

## 20 March (9:00-11:30) Oral Presentation Program

| Chair: Yuki Monden<br>(Okayama Univ.) |   | Chair: Hiroshi Hisano<br>(Okayama Univ.)  |   | Chair: Mai Minamikawa<br>(Chiba Univ.)  |  | Chair: Etsuko Araki<br>(NARO) |  | Chair: Nobuhiro Suzuki<br>(Sophia Univ.) |  |
|---------------------------------------|---|---|---|---|--|-------------------------------|--|--|--|
| 9:00                                  | 101<br>Heading gene analysis for breeding early-heading rice lines in Saitama prefecture<br><br>☆Nakamura, Y., H. Koyama (Saitama Agricultural Technology Research Center)  | 201<br>Prototype of Generative AI to Plant Breeding Data.<br><br>○Kajiyama-Kanegae, H. I., 2. J. Yonemaru (1.Res. Cent. Agric. Info. Tech., NARO, 2.Inst. Crop Sci., NARO)  | 301<br>Estimation of tolerance to heat-induced quality decline of rice during ripening in a uniform temperature<br><br>☆Nakaoka, F. I., 2. A. Kobayashi, G. Chaya, 1. S. Watanabe, Y. Morozumi, H. Nakagawa, 3. M. Yamasaki (1.Fuku Agriculture Experimental Station, 2.Niigata University, 3.Research Center for Agricultural Information Technology, NARO)                    | 401<br>Analysis of starch structure in different organs of rice with loss of starch synthase (SS) IIb function generated using CRISPR-Cas9 genome editing.<br><br>○Miura, S. I., 2. H. Odajima, S. Hirata, N. Crofts, 4. R. Morita, 3. N. Fujita, 1, 2 (1.Facilt. Biores., Akita Pref. Univ., 2.Starch Technologies Co., LTD, 3.The University of Tokyo, 4.National Institute of Technology, Akita College) | 501<br>Genetic analysis of resistance to green rice leafhopper in the backcross progenies with the genetic background of African cultivated rice, <i>Oryza glaberrima</i><br><br>☆Hironaka, R. I., T. Thein, I., Y. Yamagata, 2. H. Yasui (1.Grad. Sch. Bioresour. Environ. Sci., Kyushu Univ., 2.Fac. Agr., Grad. Sch., Kyushu Univ.) | 9:00                          |  |  |  |
| 9:15                                  | 102<br>Comparative analysis of SNPs detected by three genome-wide genotyping technologies, ddRAD-Seq, GRAS-Di, and MiG-Seq<br><br>○Shirasawa, K. I., K. Mishima, 2. T. Iki, 2. T. Hirao (1.Kazusa DNA Res. Inst., 2.FFPRI FTBC TRBO, 3.FFPRI FTBC)  | 202<br>The Activation of Transposons Under Environmental Stress and Their Potential Applications in Breeding<br><br>○Ito, H. (Grad. Sch. Sci., Univ. Hokkaido)  | 302<br>Constructing prediction models for wheat yield by employing chronological transcriptome data and mining of yield-predictive genetic components<br><br>☆Kojima, H. I., S. Yoshioka, 1. S. Kimura, 2. S. Kinoshita, 2. K. Kuroki, 3. H. Iwata, 2. S. Nasuda (1.Grad. Sch. Agric., Kyoto Univ., 2.Grad. Sch. Agric. Life Sci., Univ. Tokyo, 3.Grad. Sch. Sci., Univ. Tokyo) | 402<br>Isoflavone content in seeds of soybean introduced with Soybean dwarf virus resistance gene Rsdv1<br><br>☆Takahashi, H. I., H. Maeda, 2. N. Yamaguchi (1.Kamikawa Agr. Exp. Sta., HRO, 2.Hirosaki University, 3.Central Agr. Exp. Sta., HRO)  | 502<br>Functional analysis of quantitative blast resistance gene Pid3-II in rice<br><br>☆Abe, K., T. Ishihara, T. Inukai (Grad. Sch. Agric., Univ. Hokkaido)   | 9:15                          |  |  |  |
| 9:30                                  | 103<br>A novel Fusarium head blight resistance allele derived from Japanese landrace at 2DL located QTL is more valuable than that derived from Sumai 3<br><br>○Ohnishi, S. I., K. Horikawa, 2. K. Morita, 1. N. Yamaguchi, 2. C. Souma, 2. Y. Sato, 1. T. Sonoda (1.HRO Kitami AES, 2.HRO Central AES)   | 203<br><br><br><br><b>Chair: Ayumi Agata<br/>(Nagoya Univ.)</b>   | 303<br>Genomic prediction of stalk lodging resistance and the associated intermediate phenotypes in maize<br><br>○Morota, G. I., C. Machado e Silva, 2. B. Kunduru, 3. C. McMahan, 3. D. Robertson, 4. R. Sekhon (1.Grad. Sch. Agr. Life Sci. Univ. Tokyo, 2.Federal University of Viçosa, 3.Clemson University, 4.University of Idaho)   | 403<br>Screening and evaluation of high protein content lines from a soybean mutant population.<br><br>○Ashikaga, N. I., H. Igarashi, 1. S. Kobayashi, 2. H. Takahashi, 3. K. Sato, 4. Y. Hosokawa, 2. N. Yamaguchi (1.Tokachi Agri. Exp. Stn., HRO, 2.Central Agric. Exp. Stn., HRO, 3.Kamikawa Agri. Exp. Stn., HRO, 4.Kitami Agri. Exp. Stn., HRO)   | 503<br>Fine Mapping and Identification of a Locus Conferring Resistance to Cucumber Mosaic Virus in Spinach<br><br>☆Wu, Y. I., H. Hirakawa, 2. C. Masuta, 3. Y. Onodera (1.Grad. Sch. Agr., Hokkaido Univ., 2.Res. Fac. Agr., Kyushu Univ., 3.Res. Fac. Agr., Hokkaido Univ.)  | 9:30                          |  |  |  |
| 9:45                                  | 104<br>TE insertion and constitutive expression of VmSOS1 in salt-tolerant species <i>Vigna marina</i><br><br>○Naito, K. I., Y. Noda, 2. F. Wang, 1. C. Muto, 1. H. Ohashi, 3. H. Sakai, 4. N. Suzuki, 2. Y. Yin, 2. Y. Miyoshi, 2. K. Enomoto, 2. N. Kawachi, 2. J. Furukawa (1.Res. Cntr. Genet. Resour., NARO, 2.Takasaki Inst. Adv. Quant. Sci., QST, 3.Grad. Sch. Adv. Sci., Univ. Tokyo, 4.Res. Centr. Adv. Anal., NARO, 5.Grad. Sch. Life. Environ. Sci., Univ. Tsukuba) | 204<br>Narrowing down the CAD, causal gene of orange lemma mutation in barley<br><br>☆Kako, R. I., M. Morita, 2. N. Yamaji, 2. H. Hisano, 2. K. Sato, 1, 2 (1.Grad. Sch. Agr., Setsunan Univ., 2.IPSR, Okayama Univ.) | 304<br>Estimation of known gene effects via analysis of historical rice field experiment data<br><br>☆Chigira, K. I., E. Yamamoto, 1. A. Goto, 1. T. Ikegaya, 1. N. Suzuki, 1. Y. Kawahara, 2. M. Yamasaki, 3. K. Sugimoto, 1. K. Horii (1.Institute of Crop Science, NARO, 2.Research Center for Advanced Analysis, NARO, 3.Faculty of Agriculture, Niigata University)        | 404<br>Genotype-by-environment interaction (GEI) and yield stability of soybean genotypes in Hokkaido<br><br>☆Igarashi, H. I., N. Yamaguchi (1.Tokachi Agr. Exp. Stn., HRO, 2.Central Agr. Exp. Stn., HRO)  | 504<br>Dominant genes encoding resistance to soil-borne wheat mosaic virus in barley ( <i>Hordeum vulgare</i> L.)<br><br>○Komatsuda, T. (Shandong Academy of Agricultural Sciences (SAAS) Crop Research Institute)   | 9:45                          |  |  |  |

| Chair: Masayoshi Teraishi<br>(Kyoto Univ.) |  | Chair: Gota Morota<br>(Univ. Tokyo)  |  | Chair: Tsuyoshi Inukai<br>(Hokkaidou Univ.)  |  |
|--|--|--|--|--|--|
| 10:00                                      | 105<br>Whole genome resequencing analysis of 96 diverse adzuki varieties: A step toward genome breeding in adzuki<br><br>☆Adegawa, S.1, N. Yamaguchi1, C. Souma1, K. Shirasawa2 (1.Central Agr. Exp. Stn., HRO, 2.Kazusa DNA Research Institute)   | 205<br>Characterization of an A-to-G base editor in the Arabidopsis chloroplast genome<br><br>☆Nakazato, I., Y. Tamura, R. Masuda, N. Tsutsumi, S. Arimura (Grad. Sch. of Agr. and Life Sci., Univ. of Tokyo)  | 305<br>Development of a predicting model for the quality of brown rice based on genomic information and the temperature during the ripening period.<br><br>☆Suzuki, N.1, S. Taniguchi2, T. Hayashi2, K. Matsushita1, H. Kanegae1,2, H. Nakagawa2, A. Goto1,2 (1.Inst. Crop Sci., NARO, 2.Res. Ctr. Agric. Info. Tech., NARO)   | 405<br>Genotype by environment interactions for grain yield observed among adzuki bean cultivars in Hokkaido<br><br>☆Hosokawa, Y.1, H. Nagasawa2, N. Yamaguchi1, Y. Horiuchi2 (1.Central Agr. Exp. Stn., HRO, 2.Tokachi Agr. Exp. Stn., HRO)   | 505<br>Mixed infections of wheat yellow mosaic virus (WYMV) and soil-borne wheat mosaic virus (SBWMV) reduce wheat yields.<br><br>○Kurushima, M.1, T. Todai1, T. Sonoda2, S. Ohnishi2, M. Ishikawa3, H. Ishimura4 (1.Tokachi Agricultural Experiment Station, Hokkaido Research Organization, 2.Kitami Agricultural Experiment Station, Hokkaido Research Organization, 3.Tokachi Agricultural Extension Center, Hokkaido, 4.Agricultural Technologies and Extension Division, Hokkaido) |
| 10:15                                      | 106<br>Sex determination in Dioscorea tokoro, a dioecious wild yam species<br><br>☆Kudoh, A.1, S. Natsume2, Y. Sugihara3, H. Katoh1, A. Abe2, K. Oikawa2, M. Shimizu2, K. Itoh2, M. Tsujimura4, T. Terachi5, T. Sakai1, A. Ohta1, R. Terauchi1 (1.Grad. Agri., Kyoto Univ., 2.IBRC, 3.The Sainsbury Laboratory, 4.Grad. Agri., Ryukoku Univ., 5.Faculty of Life Sciences, Kyoto Sangyo Univ.)  | 206<br>Base editors using CRISPR-Cas3 in rice<br><br>○Saika, H.1, K. Yoshimi2 (1.Inst. Agrobiological Sci., 2.Inst. Med. Sci., Univ. Tokyo)  | 306<br>Evaluation of Segregation Prediction Accuracy for Aboveground Traits Using Soybean RILs and Subsequent Progeny Populations<br><br>☆Sakurai, K.1, Y. Toda2, H. Tsujimoto3, A. Kaga4, H. Iwata1 (1.Grad. Sch. Agr. Life Sci., Univ. Tokyo, 2.Inst. Agro-Env. Sci., NARO, 3.Arid Land Res. Ctr., Tottori Univ, 4.Inst. Crop Sci., NARO)  | 406<br>Development of 'Kitahonami'-derived wheat lines with breaking the linkage of resistance to wheat yellow mosaic disease and high-activity polyphenol oxidase.<br><br>○Kiuchi, H.1, T. Sonoda1, S. Adegawa2, N. Yamaguchi2, C. Souma2, S. Ohnishi1 (1.HRO Kitami AES, 2.HRO Central AES)  | 506<br>The establishment of a method for inducing clubroot disease by local heating<br><br>☆Haraguchi, K., S. Bang, T. Koyama, T. Ohnishi (Sch. Agr., Univ. Utsunomiya)  |
| 10:30                                      | 107<br>Whole-genome sequencing of sesame plants<br><br>Tanaka, H.1, E. Ono2, T. Segawa2, J. Murata3, H. Takagi4, Y. Uegaki5, H. Toyonaga3, A. Shiraishi3, M. Takagi6, A. Toyoda7, K. Sato8, T. Wakasugi8, M. Horikawa3, M. Kawase9, T. Itoh1, ○M. Yamamoto8 (1.School of Life Science and Technology, Institute of Science Tokyo, 2.Res. Inst. Suntory Global Innovation Center Ltd. (SIC), 3.Suntory Fdn. Life Sci. (SUNBOR), 4.Fac. Biore. Env. Sci., Ishikawa Pref. Univ., 5.Grad. Sch. Sci. Eng., Univ. Toyama, 6.Suntory System and Technology Ltd. (SST), 7.National Institute of Genetics, 8.Fac. Sci. Acad. Assem., Univ. Toyama, 9.Dep. Agr., Tokyo Univ. Agr.) | 207<br>Exploration of rice genes targeted by MEL1, a germ cell-specific Argonaute protein<br><br>○Nonomura, K.1,2, H. Liu3, M. Mimura4, W. Wu3, R. Hiratsuka5, K. Tanaka6, M. Ohtani7, T. Demura8, S. Liu3, T. Sasaki9 (1.Plant Cytogen., Natl. Inst. Genet., 2.Genet. Program, SOKENDAI, 3.Zhejiang A&F Univ., 4.Grad. Sch. Agr. Life Sci, Univ. Tokyo, 5.Jikei Univ. Sch. Med., 6.Dept. Informatics, Tokyo univ. Info. Sci., 7.Grad. Sch. Front. Sci., Univ. Tokyo, 8.Div. Bio. Sci., Nara Inst. Sci. Tech., 9.NODAI Res. Inst., Tokyo Univ. Agr.) | 307<br>Application of Random Forest in a Bayesian Optimization Framework: To propose optimal rice genotype and environment combinations<br><br>☆Mochizuki, H.1, K. Hamazaki2, C. Sato3, A. Abe4, C. Kim5,6, H. Shimonou5, H. Iwata1 (1.Grad. Sch. Agr. Life Sci., Univ., 2.Adv. Int. Proj., RIKEN, 3.Ifu-Rinrin, 4.Iwate Biotechnology Research Center, 5.Iwate University, 6.Sky Ocean Technology Co., Ltd. Sky Ocean Technology Co., Ltd.) | 407<br>Variation in rice bran lipid content in high-yielding rice varieties and genetic resource lines<br><br>○Araki, E.1, T. Miyazawa2, T. Miyazawa2, R. Sogame2, Y. Ito3, K. Ebana4, K. Toriyama3 (1.Inst. Food Res., NARO, 2.New Indust. Creat. Hatchery Cent., Tohoku Univ., 3.Grad. Sch. of Agri. Sci., Tohoku Univ., 4.Inst. Gen. Resources Cent., NARO) | 507<br>Response to low-fertilizer in the panicle architectures of cultivated rice<br><br>☆Ito, H.1, T. Mori1, K. Hasegawa1, M. Amano1, H. Yoshida2, S. Nishiuchi1, J. Murase1, M. Matsuoka2, H. Takahashi1, M. Nakazono1 (1.Grad. Sch. Bioagric. Sci., Nagoya Univ., 2.IFeS, Fukushima Univ.)  |

| Chair: Masayuki P. Yamamoto<br>(Univ. Toyama) |  | Chair: Hiroaki Saika<br>(NARO)   |   | Chair: Kiyosumi Hori<br>(NARO)   |   |       |  | Chair: Yoshiyuki Yamagata<br>(Kyushu Univ.) |  |
|---|--|--|---|--|---|-------|--|---|--|
| 10:45   | 108 Two QTLs that act additively to accelerate the flowering of Koshihikari and their interactions with meteorological environments.<br>○Yonemaru, J.1, K. Wada1, S. Watanabe2 (1.NARO-RCAIT, 2.Fukui Pref. Government)  | 208 Functional analysis of a KNOTTED1-like gene, a candidate for a gene regulating flowering in pearl millet<br>☆Kambara, K.1, S. Gupta2, T. Takano1, D. Tsugami1 (1.Grad. Sch. Agr., Univ. Tokyo, 2.ICRISAT)  | 308 Potential assessment of genomics-assisted breeding using fruit morphological features of citrus<br>☆Hironaga, K.1, T. Seino2, K. Nonaka3, T. Shimizu3,4, M. Minamikawa5 (1.Fac. Hort., Chiba Univ., 2.Grad. Sch. Hort., Chiba Univ., 3.NIFTS, NARO, 4.Kazusa DNA Res. Inst., 5.IAAR, Chiba Univ.) | 408 Trait analysis of the AGPase gene OsAGPL1 mutation in Non-Flowering Rice<br>☆Miyazaki, K., M. Suzuki, N. Nishide, S. Hashimoto, R. Morita, N. Aoki, T. Izawa (Grad. Sch. Agr. Life Sci., Univ. Tokyo)  | 508 Disruption of lipid-related gene alters pollen fertility, lipid accumulation, and cold tolerance in rice<br>☆Lubba, K.1, K. YAMAMORI2, Y. KISHIMAI (1.Hokkaido University Graduate School of Agriculture, 2.Kyoto University Graduate School of Agriculture)  | 10:45 |  |   |  |
| 11:00   | 109 Candidate genes for ratio of nodule bacteria species on soybean root<br>○Teraishi, M.1, K. Sakaguchi1, T. Tsuchimoto1, T. Yoshikawa1,2 (1.Grad. Sch. Agri., Kyoto Univ., 2.Natl. Inst. Genet.)   | 209 A CMF gene specific for sweetpotato and its wild relative are involved in storage roots formation in sweetpotato<br>☆Suematsu, K.1, R. Morita2, M. Otani3, R. Suzuki2, M. Tanaka1 (1.Kyushu Okinawa Agr. Res. Cent., NARO, 2.Grad. Sch. Agr. Life Sci., Univ. Tokyo, 3.Fac. Biores. Env. Sci., Ishikawa Pref. Univ.) | 309 Prediction of wheat milling yield based on the combination of multispectral image analysis, near-infrared spectrometry and morphometrics of grains<br>☆Yoshioka, M., T. Ikeda, Y. Ban, M. Ito, K. Kawaguchi, T. Sugita, K. Kato (Western Region Agricultural Research Center, NARO)               | 409 A new medium early maturing potato variety "Shinsei" suitable for long-term storage with good chipping quality<br>○Shimosaka, E.1, S. Tamiya1,2, K. Asano1,3, S. Tsuda1, M. Nishinaka1,4, M. Mori1,5, A. Kobayashi1,6, N. Mukojima1,7, K. Akai1, S. Okamoto1,8, A. Takada1,9 (1.Hokkaido Agri. Res. Cent., NARO, 2.Tohoku Agri. Res. Cent., NARO, 3.AFFRC, MAFF, 4.Central Region Agri. Res. Cent., NARO, 5.Calbee Potato, Inc, 6.Kyushu Okinawa Agri. Res. Cent., NARO, 7.Nagasaki Agri. For. Dev, 8.Cent. for Seeds and Seedlings, NARO, 9.Headquarters, NARO) | 509 Effects of interaction between red rice genes Rd and Rc common to weedy rice on seed freezing tolerance<br>☆Takama, R.1,2, J. Tanaka2,3 (1.Inst. Plant Protection, NARO, 2.Univ. Tsukuba, Grad. Sch. Sci. Tech., 3.Headquaters, NARO)   | 11:00 |  |   |  |
| 11:15   | 110 Potato blight resistance QTNs revealed by GWAS using a historical phenotype dataset from the HRO breeding program<br>○Sato, K.1, Y. Ishikawa1, T. Wazaki1, H. Shinada1, K. Shirasawa2, N. Yamaguchi3 (1.Kitami Agri. Exp. Stn., HRO., 2.Kazusa DNA Res. Inst., 3.Chuo Agri. Exp. Stn., HRO.) | 210 Prediction of targets for the Rf-like PPR gene cluster in the fertility-restored line RT98C derived from wild rice Oryza rufipogon W1109.<br>☆Igarashi, K., A. Kobayashi, K. Toriyama (Grad.Sch. Agri. Sci., Tohoku Univ.)   | 310 Identification and application of non-shattering genes in the mutant lines induced from an Indica Group variety, Nan-jing 11<br>Nagano, N.1, ○Y. Fukuta1,2 (1.Univ. Ryukyu, Fac. Agr., 2.JIRCAS)  | 410 Approach to melon breeding from Miyazaki - Development of high-sugar and high-flavor F1 melon strains -<br>○Chen, L.1,2, K. Hahimoto1, A. Yamaguchi1, R. Watanabe1, A. Hironaka1 (1.Fac. Envir. Hort. Sci., Minami Kyushu Univ., 2.Grad. Sch. Hort. & Food Sci., Minami Kyushu Univ.)  | 510 Elucidating salt-tolerant mechanisms in Vigna luteola by grafting and identifying salt tolerant gene candidates via root transcriptome<br>☆Iki, Y.1, F. Wang2, K. Ito1, T. Wakatake3, K. Tanoi4, K. Naito2 (1.Grad. Sch. Front. Sci., Univ. Tokyo, 2.Res. Cntr. Genet. Resour., NARO, 3.Grad. Sch. Sci. and Technol, NAIST, 4.Grad. Sch. Agri. and Life. sci., Univ. Tokyo) | 11:15 |  |   |  |

## 21 March (13:00-15:45) Oral Presentation Program

| Chair: Tomoki Hoshino<br>(Yamagata Univ.) |  | Chair: Mao Suganami<br>(Fukushima Univ.)  |   | Chair: Kazama Tomohiko<br>(Kyushu Univ.)   |  | Chair: Ryo Matsushima<br>(Okayama Univ.) |   | Chair: Ken Naito<br>(NARO) |  |
|---|--|---|---|--|--|--|---|----------------------------|--|
| 13:00                                     | I11<br>QTL mapping of agronomic traits in true seed- and tuber-derived diploid potatoes<br><br>☆Kawamura, M., R. Sanetomo, K. Hosaka (Obihiro University of Agriculture and Veterinary Medicine)   | 211<br><br>○Li, F. I, R. Yano2, R. Nakata1, K. Kanako1, M. Hashiguchi3, R. Akashi4, H. Tanaka4, K. Takagi1, S. Hiraga1, M. Ishimoto1 (1.Inst. Crop. Sci., NARO, 2.Res. Cent. Adv. Anal.,NARO, 3.Fac. Reg. Innov., Miyazaki Univ., 4.Fac. Agric., Miyazaki Univ.)  | 311<br><br>○Koizuka, N. (Coll. Agr., Tamagawa Univ.)  | 411<br><br>○Tanaka, K. I, K. Nakajima1, G. Shigita2,3, M. Okuma4, R. Ishikawa1, H. Nishida4, K. Kato4 (1.Fac. Agr. Life Sci., Hirosaki Univ., 2.Tech. U. Munich, 3.Life Environ. Sci., Univ. Tsukuba, 4.Grad. Sch. Environ. Life Nat. Sci. Tech., Okayama U.)                                | 511<br><br>○Decoding Plant Stress Communication: VOC-Induced HsfA2 Expression and Heat Stress Tolerance in <i>Arabidopsis thaliana</i>   | 13:00                                    |   |                            |  |
| 13:15                                     | I12<br>The effect of CDF1 alleles on the phenotype of the progeny from a very early-maturing potato cultivar<br><br>☆Eguchi, K., R. Sanetomo (Obihiro University of Agriculture and Veterinary Medicine)   | 212<br><br>○Hori, K. I, K. Ebana2, S. Matthew1, N. Tanaka1, K. Ishimaru1, H. Hirabayashi1, Y. Kawahara3, H. Kajiya-Kanegae1,4, T. Okunishi5, K. Sugimoto1 (1.Inst. Crop Sci., NARO, 2.Res. Cent. Genet. Resources, NARO, 3.Res. Cent. Adv. Anal., NARO, 4.Res. Cent. Agric. Info. Tech., NARO, 5.Inst. Food Res., NARO) | 312<br><br>○Chen, J., h. kitashiba, m. yamamoto (Grad. Sch. Agric. Sci., Tohoku Univ)   | 412<br><br>○Phylogenetic analysis based on the chloroplast genome in sweetpotato <i>Arabidopsis thaliana</i>   | 512<br><br>○Kurihara, M., M. Nishinaka, K. Taguchi (NARO·CARC)   | 13:15                                    | Investigation on Drought Stress Effect on Four Japanese Chili Pepper Varieties<br><br>☆Airlangga, R. I, H. Ito2 (1.Grad. Sch. Life Sci., Hokkaido Univ., 2.Fac. Sci., Hokkaido Univ.)   |                            |  |
| 13:30                                     | I13<br>Detection of QTLs associated with anthocyanin content and composition in sweetpotato storage roots<br><br>○Tanaka, M., K. Suematsu, R. Kurata, T. Sakaiguchi (Kyushu Okinawa Agr. Res. Cent., NARO)   | 213<br><br>○Shenton, M. I, K. Ishimaru1, H. Hirabayashi1, N. Tanaka1, K. Ebana3, K. Sugimoto2, K. Hori1 (1.Institute of Crop Science, NARO, 2.Institute of Crop Science, NARO, 3.Research Center of Genetic Resources, NARO)  | 313<br><br>○Yokosawa, S., H. kitashiba, M. Yamamoto (Grad. Sch. Agri., Tohoku Univ.)  | 413<br><br>○Ishii, T. I, S. Lim1, C. Orn2, R. Ishikawa1, H. Saito3, Y. Sato4 (1.Grad. Sch. Agr. Sci., Kobe Univ., 2.Cambodian Agr. Res. Dev. Inst., 3.Trop. Agr. Res. Front, JIRCAS, 4.Natl. Inst. Genet.)   | 513<br><br>○ANEE, T. I, N. Suzuki2 (1.Graduate School of Green Science and Engineering, Sophia University, 2.Faculty of Science and Technology, Sophia University)   | 13:30                                    | Response of tomato plants to salt stress, waterlogging and their combination<br><br>☆ANEE, T. I, N. Suzuki2 (1.Graduate School of Green Science and Engineering, Sophia University, 2.Faculty of Science and Technology, Sophia University)   |                            |  |
| 13:45                                     | I14<br>Identification and validation of QTLs controlling southern root-knot nematode (SP6-2) resistance utilized by bulked-segregant analysis<br><br>☆Tsuchiya, S. I, M. Kurihara2, H. Tabuchi3, K. Nishimura4, H. Nishida4, K. Kato4, Y. Monden4 (1.Fac. Agri., Okayama U., 2.Grad. Sch. Environ. Life Sci., Okayama U., 3.KARC/NARO, 4.Grad. Sch. Environ. Life Nat. Sci. Tech., Okayama U.) | 214<br><br>○Yamaguchi, N. I, K. Shirasawa2, H. Igarashi3, T. Yamada4 (1.Central Agr. Exp. Sta., HRO, 2.Kazusa DNA Res. Inst., 3.Tokachi Agr. Exp. Sta., HRO, 4.Res. fac. Agr., Hokkaido Univ.)  | 314<br><br>○Suzuki, T. I, M. Ogura1, T. Makino2, H. Kitashiba1, M. Yamamoto1 (1.Grad. Sch. Agrisci., Univ. Tohoku, 2.Grad. Sch. Sci., Univ. Tohoku) | 414<br><br>○Oshiro, K. I, T. Sato2, K. Triyama3, S. Komatsubara4, R. Mulenga5, M. Chitambi5, G. Munkombwe5, M. Chinji5, E. Musabula5, N. Museta5, L. Kamguya5, J. Njobvu5, Y. Fukuta6 (1.Grad. Sch. Agr., Univ. Ryukyu, 2.Fac. Agr., 3.Grad. Sch. Agr. Sci., 4.JICA, 5.ZARI, 6.Univ. Ryukyu) | 514<br><br>○Suzuki, N. I, M. Yunose2, K. Katano3, R. Shimizu2, C. Sumi1, M. Kaji4, S. Shigaki5, H. Suzuki6 (1.Faculty of Science and Technology, Sophia University, 2.Graduate School of Science and Technology, Sophia University, 3.College of Life Sciences, Ritsumeikan University, 4.Division of Environmental Design, Graduate School of Science and Engineering, Kanazawa University, 5.Principles of Informatics Research Division, National Institute of Informatics, 6.Faculty of Engineering, Hokkai-Gakuen University) | 13:45                                    | RbohD, an ROS-producing gene, regulates memory of short-term heat stress and responses to flooding with physical flow in <i>Arabidopsis thaliana</i><br><br>○Suzuki, N. I, M. Yunose2, K. Katano3, R. Shimizu2, C. Sumi1, M. Kaji4, S. Shigaki5, H. Suzuki6 (1.Faculty of Science and Technology, Sophia University, 2.Graduate School of Science and Technology, Sophia University, 3.College of Life Sciences, Ritsumeikan University, 4.Division of Environmental Design, Graduate School of Science and Engineering, Kanazawa University, 5.Principles of Informatics Research Division, National Institute of Informatics, 6.Faculty of Engineering, Hokkai-Gakuen University) |                            |  |

| Chair: Rena Sanetomo<br>(Obihiro Univ.) |   | Chair: Hiroaki Sakai<br>(NARO)  |   | Chair: Shun Sakuma<br>(Tottori Univ.)  |  | Chair: Katsunori Tanaka<br>(Hirosaki Univ.) |  | Chair: Takanori Yoshikawa<br>(NIG) |  |
|---|---|---|---|--|--|---|--|------------------------------------|--|
| 14:00                                   | 115<br>Genetic analysis of heterosis in culm length of sorghum F1 hybrid 'Kazetachi'<br><br>★Iri, Y.1, S. Okada2, S. Hashimoto3, S. Nakamura (Araki)2, K. Shinohara (Omae)2, S. Kasuga4, T. Sazuka2 (1.Grad. Sch. Bioagri., Univ. Nagoya, 2.Biosci. and Biotech. Center, Univ. Nagoya, 3.Grad. Sch. Agric. Life. Sci., Univ. Tokyo, 4.AFC, Fac. of Agri., Univ. Shinshu)  | 215<br>Development of NARO Open Rice Collection (NRC) and seed ionome analysis<br><br>○Tanaka, N.1, Y. Kawahara2, K. Ebana3, M. Shenton1 (1.NARO, NICS, 2.Research Center for Advanced Analysis, NARO, 3.Research Center of Genetic Resources, NARO)  | 315<br>Which S haplotypes are used in Japanese Brassica F1 varieties?<br><br>★Kato, R., J. Ji, X. Zhu, M. Yamashita, S. Miyashita, M. Yamamoto, H. Kitashiba (Grad. Sch. Agri. Sci., Tohoku Univ.)  | 415<br>Relationship between agronomic traits and QTL for hybrid weakness in RILs derived a cross between Milyang 23 and Akihikari<br><br>★Kobayashi, H.1, Y. Fukutai,2 (1.Faculty of Agriculture of University of the Ryukyus, 2.JIRCAS)   | 515<br>Analysis of rice lateral root formation mechanism by WOX gene cluster.<br><br>★Kushida, S.1, Y. Dong1, P. LIPIO1, M. Inari-Ikeda2, Y. Inukai3 (1.Grad. Sch. Bioagr., Nagoya U., 2.Sch. Hel. Nut., U. Tokaigakuen., 3.ICREA, Nagoya U.)  | 14:00                                       |  |                                    |  |
| 14:15                                   | 116<br>Yield prediction based on QTLs for yield components using yield dissection models in tomato<br><br>★Tsutsumi-Morita, Y.1,2,3, E. Heuvelink2, S. Khaleghi2, D. Bustos-Korts3,4, L. Marcellis2, K. Vermeer5, H. van Stappen-van Dijk5, F. Millenaar5, G. Van Voorn3, M. Boer3, F. Van Eeuwijk3 (1.CCCA, NIES, 2.Horticulture and Product Physiology, Wageningen University & Research, 3.Biometris, Wageningen University & Research, 4.Universidad Austral de Chile, 5.BASF's vegetable seeds business (Nunhems)) | 216<br>Genetic control of seed iron and zinc concentration in Rwandan common bean population revealed by the Genome Wide Association Study (GWAS)<br><br>★Mukamuhirwa, F.1,2, K. Shirasawa3, K. Naito4, E. Rurangwa2, V. Ndayizeye2, A. Nyombayire2, J. Muhire2, M. Govindaraj5, N. Ohtake1, K. Okazaki1, M. Okada1, E. Fukai1 (1.Grad.Sch.Sci.Tec., Niigata Univ., 2.Crop In.Tec.Trans, Rwanda Agr. Anim.Res.Dev. Board, 3.Kazusa DNA Res.Inst., 4.Research Cen.Gen.Res., Nat.Agri.Fo.Res.Org. (NARO), 5.Alliance of Bio.Int.and Int.Cen.Trop.Agr. (CIAT)) | 316<br>Development of the digital PCR analysis method for estimation of selfing seed contamination rate in strawberry F1 seed production<br><br>○Ishimori, M.1, S. Kataoka2, T. Sueyoshi3, S. Nagamatsu3, M. Tanaka3, M. Ogura2, Y. Noguchi2, Y. Higuchi1, S. Isobe1 (1.Grad. Sch. Agri. Life Sci., Univ. Tokyo, 2.NIVFS, NARO, 3.Fukuoka Agr. Forest Res. Cent.) | 416<br>Origin of crop varieties by cultivar-wild species hybridizations: a case study of yams ( <i>Dioscorea</i> spp.) in Japan<br><br>★Minoji, K.1, A. Ohta1, T. Sakai1, Y. Sugihara2, A. Kudoh1, R. Terauchi1,3 (1.Grad. Sch. Agr., Kyoto Univ., 2.The Sainsbury Laboratory, 3.IBRC)   | 516<br>Growth analysis of all cells of the rice leaf primordium by live imaging<br><br>★Taguchi, M.1, Y. Tokuyama2, R. Kelly-Bellow3, R. Smith3, Y. Kishima2, Y. Koide2 (1.Sch. Agr., Hokkaido Univ., 2.Grad. Sch. Agr., Hokkaido Univ., 3.Department of Computational and System Biology, JIC)  | 14:15                                       |  |                                    |  |
| 14:30                                   | 117<br>Comparison of good eating quality QTLs using two recombinant inbred line populations derived from Enrei and Dadachamame.<br><br>★Shioya, N.1, Y. Takagi2, E. Ogiso-Tanaka3, T. Hoshino1,2 (1.Grad. Sch. Agr., Iwate Univ., 2.Grad. Sch. Agr., Yamagata Univ., 3.Ctr. Mol. Biodivers. Res., Natl. Mus. Nat. Sci.)   | 217<br>Comparative analysis of genetic loci related to carotenoid accumulation in sweetpotato flesh using GRAS-Di and dpMIG-seq and identification of the genetic loci<br><br>★Horita, N.1, Y. Okada2, H. Kanzaki1, M. Kurihara3, K. Nishimura1, H. Nishida1, K. Kato1, Y. Monden1 (1.Grad. Sch. Env. Life. Nat. Sci. Tech., Okayama Univ., 2.KARC/NARO, 3.Grad. Sch. Env. & Life Sci., Okayama Univ.)  | 317<br>Exploration of genes regulating grass-clump dwarf in synthetic hexaploid wheat.<br><br>★Nakanishi, S.1, K. Nishimura1, M. Okada2, T. Nakazaki3,4, Y. Monden1, K. Kato1, H. Nishida1 (1.Grad. Sch. Environ. Life Nat. Sci. Tech., Okayama Univ., 2.Grad. Sch. Sci. Tech., Niigata Univ., 3.Grad. Sch. Agr., Kyoto Univ., 4.IAC, Kyoto Univ.)                | 417<br>Analysis of starch granule size diversity in <i>t</i> in <i>Vigna</i> species<br><br>○Matsushima, R.1, J. Kim1,2, T. Ishii3, J. Yamashita1 (1.Institute of Plant Science and Resources, Okayama University, 2.RIKEN Center for Sustainable Resource Science, 3.Arid Land Research Center, Tottori University International Platform for Dryland Research and Education) | 517<br>Genetic analysis of a spontaneous mutant, dwarf and short panicle<br><br>Le, T.2, D. Lam1, E. Fukai3, ○R. Ishikawa1 (1.Fac. Agri. Life Sci., Hirosaki Univ., 2.Climate Change Institute, An Giang University, 3.Fac. Agri., Niigata Univ.)  | 14:30                                       |  |                                    |  |
| 14:45                                   | 118<br>Verification of QTLs and prediction of candidate genes associated with grain yield-related traits in a pyramidale wheat ( <i>Triticum turgidum</i> L.)<br><br>★Chen, T.1, K. Nishimura2, K. Murata1, K. Nagasaki1, Y. Iwashashi1, T. Makii1, Y. Kinoshita1, H. Inoue1, R. Nakano1, T. Nakazaki1,3 (1.Grad. Sch. Agr., Kyoto Univ., 2.Grad. Sch. Environ. Life Nat. Sci. and Tech., Okayama Univ., 3.IAC, Kyoto Univ)   | 218<br>Attempts at genetic analysis of various agronomic traits in sweetpotato using image analysis<br><br>★Tanaka, S.1, H. Tabuchi2, K. Nishimura3, H. Nishida3, K. Kato3, Y. Monden3 (1.Fac. Agri., Okayama U., 2.KARC/NARO, 3.Grad. Sch. Environ. Life Nat. Sci. Tech., Okayama U.)  | 318<br>Functional analysis of a fertility restorer gene for Tadukan-type cytoplasmic male sterile rice<br><br>★Takatsuka, A.1, Y. Iwai1, H. Mireau2,3, T. Kazama4, K. Igarashi1, K. Toriyama1 (1.Grad. Sch. Agri. Sci., Tohoku Univ., 2.IJPB, INRAE Versailles, 3.AgroParisTech, Paris-Saclay Univ., 4.Grad. Sch. Biores. Environment. Sci., Kyushu)              | 418<br>Growth characteristics under subtropical environmental conditions of barley genetic resources collected from Taiwan<br><br>○Saisho, D.1, Y. Okada2, T. Suzuki2, H. Lin3, W. Chiou4 (1.IPSR, Okayama Univ., 2.Kyushu Okinawa Agricultural Research Center, NARO, 3.Taichung DARES, MOA, 4.Dept. Agronomy, National Chung Hsing University)                               | 518<br>Variation of thermo-sensitivity of heading date found in Hokkaido rice varieties affect heading synchrony and premature heading<br><br>★Hoque, M.1, S. Sakaguchi1, M. Takatori1, M. Kinoshita2, H. Shinada3, N. Yamaguchi4, T. Nishimura4, Y. Kishima1 (1.Grad. Sch. Agr., Hokkaido Univ., 2.Kamikawa Agricultural Experimental Station, Hokkaido Research Organization, 3.Kitami Agricultural Experimental Station, Hokkaido Research Organization, 4.Central Agricultural Experimental Station, Hokkaido Research Organization) | 14:45                                       |  |                                    |  |

| Chair: Moeko Okada<br>(Niigata Univ.) |  | Chair: Feng Li<br>(NARO)  |  | Chair: Motoyuki Ishimori<br>(Univ. Tokyo)  |   | Chair: Daisuke Saisho<br>(Okayama Univ.) |  | Chair: Mitsuko Kishi-Kaboshi<br>(Kazusa DNA) |  |
|---------------------------------------|--|---|--|--|---|--|--|--|--|
| 15:00                                 | 119 Identification of genetic loci associated with awn length in <i>Aegilops sharonensis</i> Eig, a wild relative of wheat<br><br>★Ye, K.I., R. Terauchi1,2, A. Ohta1 (1.Grad. Sch. Agri., Kyoto Univ., 2.Iwate Biotechnology Research Center)   | 219 Loss of function haplotype of R and T were selected for improving seed appearance<br><br>★Suganami, M.I., S. Kojima2, M. Kamakura3, M. Shiraishi3, K. Beppu3, H. Yoshida1, N. Nihei1,4, H. Takahashi1,4, S. Masumoto1,4, T. Waki5, T. Nakayama5, K. Yoshida6, T. Matsuda1,4, M. Watanabe7, M. Matsuoka1 (1.Faculty of Food and Agricultural Sciences, Institute of Fermentation Sciences, Fukushima University, 2.Graduate School of Agricultural Science, Tohoku University, 3.Ehime Prefectural Saito Agricultural High School, 4.Faculty of Food and Agricultural Sciences, Fukushima University, 5.Graduate School of Engineering, Tohoku University, 6.Faculty of Food and Health Sciences, Aichi Shukutoku University, 7.Graduate School of Life Sciences, Tohoku University) | 319 Exploration of PPR genes that regulate the expression of orf288, a CMS-causing gene in japonica rice mitochondria<br><br>○Toriyama, K.I., Y. Iwai1, K. Igarashi1, T. Kazama2 (1.Grad. Sch. Agri. Sci. Tohoku Univ., 2.Grad Sch. Biores. Environment. Sci., Kyushu Univ.)                                 | 419 Development and interlaboratory validation of a cultivar-specific identification method for 'Shine Muscat' using loop-mediated isothermal amplification (LAMP)<br><br>○Takahatake, R.I., Y. Monden2, A. Shindo2, Y. Minegishi3, F. Taniguchi4, Y. Hashimoto1, T. Takeuchi5, K. Takasaki5, S. Isobe6 (1.Institute of Food Research, National Agriculture and Food Research Organization, 2.Graduate School of Environmental, Life, Natural Science, and Technology, Okayama University, 3.Nippon Gene Co., Ltd., 4.Institute of Fruit Tree and Tea Science, National Agriculture and Food Research Organization, 5.FASMAC Co., Ltd., 6.Kazusa DNA Research Institute) | 519 Analysis of the transcription factor SIMYB21 involved in jasmonate-mediated fruit set in tomato<br><br>★Nomura, Y.I., Y. Lu2, Y. Shinozaki2, T. Kawakatsu3, K. Harada1, R. Yano4, M. Kojima5, Y. Takebayashi5, H. Sakakibara6, H. Ezura2,7, T. Ariizumi2,7 (1.Grad. Sch. Life Environ Sci., Univ. Tsukuba, 2.Fac. Life Environ Sci., Univ. Tsukuba, 3.Institute of Agrobiological Sciences., NARO, 4.Advanced Analysis Center., NARO, 5.CSRS., RIKEN, 6.Grad. Sch. Bioagric Sci., Univ. Nagoya, 7.T-PIRC., Univ. Tsukuba) | 15:00                                    |  |  |  |
| 15:15                                 | 120 Analysis of the genetic basis for heading date of African cultivated rice <i>Oryza glaberrima</i> for utilization in temperate regions<br><br>★Fujii, M.I., A. Hirao1, H. Yasui2, Y. Yamagata2 (1.Grad. Sch. Bioresour. Environ. Sci, Kyushu Univ., 2.Fac. Agr., Grad. Sch., Kyushu Univ.) | 220 Exploration and validation of allele dosage estimation method for simplified selection of sweetpotato low pasting temperature lines.<br><br>★Nakahara, T.I., M. Tanaka2, A. Kobayashi2, Y. Kawata2, K. Nishimura1, H. Nishida1, K. Kato1, Y. Monden1 (1.Grad. Sch. Environ. Life Sci. Tech., Okayama U., 2.KARC/NARO)   | 320 Increased glucoraphanin content in intergeneric hybrid between <i>Brassica oleracea</i> var. <i>italica</i> and <i>Diplotaxis tenuifolia</i><br><br>★Odashima, K.I., T. Suzuki2, T. Ohnishi1, S. Bang1 (1.Grad. Sch. Agr., Utsunomiya U., 2.Center for Bioscience research and Education, Utsunomiya U.) | 420 Secretory production of lysostaphin, an antimicrobial protein, from rice suspension cells<br><br>★Yahara, T., G. Watarai, A. Ohtawara, S. Shimoda, H. Yoneyama, Y. Ito (Grad. Sch. Agri., Tohoku Univ.)  | 520 Identification of a novel heading time-related gene HvHY2 in barley using MutMap approach<br><br>★Okuma, M., K. Nishimura, Y. Monden, K. Kato, H. Nishida (Grad. Sch. Environ. Life Nat. Sci. Tech., Okayama U.)  | 15:15                                    |  |  |  |
| 15:30                                 | 121 Exploration of quantitative trait loci for grain shape and weight in <i>Triticum timopheevii</i> and its ancestral species, <i>T. araraticum</i><br><br>★Hayashi, K.I., R. Terauchi1,2, A. Ohta1 (1.Grad. Sch. Agr., Kyoto Univ., 2.IBRC)  | 221 GenEditScan: a fast and efficient analysis tool to detect foreign DNA in the genome-edited agricultural products using high-throughput sequencing data<br><br>○Sakai, H.I., T. Sato2, T. Itoh3, R. Onuki4, Y. Tabei5 (1.Research Center for Advanced Analysis, NARO, 2.Mizuho Research & Technologies, Ltd., 3.National Taiwan University, 4.Saitama Cancer Center, 5.Faculty of Food and Nutritional Sciences, Toyo University)  | 321 Optimizing visualization of pollen tubes in wide hybridization of wheat<br><br>○Sakuma, S., K. Mishina, M. Morita, S. Matsumoto (Faculty of Agriculture, Tottori University)   | 421 A population of diploid interspecific hybrids between Asian and African rice reveals variations of pollen fertility associated with meiotic abnormalities<br><br>★Zahidah, Q.I., M. Ishihara1, Y. Minouchi1, D. Kuniyoshi2, T. Yamamoto3, K. Nagaki3, Y. Kishimai1 (1.Grad. Sch. Agr., Hokkaido Univ., 2.Tropical Agriculture Research Front, JIRCAS, 3.IPSR, Okayama Univ.)   | 521 Diversity in the juvenile-to-adult phase transition of six common wheat cultivars with different winter-spring growth habits<br><br>★Senoo, K.I., T. Yoshikawa2, S. Nasuda1 (1.Grad. Sch. Agric., Kyoto Univ., 2.Natl. Inst. Genet.)  | 15:30                                    |  |  |  |