

## **KAAB International Symposium 2018 Poster session Program**

- P-1 **Anisotropy of Electrical Conduction for Magnetic Elastomers under Magnetic Fields**  
**<sup>1,2</sup>Shota Abe, <sup>1,2</sup>Mika Kawai, <sup>1\*,2</sup>Tetsu Mitsumata**  
<sup>1</sup> Graduate School of Science and Technology, Niigata University  
<sup>2</sup> ALCA-JST
- P-2 **Magnetorheological Response for Magnetic Elastomers with Highly Embedded Plastic Beads**  
**<sup>1,2</sup>Shota Akama, <sup>1,2</sup>Mika Kawai, <sup>1\*,2</sup>Tetsu Mitsumata**  
<sup>1</sup> Graduate School of Science and Technology, Niigata University  
<sup>2</sup> ALCA-JST
- P-3 **Effect of Sonication on Magnetorheological Effect for Monomodal Magnetic Elastomers**  
**<sup>1,4</sup>Mayuko Watanabe, <sup>1,2</sup>Junko Ikeda, <sup>3</sup>Takehiro Takeda, <sup>1,4</sup>Mika Kawai, <sup>1\*,4</sup>Tetsu Mitsumata**  
<sup>1</sup> Graduate School of Science and Technology, Niigata University  
<sup>2</sup> Nihon Rufuto Corporation  
<sup>3</sup> Rigaku Corporation  
<sup>4</sup> ALCA-JST
- P-4 **Adsorption of Uranium (VI) from aqueous solution onto modified chitosan**  
**<sup>1</sup>Xiaoyu Du, <sup>1</sup>Yanling Deng, <sup>2</sup>Naoto Miyamoto, <sup>2</sup>Naoki Kano, <sup>2</sup>Hiroshi Imaizumi**  
<sup>1</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;  
<sup>2</sup> Dept. of Chem. and Chem. Eng., Fac. of Eng., Niigata Univ., Niigata, Japan
- P-5 **Phytoremediation of Cs, U and Sr from soil using cheating agent by Sunflower**  
**<sup>1</sup>Yuma Okawara, <sup>1</sup>Takumi Hori, <sup>1</sup> Shuang Zhang, <sup>2</sup>Naoto Miyamoto, <sup>2</sup>Naoki Kano, <sup>2</sup>Hiroshi Imaizumi**  
<sup>1</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;  
<sup>2</sup> Dept. of Chem. and Chem. Eng., Fac. of Eng., Niigata Univ., Niigata, Japan
- P-6 **Effect of chelating agents and biosurfactants on phytoremediation of Pb- and Zn-contaminated soil by *Brassica Juncea***  
**<sup>1</sup>Yuki Onozawa, <sup>2</sup>Lidi Gao, <sup>2</sup>Yuichii Sato, <sup>1</sup>Naoto Miyamoto, <sup>1</sup>Naoki Kano, <sup>1</sup>Hiroshi Imaizumi**  
<sup>1</sup> Dept. of Chem. and Chem. Eng., Fac. of Eng., Niigata Univ., Niigata, Japan  
<sup>2</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;
- P-7 **Fractional determination of heavy metal in soil environment and removing heavy metals from contaminated soil by tannic acid and EDDS**  
**<sup>1</sup> Hiroki Yamamoto, <sup>2</sup>Naoto Miyamoto, <sup>2</sup>Naoki Kano, <sup>2</sup>Hiroshi Imaizumi**  
<sup>1</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;  
<sup>2</sup> Dept. of Chem. and Chem. Eng., Fac. of Eng., Niigata Univ., Niigata, Japan
- P-8 **Genetic transformation of several ornamental plants with LEAFY (LFY) and TERMINAL FLOWER 1 (TFL1) genes**  
**Sankhuan Darunmas, Masahiro Otani and Masaru Nakano**  
Graduate School of Science and Technology, Niigata University, Niigata, Japan
- P-9 **In vitro multiple shoot formation in Easter cactus (*Hatiora* sp.) and Christmas cactus (*Schlumbergera* sp.)**  
**Mizuki Abe<sup>1</sup>, Yuka Iwakami<sup>2</sup>, Masahiro Otani<sup>1</sup> and Masaru Nakano<sup>1</sup>**  
<sup>1</sup> Graduate School of Science and Technology, Niigata University, Niigata, Japan  
<sup>2</sup> Faculty of Agriculture, Niigata University, Niigata, Japan

- P-10 **Establishment of a tissue culture system in *Crowea* sp. (Rutaceae)**  
**Toshiya Inamura, Masahiro Otani and Masaru Nakano**  
Graduate School of Science and Technology, Niigata University, Niigata, Japan
- P-11 **Plant regeneration from leaf explants of *Saxifraga stolonifera* (Saxifragaceae)**  
**Toko Igarashi<sup>1</sup>, Masahiro Otani<sup>2</sup> and Masaru Nakano<sup>2</sup>**  
<sup>1</sup> Faculty of Agriculture, Niigata University, Niigata, Japan  
<sup>2</sup> Graduate School of Science and Technology, Niigata University, Niigata, Japan
- P-12 **Isolation of *TERMINAL FLOWER 1*-like genes from two *Tricyrtis* spp., *Tricyrtis hirta* and *T. formosana* (Liliaceae), showing different types of inflorescence architecture**  
**Yuto Imamura, Masahiro Otani and Masaru Nakano**  
Graduate School of Science and Technology, Niigata University, Niigata, Japan
- P-13 **Effects of flower shading on coloration and expression of the flavonoid biosynthesis-related R2R3-MYB genes in tepals of *Tricyrtis* spp.**  
**Mai Shibuya, Yusuke Kanemaki, Masahiro Otani and Masaru Nakano**  
Graduate School of Science and technology, Niigata University, Niigata, Japan
- P-14 **Isolation and characterization of *LEAFY*-like gene promoters from *Tricyrtis hirta* and *T. formosana* (Liliaceae)**  
**Haruki Ouchi, Masahiro Otani and Masaru Nakano**  
Graduate School of Science and Technology, Niigata University, Niigata, Japan
- P-15 **Leaf color modification in *Kalanchoe blossfeldiana* by ectopic expression of the R2R3-MYB genes from *Tricyrtis* sp. and *Arabidopsis thaliana***  
**Takuo Fujimoto, Masahiro Otani and Masaru Nakano**  
Graduate School of Science and Technology, Niigata University, Niigata, Japan
- P-16 **Developing Recovery Process of Phosphorus from Sludge Ash and Synthesizing Fertilizer by Using Recovered-Phosphorus**  
**Ken Ito<sup>1</sup>, Yuka Kikuchi<sup>1</sup>, Yuka Hoshino<sup>1</sup>, Masaaki Kanno<sup>2</sup>, Naoki Kano<sup>3</sup>, Hee-Joon Kim<sup>3</sup>, Norikuni Otake<sup>4</sup>**  
<sup>1</sup> Dept. of Mater. Sci. and Tech., Fac. of Eng., Niigata Univ., Niigata, Japan;  
<sup>2</sup> Adv. Eng. Edu. Fac. of Eng., Niigata Univ., Niigata, Japan  
<sup>3</sup> Dept. of Chem. and Chem. Eng., Fac. of Eng., Niigata Univ., Niigata, Japan;  
<sup>4</sup> Dept. of Appl. Biol. Chem., Fac. of Agric., Niigata Univ., Niigata, Japan
- P-17 **Plant Cultivation Experiment by Using Synthesized Phosphorus Fertilizer Derived from Sludge Ash**  
**Mayu Watanabe<sup>1</sup>, Yuki Nakadai<sup>1</sup>, Mai Kanda<sup>1</sup>, Masaaki Kanno<sup>2</sup>, Naoki Kano<sup>3</sup>, Hee-Joon Kim<sup>3</sup>, Norikuni Otake<sup>4</sup>**  
<sup>1</sup> Dept. of Mater. Sci. and Tech., Fac. of Eng., Niigata Univ., Niigata, Japan;  
<sup>2</sup> Adv. Eng. Edu. Fac. of Eng., Niigata Univ., Niigata, Japan  
<sup>3</sup> Dept. of Chem. and Chem. Eng., Fac. of Eng., Niigata Univ., Niigata, Japan;  
<sup>4</sup> Dept. of Appl. Biol. Chem., Fac. of Agric., Niigata Univ., Niigata, Japan
- P-18 **Production of poly- $\beta$ -1,6-GlcNAc using Csr system in *Escherichia coli***  
**<sup>1</sup>Nozomi Ishiguro, <sup>2</sup>Syunta Yamada, <sup>2</sup>Wataru Sakai, <sup>1,2</sup>Hayuki Sugimoto, and <sup>1,2</sup>Kazushi Suzuki**  
<sup>1</sup> Dept. of Appl. Biol. Chem., Fac. of Agric., Niigata Univ., Niigata, Japan  
<sup>2</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan

- P-19 **Chitinase system of *Serratia plymuthica* isolated from Sakata, a sand dune lake, in Niigata**  
<sup>1,2</sup>Iuliia Pentekhina, <sup>1,3</sup>Dinh Minh Tran, <sup>1</sup>Tatsuyuki Hattori, <sup>1</sup>Takeshi Watanabe, <sup>1</sup>Hayuki Sugimoto, <sup>1</sup>Kazushi Suzuki  
<sup>1</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;  
<sup>2</sup> School of Economics and Management, Far Eastern Federal Univ., Vladivostok, Russia;  
<sup>3</sup> Institute of Biotechnology and Environment, Tay Nguyen Univ., Buon Ma Thuot, Vietnam
- P-20 **Small RNA ChiX and two target mRNAs coordinately control chitin degradation and utilization system in *Serratia marcescens***  
<sup>1</sup>Naoki Munakata, <sup>1</sup>Kyoko Horii, <sup>1</sup>Takuya Yamagisi, <sup>2</sup>Yujo Kojima, <sup>1,2</sup>Hayuki Sugimoto, and <sup>1,2</sup>Kazushi Suzuki  
<sup>1</sup> Graduate School of Science and Technology, Niigata University, Niigata, Japan;  
<sup>2</sup> Department of Applied Biological Chemistry, Faculty of Agriculture, Niigata University, Niigata, Japan
- P-21 **Activity measurement of nitrogen fixation in rhizobium symbiotic with soybeans**  
<sup>1</sup>Takumi Nishikata, <sup>1</sup>Norikuni Otake, <sup>1</sup>Kuni Sueyoshi and <sup>2</sup>Takuji Ohyama  
<sup>1</sup> Graduate School of Science and technology, Faculty of Agriculture, Niigata University, Niigata, Japan  
<sup>2</sup> Tokyo univ. of Agric., Facul. of Applied Biosciences, Dept. of Agriculture Chemistry, Tokyo, Japan
- P-22 **Investigation of Echigo-hime fruit quality in different ripe stage at various harvest period**  
<sup>1</sup>Moe Nomura, <sup>1</sup>Norikuni Otake, <sup>2</sup>Ryuta Tanemura, <sup>2</sup>Naonori Hamato, <sup>1</sup>Kuni Suyoshi and <sup>1</sup>Yoshitaka Motonaga  
<sup>1</sup> Applied Biological Chemistry, Faculty of Agriculture, Niigata Univ., Niigata, Japan;  
<sup>2</sup> Niigata Agricultural Research Institute Horticultural Research Center, Seiro, Japan
- P-23 **Study on seed components of Russian original soybean [*Glycine Max* (L.) Merrill] line**  
<sup>1</sup>Norikuni Otake, <sup>2</sup>Emelianov Alexey Nikolaevich, <sup>2</sup>Butovets Ekaterina Sergeyevna, <sup>2</sup>Lukyanchuk Lyudmila Mikhailovna, <sup>3</sup>Valentina Sinegovskaya, <sup>3</sup>Evgeniya Fokina, <sup>3</sup>Mikhail Sinegovskii, <sup>1</sup>Yoshitaka Sano <sup>1</sup>Anna Lyude and <sup>1</sup>Hideo Hasegawa,  
<sup>1</sup> Dept. of Appl. Biol. Chem., Fac. of Agric., Niigata Univ., Niigata, Japan;  
<sup>2</sup> Federal Scientific Center of the Far Eastern agrobiotechnology named after A. K. Chaika, Ussuriysk, Primorsky Krai, Russia;  
<sup>3</sup> All-Russian Scientific Research Institute of Soybean, Blagoveshchensk, Amur Region 675027, Russia;
- P-24 **Changing of Togoro-ume (*Prunus mume*) flavor components in different harvesting period.**  
<sup>1</sup>Nozomi Honma, <sup>2</sup>Masurou Sakata, <sup>3</sup>Takaaki Tanaka, <sup>4</sup>Kazuhiro Yamamoto, <sup>2</sup>Hiroyuki Shibukawa, <sup>2</sup>Noriko Yokoyama, <sup>1</sup>Norikuni Otake and <sup>1</sup>Kuni Sueyoshi  
<sup>1</sup> Dept. of Appl. Biol. Chem., Fac. of Agric., Niigata Univ.,  
<sup>2</sup> Konan Ward Office, Niigata City,  
<sup>3</sup> JA Niigata mirai  
<sup>4</sup> Agricultural Development and Extension center in Niigata
- P-25 **Physiological significance of NADP<sup>+</sup> synthesis in *Synechocystis* sp. PCC 6803**  
<sup>1</sup>Yuuma Ishikawa, <sup>1</sup>Atusko Miyagi, <sup>1</sup>Toshiki Ishikawa, <sup>2</sup> Minoru Nagano, <sup>1</sup>Masatoshi Yamaguchi, <sup>3</sup>Kintake Sonoike, <sup>1</sup>Yukako Hihara, <sup>1</sup>Yasuko Kaneko, <sup>1</sup>Maki Kawai-Yamada  
<sup>1</sup> Saitama University <sup>2</sup> Ritsumeikan University <sup>3</sup>Waseda University

P-26 **Subcellular localization of barley two-component nitrate transport system.**

<sup>1</sup>Shun Furuta, <sup>1</sup>Eriko Suzuki, <sup>2</sup>Norikuni Otake, <sup>2</sup>Kuni Sueyoshi

<sup>1</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;

<sup>2</sup> Faculty of Agriculture, Niigata Univ., Niigata, Japan;

P-27 **Cyanidin-3-O-glucoside attenuate amyloid beta-induced apoptosis through Nrf2 pathway in neuroblastoma Neuro-2a cells**

Mitsuhisa ISHIBASHI <sup>1</sup>, Takashi HARA <sup>2</sup>, Takeshi IKEUCHI <sup>3</sup>, Sumiko NAKAMURA <sup>4</sup>, Toshio JOH <sup>2</sup>,

Masatoyo NISHIZAWA <sup>3</sup>, Akira YAMAZAKI <sup>5</sup>, Atsushi KOBAYASHI <sup>5</sup>, Ken'ichi OHTSUBO <sup>4</sup>

<sup>1</sup> Graduate School of Science and Technology, Niigata University, Niigata, Japan

<sup>2</sup> Faculty of Agriculture, Niigata University, Niigata, Japan

<sup>3</sup> Brain Research Institute, Niigata University, Niigata, Japan

<sup>4</sup> Niigata University of Pharmacy and Applied Life Sciences, Niigata, Japan

<sup>5</sup> Echigo Seika Co., Ltd., Niigata, Japan

P-28 **Ferulic acid alleviates amyloid beta-induced cell death by ameliorating mitochondrial dysfunctions in neuroblastoma Neuro-2a cells**

Masami UMEDA <sup>1</sup>, Takashi HARA <sup>1</sup>, Takeshi IKEUCHI <sup>2</sup>, Sumiko NAKAMURA <sup>3</sup>, Toshio JOH <sup>1</sup>,  
Masatoyo NISHIZAWA <sup>2</sup>, Akira YAMAZAKI <sup>4</sup>, Atsushi KOBAYASHI <sup>4</sup>, Ken'ichi OHTSUBO <sup>3</sup>

<sup>1</sup> Faculty of Agriculture, Niigata University, Niigata, Japan

<sup>2</sup> Brain Research Institute, Niigata University, Niigata, Japan

<sup>3</sup> Niigata University of Pharmacy and Applied Life Sciences, Niigata, Japan

<sup>4</sup> Echigo Seika Co., Ltd., Niigata, Japan

P-29 **Comparative analysis of intracellular localization of OsSUMO3/4/5**

<sup>1</sup>Nanami Itoh, <sup>1</sup>Natsuki Noguchi, <sup>4</sup>Kazusato Oikawa, <sup>2,3</sup>Kimiko Itoh

<sup>1</sup> affiliation Graduate School of Science and Technology, Niigata University,Japan;

<sup>2</sup> Institute of Science and Technology, Niigata University,Japan;

<sup>3</sup> Faculty of Agriculture, Niigata University,Japan;

<sup>4</sup> Center for Sustainable Resource Science, RIKEN,Japan

P-30 **Effect of Hight-affinity K<sup>+</sup> Transporter (HKT) Gene on Salt Tolerant Bread Wheat**

**Murat AYCAN<sup>1\*</sup>, Kimiko ITOH<sup>1</sup> and Mustafa YILDIZ<sup>2</sup>**

<sup>1</sup> Institute of Science and Technology, Niigata University, Niigata, Japan

<sup>2</sup> Department of Field Crops, Faculty of Agriculture, Ankara University, Ankara, Turkey

P-31 **Effects of glycogen metabolic enzyme deficiency and OsGBSSI expressopm on glycogen structure in *Escherichia coli*.**

<sup>1</sup>Kana Ito, <sup>1</sup>Mamiko Fukushima, <sup>3</sup>Isao Hanashiro, <sup>4</sup>Goizeder Almagro, <sup>4</sup>Javier Pozueta-Romero,  
<sup>1,2</sup>Toshiaki Mitsui, <sup>1,2</sup>Kimiko Itoh

<sup>1</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan

<sup>2</sup> Institute of Science and Technology, Niigata Univ., Niigata, Japan

<sup>3</sup> Research Field in Agriculture, Agriculture, Fisheries and Veterinary Medicine Area, Kagoshima Univ., Kagoshima, Japan

<sup>4</sup> CSIC, UPNA, Gobierno de Navarra, Instituto de Agrobiotecnología, Spain

P-32 **Study of micro- and macro-structures of rice starch lacks three BE isoforms.**

<sup>1</sup>Daichi Goto, <sup>1</sup>Katsumi Abe, <sup>2</sup>Isao Hanashiro, <sup>1</sup>Ryuichi Shiratori, <sup>3</sup>Kimiko Itoh

<sup>1</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;

<sup>2</sup> Kagoshima Univ., Kagoshima, Japan;

<sup>3</sup> Institute of Science and Technology, Niigata Univ., Niigata, Japan

P-33 **TOWARDS A MULTI-APPROACH STUDY FOCUSED ON IMPROVING RESOURCE USE EFFICIENCY IN CEREALS UNDER CLIMATE CHANGE (IRUEC)**

**Marouane Baslam<sup>1,2</sup>, Toshihiro Nagamori<sup>1</sup>, Takeshi Takamatsu<sup>1,2</sup>, Kentaro Kaneko<sup>1</sup>, José Luis Araus<sup>3</sup>, Eckart Priesack<sup>4</sup>, Bertrand Gakière<sup>5</sup>, Iker Aranjuelo<sup>6</sup>, Toshiaki Mitsui<sup>1,2</sup>**

<sup>1</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;

<sup>2</sup> Fac. of Agric., Niigata Univ., Niigata, Japan;

<sup>3</sup> University of Barcelone, Barcelona, Spain:

<sup>4</sup> Helmholtz Center-Munich, Munich, Germany

<sup>5</sup>: Institute of Plant Sciences Paris-Saclay (IPS2), CNRS Université Paris-Sud, Orsay, France:

<sup>6</sup> CSIC, UPNA, Gobierno de Navarra, Instituto de Agrobiotecnología, Pamplona, Spain;

Email: mbaslam@gs.niigata-u.ac.jp

P-34 **PHYTOPATHOGENS: A GOOD OPPORTUNITY TO IMPROVE CROP YIELDS AND QUALITY UNDER CHANGING ENVIRONMENTAL CONDITIONS (POISE)**

**Marouane Baslam<sup>1,2</sup>, Kimiko Itoh<sup>3</sup>, kaneko kentaro<sup>1</sup>, Ohno Mayumi<sup>2</sup>, Furuki Kana<sup>1</sup>, Saitou Seichi<sup>1</sup>, Edurne Baroja-Fernández<sup>4</sup>, Mohammad-Reza Hajirezaei<sup>5</sup>, Karel Dolezal<sup>6</sup>, Javier Pozueta-Romero<sup>4</sup>, Toshiaki Mitsui<sup>1,2</sup>**

<sup>1</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;

<sup>2</sup> Fac. of Agric., Niigata Univ., Niigata, Japan;

<sup>3</sup> Institute of Science and Technology, Niigata University, Niigata, Japan:

<sup>4</sup> CSIC, UPNA, Gobierno de Navarra, Instituto de Agrobiotecnología, Spain;

<sup>5</sup> Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany:

<sup>6</sup> Centre of the Region Haná for Biotechnological and Agricultural Research (CRHBAR), Palacky University, Olomouc, Czech Republic.

Email: mbaslam@gs.niigata-u.ac.jp

P-35 **OPTIMIZING GROWTH AND TOLERANCE OF DATE PALM (*PHOENIX DACTYLIFERA L.*) TO DROUGHT, SALINITY, AND VASCULAR FUSARIUM-INDUCED WILT (*FUSARIUM OXYSPORUM*) BY APPLICATION OF ARBUSCULAR MYCORRHIZAL FUNGI (AMF)**

**Abdelilah Meddich<sup>1</sup>, Mohamed Ait El Mokhtar<sup>1</sup>, Widad Bourzik<sup>2</sup>, Toshiaki Mitsui<sup>3,4</sup>, Marouane Baslam<sup>3,4</sup>, and Hafidi Mohamed<sup>5</sup>**

<sup>1</sup> Department of Biology Biotechnology and Plant Physiology Unit, Université of Cadi Ayyad, Faculté des Sciences Semlalia, Marrakech, Morocco.

<sup>2</sup> Environment Service, Wilaya of the Region Marrakesh-Safi, Morocco, Préfecture of Marrakesh Morocco.

<sup>3</sup> Faculty of Agriculture, University of Niigata, Niigata, Japan.

<sup>4</sup> Graduate School of Science and Technology, University of Niigata, Niigata, Japan.

<sup>5</sup> Department of Biology Ecology and Environment Unit, Université of Cadi Ayyad, Faculté des Sciences Semlalia, Marrakech, Morocco

P-36 **Roles of autophagy in endosperm development during rice seed maturation**

**<sup>1,9</sup>Shigeru Hanamata, <sup>2</sup>Yuri Sera, <sup>3</sup>Shingo Sakamoto, <sup>4</sup>Sejiro Ono, <sup>1</sup>Kentaro Kaneko, <sup>1</sup>Yuudai Mitsui, <sup>2</sup>Tomoko Koyano, <sup>5</sup>Naoko Fujita, <sup>6</sup>Takehiro Masumura, <sup>7</sup>Hikaru Saji, <sup>5</sup>Ken-ichi Nonomura, <sup>3</sup>Nobutaka Mitsuda, <sup>1</sup>Toshiaki Mitsui, <sup>8,9</sup>Takamitsu Kurusu, <sup>2,9</sup>Kazuyuki Kuchitsu**

<sup>1</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;

<sup>2</sup> Dept. of Appl. Biol. Sci., Tokyo Univ. of Sci., Chiba, Japan;

<sup>3</sup> Biop. Rese. Inst., Nati. Inst. of Adv. Ind. Sci. and Tech. (AIST), Ibaraki, Japan;

<sup>4</sup> Experimental Farm, National Institute of Genetics (NIG), Shizuoka, Japan;

- <sup>5</sup> Dept. of Biol. Prod., Akita Prefectural Univ., Akita, Japan;  
<sup>6</sup> Labo. of Gene. Engin., Grad. Sch. of Life and Envi. Sci., Kyoto Prefectural Univ., Kyoto, Japan;  
<sup>7</sup> Cent. for Envi. Biol. and Eco. Stud., Nat. Inst. for Envi. Stud., Ibaraki, Japan;  
<sup>8</sup> Dept. of Mech. and Elec. Engin., Suwa Univ. of Sci., Nagano, Japan;  
<sup>9</sup> Imaging Frontier Center, Tokyo Univ. of Sci., Chiba, Japan

P-37 **ROLE OF ALOG FAMILY GENES IN INFLORESCENCE PATTERNING IN RICE AND ARABIDOPSIS**

**Franchini E.<sup>1</sup>, Israr Ud Din<sup>2</sup>, Bertone C.<sup>1</sup>, Finocchio A.<sup>1</sup>, Gregis V.<sup>1</sup>, Kater M.M<sup>1</sup>**

<sup>1</sup> Università Degli Studi di Milano, Dipartimento di Bioscienze. Via Celoria 26, 20133, Milan, Italy.

<sup>2</sup> Institute of Biotechnology Genetic Engineering, The University of Agriculture, Peshawar, 25130, Khyber Pakhtunkhwa, Pakistan

P-38 **THE GAGA BINDING PROTEINS BASIC PENTACSTEINE PROTEINS CONTROL SEPTUM FORMATION DURING CARPEL DEVELOPMENT IN ARABIDOPSIS THALIANA**

**Petrella R.<sup>1</sup>, Vignati V.<sup>1</sup>, Roig-Villanova I.<sup>1</sup>, Caselli F.<sup>1</sup>, Hanamata S.<sup>2</sup>, Koga A.<sup>2</sup>, Baslam M.<sup>2</sup>, Mitsui T.<sup>2,3</sup>, Kater M.M.<sup>1</sup>, Gregis V.<sup>1</sup>**

<sup>1</sup> Università Degli Studi di Milano, Dipartimento di Bioscienze. Via Celoria 26, 20133, Milan, Italy.

<sup>2</sup> Laboratory of Biochemistry, Faculty of Agriculture, Niigata University, Niigata, Japan

<sup>3</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan

P-39 **SPOROCYTELESS/NOZZLE: NEW INSIGHTS TO UNDERSTAND THE MECHANISM THAT CONTROLS SPOROGENESIS**

**Edoardo Vignati<sup>1</sup>, Marta A. Mendes<sup>1</sup>, Elena Costantini<sup>1</sup>, Francesca Lopez<sup>1</sup>, Silvia Manrique<sup>1</sup>, Lucia Colombo<sup>1</sup>**

<sup>1</sup> Dipartimento di BioScienze, Università degli Studi di Milano (Italy).

P-40 **Analysis of Brewers' Rice Grains Grown Under High Temperature Stress**

**<sup>1</sup>Nanae Ota, <sup>1</sup>Shohei Shiina, <sup>1</sup>Kentaro Kaneko, <sup>2</sup>Marouane Baslam, <sup>3</sup>Isao Hanashiro, <sup>1,2</sup>Toshiaki Mitsui**

<sup>1</sup> Grad. Sch. Sci. & Tech., Niigata Univ., Niigata, Japan

<sup>2</sup> Dept. Agric., Niigata Univ., Niigata, Japan

<sup>3</sup> Fac. Agric., Kagoshima Univ., Kagoshima, Japan

P-41 **Transmembrane nine 1 is involved in membrane trafficking through the secretory pathway to plastids in higher plants**

**<sup>1</sup>Keisuke Kawata, <sup>2,\*</sup>Kazusato Oikawa, <sup>2</sup>Aya Kitajima-Koga, <sup>1,2</sup>Takeshi Takamatsu,**

**<sup>2</sup>Ayumi Yamane, <sup>1</sup>Kentaro Kaneko, <sup>2</sup>Baslam Marouane, <sup>1,2</sup>Toshiaki Mitsui**

<sup>1</sup> Grad. Sch. of Sci. and Tech., Niigata Univ., Niigata, Japan;

<sup>2</sup> Dept. of Appl. Biol. Chem., Fac. of Agric., Niigata Univ., Niigata, Japan

\*Present address, RIKEN Center for Sustainable Resource Science, Yokohama, Japan

P-42 **Proteomics analysis reveals non-controlled activation of photosynthesis and protein synthesis in a rice npp1 mutant under high temperature and elevated CO<sub>2</sub> conditions**

**<sup>1</sup>Takuya Inomata, <sup>2</sup>Marouane Baslam, <sup>1</sup>Takahiro Masui, <sup>1,2</sup>Takeshi Takamatsu**

**<sup>1</sup>Kentaro Kaneko, <sup>3</sup>Javier Pozueta-Romero, <sup>1,2</sup>Toshiaki Mitsui**

<sup>1</sup> Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;

<sup>2</sup> Dept. of Appl. Biol. Chem., Fac. of Agric., Niigata Univ., Niigata, Japan;

<sup>3</sup> CSIC, UPNA, Gobierno de Navarra, Instituto de Agrobiotecnología, Spain

P-43 **Rapid improvement of salinity tolerance in an elite rice cultivar through an efficient SNP marker-aided backcrossing coupled with speed breeding technique**

**Md Masud Rana<sup>1</sup>, Takeshi Takamatsu<sup>1,2</sup>, Marouane Baslam<sup>2</sup> Kentaro Kaneko<sup>1</sup>, Kimiko Itoh<sup>1,2</sup>, Naoki Harada<sup>1,2</sup>, Toshie Sugiyama<sup>1,2</sup>, Takayuki Ohnishi<sup>3</sup>, Tetsu Kinoshita<sup>4</sup>, Akira Abe<sup>5</sup>, Hiroki Takagi<sup>6</sup>, and Toshiaki Mitsui<sup>1,2</sup>**

<sup>1</sup>Department of Life and Food Sciences, Graduate School of Science and Technology, Niigata University, Niigata 950-2181, Japan

<sup>2</sup>Laboratory of Biochemistry, Faculty of Agriculture, Niigata University, Niigata 950-2181, Japan

<sup>3</sup>Center for Education and Research of Community Collaboration, Utsunomiya University, Utsunomiya 321-8505, Japan

<sup>4</sup>Kihara Institute for Biological Research, Yokohama City University, Yokohama 244-0813, Japan.

<sup>5</sup>Iwate Biotechnology Research Center, Iwate 024-0003, Japan

<sup>6</sup>Faculty of Bioresources and Environmental Sciences, Ishikawa Prefectural University, Ishikawa 921-8836, Japan

P-44 **The interaction between OsLACS9 and OsTMN1 showed a possibility to be involved in the transport of Amyl-1 to plastids.**

**<sup>1</sup> Aya Koga, <sup>2</sup> Keisuke Kawata, <sup>2</sup> Takuya Arai, <sup>1</sup> Ayumi Yamane, <sup>2</sup> Tomoko Taniuchi, <sup>2</sup> Takeshi Takamatsu, <sup>1,2</sup> Toshiaki Mitsui**

<sup>1</sup> Department of Applied biological chemistry, Faculty of Agriculture, NIIGATA UNIVERSITY, Niigata, Japan

<sup>2</sup> Graduate School of Science & Technology, NIIGATA UNIVERSITY, Niigata, Japan