KAAB International Symposium 2015 Poster session Program

P-1 Biosorption of heavy metal from aqueous solution onto modified chitosan and alginic acid ¹ Yanling Deng, ¹Meiling Pang, ¹Shunsuke Sekiguchi, ²Ryo Yoshida, ²Naoki Kano, ² Hiroshi Imaizumi

- ¹ Graduate School of Science and Technology, Niigata Univ., Niigata, Japan; ² Dept. of Chem. and Chem. Eng., Fac. of Eng., Niigata Univ., Niigata, Japan
- Saponin and tannic acid for removing heavy metals from soil and sludge P-2 ¹ Meiling Pang, ¹Yukihisa Kanazawa, ²Takehiro Sano, ²Naoki Kano, ²Hiroshi Imaizumi ¹ Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;
 - ² Dept. of Chem. and Chem. Eng., Fac. of Eng., Niigata Univ., Niigata, Japan
- P-3 The effect of chelating agents on phytoremediation of Pb, Zn and Cd from soil using Brassica Juncea, Gazania and Taraxacum officinale
 - ¹Shuang Zhang, ²Lidi Gao, ¹Kei Kusano, ³Takumi Hori, ³Naoki Kano, ³Hiroshi Imaizumi
 - ¹ Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;
 - ² Dept. of Chem. and Chem. Eng., Qiqihar Univ., Qiqihar, China;
 - ³ Dept. of Chem. and Chem. Eng., Fac. of Eng., Niigata Univ., Niigata, Japan

P-4 Biosynthesis of Sesterterpenes, Head-to-Tail Triterpenes, and Sesquarterpenes in Bacillus clausii: Identification of Multifunctional Enzymes and Analysis of Isoprenoid Metabolites ¹ Daijiro Ueda, ¹Hiroaki Yamaga, ¹Mizuki Murakami, ²Yusuke Totsuka,

² Tetsuro Shinada, ¹Tsutomu Sato

¹ Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;

- ² Graduate School of Science and Technology, Osaka City Univ., Osaka, Japan
- P-5 β-Amyrin biosynthesis. Enzymatic reactions of the substrate analogs modified at the terminus

¹ Ikki Kaneko, ¹ Yuri Miyahara, ¹ Masaki Hanaoka, ¹ Kazunari Takahashi, ¹ Chiaki Nakano,

¹ Ryousuke Ito, ^{1,2}Tsutomu Hoshino

- ¹ Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;
- ² Department of Applied Biological Chemistry, Niigata Univ., Niigata, Japan;

P-6 Measurement of potassium distribution in leaf lettuce and non-destructive evaluation of potassium concentration by using near infrared spectroscopy

¹ Kazuyuki lijima, ¹ Kazuhiro Nakano, ² Shintaroh Ohashi, ¹ Ken-ichi Takizawa,

¹ Kaoru Hosokawa,³ Phonknit Maniwara, ³ Danai Boonyakiat

- ¹ Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;
- ² Faculty of Agriculture, Niigata Univ., Niigata, Japan;
- ³ Faculty of Agriculture, Chiang Mai Univ., Thailand

P-7 The effect of head space in the closed vessel on the growth characteristics of microalgae ¹ Konatsu Nagamura, ¹ Kazuhiro Nakano, ² Shintaroh Ohashi, ¹ Ken-ichi Takizawa, ¹ Kaoru Hosokawa, ³Phonkrit Maniwara, ³Danai Boonyakiat

- ¹ Graduate School of Science and Technology, Niigata Univ., Niigata, Japan;
- ² Faculty of Agriculture, Niigata Univ., Niigata, Japan;
- ³ Faculty of Agriculture, Chiang Mai Univ., Thailand

P-8 Expression analysis of two phenylalanine ammonia-lyase genes in Matsutake mushroom ¹ Yuji Tasaki, ¹Hayato Miyakawa, and ¹Shunya Hayashi

Department of Materials Engineering, National Institute of Technology, Nagaoka College, Nagaoka, Japan

P-9 Changes of soil properties by irrigation water elevate rice ¹³⁷Cs activities

¹ Yoshimasa Suzuk<u>i</u>, ¹Ryosuke Shoji, ¹Takahiro Tsurumaki, ¹Ryota Yoshizawa,

¹ Syohei Tamaki, ²Natsuki Yoshikawa, ³Hideki Ishii, ³Norio Nogawa, ²Naoki Harada and ²Masanori Nonaka

- ¹ Graduate School of Science and Technology, Niigata University, Niigata, Japan;
- ² Institute of Science and Technology, Niigata University, Niigata, Japan;

³ Fukushima Future Center for Regional Revitalization, Fukushima University, Fukushima, Japan

P-10 Antioxidant components and acetylcholinesterase inhibitory activity of burdock sprout ¹ Ryosuke Takahashi, ²Takashi Hara, ²Toshio Joh

- ¹ Niigata University Graduate School of Science and Technology, Japan;
- ² Niigata University Department of Applied Biological Chemistry, Japan

P-11 Study of *in vitro* ELC (Extra-long chain) synthesis by rice GBSSI.

¹ Ami Hyono, ¹Mina Yamazaki, ¹Michiyo Takahashi, ²Kentaro Kaneko, ²Kimiko Itoh ¹ Grad. Sch. Sci Tech., Niigata-Univ., Niigata, Japan; ²Inst. Sci. Tech., Niigata-Univ.,

P-12 Effect of heating treatment on 5'-guanylic acid content in Enokitake (*Flammulina velutipes*) ¹ Akiko Miyamoto, ²Yuichi Ikeda, ³Takashi Hara, ³Toshio Joh

- ¹ Graduate School of Science and Technology, Niigata University, Niigata, Japan;
- ² Niigata Prefectural Forest Research Institute, Japan;
- ³ Department of Applied Biological Chemistry, Niigata University, Japan

P-13 Replanting is effective on reducing cesium-137 in mulberry leaves

¹ Yusuke Kowata, ²Naoki Harada, ²Masanori Nonaka

- ¹ Graduate school of science and technology Niigata University, Niigata, Japan;
- ² Institute of Science and Technology Niigata University, Niigata, Japan

P-14 Gentio-oligosaccharide regulates bud dormancy in Gentiana triflora

¹ Hideyuki Takahashi, ²Tomohiro Imamura, ¹Kohei Fujita, ¹Masahiro Nishihara, ³ Hirofumi Uchimiya

- ¹ Iwate Biotechnology Research Center, Japan;
- ² Tokyo University of Science Department of Biological Science and Technology, Japan;
- ³ Saitama University Institute of Environmental Science and Technology, Japan

P-15 Clarification of chalking mechanism of rice grains caused by normal and high temperature during grain filling

¹ Nanako Kuribayashi, ¹Maiko Sasaki, i¹Hiromu Suzuk, ²Yukiko Sasuga,

² Kentaro Kaneko, ^{1,2}Toshiaki Mitsui

- ¹ Graduate School Science and Technology, Niigata University;
- ² Department of Applied Biological Chemistry, Niigata University

P-16 Chitin degradation and utilization system regulated by small RNA in Serratia marcescens

^{1,2} Kazushi Suzuki, ¹Haruka Minami, ¹Chisana Ogawa, ¹Naomi Sasaki, ¹Mari Shimizu,

¹ Shinya Takano, ^{1,2}Hayuki Sugimoto, and ^{1,2}Takeshi Watanabe

- ¹ Graduate School of Science and Technology, Niigata University;
- ² Department of Applied Biological Chemistry, Faculty of Agriculture, Niigata University

P-17 Suppressive Effects of Low Seed-soaking Temperatures on Germination of Long-term-stored

Rice Seeds

¹ Shigeto Itayagoshi, ¹Seiichi Mizusawa, ¹Osamu Kawakami, ²Hiroshi Shibukawa,

³ Takeshi Takamatsu, ³Maiko Sasaki, ⁴Kentaro Kaneko ^{3,4}Toshiaki Mitsui

- ¹Niigata Agricultural Research Institute, Japan;
- ² Hokuriku Research Center, NARO, Japan;
- ³Niigata University Graduate School of Science and Technology, Japan;
- ⁴ Niigata University Department of Applied Biological Chemistry, Japan
- P-18 N-glycomic and microscopic subcellular localization analyses of NPP1, 2 and 6 strongly indicate that trans-Golgi compartments participate in the Golgi-to-plastid traffic of nucleotide pyrophosphatase/phosphodiesterases in rice

¹ Kentaro Kaneko, ^{1,2}Takeshi Takamatsu, ²Takuya Inomata, ²Kazusato Oikawa, ^{1,2}Kimiko Itoh, ³Javier Pozueta-Romero, ^{1,2}Toshiaki Mitsui

- ¹ Graduate School of Science and Technology, Niigata University, Japan;
- ² Depertment of Applied Biochemistry, Niigata University, Japan;
- ³ Instituto de Agrobiotecnología (CSIC, UPNA, Gobierno de Navarra), Spain.
- P-19 Functional analysis of OsLACS9 at chloroplasts envelope membrane ¹Tomoko Taniuchi, ¹Yuki Hamada, ¹Takeshi Takamatsu, ¹Namiko Ito, ¹ Ryuichi Ishiyama, ² Aya Koga, ² Kazusato Oikawa, ^{1,2} Toshiaki Mitsui
 - ¹ Graduate School of Science and Technology, Niigata University, Japan;
 - ² Depertment of Applied Biochemistry, Niigata University, Japan
- P-20 Plastid targeting of alpha-amylase I -1 in rice cells
 - Hirokazu Ogihara, ¹ Aya Kitajima-Koga, ²Takashi Takamatsu, ¹Kazusato Oikawa, ¹Kentaro Kaneko, ^{1,2}Toshiaki Mitsui ¹ Department of Applied Biochemistry, Niigata University;

 - ² Graduate School of Science and Technology, Niigata University

P-21 Protein and gene expression analysis of grains under high temperature stress in rice variety 'Koshihikari'

- Takeshi Shirava. ^{2, 3}Toshiaki Mitsui
 - ¹Niigata Agricultural Research Institute Crop Research Center, Japan;
 - ²Niigata University Graduate School of Science and Technology, Japan;
 - ³Niigata University Department of Applied Biological Chemistry, Japan
- P-22 Identification of Fungal Proteins in Xylem Sap of Brassica oleracea Infected by Fusarium oxysporum

¹Z.J. Pu, ²Y. Ino, ²Y. Kimura, ¹A. Tago, ¹M. Shimizu, ³S. Natsume, ³K. Kaneko¹, ¹Y.

Sano.

¹ R. Fujimoto, ⁴S. Fuji, ²H. Hirano, ¹K. Okazaki

¹Graduate school of Technology and Science, Niigata University, Japan;

²Advanced Medical Research Center, Yokohama City University, Yokohama, Japan;

³Iwate Biotechnology Institute, Kitakami, Japan;

⁴Faculty of Bioresource Sciences, Akita Prefectural University, Akita, Japan

P-23 Comparative proteomics of rice endosperm proteins from seven cultivars, differences in physicochemical properties of the starches.

¹ Masataka Nihei, ²Mari Watanabe, ¹Kentaro Kaneko, ²Kimiko Itoh, ¹Toshiaki Mitsui ¹ Fac. of Agric., Niigata Univ., Japan; ^{2.} Grad. Sch. Sci. Tech., Niigata Univ., Japan