Title of Papers Presented at the 125th Meeting of The JAPANESE SOCIETY Oral presentations

Oral Presentations

101 FATES:A new strategy to identify genes among local population

○Fujino, K. [1], K. Koyanagi [2], T. Sato [3] (1.NARO Hokkaido Agr Res Cent, 2.Grad Sch IST Hokkaido U, 3.HRO Kamikawa Agr Exp Stn)

---

102 Population structure of rice local population in Hokkaido

☆Ikegaya, T. [1], H. Shinada [2], T. Yamamoto [3], E. Yamamoto [3], K. Hori [3], J. Yonemaru [3], S. Matsuba [1], K. Fujino [1] (1.NARO Hokkaido Agricultural Research Center, 2.Tokachi Agricultural Experiment Station, 3.National Institute of Agrobiological Sciences)

---

103 Identification of rice blast resistance gene, Pi60

☆Shinada, H. [1], K. Fujino [2], H. Sato [3], E. Yamamoto [4], K. Hori [4], J. Yonemaru [4], T. Yamamoto [4] (1.Beans breeding group, Tokachi Agri. Exp. Sta., 2.NARO Hokkaido Agri. Res. Cen., 3.Rice breeding group, Kamikawa Agri. Exp. Sta., 4.NIAS)

---

104 Re-sequence of a rice variety Kitaake

○Satoh, K., M. Obara, K. Fujino (NARO Hokkaido Agr Res Cent)

---

105 Genome-wide single nucleotide polymorphism and Insertion-Deletion of *japonica rice* (*Oryza sativa* L.) cultivars in Hokkaido

☆Takano, S. [1], T. Satou [2], K. Kato [1] (1.Obihiro Univ. Agr. & Vet. Med., 2.H.R.O. Kamikawa Agr. Exp. Sta.)

---

106 Identification of causative mutations responsible for phenotypes based on *de novo* assembled genome sequences : rice examples

☆Yaegashi, H. [1], H. Takagi [1,2], M. Tamiru [1], A. Abe [1], R. Fekih [1], S. Natsume [1], A. Uemura [1], R. Terauchi [1] (1.Iwate Biotech. Res. Center, 2.United Grad. Sch. Agric. Sci.,

Iwate U.)

---

107 QTL analysis in traits of strawberry fruit using octaploid strawberry linkage map

○Hashizume, F. [1], A. Fujita [1], S. Isobe [2], K. Kakeda [3] (1.Mie Pref.Agr.Res.Inst., 2.Kazusa DNA Res.Inst., 3.Grad.Sch.Fac.Bioresour., Univ.Mie)

---

108 Validation of effect using marker-assisted selection with DNA markers linked to the Fusarium wilt-resistance gene in strawberry breeding

☆Fujita, A. [1], J. Kohori [1], F. Hashizume [1], H. Kitamura [1], K. Kakeda [2], T. Mori [1] (1.Mie Pref.Agr.Res.Inst., 2.Grad.Sch.Fac.Bioresour., Univ.Mie)

---

109 QTL-seq applied to rice identifies genomic regions controlling heading date among cultivars in the northern Tohoku Region of Japan

☆Nonoue, Y. [1,2], A. Abe [3], H. Takagi [3], H. Yaegashi [3], H. Kikuchi [3], H. Utsushi [3], Y. Ogasawara [1], S. Kawadai [1], H. Sugawara [1], R. Terauchi [3] (1.Iwate Agric. Res. Ctr., 2.United Grad. Sch. Agric. Sci.,Iwate U., 3.Iwate Biotech. Res. Ctr.)

---

110 Fine mapping of *Kala3*, a gene involved in black pigmentation of rice grain

○Fujita, K. [1], H. Maeda [2], T. Izawa [3], T. Oikawa [3], T. Ebitani [1], K. Murata [1], T. Yamaguchi [1] (1.Toyama Pref. Agr. Forest. Fish. Res. Cent., 2.Toyama Pref. Takaoka Agr. Forest. Prom. Cent., 3.Nat.Inst. Agrobiological Sci.)

---

111 QTL analysis of gibberellin response in rice

☆Nagai, K., Y. Kondo, M. Ashikari (Biosci. Cent., Univ. Nagoya)

---

112 Rice novel semidwafing gene d60 proved to be xyloglucan transferase-like DNA sequence by genetic complementarity assay

☆Tomita, M. [1], K. Maeda [2], S. Ueda [2] (1.Research Institute of Green Science and Technology, Shizuoka University, 2.Faculty of Agriculture, Tottori University)

---

113 Preparation of spore germination strains population to search genetic factors controlling temperature on fruiting-body formation of *Lentinula edodes*

○Miyazaki, K. [1], T. Yamauchi [2], R. Miyamoto [3], Y. Sakamoto [4], S. Kaneko [5], S. Asano [5], Y. Miyazaki [6], E. Okii [7], S. Shiraishi [7] (1.Forestry and Forest Products Reseach Institute,

2.Hokken Inc., 3.Ooita Pref., 4.Iwate Biotechnology Research Center, 5.Tokyo Instituyte of Technology, 6.Forestry and Forest Products Research Institute, 7.Kyushu Univ., Agricultural faculty)

---

114 Natural variation in glaucousness in wild wheat progenitor *Aegilops tauschii*

☆Nishijima, R. [1], M. Iehisa [1], Y. Matsuoka [2], S. Takumi [1] (1.Grad. Sch. Agr. Sci., Kobe Univ., 2.Dep. Biosci., Fukui Pref. Univ.)

---

115 Genome sequence of Azuki bean (*Vigna angularis*) and its comparative analysis with other eudicots

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

---

116 Genetic relationship between seed weight, and seed and leaf morphology in soybean

☆Sayama, T. [1], T. Tanabata [2], K. Takagi [1,3], K. Kosuge [4], K. Okano [5], H. Sasama [1], A. Kaga [1], M. Ishimoto [1] (1.NIAS, 2.RIKEN CSRS, 3.NARC, 4.Ibaraki Plant-Biotec. Inst., 5.Ibaraki West. Agric. Office)

---

117 Genome-wide distribution of genetic diversty

○Tsumura, Y. [1], Y. Moriguchi [2], K. Uchiyama [1], S. Ueno [1], T. Ihara [1], A. Matsumoto [1] (1.Forestry and Forest Products Research Institute, 2.Niigata University)

---

118 Inverted Repeat of Chalcone Synthase 3 Pseudogene Is Associated with Seed Coat Discoloration in Soybean

☆Rodriguez, T. [1], F. Rojas [1], M. Ooyo [2], M. Senda [3], R. Takahashi [4] (1.University of Tsukuba, 2.Egerton University, 3.Hirosaki University, 4.National Institute of Crop Science)

---

119 Analysis of genome structure in a rice multiparent population

☆Yamamoto, E., T. Tanaka, R. Mizobuchi, J. Yonemaru, T. Yamamoto, M. Yano (National Institute of Agrobiological Sciences)

---

120 Detection of QTLs associated with salinity tolerance in durum wheat (*Triticum turgidum L.* var *durum*) based on association analysis

☆Turki, N. [1], T. Shehzad [1], M. Harrabi [2], K. Okuno [1] (1.Graduate School of Life and Environmental Science, University of Tukuba, 2.National Institute of Agronomy Tunisia

(INAT))

---

201 Achievement and Future Vision of National BioResource Project-Tomato

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

---

202 A new genetic resource found in a karst mountain in Thailand

Kitazawa, K. [1], Y. Takahashi [2,3], ○K. Naito [2], S. Chankaew [4], K. Irie [1], N. Tomooka [2] (1.Dept. International Agricultural Development, Tokyo University of Agriculture, 2.National Institute of Agrobiological Sciences, 3.Japan Society for Promotion of Science, 4.Kasetsart University)

---

203 Variation of *Vigna minima* observed in natural habitat during field survey in Cambodia

☆Takahashi, Y. [1,2], L. Seang [3], V. Thun [3], P. Uong [3], R. Thong [3], C. Ty [3], M. Ouk [3], K. Naito [1], N. Tomooka [1] (1.National Institute of Agrobiological Sciences, 2.Research Fellow of the JSPS, 3.Cambodian Agriculture Research and Development Institute)

---

204 Diversity in drought adaptation strategies of wild species in genus *Vigna*

☆Iseki, K. [1], K. Naito [1,2], Y. Takahashi [1,3], C. Muto [1], S. Chankaew [1,4], R. Marubodee [1,5], E. Ogiso [1], T. Isemura [1], N. Tomooka [1] (1.National Institute of Agrobiological Sciences, 2.JST PRESTO, 3.JSPS PD, 4.Kasetsart University, 5.Mie University)

---

205 Collection of ancestral form of wild barley in former Soviet Union areas

○Sato, K. [1], H. Tsujimoto [2], H. Tanaka [3], K. Kato [4], T. Smekalova [5] (1.IPSR, Okayama Univ., 2.ALRC, Tottori Univ., 3.Fac. Agr., Tottori Univ., 4.Grad. Sch. Environ. Life Sci., Okayama Univ., 5.N. I. Vavilov Inst.)

---

206 DNA variation of a clock-gene homolog *WPCL1* in wheat

☆Mizuno, N. [1,2], M. Nitta [1], S. Nasuda [1] (1.Grad.Sch.Agric.Sci., Kyoto U., 2.JSPS Research Fellow PD)

---

207 Population structure analysis of whole tetraploid wheat accessions conserved by NBRP-Wheat for selecting of core-collection

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

---

208 Exploration and collection of Triticeae genetic resources in Kyrgyz

☆Sasanuma, T. [1], J. Sadybakasova [2], N. Zhumakadyrova [2], U. Kydykbekovich [3], O. Kovaleva [4], K. Sato [5], H. Tsujimoto [6] (1.Fac. Agr., Yamagata Univ., 2.Plant Gen. Resour., Min. Agr. Kyrgyz, 3.Biol. Soil Inst., Acad. Sci. Kyrgyz, 4.N.I. Vavilov Inst., 5.IPSR, Okayama Univ., 6.ALRC, Tottori Univ.)

---

209 Development of a mini-core collection of Sri Lankan Traditional Rice

☆Padukkage, D. [1], E. Rathnathunga [2], N. Dissanayake [3], S. Senaweera [4], G. Senanayake [1], S. Geekiyanage [1] (1.Department of Agricultural Biology, Faculty of Agriculture, University of Ruhuna, Mapalana, Kamburupitiya, Sri Lanka., 2.Faculty of Graduate Studies, University of Ruhuna, Matara, Sri Lanka., 3.Rice Research and Development Institute, Batalagoda, Sri Lanka., 4.Department of Agriculture and Food Systems, Melbourne School of Land and Environment, The University of Melbourne, 4 Water Street, Creswick, Victoria 3363, Australia.)

---

210 Days to flowering affect vegetative growth and yield components of Sri Lankan traditional rice variety “Honderawala”

☆Rathnathunga, E. [1], N. Dissanayake [2], S. Senaweera [3], G. Senanayake [4], S. Geekiyanage [4] (1.Faculty of Graduate Studies, University of Ruhuna, Matara, Sri Lanka, 2.Rice Research and Development Institute, Batalagoda, Sri Lanka, 3.Department of Agriculture and Food Systems, Melbourne School of Land and Environment, The University of Melbourne, 4 Water Street, Creswick, Victoria 3363, Australia, 4.Department of Agricultural Biology, Faculty of Agriculture, University of Ruhuna, Mapalana, Kamburupitiya, Sri Lanka)

---

211 Relationship between Days to Flowering and Yield Components of selected Sri Lankan Rice Accessions

☆Pushpakumari, W. [1], E. Rathnathunga [2], N. Dissanayake [3], S. Senaweera [4], G. Senanayake [1], S. Geekiyanage [1] (1.Department of Agricultural Biology, Faculty of Agriculture, University of Ruhuna, Mapalana, Kamburupitiya, Sri Lanka., 2.Faculty of Graduate Studies, University of Ruhuna, Matara, Sri Lanka., 3.Rice Research and Development Institute, Batalagoda, Sri Lanka., 4.Department of Agriculture and Food

Systems, Melbourne School of Land and Environment, The University of Melbourne, 4 Water Street, Creswick, Victoria 3363, Australia.)

---

212 Evaluation of Sri Lankan cultivated and wild rice on growth performance after Bradyrhizobium (ORS278) inoculation under in vitro condition

☆Kumara, H. [2], N. Ahlgren [2], A. Kodithuwakku [3], E. Greenberg [2], G. Senanayake [3], S. Geekiyanage [3] (1.Board of Study in Agriculture, Faculty of Graduate Studies, University of Ruhuna, Sri Lanka, 2.Department of Microbiology, University of Washington, Seattle, WA, 206 221 2850, USA, 3.Department of Agricultural Biology, Faculty of Agriculture, University of Ruhuna, Sri Lanka)

---

213 Tolerance to heat-induced quality decline and homogeneity of other agronomic-traits of Koshihikari NIL carrying the *Sdr4* (seed dormancy 4) region from Kasalath

○Kobayashi, A. [1], K. Sugimoto [2], U. Yamanouchi [2], T. Hayashi [1], M. Yano [2], K. Tomita [1] (1.Fukui Agri. Exp. Stn., 2.National Institute of Agrobiological Sciences)

---

214 Genetic studies on Bambuseae species in Japan. XXXV. Classification of natural intergeneric hybrids and consideration of the hybrid genus

○Muramatsu, M. (*)

---

215 Variation in cadmium accumulation in shoots of sorghum landraces under field condition

○Satoh-Nagasawa, N. [1], K. Tsuboi [1], T. Shehzad [2], K. Okuno [2], J. Yoneda [3], S. Lin [3], N. Tutsumi [3], S. Uraguchi [3], T. Fujiwara [3], Y. Ito [4], T. Tokunaga [4], M. Itou [5], H. Hattori [1], N. Nagasawa [1], R. Itoh [1], K. Asari [1], H. Takahashi [1], K. Sakurai [1], A. Watanabe [1], H. Akagi [1] (1.Fac. Bopres. Sci., Akita Pref. U., 2.Grad. Sch. Life & Env. Sci., U. Tsukuba, 3.Grad. Sch. Agric. Life Sci., U. Tokyo, 4.Earth Note Co., Ltd., 5.Akita Agric. Exp. Stn.)

---

216 Collection and genetic diversity of biomass crop Giant reed (Arundo donax L.) in Japan

○Takamizo, T. [1], M. Kobayashi [1], W. Takahashi [1], M. Ebina [1], M. Takahara [1], S. Tsuruta [2] (1.NARO Institute of Livestock and Grassland Science, 2.JIRCAS Tropical Agriculture Research Front)

---

217 Identification of a quantitative trait locus involved in abscission layer formation for seed shattering in Asian wild rice, *Oryza rufipogon*

☆Myint Htun, T., C. Inoue, O. Chhourn, T. Ishii, R. Ishikawa (Grad. Sch. Agr. Sci., Kobe Univ.)

---

218 Allelic interaction at seed shattering loci in the genetic background of wild rice, *Oryza rufipogon*

☆Inoue, C., T. Htun, T. Ishii, R. Ishikawa (Grad. Sch. Agr. Sci., Kobe Univ.)

---

219 Evaluation of domestication-related traits in the genetic background of wild rice, *Oryza rufipogon*

☆Nishimura, A., T. Iwasaki, C. Yamamoto, R. Ishikawa, T. Ishii (Grad. Sch. Agr. Sci., Kobe Univ.)

---

220 Diversity of antimicrobial-type cysteine rich proteins in closely related Oryza genomes

☆Shenton, M. [1], H. Ohyanagi [1,2], A. Toyoda [3], A. Fujiyama [3], T. Nagata [1], N. Kurata [1,4] (1.National Institute of Genetics. Plant Genetics, 2.Mitsubishi Space Softwear Co. Ltd., 3.National Institute of Genetics. Comparative Genomics, 4.SOKENDAI, Life Sci.)

---

301 Characteristics of a New Rice Cultivar "Akita 107"

○Sato, K., I. Kodama, T. Kawamoto, K. Kato, R. Tahakashi, Y. Sato (Akita Prefectural Agricultural Exprement Station)

---

302 Characteristics of a rice line "Akita 110" for phytoremediation

○Kawamoto, T. [1], K. Kato [1], K. Sato [1], R. Takahashi [1], Y. Sato [1], H. Akagi [2], K. Tezuka [2] (1.Akita Pref. Agri. Expmt. St., 2.Akita Pref. Univ. Fac. Bio. Sci.)

---

303 Breeding of a large and high yielding rice Cultivar “Yamagatamochi110” for feeding

☆Abe, Y. [1], K. Yuki [2], M. Chuba [1], T. Sano [3], K. Sato [3], K. Watanabe [4], H. Goto [1], M. Mitobe [5], M. Nishimura [5], H. Sakurada [6], T. Homma [1], H. Miyano [3], N. Saito [7], K. Saito [1] (1.Rice Breeding and Crop Sci.Exp.Stn.,Yamagata Integrated Agr.Res.Cent., 2.Mogami Area General Branch Administration Office Yamagata Prefectural Government., 3.Shonai Area General Branch Administration Office Yamagata Prefectural Government., 4.Former Rice Breeding and Crop Sci.Exp.Stn.,Yamagata Integrated Agr.Res.Cent., 5.Murayama Area General Branch Administration Office Yamagata Prefectural Government., 6.Former Shonai Area General Branch Administration Office Yamagata Prefectural Government., 7.Yamagata Disease and Pest-Related Crop Damage Prevention Office,Shonai Branch.)

304 Breeding of a new rush cultivar "Suzukaze"

○Fushimizu, K. [1], Y. Koushi [1], K. Fuchikami [1], S. Fukaura [2], K. Iimure [1], Y. Nakazawa [4] (1.Kumamoto Agricultural Research Center, 2.Yatushiro Area Promotion Bureau, 3.National Agricultural Research Center for Kyushu Okinawa Region)

---

305 Breeding of new chip processing use potato variety “Rira-chip” suitable for long term storage

○Fujita, R. [1], M. Oonami [1], S. Ebe [2], S. Iketani [1], K. Senda [3], S. Tanaka [4], M. Iritani [5], T. Itoh [6], K. Furukawa [1] (1.Kitami Agri. Exp. Stn., HRO, 2.Tokachi Agri. Exp. Stn., HRO, 3.Kamikawa Agri. Exp. Stn., HRO, 4.Ornamental Plants and Vegetables Res. Cent., HRO, 5.Central Agri. Exp. Stn., HRO, 6.Former Kitami Agri. Exp. Stn., Hokkaido Pref.)

---

306 Cultivar discrimination system using the STH chromatographic PAS method toward the on-site inspection

☆Monden, Y. [1], K. Takasaki [2], M. Kawase [3], H. Akitake [1], M. Tahara [1], S. Futo [2] (1.Grad. Sch. Env. & Life Sci., Univ. Okayama, 2.Fasmac Co., Ltd., 3.Grad. Sch. Bio. Eng., Univ. Tohoku)

---

307 Genetic diversity for melon genetic resources in Kazakhstan and their transmission

☆Tanaka, K. [1], M. Sugiyama [2], A. Artemyeva [3], Z. Mamypbelov [4], T. Sergevich [5], S. Alexanian [3], K. Kato [6] (1.Fac. Humanit., Hirosaki U., 2.N.I.V.T.S., 3.V.I.R., 4.Kazakh Res. Inst. Potato Veg. Growing, 5.Kazakh Sci. Res. Inst. Rice Growing, 6.Grad. Sch. Environ. Life Sci., Okayama U.)

---

308 Evidence of conservated boi-cultural diversity in shiikuwasha at Oku, Okinawa

○Ishikawa, R. [1], H. Ashina [1], D. Tamura [1], K. Miyagi [2], M. Oonishi [3] (1.Fac. Agri and Life Sci, Hirosaki U., 2.Shishigaki Network, 3.Res. Inst. for Humanity and Nature)

---

309 Developmemt of low-calorie rice cultivars. I. Analysis of BC2F2 generation

○Fujita, N. [1], K. Tsuiki [1], N. Oitome [1], T. Kawamoto [2], I. Kodama [2], K. Kato [2], K. Sato [2], R. Takahashi [2], T. Fushimi [3] (1.Fucl. Biores. Sci., Akita Pref. Univ., 2.Agric. Exp. Sta. Akita Pref., 3.JIRCAS, TARF)

---

310 Effects of proanthcyanidin-less genes on grain dormancy by comparisons of near isogenic lines in barley

☆Himi, E. [1], T. Tonooka [2], S. Taketa [1] (1.Institute of Plant Science and Resources, Okayama Univ., 2.NARO/KARC)

---

311 Characterization of the novel low-amylose mutants of rice

○Kawadai, S. [1], A. Abe [2], Y. Nonoue [1], H. Takagi [2], Y. Ota [1], T. Kodate [1], H. Kowata [1], R. Terauchi [2], H. Sugawara [1] (1.Iwate Agric. Res. Ctr., 2.Iwate Biotech. Res. Ctr.)

---

312 Estimation of chromosomal location for two complementary recessive genes enhancing amylose content in rice seeds endosperm

○Suzuki, Y. [1], K. Suzuki [1], E. Araki [1], T. Nagata [1], J. Tanaka [1], K. Shirasawa [1,2], S. Hamada [1,3] (1.NARO, Inst. Crop Sci., 2.KAZUSA DNA Inst., 3.Fac. Agri. and Life Sci., Hirosaki Univ.)

---

313 Characterization of a rice line displaying aboundant tillers under sparse planting condition isolated from Koshihikari/ *Oryza rufipogon* CSSL

○Inagaki, N. (Natl. Inst. Agrobiol. Sci.)

---

314 Newly identified gene, *SPIKE* greatly increases grain yield of *indica* rice cultivar

○Kobayashi, N. [1], D. Fujita [2], A. Tagle [3], Y. Koide [4], K. Sasaki [5], R. Gannaban [6], S. Yanagihara [7], Y. Fukuta [7], T. Ishimaru [6,7] (1.NICS, 2.Kyushu Univ., 3.Kobe Univ., 4.Kyoto Univ., 5.Univ. Tokyo, 6.IRRI, 7.JIRCAS)

---

315 Mapping of QTLs for flower color intensity and genes related to anthocyanin biosynthesis in morning glory

☆Okuno, S. [1], T. Ito [1], H. Katsuyama [1], A. Hoshino [2], E. Nitasaka [3], S. Iida [4], N. Watanabe [1], T. Kuboyama [1] (1.Col. Agr., Ibaraki U., 2.Natl. Inst. Basic Biol., 3.Grad. Sch. Sci., Kyushu Univ., 4.Grad. Sch. Nutri. and Env. Sci. & Grad. Sch. Pharm. Sci., U. Shizuoka.)

---

316 Selection of soybean lines for seed protein content

○Kono, Y., M. Takahashi, N. Oki, M. Takahashi (Kyushu Okinawa Agr. Res. Ctr.)

---

317 Cytohistological analysis of dry and juicy stalks of Sorghum bicolor

☆Lin, C. [1], J. Yoneda [1], J. Yonemaru [2], S. Kasuga [3], M. Fujimoto [1], N. Tsutsumi [1] (1.Grad.Sch.Agric.Life Sci.,Univ.Tokyo, 2.Natl.Inst.Agrobiol.Sci., 3.Fac. of Agri.,Shinshu Univ.)

---

318 Identification of SNPs between parental lines of commercial F1 hybrid cultivar of Chinese cabbage by RNA-sequencing

☆Saeki, N. [1], S. Nose [1], T. Kawanabe [1], H. Abe [1], K. Okazaki [1], M. Kaji [3], R. Fujimoto [2] (1.Grad. Sch. Sci and Tech., Niigata Univ., 2.Grad. Sch. Agric. Sci., Kobe Univ., 3.Watanabe Seed Co.)

---

319 Trait research of the heterosis of the commercial F_1 hybrid cultivar W77 and F_2 population in Chinese cabbage

☆Abe, H. [1], T. Kawanabe [1], S. Nose [1], N. Saeki [1], M. Shimizu [1], S. Konno [2], M. Kaji [2], K. Okazaki [1], R. Fujimoto [3] (1.Grad. Sch. Sci., Univ. Niigata, 2.Watanabe Seed Co., Ltd, 3.Grad. Sch. Agric. Sci, Kobe Univ.)

---

401 gsWizaRd: Easy-to-use software for building a genomic selection prediction model

○Iwata, H. [1], Y. Takase [2], K. Kamatsuki [2], T. Hayashi [3], H. Ohyanagi [2] (1.Grad. Sch. Agr. Life Sci., Univ. Tokyo, 2.Tsukuba Div., Mitsubishi Space Software Co., Ltd., 3.NARC, NARO)

---

402 VIGoR: fast software for genomic selection and GWA mapping using variational Bayesian inference

☆Onogi, A., B. Galliot, H. Iwata (Grad. Sch. Agric. Life Sci., U. Tokyo)

---

403 Development and improvement 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.)

---

404 Accuracy and validation of genomic selection for biomass traits in biparental rice populations

○Yonemaru, J. [1], K. Matsubara [2], T. Yamamoto [1], R. Mizobuchi [1], E. Yamamoto [1], J. Tanaka [2], H. Tsunematsu [2], N. Kobayashi [2], H. Kato [1,2], M. Yano [1] (1.National Institute of Agrobiological Sciences, 2.NARO Institute of Crop Science)

---

405 Genomic selection for productivity improvement of common buckwheat (1) field trial

☆Hara, T. [1], S. Yabe [2], M. Ueno [3], H. Enoki [4], T. Kimura [4], S. Nishimura [4], Y. Yasui [3], H. Iwata [2], R. Ohsawa [1] (1.Grad. Sch. Life & Env. Sci., Univ. Tsukuba, 2.Grad. Sch. Agric. Life Sci., Univ. Tokyo, 3.Grad. Sch. Agr., Univ. Kyoto, 4.Future Project Div., TOYOTA MOTOR CORPORATION)

---

406 Genomic selection for productivity improvement of common buckwheat (2) breeding process

☆Yabe, S. [1], T. Hara [2], M. Ueno [3], H. Enoki [4], T. Kimura [4], S. Nishimura [4], Y. Yasui [3], R. Ohsawa [2], H. Iwata [1] (1.Grad. Sch. Agric. Life Sci., Univ. Tokyo, 2.Grad. Sch. Life & Env. Sci., Univ. Tsukuba, 3.Grad. Sch. Agr., Univ. Kyoto, 4.Future Project Div., TOYOTA MOTOR CORPORATION)

---

407 A proposal of a high-speed and high-performance breeding system for autogamous crops: Rapid-cycle Recurrent Genomic Selection (RRGS)

○Tanaka, J. [1], S. Yabe [2], Y. Tabei [3], Y. Taniguchi [1], M. Akasaka [1], M. Oshima [3], K. Abe [3], T. Ishii [1], H. Iwata [2] (1.NARO Institute of Crop Science, 2.University of Tokyo, 3.National Institute of Agrobiological Sciences (NIAS))

---

408 Automated tracking of timing and relative amount of paddy rice anthesis from time series outdoor images by machine learning

Guo, W., ☆S. Ninomiya (Institute of Sustainable Agro-ecosystem Services, Graduate School of Agriculture and Life Sciences, University of Tokyo)

---

409 Exploitation of autonomous elements for DNA transposon, *nDart1* transposition in rice

○Nishimura, H. [1], A. Yoshida [2], K. Tsugane [3], M. Maekawa [1] (1.Inst. Plant Sci. Res., 2.Grad. Sch. Agric. Life Sci., U. Tokyo., 3.Natl. Inst. Basic Biol.)

---

410 Mutagenesis in rice using CRISR/Cas system

☆Mikami, M. [1,2], M. Endo [2], S. Toki [1,2] (1.Yokohama City Univ., 2.Natl. Inst. Agrobiol. Sci.)

---

411 Rapid identification of the mutation genes induced by heavy-ion beam in rice

○Morita, R. [1], K. Ishii [1], H. Takehisa [2], Y. Hahashi [1], S. Kogure [1], K. Ichinose [1], H. Tokairin [1], T. Sato [3,4], T. Abe [1,4] (1.RIKEN Nishina Cent., 2.NIAS, 3.Grad. Sch. Life. Sci., U. Tohoku, 4.RIKEN Innovat. Cent.)

---

412 Application of a visible antibiotic resistant marker to gene targeting in rice

Mori, A. [1], K. Osakabe [2], M. Endo [1], S. Toki [1,3], ○H. Saika [1] (1.Agrogenomics Res. Center, NIAS, 2.CCAIC, Univ. Tokushima, 3.Kihara Inst. Biol. Res., Yokohama City Univ.)

---

413 Inheritance of the novel semidwarf characteristics in material of common buckwheat

○Morishita, T., Y. Mukasa, T. Suzuki (NARO National Agricultural research center for Hokkaido Region)

---

414 Multiple embryo sac-ovule and multiple embryo formation appeared in ovary of ASG-1 transgenic Arabidopsis

○Chen, L. [1], Y. Nishimura [1], T. Tetsumura [2], K. Yishida [3], D. Kurihara [4], T. Higashiyama [4], T. Sugita [5] (1.Fac. Horti. Environ. Sci., Minami Kyushu U., 2.Fac. Agri., U. Miyazaki, 3.Fac. Agri., U. Tokyo, 4.Fac. Sci., Nagoya U., 5.Miyazaki Pref. Agri. Expe. Sta.)

---

415 The functional analysis of apomixes-specific gene: studies on conditions for producing out of ASG-1 transgenic guinea grass

☆Nishimura, Y. [1], T. Tetsumura [2], K. Yoshida [3], D. Kurihara [4], T. Higashiyama [4], T. Sugita [5], L. Chen [1] (1.Fac. Horti. Environ. Sci., Minami Kyushu U., 2.Fac. Agri., U. Miyazaki, 3.Fac. Agri., U. Tokyo, 4.Fac. Sci., Nagoya U., 5.Miyazaki Pref. Agri. Expe. Sta.)

---

416 Cytogenetical and agronomic characterization of intergeneric hybrids between Sugarcane and *Erianthus arundenaceus*

☆Babil, P. [1,2], Y. Terajima [1], S. Irei [3], N. Ohmido [4], H. Takagi [1] (1.Trop. Agr. Res. Front, JIRCAS, 2.JSPS Post Doctoral Fellow, 3.Okinawa Pref. Agri. Res. Cent., 4.Univ. Kobe)

---

417 Development of plant regeneration and transformation system for *Erianthus* spp.

☆Izawa-Sato, K., S. Nonaka, H. Ezura (Fac. Life Environ. Sci., Univ. Tsukuba)

---

501 Expression analysis for flowering genes under an overexpression of the E1 gene, a soybean-specific inhibitor of flowering

☆Takeshima, R. [1], C. Zhao [1], M. Xu [1], B. Liu [2], S. Watanabe [3], T. Yamada [1], J. Abe [1] (1.Grad. Sch. Agric., Hokkaido U., 2.North-east Institute of Geography and Agroecology, CASA, China, 3.Fac. Agr. Saga U.)

---

502 Molecular genetic analyses of albino lemma mutants in barley

○Taketa, S., F. Katayama, E. Himi (Inst. Plant Science and Resources, Okayama Univ.)

---

503 *Agrobacterium*-mediated transformation demonstrates the function of barley *Nud* gene in determining the covered vs. naked caryopsis

○Kakeda, K. [1], A. Matsuda [1], M. Yamane [2], K. Sato [2], S. Taketa [2] (1.Grad. Sch. Bioresour., Mie U., 2.IPSR, Okayama U.)

---

504 Molecular genetic analysis of dark-induced leaf senescence

☆Inoue, R. [1], R. Miyata [1], M. Takagi [2], M. Kusaba [1,3] (1.Grad. Sch. Sci.,Hiroshima U, 2.Institute for Environmental Science and Technology ,Saitama U, 3.CREST)

---

505 Analysis of the development of rhizome bud in *O. longistaminata*

☆Yoshida, A. [1], Y. Terada [2], K. Kose [2], M. Ashikari [3], J. Kyozuka [1] (1.The Univ. Tokyo, Grad. Sch. Agric. Sci., 2.Tsukuba Univ., Inst. Appli. Phys., 3.Nagoya Univ. Grad. Ach. Bioagric Sci.)

---

506 Isolation and characterization of rice photomorphogenic mutants, *green embryo (gre)*

☆Kanegae, H., F. Ishizuna, J. Itoh, Y. Nagato (Grad. Sch. Agric. Life Sci., U. Tokyo)

---

507 Genetic interaction among the rice plastochron-related genes

☆Mimura, M., Y. Nagato, J. Itoh (Grad.Sch.Agric.Life Sci., U.Tokyo)

---

508 Variation in heading time of “Misato Golden” × “Golden Melon” RILs population grown in three different regions of Japan

○Nishida, H. [1,2], E. Aoki [3], M. Fujita [3,4], T. Kaneko [2], H. Matsunaka [4], M. Taira [3], T. Yanagisawa [3], K. Kato [1,2] (1.Grad. Sch. Environ. Life Sci., Okayama U., 2.Grad. Sch. Nat. Sci. Tech., Okayama U., 3.NARO/NICS, 4.NARO/KARC)

---

509 Relationship between spikelet shape and cleistogamy in rice

○Yoshida, H. [1], K. Miura [2], Y. Iwasaki [2], H. Kitano [3] (1.NARO Inst. Crop Sci., 2.Fukui Pref. Univ., 3.Nagoya Univ.)

---

510 Phenotype analysis of the rice mutant showing abnormal lemma and palea and identification of its responsible gene

☆Sato, D. [1], Y. Ohmori [1,2], H. Nagashima [1], H. Hirano [1] (1.Grad. Sch. Sci., Univ. Tokyo, 2.Grad. Sch. Agric. Life. Sci., Univ. Tokyo)

---

511 Important developmental genes are also required for awn formation in rice

Toriba, T. [1,2], ☆H. Hirano [1] (1.Grad. Sch. Sci., Univ. Tokyo, 2.Monash Univ.)

---

512 Methylome analysis of shoot apex

☆Tsuji, H. [1], N. Saihara [1], Y. Higashi [1], F. Miura [2], T. Ito [2], S. Tamaki [1,3], T. Kurata [3], K. Shimamoto [1] (1.Lab. of Plant Mol. Genet., Nara Inst. Sci. Technol., 2.Grad. Sch. Sci., U. Tokyo, 3.Plant Global Edu. Proj. Nara Inst. Sci. Technol.)

---

513 A novel transcription factor involved in differentiation of inner anther-wall layers during meiosis in rice

☆Ono, S. [1,2], K. Nonomura [1,2] (1.Exp. Farm, Natl. Inst. Genet., 2.Dep. Life Sci., Grad. U. Adv. Study/SOKENDAI)

---

514 Genetic model of reproductive isolation by two linked pollen sterility in repulsion phase

☆Yamagata, Y., M. Sakata, K. Doi, A. Yoshimura (Fac. Agr., Grad. Sch., Kyushu Univ.)

---

515 Genetic relation between hybrid sterility genes S35 and EFS in rice

☆Kubo, T. [1,2], A. Yoshimura [3], N. Kurata [1,2] (1.Plant Genetics, Natl. Inst. Genet., 2.Life Science, SOKENDAI, 3.Fac. Agr., Grad. Sch., Kyushu Univ.)

---

516 Development of photoperiod-sensitive cytoplasmic male sterility (PCMS) wheat lines and agronomic characters of hybrid wheat lines

○Murai, K. [1], M. Kurosaka [1], H. Oota [2], Y. Tanaka [2], N. Ishikawa [3] (1.Dep. Biosci., Fukui Pref. Univ., 2.HOKUREN, Agr. Res. Inst., 3.NARO/WARC)

---

517 Exploring evidence for phylogenetic differentiation and heteromorphic sex chromosomes in the genus Spinacia

☆Suzuki, R. [1], S. Fujito [1], Y. Hoshino [2], Y. Onodera [1] (1.Grad. Sch. Agri. , Univ. Hokkaido, 2.Hokkaido University. Field Science Center for Northern Biosphere)

---

518 Fluorescence in situ hybridization analysis of the homomorphic and heteromorphic sex chromosomes in the genus Spinacia

☆Fujito, S. [1], R. Suzuki [1], Y. Hoshino [2], N. Ohmido [3], Y. Onodera [1] (1.Grad. Sch. Agr., Univ. Hokkaido, 2.Field Science Center for Northern Biosphere, Univ. Hokkaido, 3.Graduate School of Human development and Environment, Univ. Kobe)

---

601 Aluminum tolerance confers local adaptation into East Asia on domesticated barley

☆Saisho, D. [1], K. Onishi [2], H. Ito [1], H. Kubotera [3], J. Ma [1], K. Sato [1] (1.IPSR, Okayama University, 2.Obihiro Univ. Agr. & Vet. Med., 3.NARO)

---

602 An ABC transporter RCN1 is involved in ABA transport in rice

☆Matsuda, S. [1], H. Nagasawa [1], Y. Sato [2], Y. Tokuji [1], I. Takamure [3], K. Kato [1] (1.Obihiro Univ. Agr. & Vet. Med., 2.NARO Hokkaido Agricultural Research Center, 3.Res. Fac. Agr. Hokkaido Univ)

---

603 Gene expression analysis of rice ABC transporter subfamily G

☆Nagasawa, H., Y. Azuma, S. Matsuda, K. Kato (Obihiro Univ. Agric.)

---

604 A new method for evaluating field resistance to blown spot in rice and a selection of standard rice varieties for evaluating the resistance

○Matsumoto, K. [1], C. Ota [1], T. Yamakawa [1], H. Sato [2] (1.Mie prefecture agricultural research institute, 2.NARO Kyushu Okinawa agricultural research center)

---

605 Functional analysis of a rice aspartic protease gene (OsAP77): resistance to pathogens

Alam, M. [1], H. Nakamura [2,3], H. Ichikawa [2], A. Miyao [2], H. Hirochika [2], K. Kobayshi [1,4], T. Yaeno [4], N. Yamaoka [1,4], ○M. Nishiguchi [1,4] (1.United Grad. Sch. Agric. Sci., Ehime Univ., 2.Natl. Inst. Agrobiol. Sci., 3.Present Add.: Grad. Sch. Agric. Life Sci., Univ. Tokyo, 4.Fac. Agric., Ehime Univ.)

---

606 Characterization of blast resistance gene *Pi40*(t) in genetic background of a susceptible line US-2

☆Hashimoto, S. [1,2], M. Telebanco-Yanoria [2], J. Kshirod K [3], N. Kobayashi [4], Y. Fukuta [1,2] (1.University of Tsukuba, 2.JIRCAS, 3.IRRI, 4.NARO)

---

607 Diversity and geographical distribution of rice blast races in Kenya

Telebanco-Yanoria, M. [1], ○Y. Fukuta [1], D. Makihara [2], N. Hayashi [3] (1.JIRCAS, Tropical Agricultural Research Front, 2.Nagoya University, 3.NIAS)

---

608 Genetic diversity of blast resistance and genome chromosome components of rice accessions in Kenya

☆Suzuki, T. [1], R. Ohsawa [1], D. Makihara [2], T. Sato [3], S. Yanagihara [4], H. Murage [6], E. Ateka [6], J. Mwangi [6], Y. Fukuta [5] (1.Univ.Tsukuba, 2.Univ.Nagoya, 3.Univ.Tohoku, 4.JIRCAS Biological Resources and Post-harvest Division, 5.JIRCAS Tropical Agriculture Research Front, 6.Jomo Kenyatta University of Agriculture and Technology)

---

609 Control of secondary aerenchyma formation by sugar transport in soybean

☆Takahashi, H. [1], X. Qi [1], S. Shimamura [3], S. Hiraga [2], M. Nakazono [1] (1.Grad. Sch. Agric. Sci., Nagoya U., 2.NARO Nat. Inst. Crop. Sci., 3.NARO Tohoku Agric. Res. Cent.)

---

610 Morphological characteristics and roles of aleurone layer in flood tolerance during germination of soybean

☆Sato, K., S. Jang, M. Sato, T. Yamada, Y. Jitsuyama, J. Abe (Grad. Sch. Agric., Hokkaido U.)

---

611 Role of a gene responsible for hard seededness in seed coat development of soybean

☆Jang, S. [1], M. Sato [1], K. Sato [1], R. Takahashi [2], B. Liu [3], T. Yamada [1], J. Abe [1] (1.Research Faculty of Agriculture, Hokakido Univ., 2.National Institute of Crop Science, 3.Northeast Institute of Geography and Agroecology, China)

---

612 Fine mapping of resistance genes to common cutworm (*Spodoptera litura* Fabricius), *CCW-1* and *CCW-2*, in soybean

☆Oki, N. [1], K. Komatsu [2], T. Sayama [3], M. Ishimoto [3], A. Kaga [3], M. Takahashi [1], M. Takahashi [1], Y. Kono [1] (1.NARO, KARC, 2.NARO, HARC, 3.NIAS)

---

613 Selection of soybeans tolerant to seed cracking under chilling temperatures by marker-assiseted selection for cold-induced seed coat discoloration

☆Yamaguchi, N. [1], M. Senda [2], Y. Yamashita [3], H. Shinada [1], M. Ishimoto [4], T. Miyoshi [1] (1.Tokachi Agr. Exp. Stn., HRO, 2.Fac. Agric. Life Sci., Hirosaki U., 3.Central Agr. Exp. Stn., HRO, 4.NIAS)

---

614 Marked increase in seed cracking rate of seed coat pigmented mutants from soybean cultivars tolerant for seed cracking under low temperature

○Senda, M. [1], M. Hiraoka [1], A. Kawato [1], M. Kawasaki [1], N. Yamaguchi [2] (1.Faculty of Agriculture and Life Sciences, Hirosaki University, 2.Hokkaido Research Organization Tokachi Agricultural Experiment Station)

---

615 Histo-chemical analysis of the seed coats of soybean cultivars tolerant and susceptible for seed cracking under low temperature

☆Hiraoka, M. [1], A. Kawato [1], N. Yamaguti [2], M. Kawasaki [1], M. Senda [1] (1.Faculty of Agriculture and LIfe Sciences, Hirosaki University, 2.Hokkaido Research Organization Tokachi Agricultural Experiment Station)

---

616 Correlation between freezing tolerance and fructan synthesis-related gene expression in synthetic hexaploid wheat

☆Yokota, H. [1], M. Iehisa [1], E. Shimosaka [2], S. Takumi [1] (1.Grad. Sch. Agr. Sci., Kobe Univ., 2.NARO Hokkaido Agr. Res. Center)

---

617 QTL mapping of grain craking resistance of rice derived from "YANXUAN203"

○Nakagomi, K. [1], O. Ideta [1], A. Shigemune [1], H. Ohta [2], R. Kaji [2], A. Fukushima [2], N. Tsuda [2] (1.NARO West.Reg.Agr.Res.Cent, 2.NARO Tohoku.Agr.Res.Cent)

---

618 The use of ’qESS11b’ with seed dormancy genes, is improvable low temperature tolerance of seedling establishment and pre-harvesting sprouting resistance

☆Yamaguchi, T. [1], Y. Iyama [1], K. Sugimoto [2], M. Omoteno [3], K. Fujita [1], K. Murata [1], T. Ebitani [1] (1.Toyama Pref. Agr. Forest. Fish. Res. Cent., 2.Natl. Inst. Agrobiological Sci., 3.Toyama pref. Takaoka Agr. Forest. Prom. Cent.)

---

701 Gene targeting as a technique for plant genome editing: State of the technology and generation of constitutively active *OsRac1*

☆Shimatani, Z. [1,2], R. Terada [2], T. Dang [1], Y. Kawano [1], H. Tsuji [1], K. Taoka [1], K. Shimamoto [1] (1.Nara Inst. Sci. Tech, 2.Meijo Univ.)

---

702 TALENs-mediated mutagenesis in rice

☆Nishizawa-Yokoi, A. [1], T. Hoshino [2], K. Sugimoto [2], D. Voytas [3], S. Toki [1,4] (1.Plant Genome Eng. Res. Unit, Nat. Inst. Agrobiol. Sci., 2.Rice Appl. Genomics Res. Unit, Nat. Inst. Agrobiol. Sci., 3.Univ. of Minnesota, 4.Kihara Inst. Biol. Res., Yokohama City Univ.)

---

703 Mechanisms of the areal expansion and its restriction of transgene silencing in soybean plants revealed by histological analysis

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

---

704 Generation of transgenic rice expressing heat shock protein genes under cool conditions

☆Sagehashi, Y., H. Yasuda, Y. Sato (NARO Hokkaido Agricultural Research Center)

---

705 Gene expression analysis of hybrid necrosis in interspecific hybrids of two wild einkorn wheat species

☆Takamatsu, K., S. Takumi (Grad. Sch. Agr. Sci., Kobe Univ.)

---

706 The rice nonautonomous transposable element mPing alters RNA processing

☆Kum, R. [1], T. Tsukiyama [1], H. Inagaki [1], T. Tanisaka [1,2], Y. Okumoto [1] (1.Graduate School of Agriculture, Kyoto University, 2.Department of Agriculture for Regional Reclamation, Kibi International University)

---

708 Construction of a linkage map based on active retrotransposon insertion polymorphism by utilizing high-throughput sequencing in sweet potato

☆Hara, T. [1], Y. Monden [1], Y. Okada [2], O. Jahana [3], A. Kobayashi [2], H. Tabuchi [2], M. Tahara [1] (1.Grad. Sch. Env. & Life Sci., Univ. Okayama, 2.KONARC, 3.OPARC)

709 Construction of gene expression networks and comparative analysis of the networks among multiple plant species

☆Kobayashi, M. [1], T. Takano [1], T. Suzuki [1], Y. Sasaki [1], S. Terashima [1], H. Matsumura [1], K. Morimoto [1], M. Kanno [1], H. Kanegae [1], K. Yokoyama [1], Y. Yoshida [1], H. Chiba [2], Y. Tada [2], A. Shimizu [3], K. Aya [4], M. Matsuoka [4], M. Watanabe [5], K. Suwabe [6], K. Yano [1] (1.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.)

---

710 Characterization of rice strain showing high lysine content by genetic modifying of lysine biosynthesis and catabolism

○Komatsu, A. [1], M. Ohtake [1], H. Hasegawa [2], F. Takaiwa [3], M. Ohshima [1], T. Terakawa [2] (1.NARO Institute of Crop Science (NICS), 2.HOKKO CHEMICAL INDUSTRY CO., LTD., 3.National Institute of Agrobiological Sciences (NIAS))

---

711 GWA mapping of specific combining ability in sorghum

☆Takanashi, H. [1,6], T. Abe [1], A. Onogi [1], H. Ohyanagi [2,6,8], M. Kobayashi [2,6], H. Toyoshima [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.CREST, JST, 7.PRESTO, JST, 8.Mitsubishi Space Software Co., Ltd.)

---

712 Characterization of gliadin proteins using aneuploid series of hexaploid wheat

Miura, M. [1], ☆K. Kawaura [1], M. Nakamura [1], T. Ikeda [2], Y. Ogihara [1] (1.KIBR, Yokohama City U., 2.WARC, NARO)

---

713 Properties of transgenic Arabidopsis harboring maize ubiquitin promoter driven rice 45S rRNA gene

Makabe, S., ☆I. Nakamura (Grad. Sch. Hort., Chiba U.)

---

714 Analysis of transformed soybeans which accumulate epitope fusion protein

○Hasegawa, H. [1], K. Takagi [2], N. Maruyama [3], M. Ishimoto [2], T. Terakawa [1] (1.Hokko Chem.Industry, 2.NIAS, 3.Grad.Sch.Agr.,Kyoto U.)

---

715 Production of transgenic male sterile rice plants using promoters of rice anther-specific expressed gene

☆Akasaka, M. [1], Y. Taniguchi [1], M. Oshima [2], K. Abe [2], Y. Tabei [2], J. Tanaka [1] (1.NARO, 2.NIAS)

---

716 Variation among rice cultivars on sugar-mediated regulation patterns of starch synthesis genes in endosperm

○Inukai, T. (Hokkaido University, Research faculty of agriculture)

Poster presentations

P001 Effect of seed size to yield potential and stability in soybean

○Yamada, T. [1], Y. Taki [1], M. Hajika [1], K. Takahashi [1], N. Oki [2], K. Hirata [3] (1.NARO/NICS, 2.NARO/KARC, 3.NARO/TARC)

P002 SogoDB: a new framework for analysis of crop and livestock genome

Solovieva, E., Y. Teramoto, T. Itoh, Y. Nagamura, ○A. Miyao (Agrogenomics.Res.Cent., NIAS)

P003 Phenotyping of rice culm length and panicle length in the system "FieldBook"

☆Maeda, M. [1], S. Okada [1], M. Suehiro [1], T. Goda [1], T. Ito [2], H. Yamamoto [2], D. Saisho [3], A. Garcia [4], M. Yamasaki [1] (1.Food Resources Education and Research Ctr., Grad. Sch. Agric. Sci., Kobe U, 2.FCR&BIO Co., Ltd., 3.IPSR, Okayama U, 4.United States Department of Agriculture-Agricultural Research Service)

P004 Characteristics extraction of leaf morphology by image processing using cross progeny between Koshihikari and Yayoimurasaki in rice

○Sugita-Konishi, S. [1], T. Higaki [2], N. Kutsuna [2] (1.Faculty of Agriculture, Kagawa University, 2.Graduate School of Frontier Sciences, The University of Tokyo)

P005 The analysis of leaf morphology by image processing using cross progeny between rice variety Koshihikari and Irat

Senzaki, Y., ☆R. Kawada, A. Kusutani, S. Sugita-Konishi (Faculty of Agriculture, Kagawa University)

P006 Automated tracking of paddy rice canopy coverage ratio from time series images by a illumination invariant crop segmentation method, DTSM

☆Guo, W., S. Ninomiya (Institute of Sustainable Agro-ecosystem Services, Graduate School of Agriculture and Life Sciences, University of Tokyo)

P007 Efficient data collection and management for breeding using mobile devices

☆Asano, K. [1], M. Okada [1,2], K. Taguchi [1], A. Itou [1], M. Hirafuji [1] (1.NARO Hokkaido Agr. Res. Cent., 2.Obihiro U. Agr. & Vet. Med.)

P008 A new rice cultivar Etsunan246 suitable for polished rice with embryo

○Tomita, K. [1], A. Usui [2], T. Shimizu [1], M. Tanoi [1], K. Sakai [1], A. Kobayashi [1], T. Hayashi [1], Y. Kogi [1], K. Watanabe [1] (1.Fukui Agr.Exp.Stn., 2.Nagoya Syokuryo Co., Ltd.)

P009 Screening of rutinosidase/bitterness-trace Tartary buckwheat and development of new-variety ‘Manten-Kirari’

○Suzuki, T. [1], T. Morishita [1], Y. Mukasa [1], T. Noda [1], S. Takigawa [1], K. Ishiguro [1], S. Yokota [1], H. Yamauchi [2] (1.NARO Hokkaido Agricultural Research Center, 2.Obihiro University of Agriculture and Veterinary Medicine)

P010 Development of a new glutinous rice cultivar with high blast resistance, good eating quality, and low rice cake hardening “Tohokumochi 199”

☆Sakai, M. [1], T. Endo [1], K. Nagano [1], K. Sasaki [2], B. Chiba [3], K. Wagatsuma [4], H. Hayasaka [5], K. Saeki [1], H. Sato [1] (1.Miyagi Pref. Furukawa Agricultural Experiment Station, 2.Miyagi Pref. Plant Protection Office, 3.Miyagi Pref. Hokubu Regional Promotion Office, 4.Miyagi Pref. Kesennuma Regional Promotion Office, 5.Miyagi Pref. Institute of Agriculture and Horticulture)

P011 Development of soft wheat line with glutenin subunits derived from club wheat

○Yoshimura, Y. [1], M. Sato [1], H. Jinno [1], T. Ikeda [2], T. Abe [3] (1.Kitami Agri. Exp. Stn. HRO, 2.Nat. Agri. Res. Cent. Western Reg., 3.Central Agri. Exp. Stn. HRO)

P012 A new soybean cultivar, Shuryu, with soybean mosaic virus resistance, good quality and high yield stability

○Shimamura, S. [1], A. Kikuchi [1], S. Kato [1], Y. Kono [2], S. Yumoto [1], Y. Takada [3], S. Shimada [4], T. Sakai [2] (1.NARO Tohoku Agricultural Research Center, 2.NARO Kyushu

Okinawa Agricultural Research Center, 3.NARO Western Region Agricultural Research Center, 4.NARO Agricultural Research Center)

P013 A view point of evolution of wild rice, *Oryza glumaepatula* based on chloroplast DNA

☆Hao, Y. [1], M. Akimoto [2], R. Ishikawa [3] (1.Grad. Sch. Agric., Iwate U., 2.Agric. Vete. Medi. Obihiro U., 3.Fac. Agri and Life Sci, Hirosaki U.)

P014 Adaptation to deep water stress in Australian perennial wild rice

☆Sotowa, M. [1], K. Ichitani [2], R. Ishikawa [1] (1.Fac. Agri and Life Sci, Hirosaki U., 2.Fac. Agri., Kagoshima U.)

P015 Morphological comparison of *Ae. tauschii* collected in North Caucasia grown in the original site and Japan

☆Akaike, R., A. Kakizaki, T. Sasanuma (Fac. Agr., Yamagata Univ.)

P016 Association mapping for salinity tolerance in barley

☆Sbei, H. [1], K. Sato [2], T. Shehzad [1], M. Harrabi [3], K. Okuno [1] (1.Graduate School of Life and Environment Sciences, University of Tsukuba, 2.Institute of Plant Science and Resources, 3.Breeding Laboratory, National Institute of Agriculture at Tunis, Mahrajene city)

P017 Seed dormancy in wild wheat: loss of dormancy associated with increase in seed size in early domestication process

○Ohta, S. [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)

P018 Genetic analysis on domestication related traits in Timopheevi wheat

☆Kudo, E., T. Abe, T. Sasanuma (Fac. Agr., Yamagata Univ.)

P019 Geographical variation of the W14/15 esterase genes in native gentians

○Takahashi, Y. [1], S. Chiba [1], T. Hikage [1,2], K. Kume [1], Y. Saitoh [1], K. Tsutsumi [1] (1.Cryobiofrontier Res. Center, Iwate Univ., 2.Hachimantai City Floricultural Res. and Dev. Center)

P020 Sequence Variation in the Internal Transcribed Spacer (ITS) Region of Mangosteen (*Garcinia mangostana* L.)

☆Matra, D., H. Higashio, E. Inoue (College of Agriculture, Ibaraki University)

P021 Screening of retrotransposon insertion sites useful for identifying purple-fleshed sweetpotato cultivars developed for anthocyanin pigment production

○Tanaka, M. [1], Y. Monden [2], A. Yamamoto [3], A. Shindo [2], M. Tahara [2], Y. Okada [1], Y. Takahata [1] (1.NARO Kyushu Okinawa Agr. Res. Ctr., 2.Grad. Sch. Env. & Life Sci., Univ. Okayama, 3.Fac. Agri., Univ. Okayama)

P022 Application of rice 44K SNP array to Japanese cultivars

○Ebana, K. [1], S. McCouch [2] (1.Natl.Inst.Agrobiol.Sci., 2.Cornel Univ.)

P023 Present Situation on the Nagoya Protocol to the CBD and on the International Treaty on Plant Genetic Resources for Food and Agriculture

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

P024 Genic variations for amylose and grain protein content in wheat

○Yamamori, M., T. Yasui (NARO Inst. of Crop Sci.)

P025 Studies on population dynamics of wild soybean (*Glycine soja*). I. Relationships between plant density and seed production

○Kaga, A. [1], K. Koja [2], N. Oki [3], K. Ohigashi [4], M. Tsuda [1], R. Ohsawa [2] (1.NIAS, 2.Tsukuba Univ., 3.NARO, KARC, 4.NIAES)

P026 Mutant induction in HIGOGIKU by heavy ion-beam irradiation

○Matsuda, Y., K. Sato, T. Murata (Sch.of Agri. Tokai U.)

P027 On the role of low nitrogen responsive transcription factor MYB101 during soybean root development

☆Murayama, S. [1], T. Anai [2], S. Akada [1] (1.Fac. Agri. Life Sci., Hirosaki Univ., 2.Fac. Agri., Saga Univ.)

P028 Heavy-ion beam-induced genomic rearrangements in *Arabidopsis* mutants

☆Hirano, T. [1], Y. Kazama [1], K. Ishii [2], S. Ohbu [2], Y. Shirakawa [2], T. Abe [1,2] (1.RIKEN Innovation Center, 2.RIKEN Nishina Center)

P029 Effects of treatment with DNA methylation inhibitor on the growth in hybrid tobacco cells (*Nicotiana suaveolens* × *N. tabacum*) overcoming lethality

☆Irie, K. [1], W. Marubashi [2], M. Kanekatsu [1], T. Yamada [1] (1.Grad. Sch. Agr., Tokyo U. Agr. Tec., 2.Fac. Agr., Meiji U.)

P030 Abnormality of hybrid seedlings in crosses of *Nicotiana stocktonii* Brandegee × *N. tabacum* L. and *N. stocktonii* × progenitors of *N. tabacum*

○Muraida, N., W. Marubashi (Sch.Agr.Meiji U.)

P031 Development of the multi-desease resistant transgenic rice II. Evaluation of agronomic traits in field trials

○Yamazaki, M., S. Goto, F. Shimoda, H. Takatsuji (Natl. Inst. of Agrobiol. Sci.)

P032 Isolation and Characterization of Tomato Mutants Associated with Drought Sensitivity

☆Pulungan, S., T. Ariizumi, H. Ezura (Grad. Sch. of Life and Envi. Sci., Univ. of Tsukuba)

P033 A comprehensive analysis of the gene expressions in callus of barley by microarray

☆Hisano, H., H. Nishimura, K. Sato (Institute of Plant Science and Resources, Okayama Univ.)

P034 The influence of alien genes for leaf rust resistance on the agronomic characteristics in wheat

○Ito, H. [1], K. Nakamura [2], S. Ikenaga [1], Y. Taniguchi [1] (1.NARO/Tohoku Agr.Res.Cent., 2.NARO/Kyusyu Okinawa Agr.Res.Cent)

P035 In Vitro Testing of Potato Resistance to Bacterial Wilt

☆Habe, I. [1], K. Obayashi [2] (1.Nagasaki Agriculture and Forestry Technical Development Center, 2.Ministry of Agriculture and Forestry, Nagasaki Prefectural Goverment)

P036 Virulence of some Bean Common mosaic virus (BCMV) strains collected in adzuki-field to the adzuki-bean cultivars bred in Kyoto Prefecture

○Shizukawa, Y. [1], M. Nishizaki [2], H. Sassa [2], A. Konishi [1], N. Furutani [1] (1.Kyoto.Pref.Inst.of Agri.Biotech., 2.Grad.Sch.Hort.,Chiba U.)

P037 Pathotype classification of clubroot pathogen isolated from rapeseed (Brassica napus L.) field and usability of resistance genes originated from B. rapa L.

○Kawasaki, M. [1], T. Ohara [2] (1.NARO/TARC, 2.NARO Inst. Veg. Tea Sci.)

P038 Improvement of *BSR1*-expressing disease resistant rice using constitutive and pathogen-inducible promoters

☆Maeda, S., S. Goto, F. Sasakura-Shimoda, H. Takatsuji, M. Mori (National Institute of Agrobiological Sciences)

P039 Identification of qRBS1, a QTL involved in resistance to bacterial seedling rot in rice

○Mizobuchi, R. [1], H. Sato [2], S. Fukuoka [1], S. Tsushima [3], T. Imbe [4], M. Yano [1] (1.NIAS, 2.NARO Kyushu Okinawa Agric. Res. Ctr., 3.NIAES, 4.NARO)

P040 Relationship between SBWMV resistance and SSR genotypes associated with SBWMV resistant QTL on chromosome 5DL in Japanese wheat cultivars

○Fujita, Y. [1], H. Kojima [1], T. Takayama [1], M. Fujita [1], C. Otobe [1], M. Seki [2], S. Oda [1] (1.NARO/NICS, 2.NARO/NARC)

P041 Resistance of mutant line, XM6 resistant to bacterial blight in rice. 2. Chromosomal location analysis of mutant gene using chromosome substitution lines (IAS)

○Taura, S. [1], H. Tsuneyoshi [2], K. Arima [2], K. Kawabe [1], K. Ichitani [2] (1.Inst. Gene Res., Kagoshima Univ., 2.Fac. Agri., Kagoshima Univ.)

P042 Map-based cloning of *Pi35*, a gene for QTL controlling blast resistance, identifies multiple functional nucleotide polymorphisms in a disease resistance gene

○Fukuoka, S. [1], S. Yamamoto [1], R. Mizobuchi [1], U. Yamanouchi [1], K. Ono [1], N. Kitazawa [1], N. Yasuda [2], Y. Fujita [2,3], N. Thuy T. T. [2,4], S. Koizumi [2,5], K. Sugimoto [1], T. Matsumoto [1,6], M. Yano [1] (1.Natl. Inst. Agrobiol. Sci., 2.NARO Agric. Res. Cent., 3.Coll. Bioresource Sci., Nihon U., 4.Dep. Sci., Tech. Env., MARD, Vietanm, 5.Tsukuba Int'l. Cent., JICA, 6.Agric. Forest. Fish. Res. Council, MAFF)

P043 Expression profiles of alternative oxidase genes from rice and its pathogen in the resistance to rice blast fungus infection

○Iwai, T. [1], A. Shijyou [1], I. Mituhara [2], Y. Ohashi [2], S. Seo [2] (1.Miyagi Univ., 2.National Institute of Agrobiological Sciences)

P044 Research topics in breeding of sweetpotato lines with resistance to root-knot namatode and soil rot

○Kuranouchi, T. [1], A. Takada [1], Y. Momota [2], Y. Nakamura [1], S. Tamiya [3], M. Nakatani [4], T. Kumagai [1], K. Katayama [1] (1.NARO Institute of Crop Science, 2.Formerly NARO Agricultural Research Center, 3.NARO Hokkaido Agricultural Research Center, 4.Ministry of Agriculture, Forestry and Fisheries of Japan)

P045 Genetic analysis of resistance to soybean cyst nematode in tousan soybean lines

○Yamada, N. [1], T. Sayama [2], H. Sasama [2], M. Ishimoto [2], M. Hajika [3] (1.Nagano vegetable and ornamental crops exp.stn., 2.NIAS, 3.NARO/NICS)

P046 Relationship between concentrations of non-structural carbohydrate (NSC) and growth in barley cultivars

○Seki, M. [1], T. Nagamine [1], S. Ikenaga [2], M. Furuhata [1] (1.Hokuriku Research Center, NARO Agricultural Research Center, 2.NARO Tohoku Agricultural Research Center)

P047 Genetic variation for tolerance of iron toxicity using agar nutrient solution in rice 3. Effects on the variation of the tolerance by high iron concentration

☆Tomita, A. [1,2], J. Pariasca-Tanaka [2], M. Wissuwa [2], Y. Fukuta [2] (1.University of Tsukuba, 2.JIRCAS)

P048 Analysis of cadmium transport activity of chimeric molecules between OsHMA3 and other plant HMAs

☆Kumagai, S. [1], N. Satoh-Nagasawa [2], H. Takahashi [2], K. Sakurai [2], A. Watanabe [2], H. Akagi [2] (1.Grad. Sch. Biores. Sci. Akita Pref. Univ., 2.Akita Pref. Univ)

P049 Involvement of gentian W14/15 genes in winter hardiness of overwinter buds

○Yamagishi, N. [1], T. Hikage [1,2], Y. Saitoh [1], N. Yoshikawa [1], K. Tsutsumi [1] (1.Fac. Agr., Iwate Univ., 2.Hachimantai City Floricultural Res. and Dev. Center)

P050 Adaptation responses of C4 photosynthesis and Na+/H+ antiporters to NaCl stress in Miscanthus sinensis Anderss

○Sun, Q. [1], T. Takano [1], T. Yamada [2] (1.ANESC U. TOKYO, 2.Field Science Center for Northern Biosphere, Hokkaido University)

P051 Analysis of radial oxygen loss from wheat roots under stagnant deoxygenated conditions

☆Nishiuchi, S. [1], K. Watanabe [1], F. Abe [2], M. Nakazono [1] (1.Grad. Sch. Bioagri. Sci., Nagoya Univ., 2.NARO Inst. of Crop Sci.)

P052 Study on effects of growing temperature on seed germination at low temperature of rice varieties in Hokkaido, Japan for analysis of seed wintering ability

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

P053 Evaluation of cold tolerance at the booting stage of native rice cultivars in Hokkaido and agronomic traits of their progenies crossed with "Hoshinoyume"

○Matsuba, S., S. Hayashi, K. Okazaki, J. Ushiki (NARO Hokkaido Agric. Res. Ctr.)

P054 Stimulation of ethylene biosynthesis by VLCFAs during inducible aerenchyma formation in rice root

☆Yamauchi, T. [1], K. Shiono [2], I. Takamure [3], H. Mori [1], N. Tsutsumi [4], K. Kato [5], M. Nakazono [1] (1.Grad.Sch.Bioagr.Sci., Nagoya U., 2.Department of Bioscience, Fukui Pref. U., 3.Grad.Sch.Agr., Hokkaido U., 4.Grad.Sch.Agric.Life Sci., U. Tokyo, 5.Grad.Sch.Bioagr.Sci., Nagoya U.)

P055 Effects of salt stress on cold tolerance at booting stage in the next generation of rice

☆Komoto, T. [1], A. Abe [2], A. Hukushima [3], R. Shimakage [1], R. Satou [1], H. Shimoto [1], S. Yokoi [1] (1.iwate univ., 2.IBRC, 3.NARO/TARC)

P056 Exploring QTLs for high temperature tolerance during ripening by using Introgression lines of *O. rufipogon* in the background of rice cultivar ‘Itadaki’

○Hirabayashi, H., Y. Takemoto-Kuno, Y. Takeuchi, T. Ishii (NARO, Nati. Inst. Crop Sci.)

P057 Assessment and QTL analysis of tolerance to rice karnel cracking with two methods, hygroscopic treatment and late sampling

☆Hayashi, T., A. Kobayashi, K. Tomita (Fukui Agri. Exp. Stn.)

P058 Relationship between Water Contents of Rice Seeds and their Tolerance to Heat Stress under Treatment Hot Water Disinfection

☆Ohishi, S. [1], K. Murata [2], K. Fujita [2], K. Nakaoka [3], T. Yamada [1], M. Kanekatsu [1] (1.Fac. Agr., Tokyo Univ. Agr. And Tech., 2.Toyama Pref. Agr. Fores. Fish. Res.Cent., 3.SATAKE Co. Ltd.)

P059 The effects of silicon on the development of root cell wall in rice

☆Sugiyama, F., T. Takano (ANESC, U.Tokyo)

P060 The effect of QTLs and accumulated QTLs affecting coleoptile growth and survival of seedlings in rice under low temperature and low redox conditions

○Matsuyama, H. [1], T. Yamaguchi [2], Y. Ohshita [1], H. Ogiwara [1] (1.NARO Agricultural Research Center, 2.Toyama Prefectural Agricultural, Forestry & Fisheries Research Center)

P061 QTL analysis for waterlogging tolerance derived from ‘Shokukei-32’

☆Yamashita, Y., F. Kousaka (Central Agr. Exp. Stn., HRO)

P062 Characterization of wheat myo-inositol monophosphatase gene, TaIMP

○Shimosaka, E. (NARO Hokkaido Agricultural Research Center)

P063 Molecular analysis of the novel *ago1* allele that enhances the cadmium tolerance of *Arabidopsis*

☆Nakamura, S., H. Shimizu, N. Satoh, K. Sakurai, H. Takahashi, A. Watanabe, H. Akagi (Akita Pref.Univ.)

P064 The lowering degree of rice quality under high temperature in the ripening period is different between pot and field cultivation

☆Goto, H. [1], T. Sano [2], T. Homma [1], H. Saito [1], Y. Abe [1], M. Chuba [1] (1.Rice Breeding and Crop Sci. Exp. Stn., Yamagata Integrated Agr. Res. Cent., 2.Shonai Area General

Branch Administration Office, Yamagata Prefectural Government)

P065 Effect on wheat grain color by pyramiding of Tamyb10

☆Matsunaka, H. [1], E. Himi [2], M. Fujita [3], K. Nakamura [1], M. Okami [1] (1.NARO/KARC, 2.Inst. Plant Sci. Res., Okayama Univ., 3.NRAO/NICS)

P066 Dispersion in Brix of steamed storage roots in sweetpotato cultivars harvested early

○Takada, A., T. Kuranouchi, Y. Nakamura, K. Katayama (NARO Inst. of Crop Sci.)

P067 Effect of allelic varitation in *Glu-B3* on bread-making qualities of near isogenic wheat lines

○Ito, M. [1], W. Maruyama-Funatsuki [2], T. Ikeda [2], Z. Nishio [3], K. Nagasawa [1], T. Tabiki [1] (1.NARO Hokkaido Agricultural Research Center, 2.NARO Western Region Agricultural Research Center, 3.Ministry of Agriculture, Forestry and Fisheries)

P068 Characterization of water-soluble beta-glucan riched barley line during grain germination

○Ichinose, Y., S. Kaneko, K. Komae (NARO Institute of Crop Science)

P069 Mapping a gene inducing fractured starch in barley

○Saito, M. [1], M. Taira [2], E. Aoki [2], T. Yanagisawa [2], G. Ishikawa [1], T. Nakamura [1] (1.NARO/TARC, 2.NARO/NICS)

P070 Accumulation of anthocyanin in the potato tuber by light irradiation

☆Ozaki, H. [1], S. Matsuda [1], K. Ishiguro [2], S. Tamiya [2], M. Mori [1,2], H. Miura [1] (1.Obihiro U. Agr. & Vet. Med., 2.NARO Hokkaido Agr. Res. Cent.)

P071 Differences in ethylene sensitivity detected in morning glory (*Ipomoea nil*) petals between two cultivars with a different flower life span

☆Ishii, Y. [1], T. Tanaka [1], Y. Shinozaki [2], M. Kanekatsu [1], T. Yamada [1] (1.Fac. Agr., Tokyo U. Agr. Tec., 2.Fac. of Life Env. Sci., Univ. of Tsukuba)

P072 Analysis for a novel QTL of culm controlling lodging resistance in rice

○Hobo, T. [1], R. Ishihara [2], Y. Fujishiro [2], Y. Takeda [2], T. Kunishima [2], S. Ota [2], H. Kitano [1] (1.Biosci. Biotec. Ctr., Nagoya U., 2.Grad. Sch. Bioagr. Sci., Nagoya U.)

P073 Evaluation of rice chromosome segment substitution lines for QTL associated with leaf temperature by pot experiment

○Fukuda, A. [1], K. Kondo [1], T. Tanabata [2], S. Adachi [1], M. Yano [1], T. Yamamoto [1] (1.NIAS, 2.RIKEN CSRS)

P074 Notable different frequency of loss-of-functional alleles in *MsiHd1* locus between Japanese and Chinese populations in *Miscanthus sinensis*

☆Nagano, H. [1], N. Uchino [1], J. Peng [2], E. Sacks [3], T. Yamada [1] (1.Field Science Center for Northern Biosphere, Hokkaido University, 2.Huazhong Agricultural University, Wuhan, Hubei, China, 3.Department of Crop Science, University of Illinois, USA)

P075 Establishment of heterosis at early developmental stage in Arabidopsis thaliana is independent from Pol4 activity

Kawanabe, T. [1], N. Saeki [1], T. Sasaki [2], H. Abe [1], ○R. Fujimoto [3] (1.Graduate School of Science and Technology, 2.Academia Sinica, 3.Graduate School of Agricultural Science)

P076 Relationship of cross-sectional area of vascular bundle and grain number in panicle of rice

☆Ota, S. [1], T. Hobo [2], M. Ikeda [2], H. Kitano [2] (1.Grad. Sch. Bioagr. Sci., Nagoya U., 2.Biosci. Biotec. Ctr., Nagoya U.)

P077 The judgment method of the optimum plucking time for high anthocyanin tea cultivar "Sunrouge"

○Nesumi, A. (National Insutitute of Vegetable and Tea Science, NARO)

P078 Variety of grain qualities of waxy hull-less barley "Kirari-mochi" in some production districts

○Yoshioka, T., A. Takahashi (NARO/WARC)

P079 Shotgun proteomic analysis of embryonic proteins synthesized from long-lived mRNAs during the initial phase of seed germination in rice

☆Sano, N. [1,2], Y. Takebayashi [3], H. Nakagami [3], T. Yamada [1], M. Kanekatsu [1] (1.United Grad. Sch. Agri., Tokyo U. Agri. Tec., 2.JSPS Research Fellow, 3.RIKEN CSRS)

P080 Liberated branch elongation in *noah* plants, the *Arabidopsis* mutant totally freed from apical dominance

○Watanabe, A. [1], Y. Domeki [1], H. Kasahara [2], Y. Kamiya [2], N. Satoh [1], H. Takahashi [1], K. Sakurai [1], H. Akagi [1] (1.Fac. Biological Resource Sci., Akita Pref. Univ., 2.CSRS, RIKEN)

P081 Isolation and seed size analysis of large kernel rice mutants

○Nagasawa, N., K. Kozawa, H. Tsuyuzaki (Akita prefectural university)

P082 Amyloplast-localized SSG4 protein controls the size of starch grains in rice endosperm

☆Matsushima, R. [1], M. Maekawa [1], M. Kusano [2], H. Kondo [1], N. Fujita [3], W. Sakamoto [1] (1.Institute of Plant Science and Resources, Okayama University, 2.RIKEN Center for Sustainable Resource Science, 3.Department of Biological Production, Akita Prefectural University)

P084 Developmental process of radicle during early embryogenesis in rice

☆Kitomi, Y., K. Hibara, Y. Nagato, J. Itoh (Grad. Sch. Agric. Life Sci., U. Tokyo)

P085 Expression and structural analyses of genes controlling compound leaf development in Trifolium repens L.

☆Segawa, K., K. Tsutsumi, Y. Saito (Cryobiofrontier Research Center, Univ. Iwate)

P086 Analysis of promoter sequences and expression patterns of *Wheat PISTILLATA-2* (*WPI-2*) homoeologous genes in polyploid wheat

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

P087 QTL mapping of flowering time in morning glory

☆Katsuyama, H. [1], S. Okuno [1], T. Itou [1], E. Nitasaka [2], A. Hoshino [3], S. Iida [4], M. Ono [5], T. Kuboyama [1], N. Watanabe [1] (1.Col.Agr.,Ibaraki U., 2.Grad.Sch.Sci.,Kyushu Univ, 3.Natl.Inst.Basic Biol., 4.Grad.Sch.Nutri.and Env.Sci.& Grad.Sch.Pharm.Sci.,U.Shizuoka, 5.Grad.Life & Env.Sci.,U.Tsukuba)

P088 Identification of the new allele of rice flowering promotion gene *Ehd2* by MutMap+

☆Yoshitsu, Y. [1], H. Takagi [1,2], S. Natsume [1,2], H. Yaegashi [1], A. Abe [2], R. Terauchi [1], Y. Takahata [1], S. Yokoi [1] (1.Fac. Agri., Iwate University, 2.Iwate Biotechnology Research Center)

P089 Arabidopsis ER-localized major facilitator superfamily transporter is involved in seed maturation

○Li, X., T. Takano (Asian Natural Environmental Science Center)

P090 UV-B-induced anthocyanin accumulation in the fruit skin of non-red apple

○Bai, S. [1], T. Saito [1,2], C. Honda [1], A. Ito [1], I. Nakajima [1], T. Imai [1], T. Moriguchi [1,2] (1.Inst. Fruit Tree Sci., NARO, 2.Grad. Sch. Life & Environ. Sci., Univ. Tsukuba)

P091 Light control of plant regeneration and endogenous hormone contents in calli derived from barley immature embryos

○Rikiishi, K., T. Matsuura, I. Mori, M. Maekawa (Inst. Plant Sci. Res., Okayama U.)

P092 Target screening of rice MEL2 which requires for the entering of meiosis

☆Miyazaki, S. [1,2], T. Asano [3], K. Nonomura [1,2] (1.Exp. farm, Natl. Inst. Genet., 2.Dep. Life Sci., Grad. U. Adv. Study/SOKENDAI, 3.Advanced Science Research Center, Kanazawa U)

P093 Dynamic localization of Argonaute protein MEL1 is required for the installation of synaptonemal complex in rice meiocytes

☆Liu, H. [1], K. Nonomura [1,2] (1.Exp. Farm, Natl. Inst. Genet., 2.Dep. Life Sci., Grad. U. Adv. Study/SOKENDAI)

P094 Nucleotide sequence diversity of sugar beet *Rf1* in *Beta vulgaris* genetic resources

Katsuyama, T., H. Kagami, ○T. Kubo (Research Faculty of Agriculture, Hokkaido University)

P095 Is *Rf2*-mediated fertility restoration of cytoplasmic male sterile sugar beet associated with PPR gene?

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

P096 Analysis of polyembryoney in rapeseed (*Brassica napus*)

Okumura, T., S. Yokoi, ○Y. Takahata (Fac. Agri., Iwate Uinv.)

P097 Narrowing down the sex determining genes in Silene latifolia by using Kawamoto-LMD method and Y-chromosome gene expression array

☆Kazama, Y. [1], K. Ishii [2], W. Aonuma [3], H. Kawamoto [3], S. Kawano [3], T. Abe [1,2] (1.RIKEN Innovation Cent, 2.RIKEN Nishina Cent, 3.Dep. Integ. Biol. Sci. Grad. Sch. Front. Sci. U. Tokyo)

P098 SVP-like flowering-related genes in Gentiana: structure and expression

○Bidadi, H. [1,2], K. Kume [1], K. Wakameda [1], T. Hikage [2], Y. Saitoh [1], K. Tsutsumi [1] (1.Cryobiofrontier Res. Center, Iwate Univ., 2.Hachimantai City Floricultural Res. and Dev. Center)

P099 Effect of miR164b on the development of male reproductive organ in *Brachypodium distachyon*

☆Ohshima, R. [1], S. Maeda [1], S. Sakazono [1], H. Masuko-Suzuki [1], T. Fujioka [1,2], G. Suzuki [3], K. Suwabe [2], M. Watanabe [1] (1.Grad. Sch. Life Sci., Tohoku U., 2.Grad. Sch. Biores., Mie U., 3.Div. Nat. Sci., Osaka Kyoiku U.)

P100 Exploration of RAD-seq tags specific to leaf margin phenotype of pineapple (*Ananas comosus*)

○Urasaki, N. [1], M. Shoda [2], S. Goeku [1], R. Kaneshima [1], K. Tarora [1], M. Takeuchi [2], C. Moromizato [2], K. Yonamine [2], F. Hosaka [3], K. Nashima [3], M. Kunihisa [3], S. Terakami [3], C. Nishitani [3], H. Matsumura [4], T. Yamamoto [3] (1.Okinawa Pref. Agric. Res. Ctr., 2.Okinawa Pref. Agric. Res. Ctr. Nago Branch, 3.NIFTS, NARO, 4.Gene Res. Ctr., Shinshu Univ.)

P101 Genome sequencing of mountain papaya and exploration of region flanking PRSV resistance marker Opk4_1

○Tarora, K. [1,2], S. Goeku [1], T. Takamine [1], A. Shudo [1], R. Kaneshinma [1], S. Kawano [1], K. Yasuda [1], H. Matsumura [2], N. Urasaki [1] (1.Okinawa Pref. Agric. Res. Ctr., 2.Gene Res. Ctr., Shinshu Univ.)

P102 Detection of genome-wide SNPs/InDels between two rice cultivars, Yukihikari and Jyouiku462

Takano, S. [1], N. Kinoshita [1], T. Sato [2], ○K. Kato [1] (1.Obihiro Univ. Agr. & Vet. Med., 2.H.R.O. Kamikawa Agr. Exp. Sta.)

P103 Comparative analysis of genes on Papaya Y^h and Y chromosomes

☆Ueno, H. [1], N. Urasaki [2], K. Yoshida [3], S. Natsume [3], K. Tarora [2], A. Shudo [2], R. Terauchi [3], H. Matsumura [4] (1.Dep. Biosci. Tex. Tech., Shinshu Univ, 2.Okinawa Pref. Agric. Res. Ctr, 3.Iwate Biotech. Res. Center, 4.Gene Res. Ctr., Shinshu Univ)

P104 de novo Assembly of highly heterozygous genome of Citrus unshiu Marc.

☆Tanizawa, Y. [1], T. Mochizuki [1], H. Nagasaki [1], E. Kaminuma [1], A. Toyoda [2], F. Asao [2], N. Kurata [3], Y. Nakamura [1], T. Shimizu [4] (1.Genome Info., Natl. Inst. of Genet., 2.Comparative Genomics., Natl. Inst. Genet., 3.Plant Genetics., Natl. Inst. Genet., 4.NARO, Natl. Inst. of Fruit Tree Sci.)

P105 Genetic variation and QTL detection of root related traits in upland NERICA varieties

☆Obara, M., Y. Fukuta, S. Yanagihara (JIRCAS)

P106 QTL for Fusarium Head Bright resistance of Sumai 3 on the Chromosome 6B

○Suzuki, T. [1], N. Ashikaga [2], H. Jinno [2] (1.Hokkaido Research Organization, Agricultural Research Department, Chuo Agricultural Experiment Station, 2.Hokkaido Research Organization, Agricultural Research Department, Kitami Agricultural Experiment Station)

P107 Genome-wide association studies of complex agronomic trait 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.Saga Univ.)

P108 Quantitative trait locus analysis of an F_2 population derived from self-pollinated high-biomass F_1 hybrid (Tentaka) of sorghum

☆Yamaguchi, M. [1], Y. Ito [2], J. Yonemaru [4], S. Nakamura-Araki [2], K. Shinohara-Ohmae [2], M. Matsuoka [2], H. Kitano [2], S. Kasuga [3], T. Sazuka [2] (1.Fac. of Agr., Nagoya Univ.,

2.Biosci. and Biotech. Center, Nagoya Univ., 3.AFC, Fac. of Agri., Shinshu Univ., 4.National Institute of Agrobiological Sciences, 2-1-2 Kannondai, Tsukuba, Ibaraki 305-8602, Japan)

P109 Exploration of candidate factors related to trancription of UDP-glucose: limonoid glucosyltransferase gene (LGT) by eQTL analysis

○Sugiyama, A. [1], K. Harada [2], T. Shimada [3], H. Fujii [3], T. Endo [3], M. Kita [3], T. Yoshioka [3], Y. Ikoma [3], M. Omura [2] (1.Grad. Sch. Med., Univ. Kyoto, 2.Grad. Sch. Agr., Univ. Shizuoka, 3.Natl. Inst. Fruit Tree Sci.)

P110 Linkage mapping of hairy leaf gene Hl1 and photosynthetic characteristics of the hairy leaf line

☆Hamaoka, N. [1], H. Yasui [1], T. Araki [2], O. Ueno [1], A. Yoshimura [1] (1.Fac. Agr., Grad. Sch., Kyushu Univ., 2.Fac. Agr., Ehime Univ.)

P111 Genetic mapping of the liguleless mutant gene in *Aegilops tauschii* and development of synthetic wheats

○Amagai, Y., N. Watanabe, T. Kuboyama (Col. Agri., Univ. Ibaraki)

P112 Mapping of gynoecious locus in bitter melon (*Momordica charantia*) using RAD-seq analysis

☆Fukushima, M. [1], N. Taniai [2], N. Miyagi [2], K. Tarora [2], A. Shudo [2], N. Urasaki [2], H. Matsumura [3] (1.Grad. Sch. Sci. Tech., Univ. Shinshu, 2.Okinawa Pref. Agric. Res. Ctr., 3.Gene Res.Ctr., Univ. Shinshu)

P113 Screening DNA markers for purity test of inbred lines of *Brassica oleracea* and evaluation of their versatility

☆Kawamura, K. [1], M. Genda [2], K. Sasaki [2], M. Shimizu [1], N. Saeki [1], K. Okazaki [1], R. Fujimoto [3], T. Kawanabe [1] (1.Grad. Sch. Sci. Tech., Niigata Univ., 2.Fac. Agr., Niigata Univ., 3.Grad. Sch. Agr. Sci., Kobe Univ.)

P114 Mapping of resistance to southern bean mosaic virus in soybean-1-

○Saruta, M., Y. Takada (NARO/WARC)

P115 Genomic prediction of breeding values in *Cryptomeria japonica* progeny test plantations

☆Uchiyama, K. [1], H. Iwata [2], M. Kimura [1], T. Ujino-Ihara [1], S. Ueno [1], Y. Moriguchi [3], M. Tsubomura [4], K. Mishima [4], T. Iki [4], M. Takahashi [4], A. Watanabe [4,5], N. Futamura [1], K. Shinohara [1], Y. Tsumura [1] (1.FFPRI, 2.Grad. Sch. Agr. Life Sci., Univ. of Tokyo, 3.Grad. Sch. Sci. Tech., Niigata Univ., 4.FTBC, FFPRI, 5.Grad. Sch. Agr., Kyushu Univ.)

P116 Development of a pathogen-inducible promoter and a transcription factor

○Morino, K., M. Kimizu, K. Saito (NARO)

P117 Expression analysis of biosynthesis related genes of salicylic acid in rice treated with probenazole

○Komaba, M. [1], A. Furutani [1], k. Umemura [2], K. Yamamoto [2], M. Mitomi [2], K. Uomoto [2], H. Anzai [1] (1.Gene Res. Ctr., ibaraki Univ., 2.Meiji Seika pharma Co., Ltd., Japan)

P118 Analysis of phosphoproteins in rice seeds using Phos-tag Two-dimensional electrophoresis

☆Kobayashi, M., H. Ishikawa, T. Yamada, M. Kanekatsu (Grad. Sch. Agr., Tokyo U. Agr. Tec.)

P119 Proteomic identification of the new endocytosis-regulating molecules in plants

☆Irie, A. [1], M. Fujimoto [2], J. Huang [2], M. Fujiwara [3], Y. Fukao [3], S. Arimura [2], N. Tsutsumi [2] (1.Fac. of Agric., U. Tokyo, 2.Grad. Sch. Agric. Life. Sci., U. Tokyo, 3.Plant Global Educational Project, NAIST)

P120 Development of RNAi-mediated virus disease-resistant lines from a forage rice cultivar, Tachiaoba

○Saito, K. [1], H. Aoki [1], T. Uehara-Ichiki [2], H. Saika [2], S. Toki [2], T. Sasaya [3], O. Yatou [1] (1.NARO Agric. Res. Ctr., 2.Natl. Inst. Agrobiol. Sci., 3.NARO Kyushu Okinawa Agric. Res. Ctr.)

P121 Production of polyhydroxy butylate (PHB) in transgenic rice plants

Yamasaki, T. [1], S. Hara [1], A. Tamaki [1], A. Kawamura [1], T. Sasaki [3], H. Kusano [1], K. Matsumoto [2], ☆H. Shimada [1] (1.Department of Biological Science and Technology, Tokyo University of Science, 2.Division of Biotechnology and Macromolecular Chemistry, Faculty

of Engineering, Hokkaido University, 3.RIKEN Biomass Engineering Program, RIKEN Institute)

P122 Comprehensive analysis of expressed genes between common wheat and its ancestors by the RNA-seq

☆Kajita, Y. [1], K. Mishina [1], Y. Kamiya [1], K. Kawaura [1], S. Sakuma [1], H. Tarui [2], N. Suzuki [2], M. Tagami [2], J. Kawai [2], Y. Ogihara [1] (1.KIBR,Yokohama City U., 2.RIKEN OSC)

P123 RNA sequencing-mediated transcriptome analysis of rice plants in endoplasmic reticulum stress conditions

☆Wakasa, Y., Y. Oono, F. Takaiwa (NIAS)

P124 Comparative transcriptome analysis of morning glory (*Ipomoea nil*) petals treated with autophagy inhibitor

☆Ogura, N. [1], H. Ono [1], Y. Shinozaki [2], M. Kanekatsu [1], T. Yamada [1] (1.Fac. Agr., Tokyo U. Agr. Tec., 2.Fac. of Life Env. Sci., Univ. of Tsukuba)

P125 Efficient transformation method for wheat calli mediated with *Agrobacterium*

☆Kamiya, H. [1], Y. Ishida [2], M. Isshiki [1] (1.KIBR. Yokohama City U., 2.Plant innovation center, Japan tobacco Inc.)

P126 Novel epigenome editing in potato

☆Kasai, A., H. Hojo, T. Harada (Fac. Agric.Life Sci., Hirosaki Univ.)
