹, Y. Suzuki ¹ (1.NARO, Inst. Crop Sci, 2.Fac. Agri. & Life Sci., Hirosaki Univ.)

508 Development and evaluation of giant embryo mutants originated from rice variety "Mizuhochikara"

☆Sakata, M., H. Matsusaka, K. Takahashi, Y. Nakamura, T. Kumamaru, M. Sato, A. Enomoto, K. Tashiro, S. Kuhara, H. Satoh, A. Yoshimura (Fac. Agr., Grad. Sch., Kyushu Univ.)

509 Identification of chromosome region controlling resistance to high temperature during ripening by using CSSLs of wild relatives of cultivated rice

Miyahara, K. ¹, H. Hirabayashi ², Y. Haraguchi ¹, N. Tateishi ³, M. Miyazaki ¹, ○T. Wada ¹
(1.Fukuoka Agric. Res. Cent., 2.NARO, Natl. Inst. Crop Sci., 3.Fukuoka Pref. Gov.)

510 Detection of novel QTL associated with heat-induced quality decline in rice grown at 32 degrees during the period of grain filling

☆Mizunaga, M. ¹, A. Kobayashi ², K. Okuno ^{1,3} (1.Grad.Sch.Life and Envi.Sci.,U.Tsukuba,
2.Fukui Agric.Exp.Sta, 3.ARENA,U.Tsukuba)

511 Evaluation of grain yield and yield-related traits of near-isogenic lines for days to heading with the genetic background of an indica-type rice variety IR64

☆Sasaki, K. ^{1,2}, D. Fujita ³, R. Gannaban ¹, P. Lumanglas ¹, Y. Fukuta ², N. Kobayashi ³,
T. Ishimaru ^{1,2} (1.IRRI, 2.JIRCAS, 3.NICS)

512 Beer Foam Stability and Barley B-hordein

☆Iimure, T. ¹, R. Kanatani ¹, W. Saito ¹, Y. Muraoka ², M. Kihara ¹, M. Sato ², K. Sato ³,
K. Ogushi ¹ (1.BRDD, Sapporo Brew. Ltd., 2.Frontier Laboratories of Value Creation,
Sapporo Brew. Ltd., 3.IPSR, Okayama U.)

513 The optimized levels of fertilizer, seed sowing on growth, yield and malting quality of new beer barley cultivar "Asukagolden"

○Yamaguchi, M. ¹, T. Iida ², M. Oyama ¹, M. Oozeki ¹, T. Sekiwa ¹, Y. Suzuki ³, M. Usui
⁴, T. Kato ¹, T. Sotome ¹ (1.Tochigi. Agr. Exp. Stn., 2.Kamitsuga Agr. Pro. Office,
3.Shimotsuga. Agr. Pro.Office, 4.Tochigi Pref. Dept. of Agr.)

514 QTL analysis for lesion color of target leaf in Sorghum bicolor (L)

○Kawahigashi, H. ¹, S. Kasuga ², Y. Sawada ³, T. Ando ¹, J. Yonemaru ¹ (1.NIAS,
2.Shinshu university, 3.Riken)

515 Two different variations are involved in the white coloration in *Lilium speciosum* flowers

Suzuki, K. ¹, ○M. Yamagishi ², K. Tasaki ² (1.Sch. Agr., Hokkaido U., 2.Res. Fac. Agr.,
Hokkaido U.)

516 Molecular structure of novel high-molecular-weight glutenin subunit genes present in 1E chromosome of *Thinopyrum elongatum*

○Tanaka, H. ¹, K. Mukai ¹, A. Nishiura ^{1,2}, H. Kaminaka ¹, H. Tsujimoto ³ (1.Fac. Agr., Tottori Univ., 2.Dep. Biosci., Fukui Pref. Univ., 3.ALRC, Tottori Univ.)

517 Research on flour milling evaluation in Japanese common wheats. 19. Genetic variations of flour median particle size in Japanese and Chinese wheats.

○Nakamura, H. (NARO Institute of Crop Science)

518 Comparison of the cotyledon transcriptome profiles of a heterotic hybrid and its parents in *Arabidopsis thaliana*

○Fujimoto, R. ^{1,2}, J. Taylor ³, T. Kawanabe ¹, N. Saeki ¹, H. Abe ¹, J. Peacock ³, E. Dennis ³ (1.Graduate School of Science and technology, Niigata university, 2.JST PRESTO, 3.CSIRO Plant Industry)

519 Early developmental heterosis in commercial F1 hybrid cultivar of Chinese cabbage'W39'

☆Saeki, N. ¹, T. Kawanabe ¹, H. Abe ¹, M. Kaji ², K. Okazaki ¹, R. Fujimoto ¹ (1.Graduate school of Science and Technology, Niigata University, 2.Watanabe seed Co., Ltd.)

520 Variation of the level of the heterosis in *Arabidopsis* F₁ hybrids

☆Kawanabe, T., C. Ide, N. Saeki, R. Fujimoto (Grad. Sch. Sci. Tech., U. Niigata)

521 Genetic analysis of green plant vernalization using *Brassica rapa*- *B. oleracea* chromosome addition lines

☆Tomaru, Y., Y. Nakamura, M. Shimizu, R. Fujimoto, K. Okazaki (Grad. Sch. Sci. Tech., U. Niigata)

522 Molecular genetic analysis of leaf senescence regulated by strigolactone in *Arabidopsis*

☆Ueda, H. ¹, m. kusaba ^{1,2} (1.Grad.sch.sci.,Hiroshima U, 2.CREST)

523 Alteration of class B and class C MADS-box gene expression patterns among homoeologous genes in polyploid wheat

☆Tanaka, M., H. Tanaka, S. Kitagawa, K. Murai (Dep. Biosci., Fukui Pref. Univ.)

524 Analysis of functional RNAs in green tea infusion

☆Ogino, A., F. Taniguchi, M. Monobe (National Agriculture and Food Research Organization, Institute of Vegetable and Tea Science)

601 Molecular genetic analyses of palea-less and split-palea mutants in barley

○Taketa, S. ¹, T. Sotome ², E. Himi ¹ (1.Institute of Plant Science and Resources, Okayama U., 2.Tochigi Pref. Agr. Exp. Stn.)

602 *Six-rowed spike 4* (*vrs4*) controls spikelet and floret determinacy in barley

○Komatsuda, T. ¹, S. Sakuma ^{1,2}, N. Anwar ¹, R. Koppolu ³, M. Pourkheirandish ¹, A. Tagiri ¹, T. Schnurbusch ³ (1.National Institute of Agrobiological Sciences (NIAS), 2.Kihara Inst. Biol. Res., Yokohama City University, 3.Leibniz-Institute of Plant Genetics and Crop Plant Research (IPK))

603 Characterization and linkage analysis of barley awnless gene

☆Sakuma, S. ¹, T. Komatsuda ² (1.KIBR, Yokohama City U., 2.NIAS)

604 Analysis of *TAWAWA1* gene, which is related to the increase in grain yield. I

☆Yamazaki, R., A. Yoshida, H. Tokunaga, J. Kyozuka (Grad. Sch. Agric. Life Sci., U. Tokyo)

605 Analysis of *TAWAWA1* gene, which is related to the increase in grain yield. II

☆Yoshida, A., R. Yamazaki, H. Tokunaga, J. Kyozuka (Grad. Sch. Agric. Life Sci., U. Tokyo)

606 Analysis of the genes regulated by Strigolactone in dormant buds in rice

☆Takahashi, M., L. Luo, J. Kyozuka (Grad.Sch.Agric.Life Sci., U.Tokyo)

607 Analysis of *EMBRYOLESS1* gene associated with embryo/endosperm size ratio in rice

☆Horishima, Y. ¹, R. Kum ^{2,3}, R. Ishikawa ⁴, K. Hibara ¹, J. Ito ¹, Y. Nagato ¹ (1.Grad.Sch.Agric.Life Sci., U.Tokyo, 2.Sch.Agric.Sci., U. Kobe, 3.Grad.Sch.Agric.,

608 Genetic factors influencing increase of embryo size in rice

☆Hibara, K. ¹, H. Kobayashi ², J. Itoh ¹, Y. Nagato ¹ (1.Grad.Sch.Agric.Life Sci., U.Tokyo, 2.Fac.Agri., U.Tokyo)

609 Analysis of the mechanism of controlling leaf width by *NAL2/3* in rice

☆Ozawa, M., Y. Sato (Graduate School of Bioagricultural Sciences, Nagoya University)

610 Functional differentiation and association with flowering of *FRUITFULL-like* genes in soybean

☆Takeshima, R. ¹, C. Zhao ¹, M. Xu ¹, B. Liu ², T. Yamada ¹, J. Abe ¹ (1.Grad. Sch. Agric., Hokkaido U., 2.North-east Institute of Geography and Agroecology, CASA, China)

611 Functional analysis for two E1-like genes by using Apple latent spherical virus (ALSV)

☆Xu, M. ¹, N. Yamagishi ², R. Takeshima ¹, M. Kasai ¹, A. Kanazawa ¹, N. Yoshikawa ², T. Yamada ¹, J. Abe ¹ (1.Univ. Hokkaido, 2.Univ. Iwate)

612 Functional Diversification of FD Transcription Factors in Rice, Components of Florigen Activation Complexes

☆Tsuji, H., H. Nakamura, K. Taoka, K. Shimamoto (Grad. Sch. Biol. Sci., Nara Inst. Sci. Technol.)

613 Reason why OsELF3-1 can act as a regulator of photoperiodic flowering in rice

○Itoh, H. ¹, Y. Tanaka ¹, A. Gynheung ², T. Izawa ¹ (1.National Institute of Agrobiological Sciences, 2.Crop Biotech. Institute, Kyung Hee University)

614 Interaction analysis of pollen S candidate SFBB with SSK1 (Skp1-like1) and SBP1 (S-RNase binding protein1) of apple

☆Minamikawa, M., H. Sassa (Grad. Sch. Hort., Chiba Univ.)

615 Analysis of pollen S candidates SFBB genes of a Japanese pear cultivar 'Natsuhikari' with weak self-incompatibility

☆Hiraoka, T., M. Minamikawa, M. Kato, H. Sassa (Grad. Sch. Hort., Chiba Univ.)

616 Verification of the haplotype-specific pollen inhibitory effect of the candidate female *S* factor in the self-incompatibility of *Hordeum bulbosum*

☆Hashimoto, S. ¹, R. Asahara ², T. Hiramatsu ², M. Iwano ³, K. Kakeda ¹ (1.Grad. Sch. Biores., Mie Univ., 2.Fac. Biores., Mie Univ., 3.Grad.Sch.Biol.Sci., NAIST)

617 Characterization of pollen behavior on self- and cross-pollinations in *Brassica rapa*

☆Sone, M. ¹, K. Hiroi ¹, S. Sakazono ¹, M. Osaka ¹, H. Masuko-Suzuki ¹, T. Matsuda ², G. Suzuki ³, K. Suwabe ², M. Watanabe ¹ (1.Grad. Sch. LifeSci., Tohoku U., 2.Grad. Sch. Biores., Mie U., 3.Div. Nat. Sci., Osaka Kyoiku U.)

618 Analysis for ubiquitin domain containing protein that interact with RF2, a restorer of fertility of LD-type CMS in rice

☆Fujii, S., T. Kazama, Y. Ito, S. Kojima, K. Toriyama (Grad. Sch. Agri. Sci., Tohoku Univ.)

619 RNA processing of *orf113* associated with RT98-type CMS in a fertility restorer rice

☆Igarashi, K. ¹, T. Kazama ¹, K. Motomura ², K. Toriyama ¹ (1.Grad. Sch. Agri. Sci., Tohoku Univ., 2.Fac. Agri., Univ. Ryukyus)

620 Molecular analysis of different effects of a fertility restorer, *Rf2*, for different varieties of cytoplasmic male sterile rice

☆Kazama, T. ¹, S. Fujii ¹, E. Itabashi ¹, K. Motomura ², K. Toriyama ¹ (1.Grad. Sch. Agri. Sci., Tohoku Univ., 2.Fac. Agri., Univ. Ryukyus)

621 RNA processing of *orf352* associated with RT102-Type CMS in a fertility restorer rice line

☆Okazaki, M. ¹, T. Kazama ¹, K. Motomura ², K. Toriyama ¹ (1.Grad. Sch. Agri. Sci., Tohoku Univ., 2.Fac. Agri., Univ. Ryukyus)

622 Characterization and gene prediction of *Rf2*, a novel *restorer-of-fertility* locus for Owen-type cytoplasmic male sterility in sugar beet

☆Honma, Y. ¹, K. Taguchi ², H. Hiyama ¹, R. Yui-Kurino ¹, H. Hamada ¹, T. Kubo ¹, T. Mikami ¹ (1.Grad. Sch. Agr., Hokkaido U., 2.NARO Hokkaido Agr. Res. Center)

623 Heterostyly in *Linum grandiflorum* V: Attempts using Next-Generation sequencing to isolate novel S candidate genes.

○Ushijima, K.¹, T. Suzuki², R. Nakano¹, T. Higashiyama^{2,3}, Y. Kubo¹ (1.Grad. Sch. Env. Life Sci., Okayama Univ., 2.Higashiyama Live-Holonics, JST, 3.Inst. ITbM, Nagoya Univ.)

624 Plant regeneration from etiolated cotyledon in *Matricaria recutita*

☆Ishimoto, E., Y. Takahara (Nagaoka University of Technology Bioengineering)

Poster presentations

P001 Development of method for analyzing gene function in Brassicaceae Crops

○ABE, H.¹, M. SUGAWARA¹, Y. TOMITAKA², S. TSUDA², M. KOBAYASHI¹ (1.RIKEN BioResource Center, 2.National Agricultural Research Center)

P002 Genomic selection for wheat flour color: a possibility and subject for a future study

○Ishikawa, G.¹, M. Sato², M. Saito¹, H. Ito¹, H. Jinno², H. Maejima³, Y. Uehara³, Y. Yoshimura², T. Nakamura¹ (1.NARO/TARC, 2.HRO/Kitami Agri. Exp. Sta., 3.Nagano Pref. Agri. Exp. Sta.)

P003 A simple hydroponics method for small-scale crop seed production in a plant incubator

○Kuroda, M.¹, S. Ikenaga² (1.NARO Agricultural Research Center, 2.NARO Tohoku Agricultural Research Center)

P004 Consideration for the propriety of seed transfer by estimating adaptability against different environments in *Cryptomeria japonica*

○Miura, M.¹, S. Hanaoka², Y. Hiraoka², M. Takahashi², A. Watanabe³ (1.Tohoku branch, FTBC, FFPRI, 2.FTBC, FFPRI, 3.Faculty of Agriculture, Kyushu University)

P005 Rapid screening for low pasting temperature starches in sweet potato varieties and lines by alkali solubility test using microscopy.

○Kobayashi, A.¹, K. Katayama², T. Sakai¹, Y. Kai¹, M. Yoshinaga³ (1.NARO Kyushu Okinawa Agricultural Research Center, 2.NARO Institute of Crop Science, 3.NARO Headquarters)

P006 Development of efficient *Agrobacterium*-mediated transformation system for *Brachypodium distachyon*

○Himuro, Y.¹, K. Ishiyama², F. Takahashi¹, K. Mochida¹, M. Kobayashi^{1,2}, K. Shinozaki¹ (1.BMEP, CSRS, Riken, 2.BRC Plant Div., Riken)

P007 Refinement of phenotyping procedure for forest tree breeding

○Hiraoka, Y.¹, M. Takahashi¹, A. Watanabe² (1.Forest Tree Breeding Center, Forestry and Forest Products Research Institute, 2.Faculty of Agriculture, Kyushu University)

P008 Breeding of New Wheat Variety 'Yumekirari' For Japanese noodle With Resistance to Wheat Yellow Mosaic Virus and Japanese Soil-Borne Wheat Mosaic Virus

○Uehara, Y.¹, H. Maejima¹, T. Ushiyama¹, S. Hosono¹, K. Nakamura², T. Taniguchi³, H. Tabuchi⁴, M. Kubota⁵, N. Nakazawa¹, N. Takahashi⁶, T. Arai⁷, K. Goto⁸, N. Sakai¹, T. Kondo⁹ (1.Nagano Agr.Exp.Stn., 2.NARO/TARC, 3.Matsumoto Agr.Ext.Cent., 4.Nagano Agr.Ext.Cent., 5.Nagano Pref. Farmers Academy, 6.Nagano Pref.Plant Protection Assoc., 7.Nanshin Agr.Exp.Stn., 8.Nagano Animal Industry Exp. Stn., 9.Jyoshou Agr.Ext.Cent.)

P009 Breeding of a new wheat cultivar 'Setokirara' with good bread making quality for temperate regions.

○Takata, K., M. Yanaka, N. Ishikawa, T. Ikeda, W. Funatsuki (WARC, NARO)

P010 Breeding of a new two-rowed barley cultivar "Haruka Nijo" exhibiting high-level resistance to BaYMV and pre-harvest sprouting

○Tonooka, T.¹, N. Kawada¹, H. Araki¹, S. Taya^{1,2}, T. Tsutsumi^{1,2}, M. Seki^{1,3}, M. Taira^{1,4}, T. Hatano¹, M. Fujita¹, K. Hatta^{1,5}, H. Matsunaka¹, K. Kubo^{1,6}, S. Oda^{1,4} (1.NARO/KARC, 2.Retired, 3.NARO/NARC, 4.NARO/NICS, 5.MAFF, 6.NARO/TARC)

P011 Characteristics of new rice variety "Fukumaru" with large seed size

○Fukazawa, Y., K. Kawamata, K. Kosuge, K. Okamoto (Plant Biotech.Inst.,IBARAKI Agri Cent.)

P012 Breeding of a new rice line "Chubu 134" having two field resistance genes to blast disease, *Pi39* and *Pb1*.

○Yoshida, T. ¹, N. Saka ¹, M. Nakamura ¹, T. Terashima ¹, Y. Mizukami ¹, H. Katou ¹, Y. Nakajima ¹, T. Nonoyama ¹, S. Kudou ¹, M. Shirota ¹, S. Kuroyanagi ², A. Ikeda ¹ (1.Mt. Reg. Agric. Inst., Aichi Agric. Res. Ctr., 2.Aichi Agric. Res. Ctr.)

P013 Breeding of a new rice cultivar "Kitamizuho" with high amylose contents

Matsuba, S. ¹, ○T. Ikegaya ¹, W. Funatsuki ², T. Umemoto ¹, M. Kuroki ³, Y. Tamura ⁴, N. Yokogami ¹, H. Shimizu ¹ (1.NARO Hokkaido Agric. Res. Ctr., 2.NARO Western. Agric. Res. Ctr., 3.NARO Inst. Crop Sci., 4.NARO Kyushu Okinawa Agric. Res. Ctr.)

P014 Breeding of new rice lines "Daiiku2540"and"Daiiku2541"with high eating and grain qualities and many long awns,reducing agricultural damage by wild boars.

☆Mori, S. ¹, J. Nakagawa ², T. Yoshida ¹, K. Hino ¹ (1.Shiga Pref. Agric. Tech. Promo. Cent., 2.East Omi Agricultural and Rural Development Promotion Office)

P015 A self-compatible mutantof Japanese pear produced by crossing with gamma-irradiated 'Nijisseiki' pollen

○Saito, T. ¹, Y. Sawamura ¹, N. Takada ¹, A. Sato ¹, N. Mase ¹, K. Kotobuki ¹ (1.NARO Inst. Fruit Tree Sci., 2.NARO Inst. Fruit Tree Sci., 3.NARO Inst. Fruit Tree Sci., 4.NARO Inst. Fruit Tree Sci., 5.NARO Inst. Fruit Tree Sci., 6.NARO Inst. Fruit Tree Sci.)

P016 Shizuki:A new potato variety with purple skin and Yellow flesh

Mori, M. ¹, S. Tsuda ¹, A. Kobayashi ^{1,2}, A. Takada ^{1,3}, N. Mukojima ^{1,4}, ○S. Tamiya ¹, M. Nishinaka ¹, K. Asano ¹, Y. Umemura ¹, T. Kimura ⁵, Y. Momota ¹, A. Kushida ¹, T. Uehara ^{1,6} (1.NARO Hokkaido Agr. Res.Cent., 2.NARO Kyushu-okinawa Agr. Res.Cent., 3.NARO Inst. Crop Science, 4.Nagasaki Pref., 5.National Center for Seeds and Seedlings, 6.NARO Agr. Res.Cent.)

P017 Breeding of a new potato cultivar "Kitamusashi" with field resistance to late blight.

Tsuda, S. ¹, S. Tamiya ¹, M. Nishinaka ¹, ☆K. Asano ¹, M. Mori ¹, A. Kobayashi ^{1,2}, A. Takada ^{1,3}, N. Mukojima ^{1,4}, N. Takada ^{1,5}, A. Kushida ¹, T. Uehara ^{1,6} (1.Naro Hokkaido Agr. Res. Cent., 2.Naro Kyushu Okinawa Agr. Res. Cent., 3.Naro Inst. of Crop Sci., 4.Nagasaki Pref., 5.National Center for Seeds and Seedlings, 6.NARO Agricultural Research Center)

P018 Development of a new black seeded soybean variety 'Tsuburakuro' with high yield, extra large seed size and SCN resistance.

○Fujita, S. ¹, F. Kosaka ¹, S. Ohnishi ^{1,4}, Y. Tanaka ^{1,3}, T. Miyoshi ^{1,3}, H. Ochi ^{2,5}, M. Tezuka ^{2,6}, K. Shirai ^{1,7}, S. Hagihara ^{1,4} (1.HRO Central AES, 2.HRO Donan AES, 3.Present ; HRO Tokachi AES, 4.Present ; HRO Kitami AES, 5.Present ; Higashikawa, Hokkaido, 6.Present ; Ishikari, Hokkaido, 7.Present ; Kitahiroshima, Hokkaido)

P019 A new soybean cultivar "Tohoku 164", with Resistance to Soybean Mosaic Virus and Lodging.

☆Kato, S. ¹, S. Shimamura ¹, A. Kikuchi ¹, Y. Kono ², S. Yumoto ¹, Y. Takada ³, S. Shimada ⁴, T. Sakai ², H. Shimada ⁵, K. Takahashi ⁶, T. Adachi ⁷, K. Tabuchi ⁸ (1.National Agricultural Research Center for Tohoku Region, 2.National Agricultural Research Center for Kyushu Okinawa Region, 3.National Agricultural Research Center for Western Region, 4.National Agricultural Research Center, 5.Hokkaido Research Organization Kamikawa Agricultural Experiment Station, 6.National Institute of Crop Science, 7.Retired, Japan International Research Center for Agricultural Sciences, 8.Retired, National Agricultural Research Center)

P020 Breeding of new dainagon- azuki bean "Kyouto Azuki 1 gou" with BCMV resistance and high processing traits.

○Shizukawa, Y., N. Furutani (Kyoto Prefectural Agriculture,Forestry and Fisheries Technology Center)

P021 "Makura-Kei 56-01", new high-galloyl-strictinin tea line

○Nesumi, A. ¹, M. Monobe ¹, A. Ogino ¹, K. Yoshida ¹, F. Taniguchi ¹, H. Yorozuya ¹, M. Yamamoto(Maeda) ² (1.NARO Inst., Vegetable and Tea Science, 2.NARO Inst., Food Research Institute)

P022 Breeding of "Itomaki-Daikon" of Miyazaki origin vegetable using race selection and RAPD-PCR methods

☆Nakahata, Y. ¹, S. Shimonakazono ¹, Y. Tanaka ¹, K. Kumamoto ¹, Y. Nishimura ¹, H. Tominaga ², L. Chen ¹ (1.Fac. Horti. Environ. Sci. Minamikyushu U., 2.Former Miyazaki Pref. Agri. Expe. Sta.)

P023 Achievement and Future View of National BioResource Project-Tomato

☆Hoshikawa, K. ¹, T. Ariizumi ¹, Y. Yamazaki ², N. Fukuda ¹, Y. Kanayama ³, Y. Kubo ⁴, K. Aoki ⁵, H. Ezura ¹ (1.Fac. Life Environ. Sci., Univ. Tsukuba, 2.Nati. Inst. Genet, 3.Grad. Sch. Agri. Sci., Tohoku Univ, 4.Grad. Sch. Envi. Life Sci., Okayama Univ, 5.Grad. Sch. Lif. Envi. Sci., Osaka Pref. Univ)

P024 Assesment of genetic diversity and genetic structure in *Cryptomeria japonica* core collection

☆Uchiyama, K. ¹, N. Miyamoto ², M. Takahashi ², A. Watanabe ³, Y. Tsumura ¹ (1.Forestry and Forest Products Research Institute, 2.Forestry and Forest Products Research Institute, Forest breeding center, 3.Faculty of Agriculture, Kyushu University)

P025 Relationship between days to heading and spikelet number per spike in wheat

☆Okami, M., K. Nakamura, H. Matsunaka, M. Fujita (NARO Kyushu Okinawa Agricultural Research Center)

P026 Destribution and genetic diversity of *Zoysia* species in Kyushu and Okinawa

Matsuda, Y., H. Kaneko, ○T. Murata (Tokai University School of Agriculture)

P027 Phenotypic variations in flowering time and morphological traits among genetic resources of *Erianthus*, which is the promising biomass crop, found in Japan.

☆Uwatoko, N., M. Gau (NARO Kyushu Okinawa Agricultural Research Center)

P028 Origin of foxtail millet landraces from Nansei Islands, Tanwan and the Philippines

○Fukunaga, K. ¹, M. Eda ¹, K. Ichitani ² (1.Fac. Life and Environ. Sci., Pref. Univ. Hiroshima, 2.Fac., Agr., Kagoshima Univ.)

P029 Reconsideration of genetic mechanism controlling fruit color in *Capsicum*

○Sasanuma, T., Y. Inaba, T. Abe (Fac. Agr., Yamagata U.)

P030 Relationship between the frequency of photoperiod sensitive genes and flowering periods common buckwheat cultivars

☆Kashima, K., T. Hara, R. Ohsawa (Grad. Sch. Life & Env. Sci., Univ. Tsukuba)

P031 Analysis on the accumulation of potassium and cesium in wheat varieties

○Kubo, K.¹, H. Kobayashi¹, T. Ota¹, T. Murakami¹, T. Ishikawa¹, T. Eguchi¹, M. Fujita², Y. Watanabe³, T. Nakajima⁴, T. Shinano¹ (1.NARO/TARC Agricultural Radiation Research Center, 2.NARO/KARC, 3.NARO/ARC, 4.NARO/Headquarters)

P032 An educational program ‘Kitchen PCR’ for experience of plant genetic diversity at the DNA level

○Asakura, N. (Kanagawa Univ. Fac. Eng.)

P033 Quantitative evaluation of flower petal and flower shapes in *Primula sieboldii* by image analysis

☆Aoki, T., Y. Yoshioka, R. Ohsawa (Grad.Sch.Life&Env.Sci.,Univ.Tsukuba)

P034 Accession of the International Treaty on Plant Genetic Resources for Food and Agriculture by Japan

○Yamamoto, A. (Environment Policy Division, Minister's Secretariat, MAFF)

P035 Micro-array analysis of a soybean mutant deficient in the low-nitrogen responsive *MYB101*.

○Akada, S.¹, M. Nagata², A. Suzuki², T. Anai² (1.Fac. Agri. and Life Sci., Hirosaki Univ., 2.Fac. Agri., Saga Univ.)

P036 Isolation and characterization of *GmphyA1* mutant in soybean

☆Uehara, S., S. Watanabe, T. Anai (Fac. Agric. Saga U.)

P037 GIANT CHLOROPLAST (GIC) encodes an ARC6-like protein involved in chloroplast division in rice (*Oryza sativa* L.)

☆Kamau, P., M. Ryo, M. Masahiko, S. Wataru (Institute of Plant Science and Resources, Okayama University)

P038 Exome analysis of rice mutants induced by heavy-ion beam irradiation

☆Ishii, K.¹, R. Morita¹, H. Takehisa², Y. Hayashi¹, S. Kogure¹, K. Ichinose¹, H. Toukairin¹, T. Sato^{3,4}, T. Abe^{1,3} (1.RIKEN Nishina Cent., 2.NIAS, 3.RIKEN Innovat. Cent., 4.Grad. Sch. Life. Sci., U. Tohoku)

P039 Whole genome analysis of a milky white rice mutant of rice "Akitakomachi" by ion beam

Shirahata, G. ¹, A. Takahashi ¹, T. Oiso ¹, H. Kagaya ¹, T. Kawamoto ², A. Tanaka ³, N. Satoh (Nagasawa) ¹, K. Sakurai ¹, A. Watanabe ¹, H. Akagi ¹, ○H. Takahashi ¹ (1.Fac. Biores. Sci., Akita Pref. U., 2.Akita Pref. Agriculture Research Center, 3.QuBS, JAEA)

P040 Genes modifying the effect of ion-beam induced late heading mutant gene in a extremely late-heading mutant KGM26 in rice

○Ichitani, K. ¹, Y. Nishi ¹, Y. Nozoe ¹, D. Yamaguchi ¹, S. Taura ², M. Sato ¹ (1.Fac. Agr., Kagoshima Univ., 2.Inst. Gene Res., Kagoshima Univ.)

P041 Genetic analysis of an ion-beam induced extremely late-heading mutant KGM25 in rice

☆Nishi, Y. ¹, S. Taura ², Y. Fukutoku ³, M. Onoue ¹, K. Shimizu ¹, F. Hashimoto ¹, Y. Sakata ¹, M. Sato ¹, K. Ichitani ¹ (1.Fac. Agr., Kagoshima Univ., 2.Inst. Gene Res., Kagoshima Univ., 3.Radioisotope Center, Kagoshima Univ.)

P042 Analysis of the deletion mutants in the apomixis genomic region induced by heavy ion-beam irradiation.

○Takahara, M. ¹, M. Ebina ¹, R. Morita ², Y. Kazama ³, T. Abe ^{2,3}, T. Takamizo ¹, H. Nakagawa ⁴ (1.NILGS, 2.RIKEN Nishina Center, 3.RIKEN Innovation Center, 4.JIRCAS)

P043 Application of boron neutron capture reaction (BNCR) to barley and tobacco plants for induction of mutation.

☆Iwamoto, S. ¹, M. Yanase ¹, T. Tezuka ¹, T. Morikawa ¹, Y. Hattori ², M. Kirihata ² (1.Grad. Sch. Life and Environmental Sci., Univ. Osaka Prefecture, 2.Grad. Sch. Research organization for the 21 century., Univ. Osaka Prefecture)

P044 Construction of *Silene latifolia* Y-deletion map by adapting traveling salesman problem

☆Kazama, Y. ¹, K. Ishii ², W. Aonuma ³, H. Kawamoto ³, T. Ikeda ², A. Matsunaga ¹, S. Kawano ³, T. Abe ^{1,2} (1.RIKEN Innovation Center, 2.RIKEN Nishina Center, 3.Dep. Integ. Biol. Sci. Grad. Sch. Front. Sci. U. Tokyo)

P045 Vitrification of interspecific hybrid seedlings between *Nicotiana trigonophylla* Dunal and *N. tabacum* L.

☆Liu, H., W. Marubashi (Sch.Agr.Meiji U.)

P046 Expression of autophagy-related genes in hybrid tobacco cells and seedlings (*Nicotiana suaveolens* x *N. tabacum*) showing temperature-sensitive lethality

☆Ueno, N.¹, T. Yamada¹, W. Marubashi², M. Kanekatsu¹ (1.Fac.Agr., Tokyo U.Agr.Tec., 2.Fac.Agr., Meiji U.)

P047 The Functional analysis of apomixis specific gene: Observation of reproductive mode in ASG-1 transgenic Arabidopsis

○Chen, L.¹, Y. Nishimura¹, K. Yoshida², T. Tetsumura³, T. Sugita⁴, L. Li^{1,5} (1.Fac. Horti. Environ. Sci. Minamikyushu U., 2.Fac. Agri. U. Tokyo, 3.Fac. Agri. U. Miyazaki, 4.Miyazaki Pref. Agri. Expe. Sta., 5.Shenyang Normal U.)

P048 The functional analysis of apomixis specific gene: Approach to producing out of ASG-1 transgenic guinea grass

☆Umeki, K.¹, Y. Nishimura², T. Sugita³, T. Hamaguchi⁴, H. Ichikawa⁵, K. Yoshida⁶, D. Kurihara⁷, T. Higashiyama⁷, L. Chen^{1,2} (1.Grad. Sch. Horti. Food. Sci. Minamikyushu U., 2.Fac. Horti. Environ. Sci. Minamikyushu U., 3.Miyazaki Pref. Agri. Expe. Sta., 4.Miyazaki Pref. Office, 5.NIAR, 6.Fac. Agri. U. Tokyo, 7.Fac. Sci. Nagaya U.)

P049 The functional analysis of apomixis specific gene: Evaluation of drought-resistance in ASG-1 transgenic Arabidopsis

☆Nishimura, Y.¹, T. Tetsumura², K. Yoshida³, T. Sugita⁴, D. Kurihara⁵, T. Higashiyama⁵, L. Li^{1,6}, L. Chen¹ (1.Fac. Horti. Environ. Sci. Minamikyushu U., 2.Fac. Agri. U. Miyazaki, 3.Fac. Agri. U. Tokyo, 4.Miyazaki Pref. Agri. Expe. Sta., 5.Fac. Sci. Nagaya U., 6.Shenyang Normal U.)

P050 Production of various fructan in transgenic sugar beet.

☆Matsuhira, H., K. Tamura, M. Yoshida (NARO-Hokkaido Agr. Res. Ctr.)

P051 Studies on leaf variegation observed in the transplastomic tobacco lines expressing stromal APX in chloroplast

☆Uemura, K.¹, M. Tsuji², S. Hayashi², H. Yamamoto², T. Terachi¹ (1.Fac.Life Sci., Kyoto Sangyo U., 2.Grad.Sch.Fac.Eng., Kyoto Sangyo U.)

P052 Approach for marker elimination via DNA double-strand breaks

☆Saika, H.¹, A. Mori¹, Y. Kwon^{1,2}, M. Endo¹, K. Osakabe^{1,3}, S. Toki^{1,2} (1.Agrogenomics Res. Center, NIAS, 2.Kihara Inst. Biol. Res., Yokohama City Univ., 3.Inst. Env. Sci. Tech., Saitama Univ.)

P053 Allelic variation of clubroot resistance gene, *Crr1a*, in *Brassica rapa*.

○Hatakeyama, K., S. Matsumoto (NARO Institute of Vegetable and Tea Science)

P054 Development of DNA markers linked to clubroot resistance locus, *CRk*, in *Brassica rapa*.

○Matsumoto, S., K. Hatakeyama (NARO Institute of Vegetable and Tea Science)

P055 Relationship between genotypes of marker closely linked to *FocBo1* and resistance to Fusarium wilt in *Brassica oleracea* cultivars.

☆Shimizu, M., T. Kawanabe, Z. Pu, R. Fujimoto, K. Okazaki (Grad. Sch. Sci. Tech., U. Niigata)

P056 Detection of a novel gene for resistance to root-rot fusarium race 2 in lettuce

Shimizu, Y.¹, ○T. Koba¹, A. Taguchi¹, H. Serizawa², K. Seki², H. Sassa¹, S. Kikuchi¹ (1.Graduate School of Horticulture, Chiba University, 2.Nagano Vegetable and Ornamental Crops Experimental Station)

P057 Confirming QTLs for the sheath blight resistance of a rice line WSS2,

○Sato, H.^{1,2}, M. Sato³, I. Yamane³, Y. Takenoshita⁴ (1.present:KONARC, 2.NICS, 3.Kagoshima Pref. Inst. Agr. Dev., 4.Kagoshima Pref. Inst. Agr. Dev. Bio.)

P058 Overexpression of *BSR1* confers broad-spectrum protection against several diseases in rice

☆Maeda, S., N. Hayashi, M. Mori (National Institute of Agrobiological Sciences)

P059 Genes related to lesion elongation of bacterial blight in japonica rice variety, Koshihikari

☆Tsuneyoshi, H. ¹, K. Ichitani ¹, M. Sato ¹, K. Kawabe ², K. Arima ¹, S. Taura ²
(1.Faculty of agriculture, Kagoshima university, 2.Institute of gene research Kagoshima university)

P060 Linkage Analysis of a Novel QTL Region for Resistance to Panicle Blast in the Rice Cultivar Miyazakimochi.

☆Ishihara, T. ¹, Y. Hayano-Saito ¹, S. Oide ¹, T. Ashizawa ¹, K. Ebana ², K. Hayashi ¹, F. Suzuki ¹, M. Noguchi ¹, T. Yoshida ³, Y. Mizukami ³, M. Nakamura ³, T. Nonoyama ³, H. Tsunematsu ⁴, S. Koizumi ¹ (1.NARO Agricultural Research Center, 2.National Institute of Agrobiological Sciences, 3.Aichi Agricultural Research Center, 4.NARO Institute of Crop Science)

P061 Barley shows field resistance to Chinese wheat mosaic virus (CWMV) infection

○Maejima, H. ¹, Y. Shirako ², M. Tamura ², Y. Uehara ¹ (1.Nagano Agri.Exp.Sta., 2.ANESC, Univ. Tokyo)

P062 Expression profiling of *F. graminearum* toxin related genes in wheat spikes

○Harada, M., T. Ban (Yokohama city university Plant Genetic Resource)

P063 Genetic analysis and DNA marker screening for root-knot nematode resistance in oats

☆Nakaoka, F. ¹, M. Katsura ², Y. Tateishi ², M. Yanase ¹, T. Tezuka ¹, T. Morikawa ¹ (1.Grad. Life and Environmental Sci. Univ., Osaka Prefecture, 2.National Agriculture Center for Kyushu and Okinawa)

P064 Evaluation of sweet potato resistance to West Indian Sweetpotato Weevil (*Euscepes postfasciatus*). II. Resistance evaluation in the field.

☆Okada, Y. ¹, T. Sakai ², A. Ooshiro ³, K. Takesaki ⁴, K. Miyaji ⁴, M. Yoshida ¹, K. Yasuda ³, Y. Takahata ², K. Ichinose ⁵ (1.KONARC, 2.KONARC Miyakonojyo, 3.OPARC Nago, 4.KIAD Oshima, 5.KONARC Itoman)

P065 Relationship between tolerance to abnormal early ripening and rate of flag leaf senescence after anthesis in wheat

○Nakamura, K., H. Matsunaka, M. Fujita, M. Okami (NARO Kyushu Okinawa Agricultural Research Center)

P066 Adaptation responses of C4 photosynthesis to NaCl stress in *Miscanthus sinensis* Anderss.

○Sun, Q., T. Takano (ANESC U. TOKYO)

P067 The effect of bicarbonate stress on intracellular pH

☆Kobayashi, S., T. Takano (ANESC., Univ. Tokyo)

P068 SA antagonizes ABA suppression to shoot growth and cell cycle progression in rice seedlings.

○Meguro, A., Y. Sato (NARO Hokkaido Agricultural Research Center)

P069 Effect of marker-assisted selection for pre-harvest sprouting: Pyramiding MFT-3A and Phs1

○Matsunaka, H.¹, M. Chono², A. Torada³, S. Oda², H. Kojima², M. Fujita¹, S. Nakamura², K. Hatta⁴ (1.NARO/KARC, 2.NARO/NICS, 3.Hokuren Agricultural Research Institute, 4.Agriculture, Forestry and Fisheries Research Council, MAFF)

P070 Study on influence of low temperature and soil water conditions on the rice seed viability for analysis of rice seed wintering ability in Hokkaido.

○Ushiki, J., S. Hayashi, S. Matsuba, K. Okazaki (Hokkaido Agricultural Research Center)

P071 Development of the novel line, Toyama 80, with Koshihikari genetic background can produce superior grains for appearance quality under high temperature stress

○Ebitani, T.¹, K. Murata¹, Y. Iyama¹, T. Yamaguchi¹, K. Fujita¹, J. Sonoda² (1.Toyama Prefectural Agricultural, Forestry & Fisheries Research Center, 2.Kagoshima Prefectural Institute for agricultural Development)

P072 Analysis of Heat Tolerance in Seeds of NIAS Global Rice Core Collection during Hot Water Disinfection

☆Kashiwagi, M.¹, K. Murata², N. Sano¹, T. Yamada¹, M. Kanekatsu¹ (1.United Grad. Sch. Agric. Sci., Tokyo U. Agr. Tec., 2.Toyama Pref. Agr. Forest. Fish. Res. Cen.)

P073 Candidate genes related to seedling vigor under cold conditions in rice (*Oryza sativa* L.)

○Ohashi, M., A. Endo, Y. Sagehasi, Y. Sato (NARO Hokkaido Agricultural Research Center)

P074 Morphological differences of rice anther caused by low temperature at the booting stage

○Ogasawara, K., S. Ishiguro, K. Fujino, Y. Kishima (Res. Fac. Agr. Hokkaido Univ)

P075 Cold tolerance of transgenic rice plants expressing stress tolerance related genes using anther-specific or cold-inducible promoters

○Sato, Y., R. Imai, E. Shimosaka (NARO Hokkaido Agricultural Research Center)

P076 QTLs for cold tolerance at the booting stage in rice located on the chromosome 4,6,9 in highly cold tolerant line.

☆Saeki, K.¹, T. Endo¹, H. Shinada², T. Yamamoto³ (1.Miyagi Prefectural Furukawa Agricultural Experiment Station, 2.Tokachi Agricultural Experiment Station, 3.National Institute of Agrobiological Sciences)

P077 Cool-responsive change in the anther transcriptome with transposable elements is indicative of stress sensitivity in the rice strains.

☆Ishiguro, S.¹, K. Ogasawara¹, K. Fujino¹, Y. Sato², Y. Kishima¹ (1.Res. Fac. Agr., Hokkaido U., 2.NARCH)

P078 Global transcriptome profile of rice leaf in response to three major nutrient deficiencies

☆Takehisa, H., Y. Sato, Y. Nagamura (National Institute of Agrobiological Sciences)

P079 Production of transgenic wheat plants overexpressing cereal *DOG1* homologous genes

○Abe, F.¹, S. Nakamura¹, Y. Ishida², I. Ashikawa¹ (1.NARO Inst. Crop Sci., 2.Japan Tobacco Inc., Plant Innovation Center)

P080 Variation in eating quality traits among accessions of Japanese rice landraces and cultivars.

○Hori, K.¹, K. Suzuki², K. Ebana¹, M. Yano¹ (1.NIAS, 2.NARO NICS)

P081 Rapid detection methods of low pasting temperature starches in sweetpotato by alkali disintegration.

○Katayama, K. ¹, T. Sakai ², Y. Kai ², M. Yoshinaga ³ (1.NARO/NICS, 2.NARO/KARC, 3.NARO)

P082 Functional analysis of a buckwheat MYB transcription factor gene which regulates flavonol synthesis

○Matsui, K. ¹, Y. Ohshima ², N. Mitsuda ², Y. Nishiba ¹, A. Walker ³, M. Takagi ², R. Simon ³, J. Iwamoto ¹, H. Takami ¹ (1.NARO/KARC, 2.AIST, 3.CSIRO)

P083 Occurring Sterility increase crude protein content of barley grain

○Oyama, M., T. Sotome, M. Yamaguchi, M. Oozeki (Tochigi Pref. Agr. Exp. Stn.)

P084 Effects of sowing time and top-dressing to β-glucan contents in hull-less barley.

○Takahashi, A. ¹, T. Yanagisawa ², T. Yoshioka ¹ (1.NARO/WARC, 2.NARO/NICS)

P085 Effect of wheat protein content and alleles at Glu-A1 and Glu-D1 on cookie diameter

○Yanaka, M., K. Takata, N. Ishikawa, W. Funatsu (WARC/NARO)

P086 Analysis of the interaction between soymilk minerals and macromolecules by the chromatography

○Toda, K., K. Takahashi, M. Hajika (NARO Institute of Crop Science)

P087 Relation of *Pseudo-Response Regulator (PRR)-like* gene to flowering time in *Miscanthus* genome.

Sugisawa, S. ¹, ○H. Nagano ², M. Dwiyanti ², E. Sacks ³, T. Yamada ² (1.Grad. Sch. Agric., Hokkaido University, 2.Field Science Center for Northern Biosphere, Hokkaido University, 3.Department of Crop Science, University of Illinois)

P088 Development of image analysis method for measuring heat-induced quality decline of rice.

○Kobayashi, A. ¹, T. Tanabata ², K. Tomita ¹ (1.Fukui Agri. Exp. Stn., 2.RIKEN CSRS)

P089 A genetic study for relationship between the grain productivity and tiller order in rice

☆kunishima, t. ¹, y. fujishiro ¹, t. nakano ¹, y. takeda ¹, r. ishihara ¹, t. hobo ², h. kitano ² (1.Fac. Agr., Nagoya U., 2.Biosci. Biotec. Ctr., Nagoya U.)

P090 Preliminary mapping of yield related QTLs in F2 of the cross between LIA and Basmati

☆Gichuhi, E. ¹, H. Eiko ², M. Maekawa ² (1.Graduate school of Natural science and Technology, Okayama University, 2.Institute of Plant Science and Resources, Okayama University)

P091 Phytoremediation effects of Radiocesium in soil by use of rice cultivars

○Ono, Y., H. Sato (Fukushima Agricultural Technology Centre)

P092 The “Fairy” produced by the fairy-ring-forming fungus affects the growth and the salt tolerance of rice.

☆Ikka, T. ¹, H. Ariyoshi ¹, T. Asai ², H. Tobina ^{2,3}, J. Choi ³, T. Asakawa ⁴, T. Kan ⁴, A. Morita ¹, H. Kawagishi ^{1,3} (1.Grad. Sch. Agr., Shizuoka Univ., 2.Edu. Res. Field Sci. Agr., Shizuoka Univ., 3.Res. Inst. Green Sci. Tech., Shizuoka Univ., 4.Sch. Pharm. Sci., Univ. Shizuoka)

P093 Analysis for qPRL5 affecting panicle length in rice

○Hobo, T. ¹, K. Ando ², Y. Fujishiro ², M. Ikeda ¹, M. Matsuoka ¹, K. Doi ², H. Kitano ¹ (1.Biosci. Biotec. Ctr., Nagoya U., 2.Grad. Sch. Bioagr. Sci.)

P094 Fine mapping of qSRN7 affecting higher order branching of panicle in rice increasing grain number

☆Fujishiro, Y. ¹, T. Hobo ², R. Ishihara ¹, Y. Takeda ¹, T. Kunishima ¹, M. Ikeda ², J. Kyozuka ³, H. Kitano ² (1.Grad. Sch.Bioagar.Sci.,Nagoya U, 2.Biosci. Biotech. Ctr., Nagoya U., 3.Grad. sci. Agric. Life Sci.,U.Tokyo)

P095 Morphological variations of yield-related traits in the Koshihikari mutants

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P096 The saccharification efficiencies of rice cultivars.

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P097 Effect of agronomic traits of barley breeding using near isogenic lines about endosperm characters in two-rowed hullless barley

○Yanagisawa, T. ¹, T. Tonooka ², M. Taira ¹, E. Aoki ¹ (1.NARO/NICS, 2.NARO/KARC)

P098 Genetic mapping of small seed in Azuki bean.

Horiuchi, Y. ¹, R. Ogura ², H. Yamamoto ³, N. Shimoda ³, A. Kaga ⁴, N. Tomoka ⁴, H. Sato ¹, ○K. Kato ³ (1.H.R.O. Tokachi Agr. Exp. Sta., 2.H.R.O. Cent. Agr. Exp. Sta., 3.Obihiro Univ. Agr. & Vet. Med., 4.Nat. Inst. Agrobiologocal Sci.)

P099 Analysis of dormancy in seeds of an indica rice cultivar "Habataki"

☆Ikeda, K. ¹, N. Sano ¹, K. Murata ², T. Ebitani ², T. Yamada ¹, M. Kanekatsu ¹ (1.Grad. Sch. Agr., Tokyo U. Agr. Tec., 2.Toyama Pref. Agr. Forest. Fish. Res. Cen.)

P100 Functional analysis of rice heterotrimeric G-protein γ-subunit genes.

☆Sugita, I., S. Segami, M. Nakamura, M. Matsumura, K. Miura, Y. Iwasaki (Faculty of biotechnology, Fukui prefectural university)

P101 Analysis of the lateral root formation via OsPIN2 gene in rice.

☆Inahashi, H. ¹, T. Yamauchi ¹, A. Ogawa ², Y. Inukai ³ (1.Graduate School of Bioagricultural Sciences, Nagoya University, 2.Faculty of Bioresource Sciences, Akita Prefectural University, 3.International Cooperation Center for Agricultural Education, Nagoya University)

P102 Regulation of plant growth and development by auxins

○Kasahara, H. ^{1,2} (1.RIKEN CSRS, 2.JST PRESTO)

P103 The functional characterization of Nonphototropic hypocotyl 3 (NPH3) in *Arabidopsis thaliana*

☆Kansup, J. ¹, D. Tsugama ², T. Takano ¹ (1.ANESU., U.Tokyo, 2.Grad.Sch.Agric.Life Sci., U.Tokyo)

P104 Deletion mapping of awn inhibitor gene *B2* in common wheat

☆Mizuno, N. ^{1,2}, T. Sakaguchi ¹, T. Endo ¹, S. Nasuda ¹ (1.Grad.Sch.Agric.Sci., Kyoto U., 2.JSPS Research Fellow)

P105 Expression analysis of phytochrome genes on bulb formation in wild barley *Hordeum bulbosum* L. and mutant screening by ion-bean irradiation.

☆Kobayashi, Y. ¹, Y. Kazama ^{1,2}, M. Alagu ¹, T. Abe ^{2,3}, T. Ban ¹ (1.Kihara Inst. Bio. Res., Yokohama City U., 2.RIKEN Innovation Cent., 3.RIKEN Nishina Cent.)

P106 The extra early-flowering mutant of einkorn wheat, *extra early-flowering 1* (*exe1*) and *exe3* lack a *Wheat PHYTOCLOCK 1* gene

○Nishiura, A. ¹, Y. Kazama ², T. Abe ³, N. Mizuno ⁴, S. Nasuda ⁴, K. Murai ¹ (1.Dep. Biosci., Fukui Pref. Univ, 2.RIKEN, Innovat. Cent, 3.RIKEN, Nishina Cent, 4.Grad. Sch. Agr., Kyoto Univ)

P107 Genetic analysis of a gene controlling long juvenile period characteristic in a Brazilian soybean cultivar.

☆Yokota, Y. ¹, T. Yamada ², T. Sayama ¹, H. Sasama ¹, M. Hajika ², M. Ishimoto ¹ (1.NIAS, 2.NICS)

P108 Analysis of flowering pathways in the photoperiod-insensitive mutant of rice

☆Yoshitsu, Y., Y. Takahata, S. Yokoi (Fac. Agri., Iwate University)

P109 Identification of *APETALA1* and *LEAFY* homologs in *Camellia sinensis*

☆Yamada, M., S. Kitagawa, K. Murai (Dep. Biosci., Fukui Pref. Univ.)

P110 Two inactive MdMYB1 alleles were transcribed during UV-B-induced coloration of 'Mutsu' apple

☆Bai, S. ¹, T. Saito ^{1,2}, C. Honda ¹, T. Moriguchi ^{1,2} (1.Inst. Fruit Tree Sci., NARO, 2.Grad. Sch. Life & Environ. Sci., Univ. Tsukuba)

P111 RNA targeting to a specific ER subdomain is required for efficient transport and packaging of seed storage proteins to the protein bodies in rice endosperm.

☆Sugino, A.^{1,2}, T. Okita², H. Washida^{1,2} (1.Grad. Sch. Bio. Sci., NAIST, 2.IBC, Washington State U.)

P112 Analysis of low fertility in vegetable rape (*Brassica napus*) "Haruno-kagayaki"
Ishimura, K., S. Yokoi, ○Y. Takahata (Fac. Agri., Iwate Univ.)

P113 Mutations of BrFIEa and BrMSI1a in *Brassica rapa* involved in the ability of interspecific hybrid formation with *Brassica napus*

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P114 Embryogenesis and morphogenesis of somatic embryos of *Camellia sinensis* in order to produce transgenic tea trees.

○Furukawa, K., F. Kondo, A. Nemoto (Department of chemistry and biochemistry, Numazu National College of technology)

P115 Optimum culture condition for plant regeneration in *Leucanthmum.vulgare*

☆Igarashi, M., Y. Takahara (Nagaoka University of Technology Bioengineering)

P116 Comparative analysis of expressed genes on pre-/post-pollination in *Arabidopsis*

☆Matsuda, T.¹, M. Osaka², M. Sewaki¹, S. Sakazono², K. Nagasaka¹, M. Sone², H. Masuko-Suzuki², M. Iwano³, S. Takayama³, K. Yano⁴, G. Suzuki⁵, M. Watanabe², K. Suwabe¹ (1.Grad. Sch. Biores., Mie U, 2.Grad. Sch. Life Sci., Tohoku U, 3.Grad. Sch. Biol. Sci., Nara Institute of Science and Technology, 4.Fac. Agri., Meiji U, 5.Div. Nat. Sci., Osaka Kyoiku U)

P117 Male-fertility restoration of cytoplasmic male-sterile sugar beet is affected by nuclear genetic background

Kagami, H., M. Kurata, A. Muramatsu, T. Arakawa, T. Mikami, ○T. Kubo (Research Faculty of Agriculture, Hokkaido University)

P118 The characterization and the improvement by the crossing of the male sterile F2 line in *Cryptomeria japonica*.

○Tsubomura, M.¹, M. Tamura², Y. Hiraoka¹, M. Kurita¹, A. Watanabe² (1.FTBC, FFPRI, 2.Grad. Sch. Agr., Univ. Kyushu)

P119 Evaluation of hybrid sterility observed in interspecific hybrids between *Nicotiana benthamiana* and *N. excelsior*

☆Kitamura, N., T. Morikawa, M. Yanase, M. Oda, T. Tezuka (Grad. Sch. Life Envi. Sci., Osaka Pref. U.)

P120 Dosage effect of the monoecious gene on the proportion of female flowers in spinach plants.

○Haseda, A., Y. Oda, Y. Onodera (Grad. Sch. Agr., Hokudai U)

P121 Hybrid weakness-like phenomenon found in the F₁ generation from the crosses between a wild rice accession from Asia and accessions from Australia

☆Nozoe, Y.¹, K. Ichitani¹, R. Ishikawa², T. Sato³, Y. Sato⁴, I. Nakamura⁵, S. Taura⁶, M. Sato¹ (1.Fac. Agr., Kagoshima Univ., 2.Fac. Agri. Life Sci., Hirosaki Univ., 3.Grad. Sch. Life Sci., Tohoku Univ., 4.Res. Inst. Humanity & Nature, 5.Grad. Sch. Hort., Chiba Univ., 6.Inst. Gene Res., Kagoshima Univ.)

P122 Segregation distortion in doubled haploid populations derived from reciprocal F1 hybrids of Nipponbare and Kasalath.

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P123 Development of DNA markers linked to *spikelet-tipped bristles 1* (*stb1*) in foxtail millet (*Setaria italica* (L.) P.Beauv.)

○Mukainari, Y.¹, Y. Suzuki², K. Ichitani³, K. Fukunaga² (1.Grad. Sch. Comprehensive Scientific Research, Pref. Univ. Hiroshima, 2.Fac. Life Environ. Sci., Pref. Univ. Hiroshima, 3.Fac. Agr., Kagoshima Univ.)

P124 Characterization of ESTs derived from each organ of *Cryptomeria japonica*

○Tamura, M.¹, k. Mishima², T. Iki², M. Nose², M. Tsubomura², M. Kurita², A. Watanabe¹ (1.Department of Forest Environmental Science, Faculty of Agriculture, Kyushu University, 2.Forest Tree Breeding Center, FFPRI)

P125 Single nucleotide polymorphism in genes accounting for ethylene biosynthesis and perception in melon

☆Shibata, C., K. Tanase-Hiwasa, T. Ariizumi, H. Ezura (Fac. Life Environ. Sci., Univ. Tsukuba)

P126 A sequence analysis of mitochondrial genome of radish (*Raphanus sativus*) using next-generation sequencer 3:complete mitcondrial genome of Aonaga radish

○Okabe, S. ¹, Y. Tanaka ³, H. Yamagishi ², T. Terachi ² (1.Grad.Sch.Fac.Eng., Kyoto Sangyo U.,, 2.Fac.Life Sci.,Kyoto Sangyo U.,, 3.Grad.Sch.Environ.Life Sci.,Okayama U.)

P127 Genome-wide association study for flowering time in soybean mini core collection

☆Tsuda, M. ¹, S. Watanabe ², T. Shimizu ¹, K. Machita ¹, M. Ishimoto ¹, A. Kaga ¹ (1.NIAS, 2.Univ. Saga)

P128 The *Vigna* genome project

☆Sakai, H., K. Naito, E. Ogiso-Tanaka, A. Kaga, T. Itoh, N. Tomooka (National Institute of Agrobiological Sciences, Japan)

P129 Molecular characterization of a semidwarf mutant *sda* in tartary buckwheat

☆Nakano, A. ¹, M. Komori ¹, Y. Nakamura ¹, T. Morishita ², T. Suzuki ², A. Shimizu ³, J. Aii ¹, H. Tanaka ¹ (1.NUPALS, 2.NARCH, 3.IRB, NIAS)

P130 Comparative analysis on the RNA editing sites between common wheat and *Aegilops geniculata* mitochondrial genome by RNA-Seq data

☆Gyawali, Y. ¹, S. Kimura ², S. Kitagawa ³, K. Murai ³, T. Terachi ² (1.Plant Organlle Genomics Research Center, Kyoto Sangyo U., 2.Fac. Life Sci., Kyoto Sangyo U., 3.Dept. Bio. Sci., Fukui Prefectural U.)

P131 A mitochondrial polymorphic region affected by nuclear genome constitution of Emmer-Dinkel wheat.

☆Tsujimura, M. ¹, N. Mori ², H. Yamagishi ³, T. Terachi ³ (1.Plant Organelle Genomics R.C., 2.Grad. Sch. Agric. Sci., Kobe Univ., 3.Fac. Life Sci., Kyoto Sangyo Univ.)

P132 *DRO2*, a novel QTL for deep rooting detected on rice chromosome 4

Uga, Y., E. Yamamoto, N. Kanno, ○S. Kawai, T. Mizubayashi, S. Fukuoka (NIAS)

P133 QTL analysis for the traits of culm controlling lodging resistance in rice

☆Ishihara, R.¹, Y. Fujishiro¹, T. Hobo², H. Kitano² (1.Grad. Sch. Bioagr., Univ. Nagoya, 2.Biosci. Biotech. Ctr., Univ. Nagoya)

P134 Wild QTLs analysis for agronomic traits using recombinant inbred lines between *Oryza rufipogon* and *O. sativa*

☆Thanh, P., P. Dang Thai Phan, R. Ishikawa, T. Ishii (Lab. Plant Breeding, Grad. Sch. Agric. Sci., Kobe Univ.)

P135 Identification of the QTL for winter hardiness on linkage group 7 of meadow fesue and perennial ryegrass

○Tamura, K., K. Tase, Y. Sanada (HARC, NARO)

P136 QTL mapping for root length of soybean seedlings grown in hydroponic condition

○Xu, D., H. Chen, G. Li (Japan International Research Center for Agricultural Sciences)

P137 QTLs controlling high temperature-induced seed coat cracking in the soybean cultivar 'Toyomusume'

☆Yamashita, Y.¹, H. Funatsuki², N. Yamaguchi³, S. Ohnishi⁴, F. Kousaka¹ (1.Central Agr. Exp. Stn., HRO, 2.WeNARC, NARO, 3.Tokachi Agr. Exp. Stn., HRO, 4.Kitami Agr. Exp. Stn., HRO)

P138 Mapping of seed coat bloom trait in Tanbaguro

○Saruta, M.¹, Y. Takada¹, T. Sayama², M. Ishimoto² (1.WARC, 2.NIAS)

P139 Construction of a reference genetic linkage map for carnation

○Yagi, M.¹, T. Yamamoto², S. Isobe³, H. Hirakawa³, S. Tabata³, K. Tanase¹, H. Yamaguchi¹, T. Onozaki¹ (1.NIFS, 2.NIFTS, 3.Kazusa DNA Res. Inst.)

P140 A genetic linkage map of Japanese chestnut based on genomic- and EST-SSR markers

○Terakami, S., S. Nishio, N. Takada, H. Kato, M. Kunihisa, C. Nishitani, T. Saito, T. Yamamoto (NIFTS)

P141 Development of DNA markers linked to the male sterile genes using high density linkage map in *Cryptomeria japonica* .

☆Moriguchi, Y.¹, T. Ihara², K. Uchiyama², S. Ueno², A. Matsumoto², N. Futamura², M. Saito³, Y. Higuchi⁴, S. Itoo⁴, D. Miyajima⁵, K. Shinohara², Y. Tsumura² (1.Grad. Sch. Sci. Tech., Niigata Univ., 2.FFPRI, 3.Toyama For. For. Prod. Res. Cent., 4.Ex. Niigata For. Res. Cent., 5.Niigata For. Res. Cent.)
