KAAB International Symposium 2019 Poster session Program

Biochemistry

P-1 **Analysis of the intercellular localization and interaction between *Oryza sativa* Transmembrane Nine Protein 1 (TMN1) and α-amylase (Amyl-1) : New insights into the transport and localization mechanisms of plastid proteins through the secretory pathway**

[1]Ayumi Yamane, [2]Kazusato Oikawa, [2]Aya Koga, [2]Reo Tanaka, [1]Kentaro Kaneko, [2]Shigeru Hanamata, [2]Marouane Baslam, [1,2]Toshiaki Mitsui

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P-2 **Volatile-mediated effects on growth promotion, signaling, and heat-stress tolerance in Rice at seedling and reproductive stages**

[1]Saho Nambo, [2]Javier Pozueta-Romero, [1,3]Toshiaki Mitsui, [3]Marouane Baslam

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P-3 **Development of sake-brewing rice (Koshi-tanrei *Sdr4-k*) tolerant to pre-harvest sprouting through speed-breeding technique**

[1]Maiko Iwano, [1]Rana Md Masud, [2]Shinya Kanazawa, [1]Kentaro Kaneko, [2]Marouane Baslam, [1,2]Toshiaki Mitsui

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P-4 **Technology development of high-protein rice endosperm**

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P-5 **Sake and "Elite" Rice Grains Responses to Rising Temperatures**

[1]Nanae Ota, [1]Shohei Shiina, [2]Yudai Kikuchi, [1]Kentaro Kaneko, [2]Marouane Baslam, [3]Isao Hanashiro, [1,2]Toshiaki Mitsui

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P-6 **Elucidating the timing and mechanisms of chalkiness formation in grain rice developmental processes under combined stresses**

[1]Masashi Saito, [1]Nodoka Wakamatsu, [2]Arisa Shimbo, [1]Takuya Inomata, [1]Kentaro Kaneko, [2]Marouane Baslam, [1,2]Toshiaki Mitsui

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P-7 **Exogenously H_2O_2 treatment improves high temperature ripening damage tolerance**

[1]Mari Sekura, [1]Yudai Mitsui, [1]Yukiko Sasuga, [1]Shigeru Hanamata, [1]Marouane Baslam, [2]Kentaro Kaneko, [1,2]Toshiaki Mitsui

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P-8 **Functional analysis of late embryogenesis abundant protein 3-1 in high temperature stress-induced chalky grain of rice**

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P-9 **FT-IR analysis of ethyl-methane-sulfonate-induced (EMS) soybeans and their amino acids**

Kazushi Suzuki, Norikuni Ohtake, Kuni Sueyoshi, Yoshitaka Motonaga

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P-10 **Impact of autophagy on gene expression and tapetal programmed cell death during pollen development in rice**

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P-11 **Arbuscular mycorrhizal fungi application improve nutrient uptake and antioxidant system of date palm seedlings under salt stress**

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P-12 **Towards a multi-approach study focused on Improving Resource Use Efficiency in Cereals under Climate Change (IRUEC)**

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P-13 **Insights into the mechanisms involved in the improvement of yields and quality of Rice exposed to volatile compounds emitted by phytopathogens under climate change Scenarios**

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P-14 **Combined use of green compost with Mycorhizae and rhizobia for reducing the negative effects of salt stress in Alfalfa (*Medicago sativa*)**

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P-15 **Arbuscular mycorrhizal fungi modulate stomatal, hydraulic, and (in)-organic adjustments of two contrasting Carob (*Ceratonia siliqua* L.) ecotypes to drought stress and recovery conditions**

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P-16 **Development of new salt-tolerant wheat genotypes in Central Anatolia confirmed by physio-biochemical and molecular analyses**

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Microorganisms

P-17 **Identification of a novel heptaprenyl reductase and search for a Z-type sesquarterpene cyclase from *Mycobacterium* spp.**

[1]Tohru Abe, [1]Sadamu Ozaki, [2]Yuri Yoshida, [2]Ayana Miura, [2]Masahiro Sagara, [1,2]Daijiro Ueda, [2]Kentaro Kaneko, [1,2]Toshiaki Mitsui, [1,2]Tsutomu Sato

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P-18 **Characterization and mutation of class-IB terpene synthase**

[1]Rafaella Stepanova, [1]Tomoyuki Nishi, [1]Kei Sugawara, [1]Kao Ogawa, [1]Hirotada Takahashi, [1]Daijiro Ueda, [2]Masahiro Fujihashi, [2]Kunio Miki, [2]Yoko Yasuno, [3]Tetsuro Shinada, [1]Tsutomu Sato

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P-19 **Analysis of stability and function of small RNA CsrB in *Escherichia coli***

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P-20 **Structural Stability of Chitin-binding protein 21 (CBP21)**

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P-21 **Analysis of GGDEF/EAL domain proteins, YliE and YliF, in *Escherichia coli***

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P-22 **Analysis of chitin degradation enzymes in chitinase system of *Serratia plymuthica***

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P-23 **Post-transcriptional regulation of chitinase system by small RNA ChiX in *Serratia***

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P-24 **Improvement of Fermentation Ability for Sake Brewing of Wild Yeast by Breeding**

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P-25 **Characterizing hydrogenase activity of Bradyrhizobium diazoefficiens USDA110**

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P-26 **OsGBSSI expression and glycogen metabolic enzyme deficiency affects glycogen structure and metabolome in *Escherichia coli***

[1]Kana Ito, [1]Mamiko Fukushima, [3]Goizeder Almagro, [3]Javier Pozueta-Romero, [2]Hideyuki Takahashi, [2]Toshiaki Mitsui, [2]Kimiko Itoh

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Soil Science

P-27 **Effect of chelating agents (EDTA, HIDS) on phytoremediation of Pb- and Cd- contaminated soil by *Brassica Juncea***

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P-28 **Determination of heavy metals in soil environment and removal of heavy metals from contaminated soil by tannic acid and EDDS**

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P-29 **Preparation and Characterization of EDTA-chitosan modified metal-organic framework**

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P-30 **Stir bar sorptive extraction of free fatty acid in culture solution of cyanobacteria**

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P-31 **Developing Recovery Process of Phosphorus from Sludge Ash and Plant Cultivation Experiment by Using Synthesized Phosphorus Fertilizer Derived from Sewage Sludge Ash**

[1]Ken Ito, [1]Mayu Watanabe, [1]Yuki Nakadai, [2]Arata Okazaki, [2]Yuka Hoshino, [3]Rina Okamoto, [3]Togashi Takehiro, [3]Haruka Imaizumi, [4]Norikuni Otake, [5]Masaaki Kanno, [2]Naoki Kano, [2]Hee-Joon Kim

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P-32 **Development of cultural environment for a year-round cultivation by using regional resource**

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P-33 **Nondestructive Determination of Potassium Concentration in Lettuce by Visible/Near infrared spectroscopy**

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Horticulture

P-34 **Production and characterization of transgenic *Lilium* 'Acapulco' plants containing the MBW-complex genes of *Arabidopsis thaliana***

Takuo Fujimoto, Masahiro Otani, Masaru Nakano

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P-35 **Production of triploid hybrid plants between a tetraploid variant of *Tricyrtis* sp. 'Shinonome' and *T. formosana* 'Seiryu' via ovule culture**

Keitaro Tago, Toshiya Inamura, Masahiro Otani, Masaru Nakano

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P-36 **Production and characterization of interspecific hybrids between *Tricyrtis* formosana and *T. macropoda* or *T. affinis* via ovule culture**

[1]Yuri Kato, [2]Toshiya Inamura, [2]Masahiro Otani, [2]Masaru Nakano

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P-37 ***In vitro* chromosome doubling of *Crowea* sp. by spindle toxin treatment of shoot segments**

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P-38 **Expression analysis of *TERMINAL FLOWER 1*-like genes from two *Tricyrtis* spp. showing different types of inflorescence architecture**

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P-39 **Ectopic expression of the TERMINAL FLOWER 1 (TFL1) gene of *Arabidopsis thaliana* promotes branching in transgenic *Kalanchoe blossfeldiana***

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P-40 **Investigation of Echigohime fruit quality in different developing stages during various hervest periods**

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P-41 **Study on Togoro-ume (*Prunus mume*) flavor components in different harvesting period**

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Animal Ecology & Functional Compounds

P-42 **Effects of fragmentation between forest and paddy levees on soil animals in *Satoyama***

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P-43 **Protective effects of ferulic acid-4'-O-glucuronide (FA4G) on amyloid β-induced cytotoxicity in human neuroblastoma SK-N-SH cells**

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P-44 **Protective effects of anthocyanin on amyloid β-induced cytotoxicity and tau phosphorylation in Neuro 2a cells stably expressing human tau (N2aMAPT)**

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P-45 **Heat-killed *Lactobacillus casei* subsp. casei 327 promotes defecation and colonic serotonin synthesis in mice**

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P-46 **Accuracy of Genomic Selection**

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Materials Chemistry

P-47 **Magnetorheological Response for Polysaccharide Magnetic Hydrogels**

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P-48 **Magnetorheological Effect for Magnetic Elastomers with Various Particle Dispersibility by Sonication**

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P-49 **Magnetorheological response for magnetic elastomers with magnetic particles coated by PMMA**

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P-50 **Magnetorheological response for bimodal magnetic elastomers mimetic to sea cucumber**

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P-51 **Variable Vibration Absorbing Property for Bimodal Magnetic Elastomers**

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P-52 **Electric Properties for Bio-Based Polyimide derived from 4,4'-diamino-α-truxillic acid and 1,2,3,4-cyclobutanetetracarboxylic dianhydride**

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