

Poster Presentation

Session 1 (P1-) : 11th July Wednesday 11:30 ~ 12th July Thursday 12:00
Core time : odd number 11th July 15:30 ~ 16:45 / even number 11th July 16:45 ~ 18:00

Session 2 (P2-) : 12th July Thursday 12:30 ~ 13th July Friday 13:00
Core time : odd number 12th July 15:30 ~ 16:45 / even number 12th July 16:45 ~ 18:00

11th July (Wednesday), Room A1

* : Poster award candidates

P1-001~P1-009 Soil Ecosystem

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- * **P1-001** Difference in microbial community structure of lotus production soil by influence of replant problem
レンコン栽培実圃場の連作障害有無における微生物群集構造の違い
○Hazuki Kurashita¹⁾, Yuga Hirakata²⁾, Motonori Takagi³⁾, Masashi Hatamoto²⁾, Shinya Maki²⁾, Takashi Yamaguchi²⁾, Toru Aoi⁴⁾, Kyohei Kuroda¹⁾
1) NIT, Miyakonojo College 2) Nagaoka Univ. of Tech. 3) Ibaraki Agric. Cent. 4) NIT, Gunma College
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- P1-002** Microflora in Arctic Wetland Soils of a Taiga-Tundra Ecotone in Northeastern Siberia
北東シベリアタイガ - ツンドラ境界域湿地土壌の微生物叢
○Jun Murase¹⁾, Atsuko Sugimoto²⁾, Ryo Shingubara³⁾, Trofim C. Maximov⁴⁾
1) Grad. Sch. Bioagr. Sci., Nagoya Univ. 2) Fac. Earth Environ. Sci., Hokkaido Univ.
3) Grad. Sch. Environ. Sci., Hokkaido Univ. 4) Inst. for Biol. Problems of Cryolithozone SB RAS
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- * **P1-003** Environmental factors affecting the activities of nitrogen fixation and denitrification in the peatland of Ozegahara Mire, Central Japan
尾瀬ヶ原における泥炭土壌の窒素固定活性と脱窒活性に影響を及ぼす環境要因の検討
○Haruka Shigeta¹⁾, Kazuyuki Inubushi¹⁾, Mitsuru Sakamoto²⁾
1) Soil Science, Chiba Uni. 2) Environmental Science, Univ. of Shiga Pref.
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- * **P1-004** Cultivation of Novel Nitrite Oxidizer *Nitrospira* from Acidic Soil
酸性土壌に由来する新規な亜硝酸酸化細菌*Nitrospira*の培養
○Yu Takahashi¹⁾, Hirotsugu Fujitani^{2), 3)}, Yuhei Hirono⁴⁾, Masahito Hayatsu⁴⁾, Satoshi Tsuneda^{1), 2)}
1) Grad. Sch. Adv. Sci. Eng., Waseda Univ. 2) NLR, Waseda Univ. 3) Environ., DTU
4) NARO
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- * **P1-005** A study on the effect of application of different organic materials on soil bacterial communities under flooded condition
施用する有機物の構成成分の違いが湛水条件下の土壌細菌群集に与える影響に関する研究
○Kazuki Suzuki¹⁾, Aya Kaneko²⁾, Natsumi Wada³⁾, Naoki Harada⁴⁾
1) Center for Transdisciplinary Research, Institute for Research Promotion, Niigata Univ.
2) Graduate School of Science and Technology, Niigata Univ. 3) Faculty of Agriculture, Niigata Univ. 4) Institute of Science and Technology, Niigata Univ.
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- * **P1-006** Effect of drying and rewetting on greenhouse gas emission in different fertility soils with biochar
乾湿の繰り返しおよびバイオ炭が炭素含量の異なる土壌の温室効果ガス放出に及ぼす影響
○Manami Shiga¹⁾, Kátai János²⁾, Andrea Balláné Kovács²⁾, Imre Vágo²⁾, Magdolna Tallai²⁾, Kazuyuki Inubushi¹⁾
1) laboratory of soil science, Chiba University 2) University of Debrecen
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P1-007 Temporal variation of microbial community in the biodegradable plastic film-buried soil**生分解性プラスチックPBSAフィルム埋設土壌における微生物群集の経時的変化**

○Shun Tsuboi¹、Yuko Takada Hoshino¹、Hirohide Uenishi²、Natsuki Oomae³、Tomotake Morita³、Kimiko Yamamoto-Tamura¹、Yuka Sameshima-Yamashita¹、Ayaka Kishimoto-Mo¹、Hiroko Kitamoto¹

1) NIAES, NARO 2) NIAS, NARO 3) ISC, AIST

* **P1-008 [ASME] Semi-ubiquitous presence of iron reducing bacterial *nif* genes in terrestrial soils****陸域土壌における鉄還元菌窒素固定遺伝子の分布—水田だけではない!? 鉄還元菌による窒素固定—**

○Yoko Masuda¹、Hideomi Itoh²、Yutaka Shiratori³、Seigo Amachi⁴、Keishi Senoo^{1, 5}

1) Graduate school of agricultural and life sciences, The University of Tokyo

2) AIST, Hokkaido 3) Niigata Agricultural Research Institute 4) Graduate school

of Horticulture, Chiba University 5) Collaborative Research Institute for Innovative Microbiology, The University of Tokyo

P1-009 Assessment of soil fertility using voltage of microbial fuel cell**微生物燃料電池の電位を用いた土壌肥沃度の評価の可能性**

○Hiroshi Yukimoto、Shohei Ebe、Tatsuya Ohike、Masahiro Okanami、Takashi Ano
Grad. Sch. BOST, Kindai Univ.

P1-010~P1-021 Aquatic Ecosystem**P1-010 Succession of bathymetric microbial community in deep-sea hydrothermal plumes****微生物群集構造遷移から推定される深海漸深層における微生物の役割**

○Michinari Sunamura

EPS, Univ. of Tokyo

P1-011 Quantification of single-stranded viruses in the marine environment**海洋環境中の一本鎖DNAウイルス群の新規定量解析**

○Mitsuhiro Yoshida¹、Yukari Yoshida-Takashima¹、Miho Hirai²、Yoshihiro Takaki¹、Takuro Nunoura²、Ken Takai¹

1) D-SUGAR, JAMSTEC 2) R&D Center for MB, JAMSTEC

P1-012 Abundance, diversity and cultivation of anaerobic protists in anoxic lacustrine sediments**湖沼堆積物における嫌気性原生生物の現存量、多様性と単離培養**

○Ryuji Kondo、Takafumi Kataoka

Dept. Marine Sci. Tech., Fukui Pref. Univ

P1-013 Contribution of the polyphosphate accumulating bacteria to phosphorus dynamics in river water**河川から高頻度に検出されるポリリン酸蓄積細菌がリン動態に及ぼす影響**

○Keiji Watanabe¹、Wataru Suda²、Sho Morohoshi³、Tadao Kunihiro³

1) CESS 2) RIKEN IMS 3) TechnoSuruga Lab.

P1-014 Enrichment of marine bacteria with adding a halocarbon, Bromoform (CHBr₃)**ハロゲン化炭素ブロモホルムによる海洋細菌の集積培養**

○Takafumi Kataoka¹、Atsushi Ooki²、Daiki Nomura²

1) MST, Fukui Pref. Univ. 2) Faculty of Fisheries Sci., Hokkaido Univ.

* **P1-015 Transitions of dissolved organic matter composition and bacterial community structure in long-term biodegradation assay of lake water****長期生分解実験における湖水の溶存有機物組成と細菌群集構造の変化**

○Taisuke Nakajima¹、Ikuro Kasuga¹、Futoshi Kurisu²、Hiroaki Furumai²

1) dUE, Grad. Univ. of Tokyo 2) RECWET, Grad. Univ. of Tokyo

* **P1-016 Changes in sediment bacterial community composition in response to seasonal hypoxia in an enclosed bay, for four consecutive years****季節的な貧酸素化に対する閉鎖性内湾の堆積物細菌群集組成の変動**

○Fumiaki Mori¹、Yu Umezawa²、Ryuji Kondo³、Minoru Wada¹

1) GFES, Nagasaki Univ. 2) GSA, Tokyo Univ. Agr. and Tech. 3) MST, Fukui Prefectural Univ.

P1-017 Significant decrease in nitrification rates by Arctic environment changes

北極環境変動は硝化速度を低下させる

○Takuhei Shiozaki¹⁾、Minoru Ijichi²⁾、Akiko Makabe³⁾、Amane Fujiwara⁴⁾、Koji Sugie¹⁾、Shigeto Nishino⁴⁾、Chisato Yoshikawa⁵⁾、Naomi Harada¹⁾

1) RCGC, JAMSTEC 2) AORI, UTokyo 3) SIP, JAMSTEC 4) IACE, JAMSTEC

5) Department of Biogeochemistry, JAMSTEC

P1-018 [ASME] Elevational patterns and hierarchical environmental determinants of biodiversity across taxonomic scales○Chih-Fu Yeh^{1), 3)}、Jianjun Wang^{1), 2)}、Janne Soininen¹⁾、Anette Teittinen¹⁾

1) Department of Geosciences and Geography, University of Helsinki 2) Nanjing Institute of Geography and Limnology, Chinese Academy of Sciences 3) Institute of ecology and evolution, National Taiwan Univ

P1-019 [ASME] Kibdelomycin A, a novel natural algicide with low toxicity to nontarget organisms

○Ying Xu

Shenzhen Engineering Laboratory for Marine Algal Biotechnology, College of Life Sciences and Oceanography, Shenzhen University

*** P1-020 [ASME] Lysing activity of *Aeromonas* sp. L23 against cyanobacteria and green algae under varying nutrient conditions**○Susmita Das Nishu¹⁾、Yunhee Kang¹⁾、Han Il²⁾、Tae Kwon Lee³⁾

1) Student, Department of Environmental Engineering, Yonsei University, Wonju 26493, Republic of Korea 2) Postdoctoral Researcher, Department of Environmental Engineering, Yonsei University, Wonju 26493, Republic of Korea 3) Assistant Professor, Department of Environmental Engineering, Yonsei University, Wonju 26493, Republic of Korea

*** P1-021 Finding viruses in the deep biosphere: Improved extraction and enumeration from seafloor sediment**Donald Pan¹⁾、Yuki Morono²⁾、Fumio Inagaki²⁾、Ken Takai¹⁾1) Department of Subsurface Geobiological Analysis & Research, JAMSTEC
2) Kochi Core Center, JAMSTEC**P1-022~P1-037 Wastewater Treatment***** P1-022 Visualization of uncultured microorganisms in sludge of the EGSB reactor by using HCR-FISH**

EGSBリアクター内の汚泥に対するHCR-FISH法を用いた未培養微生物の視覚的検出

○Yuki Okazaki¹⁾、Jun Harada²⁾、Takeshi Yamada²⁾、Atsushi Nakano³⁾、Tsuyoshi Yamaguchi¹⁾

1) NIT, Matsue College Dept. of Civil and Environ. 2) Toyohashi Univ. of Tech. Dept. of Environ. and Life Sci. 3) Sumitomo Heavy Industries Environment Co., Ltd.

P1-023 Hydrogen anaerobic denitrification and its microbial community structure

水素嫌気環境下の脱窒反応とその微生物群衆構造

○Tatsuru Kamei¹⁾、Yuya Tsutsumi²⁾、Rawintra Eamrat¹⁾、Yuki Yoneyama¹⁾、Yasuhiro Tanaka³⁾、Tadashi Toyama¹⁾、Futaba Kazama¹⁾

1) ICRE, Univ. of Yamanashi 2) Integ., Grad., Sch. of Med., Eng., & Agri., Sci., Univ. of Yamanashi 3) Dept. of Life Env., Univ. of Yamanashi

*** P1-024 Energy recovery from sewage wastewater by microbial fuel cell**

微生物燃料電池を用いた汚水中バイオマスからの電流回収

○Mari Sugioka¹⁾、Naoko Yoshida¹⁾、Akihiro Iwata³⁾、Hirokazu Matsubara²⁾、Mitsuhiro Sakoda³⁾、Yoshinori Genda³⁾、Kazuki Iida²⁾

1) Dept. Civil. Eng., Nitech 2) Nippon Koei Co.,Ltd. 3) Tamano Consultants Co., Ltd.

P1-025 Effect of fluid flow on microbial electricity production from sewage wastewater

流れが微生物の下水からの電流生産に与える影響評価

Kohei Miyazaki、Ken Fujii、○Naoko Yoshida
Dept. of Civil Eng., Nitech

P1-026 Ammonia/Nitrite Removal Capability and Community Structures of Bacteria Attached to Wooden Plastics

観賞魚水槽用濾材としての木質プラスチックの利用： アンモニア/亜硝酸除去能と付着細菌群集構造
Eri Kumita¹⁾、Yukari Iwasaki²⁾、○Akihiro Saito^{1), 3)}
1) Dep. Appl. Biol. Chem., Chiba Univ. 2) Grad. School Sci. Technol., Shizuoka Inst. Sci. Technol. 3) Dept. Mater. Life Sci., Shizuoka Inst. Sci. Technol.

* **P1-027 Methane production in the fed-batch Microbial Fuel Cell**

バッチ式微生物燃料電池におけるメタンガス生産
○Masaki Umetsu¹⁾、Yasuhiro Fukuda¹⁾、Hideyuki Takahashi²⁾、Chika Tada¹⁾
1) Grad. Sch. Agric. Sci., Tohoku Univ. 2) Grad. Sch. Environ. Stud., Tohoku Univ.

* **P1-028 Mn oxidation performances of bioreactors enriched on different organic substrates**

バイオリクターを用いた異なる有機基質によって集積されたマンガン酸化細菌のマンガン酸化能力の違い
○Taiki Ota¹⁾、Ahmad Shoiful¹⁾、Akiyoshi Ohashi¹⁾、Noriatsu Ozaki¹⁾、Tomonori Kindaichi¹⁾、Yoshiteru Aoi²⁾
1) Env. Presev. Eng., Hiroshima Univ. 2) Met. Eng., Hiroshima Univ

* **P1-029 Bacterial consortia for textile waste water treatment**

実染色排水の脱色処理のための微生物コンソーシア
○Yu Yamanashi、Miyuki Yamashita、Tsukasa Ito
Dept Env Eng Sci, Gunma Univ

* **P1-030 Archaeal community structure of the anaerobic granular sludge developed in the UASB reactor feeding with iso-plophyl alcohol and tetramethylammonium-hydroxide containing wastewater**

イソプロピルアルコールおよび水酸化テトラメチルアンモニウム合成排水を処理対象としたUASBリアクター保持グラニューール汚泥の微生物群集構造解析
○Tsuyoshi Danshita¹⁾、Yuma Miyoka¹⁾、Haruhiko Sumino²⁾、Akinori Iguchi³⁾、Norihiisa Matsuura⁴⁾、Takashi Yamaguchi¹⁾、Kazuaki Syutsubo⁵⁾
1) NUT 2) NIT,Gifu College 3) NUPALS 4) Kanazawa Univ. 5) NIES

P1-031 Mutant strains of *Pseudomonas resinovorans* oxidizing Mn (II) at high Mn (II) concentrations

高濃度Mn (II) でMn (II) 酸化する*Pseudomonas resinovorans*の変異株
○Shuji Matsushita¹⁾、Yoshiteru Aoi²⁾、Tomonori Kindaichi¹⁾、Noriatsu Ozaki¹⁾、Akiyoshi Ohashi¹⁾
1) Grad. Sch. of Eng., Hiroshima Univ. 2) Grad. Sch. of Adv. Sci. of Mat., Hiroshima Univ.

* **P1-032 [ASME] Effects of inhibitors on the structure of acetate- and propionate-degrading methanogenic microbial community**

○Hui-Zhong Wang、Min Gou、Yue Yi、Yue-Qin Tang
Sichuan University

* **P1-033 [ASME] Wastewater is the main source of proliferation and accumulation of antibiotic resistance genes in the freshwater environment**

○Jin Ju Kim¹⁾、Hoon Je Seong¹⁾、Woo Jun Sul¹⁾、Jong-Chan Chae²⁾
1) Department of Systems Biotechnology, Chung-Ang University, Anseong, Republic of Korea 2) Division of Biotechnology, Chonbuk National University, Iksan 54596, Republic of Korea

P1-034 [ASME] Microbiomes in eleven sludges originated from four full-scale WWTPs in Korea

○Sunja Cho¹⁾、Myeonghwa Park²⁾、Youngok Lee³⁾
1) Dept. of Microbiology, Pusan National University 2) Dept. of Environmental Engineering, Pusan National University 3) Dept. of Biological Sciences, Daegu University

* **P1-035 [ASME] The study of electricity production and phosphate recycling using flat plate microbial fuel cell (FPMFC).**

○Li-Hsun Haung、Chang-Ping Yu
Graduate institute of environmental engineering (GIEE), National Taiwan University

- * **P1-036 [ASME] Performance analysis of biocathode with liter-scale membrane-less microbial fuel cells and its evaluation to drive a humidity and temperature sensor by power management system**
 ○Chao-Chin Chang, Chang-Ping Yu
 Graduate Institute of Environmental Engineering (GIEE), National Taiwan University

- P1-037 High Throughput Metagenomic Analyses for Viral Communities within Reclaimed Water from Campus Sewers**
 ○Hsion-Wen David Kuo, Shi-Le Wang
 Department of Environmental Science and Engineering, Tunghai University, Taichung, Taiwan

P1-038~P1-046 Bioremediation

- P1-038 Bioaugmentation for trichloroethene- contaminated groundwater with Dehalococcoides**
 Dehalococcoides属細菌を用いたトリクロロエチレン汚染地下水のバイオオーグメンテーション
 ○Noriya Okutsu
 KURITA

- * **P1-039 Search for Nitrous oxide consumption bacteria from Collapsing Palsa, Finland**
 フィンランド・パルサ崩壊地から亜酸化窒素消去細菌の探索
 ○Yuta Takatsu¹⁾, Teemu Tahvanainen²⁾, Yasuyuki Hashidoko¹⁾
 1) Ecochem, Univ of the Hokkaido 2) Univ of Eastern Finland

- P1-040 Microbial community analysis in degradation of polycyclic aromatic hydrocarbons (PAHs) by cooperation effect of marine oligochaete and microorganisms**
 海産ミズと微生物の協同的な多環芳香族炭化水素(PAHs)の減衰における微生物群集構造解析
 ○Mana Ito, Katsutoshi Ito, Takeshi Hano, Motoharu Uchida
 FEIS, FRA

- * **P1-041 Analysis of microbial communities involved in anaerobic biodegradation of chlorinated ethenes based on DNA and RNA**
 DNAおよびRNAに基づくクロロエチレン類の嫌気分解微生物叢の解析
 ○Miho Yoshikawa, Ming Zhang
 Geological Survey of Japan, AIST

- * **P1-042 Screening of phenol-degrading bacteria indicating plant growth promoting activity for *Lemnoideae***
 ウキクサ亜科植物の生育を促進するフェノール分解菌の検索
 ○Tomoki Iwashita¹⁾, Yasuhiro Tanaka²⁾, Hideyuki Tamaki³⁾, Yasuko Yoneda³⁾, Ayaka Makino³⁾, Tadashi Toyama¹⁾, Masaaki Morikawa⁴⁾, Yoichi Kamagata³⁾, Kazuhiro Mori¹⁾
 1) Fac. Engineer., Univ. of Yamanashi 2) Fac. Life Environ. Sci., Univ. of Yamanashi
 3) BRI., AIST 4) Grad. Sch. Environ. Sci., Hokkaido Univ.

- * **P1-043 Bromate reduction by *Shewanella* sp.M-Br in the presence of chelated iron**
 鉄を介して臭素酸を還元する? ~*Shewanella*の新たな可能性を探る~
 ○Hiroko Fujiya, Seigo Amachi
 Horticult, Univ. of the Chiba

- * **P1-044 Molecular characterization of *opdA* homologs and *nmoA*, genes involved in nonylphenol degradation**
 ノニルフェノール分解酵素遺伝子*opdA*相同体および*nmoA*の分子学的特性
 ○Mina Ootsuka¹⁾, Yoko Yoshioka-Ikunaga¹⁾, Tomoyasu Nishizawa^{1), 2)}, Morifumi Hasegawa^{1), 2)}, Yasurou Kurusu^{1), 2)}, Hiroyuki Ohta^{1), 2)}
 1) Tokyo Univ. of Agric. Tech., United school of Agric. sci. 2) Ibaraki Univ., College of Agric.

- * **P1-045 [ASME] *Bacteroides sedimenti* sp. nov., a novel species of the genus *Bacteroides* which enhances the dechlorination of cis-chloroethene by Dehalococcoides enriched culture**

○Mohamed Ismaeil¹⁾, Naoko Yoshida²⁾, Arata Katayama^{1), 3), 4)}

1) Graduate School of Environmental Studies, Nagoya University, Japan 2) Graduate school of Engineering, Nagoya Institute of Technology, Japan 3) Department of Civil Engineering, Graduate School of Engineering, Nagoya University, Japan 4) Institute of Materials and Systems for Sustainability (IMaSS), Nagoya University, Japan

- P1-046 Network and Gene Expression of Functional Dechlorinating Community in the chloroethenes-contained sites**

○Hui-Ping Chuang¹⁾, Henry Yew²⁾, Jia-Jun Tee²⁾, Liang-Ming Whang^{1), 2)}, Tsair-Fuh Lin^{1), 2)}

1) Sustainable Environment Research Laboratories, National Cheng Kung University, Taiwan 2) Department of Environmental Engineering, National Cheng Kung University, Taiwan

P1-047~P1-061 Phylogeny and Taxonomy

- P1-047 Comparison of bacterial diversity among the Awa Bancha tea leaves produced at Tokushima prefecture, Japan**

徳島県で生産される阿波番茶茶葉微生物の比較検討

○Takanori Satoh¹⁾, Mitsuki Fujii²⁾, Seiji Arai²⁾, Daiki Komahara²⁾, Maki Takeda²⁾, Ai Hasegawa²⁾, Mariko Nakae³⁾, Kenji Akiyoshi³⁾

1) Biochem. Lab., Sci. Tech., Tokushima Univ. 2) Fac. of IAS, Tokushima Univ. 3) Grad. Sch. of IAS, Tokushima Univ.

- * **P1-048 Characterization of a novel *Bacteroidetes* bacterium, strain WSM2-2, isolated from soil**

土壌から分離した新規*Bacteroidetes*門細菌WSM2-2株の特徴づけ

○Masataka Aoki¹⁾, Masataka Kusube²⁾, Masashi Hatamoto³⁾, Takashi Yamaguchi⁴⁾

1) Dept. Civil Eng., NIT, Wakayama College 2) Dept. Appl. Chem. Biochem., NIT, Wakayama College 3) Dept. Civil Environ. Eng., Nagaoka Univ. of Technology 4) Dept. Sci. Technol. Innov., Nagaoka Univ. of Technology

- * **P1-049 Cultivation-independent and -dependent analyses of rhizosphere soil- and root-associated bacteria in *Pteridium aquilinum* in Shonai-Asahi mountainous region, Yamagata**

庄内朝日山地に自生するワラビの根圏に生息する細菌群のメタ16S解析及び純粋分離

○Tsukine Hanawa¹⁾, Daisuke Arai²⁾, Yoshiaki Iiduka²⁾, Yuniar Devi Utami³⁾, Takumi Murakami³⁾, Yuichi Hongoh³⁾, Satoshi Hattori¹⁾

1) Grad. Sch. Agri., Yamagata Univ. 2) FSC. Agri., Yamagata Univ. 3) Tokyo Tech. Sch. Life Sci. Tech.

- * **P1-050 Microbial community structure analysis in *Acer palmatum* bark and isolation of bacteria belonging to Candidate division FBP**

イロハモミジ樹皮の微生物群集構造解析とCandidate division FBPに属する微生物の分離培養

○Kazuki Kobayashi, Hideki Aoyagi

Grad. Sch. Life Environ. Sci., Univ. Tsukuba

- * **P1-051 Phylogenetic position of aerobic anoxygenic phototrophic bacteria newly isolated from a river within the order *Rhodobacterales***

河川から単離した*Rhodobacterales*目に属する好気性光合成細菌の系統

○Setsuko Hirose, Shin Haruta, Satoshi Hanada

Tokyo Metropolitan University

- * **P1-052 Unveiling the diversity of osmotrophic cercozoan species**

吸収栄養性ケルコゾア生物の驚くべき多様性

○Akinori Yabuki¹⁾, Takashi Shiratori¹⁾, Chihaya Fujii^{1), 2)}, Katsunori Fujikura¹⁾

1) Bio-Dive, JAMSTEC 2) Faculty of Agriculture, Tohoku Univ.

P1-053 [ASME] Gut microbial diversity of Korean indigenous fishes and a bird revealed using culturomics and molecular taxonomic tools.

○Soyeon Lee, Woorim Kang, Hojun Sung, Juneyoung Lee, Nari Shin, Jihyun Yun, Pilsoo Kim, Jeongeun Han, Yunseok Jeong, Mija Jeong, Dongwook Hyun, Hyunsik Kim, Eunjeong Tak, Jinwoo Bae
Department of Life and Nanopharmaceutical Sciences and Department of Biology, Kyung Hee University

* **P1-054 [ASME] The culture-dependent analysis of the gut bacterial communities of the Korean marine invertebrates**

○Yunseok Jeong, Woorim Kang, Hojun Sung, Juneyoung Lee, Jihyun Yun, Eunjeong Tak, Nari shin, Pilsoo Kim, Soyeon Lee, Jeongeun Han, Hyunsik Kim, Dongwook Hyun, Mija Jeong, Minsoo Kim, Taewoong Won, Jinwoo, Bae
Department of Life and Nanopharmaceutical Sciences and Department of Biology, Kyung Hee University

* **P1-055 [ASME] Gut microbiota of Korean indigenous freshwater fishes investigated by culture-dependent method.**

○Jeong Eun Han, Woorim Kang, June-Young Lee, Hojun Sung, Ji-Hyun Yun, Mi-Ja Jung, Pil Soo Kim, Na-Ri Shin, Dong-Wook Hyun, Hyun Sik Kim, UnJung Tak, So-Yeon Lee, Yun Seok Jeong, Tae Woong Whon, Min-Soo Kim, Jin-Woo Bae
Department of Life and Nanopharmaceutical Sciences and Department of Biology, Kyung Hee University

P1-056 [ASME] *Blautia hominis* sp. nov., isolated from human faeces

○Na-Ri Shin, Woorim Kang, Eeon Jung Tak, Dong-Wook Hyun, Pil Soo Kim, Hyun Sik Kim, June-Young Lee, Hojun Sung, Tae Woong Whon, Jin-Woo Bae
Department of Biology, Kyung Hee University

P1-057 [ASME] Taxonomic Diversity of Microbial Community on Cucumber (*Cucumis sativus*) cultivated in South Korea

Da Young Jeon¹⁾, Su Jin Yum¹⁾, Seung Min Kim²⁾, Hye Jin Lee¹⁾, Dong Woo Seo¹⁾,
○Hee Gon Jeong¹⁾
1) Department of Food Science and Technology, Chungnam National University, Daejeon, Korea 2) Department of Human Ecology, Korea National Open University, Seoul, Korea

* **P1-058 [ASME] Description of *Ciceribacter* sp. nov., Isolated from landfill soil**

Ji-Young Kim⁴⁾,⁵⁾, ○So-Hyun Park¹⁾, Hong-Shik Oh²⁾, Sang Hun Byun³⁾
1) Department of Aquatic Life Medicine, Jeju National University, Jeju 63243, Korea
2) Department Faculty of Science Education, Jeju National University, Jeju 63243, Korea 3) GL International Co., Ltd, Jeju 63309, Korea 4) Research institute for basic science, Jeju National University, Jeju 63243, Korea 5) Jeju Biological Resource Co., Ltd, Jeju 63242, Korea

* **P1-059 [ASME] Description of *Gramella* LPB144T sp. nov.**

○Sungmi Choi¹⁾, Hana Yi¹⁾,²⁾,³⁾, Su-Kyoung Shin²⁾
1) Department of Public Health Sciences, Graduate School, Korea University, Seoul, Republic of Korea 2) School of Biosystem and Biomedical Science, Korea University, Seoul, Republic of Korea 3) Institute for Biomaterials, Korea University, Seoul, Republic of Korea

P1-060 [ASME] Bacterial Community Analysis and Antibacterial Activity Isolated from *Umbraulva japonica*

Moo-Soo Heo, ○Ji-Hyun Kim, So-Hyun Park, Kyung-Mi Moon
Marine Applied Microbes and Aquatic Organism Disease Control Lab, Department of marine Life Science, Jeju National University, Jeju 63243, Republic of Korea

P1-061 [ASME] *Emticicia fluvii* sp. nov., a species of the family Cytophagaceae isolated from fresh water

○Yochan Joung, Hye-jin Jang, Jaeho Song, Jang-Cheon Cho
Department of Biological Science, Inha University, Incheon 22212, Republic of Korea

P1-062~P1-073 Genomics and Molecular Biology

 * **P1-062 Dehalogenation of chloroform by marine anaerobic bacteria**

海洋の嫌気性細菌によるクロロホルムの分解

 ○Kenji Matumura¹⁾、Takeshi Terahara³⁾、Chiaki Imada³⁾、Hiroyuki Fuse²⁾

1) SIT 2) SIT 3) Tokyo Univ. of Marine Science and Technology

P1-063 Analysis of genes involved in phosphate-taxis of *Stenotrophomonas maltophilia*

 日和見感染菌*Stenotrophomonas maltophilia*のリン酸走性に関与する遺伝子の解析

○Yu Yanagisawa、Toshiyuki Nikata、Yasuzou Sakai

Utsunomiya Univ.

P1-064 Isolation and comparative genomics of *Sicyoidochytrium minutum* DNA virus (SmDNAV) strains infecting Thraustochytrids

ラビリンチュラ類感染性ウイルスSmDNAV新規株の分離とゲノム比較解析

 ○Yoshitake Takao¹⁾、Takayuki Shimeki²⁾

1) Fukui pref. univ. Marine Science and Technology 2) Fukui pref. univ. Graduate School of Bioscience and Biotechnology

P1-065 Unusual features found in genome sequences of the halophilic photosynthetic bacterium *Halorhodospira halochloris*

 好塩性光合成細菌*Halorhodospira halochloris*の特異なゲノム構造：2つのpufオペロン

 ○Yusuke Tsukatani¹⁾、Hitoshi Tamiakli²⁾、Yuu Hirose³⁾

1) MFBio, JAMSTEC 2) Grad. Sch. Life Sci., Ritsumeikan Univ. 3) EIIRIS, Toyohashi Tech.

 * **P1-066 Functional analysis of *Bacillus subtilis*'s membrane vesicle**

枯草菌メンブレンベシクルの機能探索

 ○Takamitsu Soma¹⁾、Tatsuya Yamamoto²⁾、Masanori Toyofuku²⁾、Nozomu Obana²⁾、Nobuhiko Nomura²⁾

1) Grad. Sch. Life Environ. Sci., Univ. Tsukuba 2) Fac. Life Environ. Sci., Univ. Tsukuba

 * **P1-067 Bidirectional conversion of *P.aeruginosa* from social to asocial**

緑膿菌の可動性因子を用いた細胞間コミュニケーションの切替

 ○Yuki Suzawa¹⁾、Masasiro Toya¹⁾、Masanori Toyofuku²⁾、Nozomu Obana²⁾、

 Kazuhiro Kogure³⁾、Nobuhiko Nomura²⁾

1) Grad. Sch. Life Environ. Sci., Univ. Tsukuba 2) Fac. Life Environ. Sci., Univ. Tsukuba 3) Atmosphere and Ocean Research Institute, Univ. Tokyo

 * **P1-068 Heterogeneous production of phage-like bacteriocin in *Bacillus subtilis***

枯草菌におけるファージ様バクテリオシンの不均一な生産機構の解析

○Tatsuya Yamamoto、Masanori Toyofuku、Nobuhiko Nomura

Faculty of Life and Environmental Sciences, Univ. of Tsukuba

 * **P1-069 Characterization of a MazEF module, a well conserved toxin-antitoxin system, in *Clostridium perfringens***

 病原菌*Clostridium perfringens*由来トキシン-アンチトキシン機構MazEFの分子認識と生理機能に関する考察

 ○Akiko Yokota¹⁾、Tatsuki Miyamoto¹⁾、²⁾、Yuri Ota¹⁾、²⁾、Masako Tsuruga¹⁾、

 Satoshi Tsuneda²⁾、Naohiro Noda¹⁾、²⁾

1) BMD, AIST 2) Grad. Sch. Adv. Sci. Eng., Waseda Univ.

 * **P1-070 Construction of Efficient Organochlorine Pesticide Degraders by Using an Artificial Gene Cluster**

人工クラスターによる高効率有機塩素殺虫剤資化菌の構築

○Lijun Su、Hiromi Kato、Yoshiyuki Ohtsubo、Masataka Tsuda、Yuji Nagata

Graduate School of Life Sciences, Tohoku Univ.

P1-071 [ASME] Novel lytic DNA virus from *Methanoculleus taiwanensis*

○Mei-Chin Lai、Wen-Hsin Wei、Sheng-Chung Chen

Department of Life Sciences, National Chung Hsing University, Taichung, Taiwan

P1-072 [ASME] Genome analysis of *Rubritalea profunda* SAORIC-165^T isolated from deep seawater in the northwestern Pacific Ocean

○Jaeho Song¹⁾, Innam Kang¹⁾, Yochan Joung¹⁾, Susumu Yoshizawa²⁾, Ryo Kaneko³⁾, Koji Hamasaki²⁾, Jang-Cheon Cho¹⁾, Kazuhiro Kogure²⁾

1) Inha University 2) Atmosphere and Ocean Research Institute, The University of Tokyo 3) National Institute of Polar Research

* **P1-073 [ASME] Systemic total IgE levels are determinant for dysbiosis of microbial dysbiosis occurred in inferior turbinate of nasal cavity in allergic rhinitis patient**

○Dong-Wook Hyun, Min-Soo Kim, Tae Woong Whon, Na-Ri Shin, Pil Soo Kim, Hyun Sik Kim, June Young Lee, Euon Jung Tak, Hojun Sung, Jin-Woo Bae
Kyung Hee University

P1-074~P1-081

Methodology and Bioinformatics

* **P1-074 Development of a microbial cultivation and sorting technique based on water-in-oil emulsion**

water-in-oilエマルションを利用した微生物培養および分取技術の開発

○Kanakano Saito^{1), 2)}, Yuri Ota^{1), 2)}, Satoko Matsukura²⁾, Taeko Takagi²⁾, Masamune Morita²⁾, Satoshi Tsuneda¹⁾, Naohiro Noda^{1), 2)}

1) Grad. Sch. Adv. Sci. Eng., Waseda Univ. 2) Biomed. Res. Inst., AIST

* **P1-075 Who is the most diverse? Cross kingdom comparison of oceanic plankton biodiversity**

誰が最も多様か？海洋プランクトン多様性の生物界・ウイルス界横断型比較解析

○Yanze Li, Hiroyuki Ogata

ICR, Kyoto Univ.

P1-076 X-ray computed nano-tomography for visualizing microbial cells and its surrounding environments

微小生命活動の現場を視る – X線マイクロ/ナノCTによる微生物細胞可視化の試み

○Yuki Morono^{1), 2)}, Goichiro Uramoto³⁾, Kentaro Uesugi⁴⁾, Akihisa Takeuchi⁴⁾, Masayuki Uesugi⁴⁾, Kengo Kubota⁵⁾, Tatsuhiko Hoshino^{1), 2)}, Fumio Inagaki^{1), 2), 6)}

1) KCC, JAMSTEC 2) KCC, Kochi University 3) KCC, Kochi University 4) JASRI/SPring-8 5) Tohoku University 6) ODS, JAMSTEC

P1-077 Modelling and Control of Fermentation by Microbial Ecosystem

微生物共生系による発酵のモデル化と制御

○Akifumi Nishida¹⁾, Kaoru Nakasone²⁾, Masayuki Yamamura¹⁾

1) Info, Tokyo Tech 2) Biotech and Chem, Kindai Univ

* **P1-078 Detection of *E. coli* by a novel sensitive FISH using click chemistry**

Click chemistryを用いた高感度FISH法によるE.coliの視覚的検出

○Ayano Yamasaki, Keisuke Kimura, Masamichi Takebe, Tsuyoshi Yamaguchi
National Institute of Technology, Matsue College

* **P1-079 Directional statistics modeling of prokaryotes genome quantity**

原核生物ゲノム量の方向統計モデリング

○Shinya Suzuki, Takuji Yamada

Dept. of Life Science and Technology, Tokyo Tech

P1-080 Detection and separation of spores in subseafloor sediments

海底下堆積物における孢子の検出とその分離

○Takeshi Terada¹⁾, Yuki Morono²⁾, Fumio Inagaki²⁾

1) Marine Works Japan Ltd. 2) JAMSTEC Kochi

* **P1-081 [ASME] The novel sorting method using magnetic nanoparticles to gain the microbial populations with different utilizing rate of the substrate in a complex environment**

○Jee Hyun No, Eun Sun Lyoo, Soo Bin Kim, Tae Kwon Lee
Yonsei university

P1-082~P1-094 Extreme Environment

- * **P1-082 Unique labyrinthulomycete lineages in aquatic mosses inhabiting an Antarctic lake**
南極湖沼の水生蘚類から見出された新奇のラビリンチュラ類
 ○Ryosuke Nakai¹⁾, Yuiki Takahashi^{2), 3)}, Masaki Yoshida²⁾, Megumu Tsujimoto⁴⁾,
 Atsushi C. Suzuki⁵⁾, Sakae Kudoh^{4), 6)}, Satoshi Imura^{4), 6)}
 1) AIST 2) Univ. of Tsukuba 3) Toho J&H H.S. 4) NIPR 5) Keio Univ. 6) SOKENDAI
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- * **P1-083 Current generation and electron absorption by *shewanella* isolated from a deep-sea hydrothermal field**
深海熱水噴出域から単離したシュワネラ菌の電流生成と電子吸収
 ○Mariko Shitara¹⁾, Masahiro Yamamoto²⁾, Akiko Tanizaki²⁾, Hiroyuki Kashima²⁾,
 Takuro Nunoura²⁾, Ken Takai²⁾
 1) Nanobio, Grad. Sch. of Yokohama City Univ. 2) JAMSTEC
-
- P1-084 Cultivation of electrosynthetic microorganisms by using deep-sea hydrothermal power generation**
深海熱水発電を利用した電気合成微生物の培養
 ○Masahiro Yamamoto, Akiko Tanizaki, Miwako Tsuda, Yoshihiro Takaki, Ken Takai
 JAMSTEC
-
- P1-085 Characterization of temperate phages induced from *Persephonella* sp**
***Persephonella* sp.から誘発される溶原性ファージの性状解析**
 ○Yukari Yoshida, ○Yoshihiro Takaki, Takuro Nunoura, Ken Takai
 JAMSTEC
-
- P1-086 Evidence for denitrification in deep aquifer**
深部帯水層中における脱窒の証拠
 ○Kanta Ashinuma¹⁾, Makoto Matsushita⁴⁾, Yu Sato⁵⁾, Masahiro Uchino²⁾,
 Hiroyuki Kimura^{1), 2), 3)}
 1) Graduate School of Integrated Science and Technology, Shizuoka Univ.
 2) Department of Geoscience faculty of Science, Shizuoka Univ. 3) Green Science and
 Technology, Shizuoka Univ. 4) Department of Biogeochemistry, JAMSTEC.
 5) Graduate School of Engineering, Osaka Univ.
-
- P1-087 Ecophysiology of previously uncultivated thermophiles revealed by long-term continuous cultivation and metagenomics**
長期連続培養とメタゲノム解析によって明らかになった未培養性好熱菌の生理生態
 ○Shingo Kato^{1), 2)}, Sanae Sakai¹⁾, Miho Hirai¹⁾, Eiji Tasumi¹⁾, Manabu Nishizawa¹⁾,
 Katsuhiko Suzuki¹⁾, Ken Takai¹⁾
 1) JAMSTEC 2) JCM, RIKEN-BRC
-
- P1-088 Improvement of Terrestrial Groundwater Sampling Method Significantly Affects the Results of Microbial Community in Terrestrial Lignite Seams**
サンプリング装置の改良が陸域褐炭層地下水中の微生物群集構造解析に与える影響について
 ○Akio Ueno¹⁾, Satoshi Tamazawa¹⁾, Shuji Tamamura¹⁾, Noritaka Aramaki¹⁾,
 Badrul AKM Alam¹⁾, Takuma Murakami¹⁾, Shinji Yamaguchi²⁾, Hideo Aoyama²⁾,
 Junya Yamagishi³⁾, Hideyuki Tamaki⁴⁾, Daisuke Mayumi⁵⁾, Takeshi Naganuma⁶⁾,
 Katsuhiko Kaneko¹⁾
 1) H-RISE 2) Mitsubishi Material Co. Ltd. 3) Hokkaido University 4) AIST BPRI
 5) AIST Geo-Res. Env. 6) Hiroshima University
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- * **P1-089 Ecophysiology of a novel thermophilic N₂O-reducing epsilonproteobacterium isolated from a deep-sea hydrothermal field**
深海底熱水活動域より分離された新規好熱性N₂O還元*Epsilonproteobacteria*の生理生態学的特徴
 ○Muneyuki Fukushi¹⁾, Hirohisa Tanaka¹⁾, Sayaka Mino¹⁾, Satoshi Nakagawa^{2), 3)},
 Ken Takai³⁾, Tomoo Sawabe¹⁾
 1) Faculty of Fisheries Sciences, Hokkaido University 2) Graduate School of
 Agriculture, Kyoto University 3) Japan Agency for Marine-Earth Science and
 Technology (JAMSTEC)

- * **P1-090 Distribution pattern of microbial communities in the shallow-water hydrothermal field off Kueishan Island, Taiwan**
台湾亀山島の浅海熱水活動域に生息する微生物群集の分布様式
 ○Chiaki Tominaga¹⁾、Sayaka Mino¹⁾、Jesse McNichol²⁾、Benny Chan³⁾、Sen-Lin Tang³⁾、Satoshi Nakagawa⁴⁾、⁵⁾、Junichi Miyazaki⁵⁾、Ken Takai⁵⁾、Tomoo Sawabe¹⁾
 1) Faculty of Fisheries Sciences, Hokkaido University 2) Department of Biological Sciences, University of Southern California 3) Biodiversity Research Center, Academia Sinica 4) Graduate School of Agriculture, Kyoto University 5) Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

P1-091 Characterization of a novel mesophilic bacterium in the class *Thermotogae* isolated from a hydrothermal field

- 海底熱水域より分離した*Thermotogae*綱に属する新規中温性細菌sy52株の諸性状**
 ○Koji Mori¹⁾、Kenta Sakurai¹⁾、Takeshi Kakegawa²⁾、Satoshi Hanada³⁾
 1) NBRC, NITE 2) Tohoku Univ. 3) Tokyo Metro. Univ.

P1-092 Polyphasic characterization of novel acidophilic bacterium strain KY-1 isolated from Yubatake, Kusatsu hot spring

- 草津温泉湯畑から分離した新規好酸性細菌KY-1株の多相分類学的解析**
 ○Suzuka Kajiwara、Norio Kurosawa
 Geod. Sch. Soka Univ

P1-093 Taxonomic study of a novel thermoacidophilic archaeon *Acidianus* sp. strain HS-5 isolated from Unzen hot spring in Japan

- 雲仙温泉から分離した新規好熱好酸性アーキア*Acidianus* sp. HS-5株の分類学的解析**
 ○Hiroyuki Sakai¹⁾、²⁾、Norio Kurosawa¹⁾
 1) Grad. Sch. Soka Univ. 2) JSPS Research Fellow DC2

P1-094 [ASME] Changes in marine microbial communities along salinity gradients

- Haneul Kim、Heeyoung Kang、Inseong Cha、Jinkyong Kang、Kiseong Joh
 Hankuk University of Foreign Studies

P1-095~P1-101 Interface and Biofilm

- * **P1-095 Characterization of biofilm formation and degradation of biodegradable plastic films by bacterial isolates from seawater**

- 生分解性プラスチック分解活性を有する海洋性バイオフィーム形成細菌の機能解析**
 ○Kento Ogata¹⁾、Jing Lu¹⁾、Shunsuke Sato²⁾、Tomohiro Morohoshi¹⁾
 1) Grad. Sch. Eng., Utsunomiya Univ. 2) Kaneka Corp.

- * **P1-096 Analysis of dissolved-saccharide component in the interstitial water of biofilm formed on the surface of stones in several rivers**

- 河川の石表面上バイオフィームの間隙水に含まれる溶存態糖成分の解析**
 ○Yuki Tsuchiya¹⁾、Erina Hirota²⁾、Akihiro Kitamura²⁾、Hisao Morisaki²⁾
 1) Coll. Bioresour. Sci., Nihon Univ. 2) Coll. Life Sci., Ritsumeikan Univ.

P1-097 Iron starvation-dependent biofilm formation and metal corrosion on stainless steel by marine isolate FT01

- 海洋単離株FT01の鉄飢餓に依存したステンレス鋼へのバイオフィーム形成および金属腐食**
 ○Nanako Ito¹⁾、Hiroki Watanabe²⁾、Tomohiro Inaba³⁾、Nozomu Obana⁴⁾、Yasuyuki Miyano⁵⁾、Nobuhiko Nomura⁴⁾
 1) Grad. Sch. Life Environ. Sci., Univ. Tsukuba 2) Grad. Sch. Life Environ. Sci., Univ. Tsukuba 3) AIST, EMRI 4) Fac. Life Environ. Sci., Univ. Tsukuba 5) Fac. Eng. Sci., Akita Univ.

- * **P1-098 Localization of alginate production in mucoidy *Pseudomonas aeruginosa* biofilms**

- 緑膿菌ムコイド株のバイオフィーム中におけるアルギン酸産生の局在解析**
 ○Kanakano Itagaki¹⁾、Masanori Toyofuku²⁾、Nozomu Obana²⁾、Andrew Utada²⁾、Nobuhiko Nomura²⁾
 1) Grad. Sch. Life Environ. Sci., univ. Tsukuba 2) Fac. Life Environ. Sci., Univ. Tsukuba

P1-099 Biofilm formation by *Bacillus subtilis* and its effect on the microbial fuel cell**枯草菌のバイオフィーム形成と抗生物質生産**

○Yuji Fukumoto, Hiroshi Yukimoto, Shohei Ebe, Tatuya Ohike, Masahiro Okanami, Takashi Ano

Grad. Sch. BOST, Kindai Univ., Wakayama, Japan

* **P1-100 [ASME] Microbial community analysis of anode and cathode biofilm**

○Huei-Chen Chen¹⁾, Chang-Ping Yu¹⁾

1) Graduate Institute of Environmental Engineering (GIEE), National Taiwan University

* **P1-101 [ASME] Performance of different external resistances on anaerobic activated sludge in laminar flow microbial fuel cells**

○Zhong-Xian Wu¹⁾, Chang-Ping Yu¹⁾

1) Graduate Institute of Environmental Engineering (GIEE), National Taiwan University

P1-102~P1-121 Symbiosis and Interaction**P1-102 Reproducibility of reconstruction of soil microbial community****土壌細菌叢の形成プロセスにおける再現性**

○Hiromi Kato¹⁾, Hiroshi Mori²⁾, Ken Kurokawa²⁾, Masataka Tsuda¹⁾, Yuji Nagata¹⁾

1) Graduate School of Life Sciences, Tohoku University 2) NIG

* **P1-103 Isolation of carrageenan/alginate degrading bacteria and understanding macroalgae-microbe relationships****カラギーナン・アルギン酸分解菌の単離及び、種-宿主間の相関性**

○Yasuhito Yokoi¹⁾, Toshiyuki Shibata²⁾, Reiji Tanaka²⁾, Hideo Miyake²⁾, Tetsushi Mori³⁾

1) Dept. Life Sci. & Biotech., Tokyo Univ. Agric. Technol. 2) Grad. Sch. Bioresour., Mie Univ. 3) Grad. Sch. Engr., Tokyo Univ. Agric. Technol.

* **P1-104 Analysis of competitive exclusion and niche differentiation among bacterial species associated to duckweed *Lemna minor*****コウキクサ共生細菌における競争排除と共存機構の解析**

○Hidehiro Ishizawa¹⁾, Masashi Kuroda¹⁾, Kanako Inoue²⁾, Daisuke Inoue¹⁾, Masaaki Morikawa³⁾, Michihiko Ike¹⁾

1) Graduate School of Engineering, Osaka Univ. 2) Research Center for Ultra-High Voltage Electron Microscopy, Osaka Univ. 3) Graduate School of Environmental Science, Hokkaido Univ.

* **P1-105 Microbial community analysis and cultivation of predominant microorganisms in button mushroom media utilizing sewage sludge****下水汚泥堆肥を用いたマッシュルーム菌床に優占する複合微生物群の群集構造解析および培養**

○Kyohei Kuroda¹⁾, Manami Kotsusa¹⁾, Yujiro Tokuda²⁾, Shoji Ikeda³⁾, Yuga Hirakata³⁾, Masashi Hatamoto³⁾, Masayoshi Yamada²⁾, Takashi Yamaguchi³⁾, Fumio Yagi⁴⁾, Masahito Yamauchi²⁾

1) NIT, Miyakonojo College 2) NIT, Kagoshima College 3) Nagaoka Univ. of Tech. 4) Kagoshima Univ.

* **P1-106 Intracellular symbiosis in lygaeoid species****腸内から細胞内へ：ナガカメムシの細胞内共生進化**

○Shunta Kurihara¹⁾, Kazuki Takeshita²⁾, Yu Matsuura²⁾, Gaku Tokuda¹⁾, Teruo Sone¹⁾, Hideomi Ito³⁾, Yoshitomo Kikuchi^{1), 3)}

1) Univ. of the Hokkaido 2) TBRC, Univ. of the Ryukyu 3) AIST, Hokkaido

* **P1-107 *Paracoccus denitrificans* sequesters quorum-sensing signals from other bacteria via membrane vesicles*****Paracoccus denitrificans*はメンブレンベシクルを介して異種細菌のクオラムセンシングシグナルを奪う**

○Kana Morinaga¹⁾, Andrew S. Utada²⁾, Nozomu Obana²⁾, Nobuhiko Nomura²⁾, Masanori Toyofuku²⁾

1) Grad. school of Life and Env. Sciences, Univ. of Tsukuba 2) Faculty of Life and Env. Sciences, Univ. of Tsukuba

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- * **P1-108 Contribution of spatial heterogeneity and interspecies interactions to community and evolutionary dynamics of pathogenic bacteria in a two-species co-culture system**
 異種病原性細菌の二者共存系における群集動態および進化動態に対する空間不均一性と種間相互作用の寄与
 ○Kyosuke Yamamoto^{1), 2)}、Hiroyuki Kusada¹⁾、Yoichi Kamagata¹⁾、Hideyuki Tamaki^{1), 2), 3)}
 1) BPRI, AIST 2) Faculty of Life and Environ. Sci., Univ. of Tsukuba 3) BRC, Univ. of Tokyo
-
- P1-109 [ASME] Discovery of algicidal substances from a red tide derived bacteria**
 ○Liyan Wang^{1), 2), 3)}、Jiahui Wu¹⁾、Huirong Chen^{1), 2), 3)}、Shuangfei Li^{1), 2), 3)}、
 Xiaofan Li^{1), 2), 3)}、Zhangli Hu^{1), 2), 3)}
 1) College of Life Sciences, Shenzhen University 2) Shenzhen Key Laboratory of Marine Bioresource and Eco-environmental Science 3) Shenzhen Key Laboratory of Microbial Genetic Engineering
-
- P1-110 Antifungal activity of volatile substances produced by bacteria from soil and plant**
 土壌および植物から分離した細菌の各種糸状菌に対する遠隔抗菌活性
 ○Toshiyuki Morita、Noriko Ryuda、Daisuke Ueno、Takashi Someya
 Faculty of Agriculture, Saga University
-
- P1-111 PGPR against plant pathogens causing potato common scab; application of bacterial inoculants derived from potato tuber surface as a soil amendment**
 ジャガイモ塊茎表皮から分離した共生細菌を用いたそうか病対策資材
 ○Megumi Takegoshi¹⁾、Miyuki Ishikawa¹⁾、Masahiro Mitsuboshi¹⁾、Yuzo Kioka¹⁾、
 Katsunori Noguchi¹⁾、Masao Sakai²⁾、Makoto Ikenaga²⁾、Yatuka Nishi³⁾、Kiyofumi Mori⁴⁾、
 Yasuhiro Suga⁵⁾、Kazuyuki Okazaki⁶⁾、Kenji Asano⁶⁾、Seishi Ikeda⁶⁾
 1) Katakura & Co-op Agri Corporation 2) Kagoshima University 3) Kagoshima Prefectural Institute for Agricultural Development 4) Kagoshima Prefectural Institute for Agricultural Development Osumi Branch 5) Nagasaki Agricultural and Forestry Technical Development Center 6) Hokkaido Agricultural Research Center, NARO
-
- * **P1-112 Ant- and nest-associated bacterial communities revealed by meta-genomic analyses**
 メタゲノムで解き明かすトゲオオハリアリの細菌叢 -社会に潜むその多様性と分布-
 ○Hiroyuki Shimoji¹⁾、Hideomi Itoh²⁾、Yu Matsuura³⁾、Yoshitomo Kikuchi³⁾
 1) Kwansai Gakuin Univ. 2) AIST 3) Univ. of the Ryukyus
-
- * **P1-113 [ASME] Dual species calcium carbonate-biofilm formation by alkali generating *Lysinibacillus boronitolerans* YS11 and alkaliphilic *Bacillus* sp. AK13**
 ○Yun Suk Lee、Woojun Park
 Laboratory of Molecular Environmental Microbiology, Department of Environmental Science and Ecological Engineering, Korea University, Seoul, 02841, Republic of Korea
-
- * **P1-114 [ASME] Community structure of arbuscular mycorrhizal fungi of *Chamaecyparis formosensis* in the forests alone altitudes**
 ○Hsuan-Ming Cheng、Pi-Han Wang
 Department of Life Science, Tunghai University
-
- * **P1-115 [ASME] Do ectomycorrhizal plants associate with arbuscular mycorrhizal fungi? The study of AMF community structure in a coniferous forest**
 ○Liu Ren-Cheng、Wang Pi-Han
 Tunghai University, Department of Life Science
-
- * **P1-116 [ASME] Complex interaction of genetics factors and migration history on the gut microbiota in a species complex**
 ○My-Hanh Le^{1), 2), 3)}、Daryi Wang¹⁾
 1) Biodiversity Research Center, Academia Sinica, Taipei, Taiwan 2) Department of Life Science, National Taiwan Normal University, Taipei, Taiwan 3) Biodiversity Program, Taiwan International Graduate Program, Academia Sinica and National Taiwan Normal University, Taipei, Taiwan
-
- * **P1-117 [ASME] Symbiotic interaction between *Microcystis aeruginosa* and *Rhizobium* species by quorum sensing and oxidative stress defense**
 ○Bora Shin¹⁾、Yunho Lee²⁾、Minkyung Kim¹⁾、Che Ok Jeon²⁾、○Woojun Park¹⁾
 1) Laboratory of Molecular Environmental Microbiology, Department of Environmental Sciences and Ecological Engineering, Korea University, Seoul 02841, Republic of Korea 2) Department of Life Science, Chung-Ang University, Seoul 06974, Republic of Korea
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P1-118 [ASME] Identification and characterization of Siboglinidae tubeworms from South Good Weather Ridge and their microbial symbionts

Sheng-Chung Chen, Mei-Chin Lai, OYi-Ting You
Department of Life Sciences, National Chung Hsing University

* **P1-119 [ASME] Gut microbiota of cephalopods determined by host phylogeny**

O Woorim Kang, Pil Soo Kim, Eeon Jung Tak, Hojun Sung, Na-Ri Shin,
Dong-Wook Hyun, TaeWoong Whon, Hyun Sik Kim, June-Young Lee, Jin-Woo Bae
Department of Life and Nanopharmaceutical Sciences and Department of Biology,
Kyung Hee University

* **P1-120 [ASME] Hologenomic study of *Ephydatia muelleri* elucidates the constitution of microbial communities of freshwater sponges**

O Liisi Karlep¹), Barbara Lindhard²), Simon Rasmussen³), Joshua I. James⁴), Sünje J. Pamp²)
1) DCB, Tallinn Univ. of Technology, Estonia 2) NFI, Technical Univ. of Denmark, Denmark
3) DBHI, Technical Univ. of Denmark, Denmark 4) DFIRE, Hallym Univ., South Korea

P1-121 Bacterial communities associated with the coral *Acropora pulchra* in inshore and offshore reef of Biawak Island, Indonesia.

O Muhammad W. Lewaru^{1,2}), Mochamad Untung K. Agung^{1,2}), Syawaludin A. Harahap¹)
1) Department of Marine Science, Padjadjaran University. 2) Biotechnology Laboratory,
Faculty of Fisheries and Marine Science, Padjadjaran University.

P1-122~P1-128 Plant Pathology* **P1-122 Discovery of an anaerobic microbes involved in suppressive of tomato bacterial wilt symptom using soil microbe information and microbial bioresource**

土壤微生物情報と微生物バイオリソースを用いたトマト青枯病発病抑制に関わる嫌気性細菌の発見
O Chol Gyu Lee, Takashi Itoh, Toshiya Iida, Moriya Ohkuma
RIKEN BRC

* **P1-123 Bacteria isolated from low concentration ethanol disinfecting soil suppresses tomato wilt disease fungi even at low temperature**

低濃度エタノール消毒土壌から単離した細菌は低温でもトマト萎凋病菌を抑制する
O Taro Isoyama¹), Tomoyuki Hori²), Noriaki Momma³), Toshiyuki Usami¹), Seigo Amachi¹)
1) TGSH, Ciba Univ. 2) AIST 3) Inst. Hort. Plant. Breed.

* **P1-124 Suppressing effects of wild grass compost in Aso, Kumamoto, as well as its antagonistic bacterial isolates on *Fusarium* rot of onion seedlings**

阿蘇の野草堆肥およびその拮抗菌分離株のタマネギ幼苗における *Fusarium* 病害抑制効果
O Yuko Sueishi¹), Noriko Ryuda¹), Yutou Kame²), Daisuke Ueno¹), Takashi Someya¹)
1) Fac. Agr., Saga Univ. 2) Dep. Life and Environ. Sci., Kagoshima Prefectural College

* **P1-125 Development of microbial pesticide by actinomycetes with antifungal activity**

抗真菌活性を持つ放線菌の微生物農薬開発に向けた研究
O Minoru Maeda, Tatsuya Ohike, Masahiro Okanami, Tetsuya Matsukawa,
Shinichiro Kajiyama, Takashi Ano
Grad. Sch. BOST, Kindai Univ.

* **P1-126 Inhibition of fungal plant pathogens by using Okinawa microbial library**

沖縄微生物ライブラリーを利用した植物病原糸状菌の抑制
O Makoto Ueno¹), Tomoko Tamura²), Yuichiro Yokoyama¹), Rattrikorn Ganphung^{1,3}),
Naoya Shinzato⁴), Michihiro Ito⁴)
1) Fac. Life Environ. Sci., Shimane Univ. 2) Ex-Fac. Life Environ. Sci., Shimane Univ.
3) United. Grad. Sch. Agric. Sci., Tottori Univ. 4) TBRC, Univ. of the Ryukyus

* **P1-127 [ASME] Characterization of podoviridae-type bacteriophages infecting *Ralstonia solanacearum* and potential to control tomato bacterial wilt**

O Seung Yeup Lee, Hyo Jeong Kim, Roniya Thapa Magar, Kihyuck Choi, Seon-Woo Lee
Department of Applied biology, Dong-A Univ.

- * **P1-128 [ASME] Tomato rhizosphere microbiota plays a role of protecting tomato from bacterial wilt**
 ○Pyeong An Lee¹、Kihyuck Choi¹、Hyun Gi Kong¹、Soo Yeon Choi¹、Eun Joo Jung¹、Min-Jung Kwak²、Jidam Lee²、Ju Yeon Song²、Jihyun Kim²、Seon-Woo Lee¹
 1) Dong-A Univ. 2) Yonsei Univ.

P1-129~P1-135 Pathogenic Microbes

P1-129 Survival of *Listeria monocytogenes* in vegetable field

野菜栽培環境におけるリステリアの生残性

○Nobuyuki Kijima¹、Ken-ichi Honjo²、Masayuki Maeda³

1) Institute of Vegetable and Floriculture Science, NARO 2) Dept. Biosci. and Biotechnol. Kyusyu Univ. 3) Niigata Agricultural Research Institute

- * **P1-130 Extracellular electron transport Recovers Fermentation suppressed by Highly Reductive Potential in *Streptococcus mutans***

○Divya Naradasu¹、Shu Zhang²、Tatsuji Nishihara³、Kazuhito Hashimoto²、Akihiro Okamoto²

1) Department of Advanced Interdisciplinary Studies, Rcast, Graduate School of Engineering, The University of Tokyo, 4-6-1 Komaba, Meguro-ku, Tokyo 153-8904 Japan. 2) Interfacial Energy Conversion Group, National Institute for Materials Science, 1-1 Namiki, Tsukuba, Ibaraki 305-0044, Japan. 3) Division of Infections and Molecular Biology, Department of Health Promotion, Science of Health Improvement, Kyushu Dental University, 2-6-1 Manazuru, Kokurakita-ku, Kitakyushu, 803-8580, Japan.

P1-131 Lipopolysaccharide structure impacts the physical properties and attachment of membrane vesicles

緑膿菌リポ多糖はメンブレンベシクルの物性及び付着性に影響する

○Yuma Susa¹、Masaharu Kurosawa¹、Masanori Toyofuku²、Nozomu Obana²、Nobuhiko Nomura²

1) Grad. Sch. Life Environ. Sci., Univ. Tsukuba 2) Fac. Life Environ. Sci., Univ. Tsukuba

- * **P1-132 Functional analysis of proteins accumulated in membrane vesicles of *Clostridium perfringens***

宿主の免疫を誘導するウェルシュ菌メンブレンヴェシクルに集積されたタンパク質の機能解析

○Hibiki Okuwaki¹、Nozomu Obana²、Kyoko Nagayama¹、Ryomo Nakao³、Hidenobu Senpuku³、Nobuhiko Nomura²

1) Grad. Sch. Life Environ. Sci., Univ. Tsukuba 2) Fac. Life Environ. Sci., Univ. Tsukuba 3) Department of Bacteriology, NIID

P1-133 Genomic variation substantiates strain-to-strain diversity of biofilm formation in *Campylobacter jejuni*

*Campylobacter jejuni*が顕すバイオフィーム形成とゲノムの多様性

○Hiroshi Asakura
NIHS

- * **P1-134 Functional analysis of a novel sporulation regulator CtrAB conserved in *Clostridium* クロストリジウム属細菌に保存される新規の芽胞形成制御因子 CtrAB の機能解析**

○Naoki Muto¹、Nozomu Obana²、Nobuhiko Nomura²

1) Grad. Sch. Life Environ. Sci., Univ. Tsukuba 2) Fac. Life Environ. Sci., Univ. Tsukuba

P1-135 [ASME] Multi-omics profiling of rectal microbiome reveals active populations of *Enterobacteriaceae* and their lytic bacteriophages in diarrheic calves

○Tae Woong Whon¹、Hyun Sik Kim¹、Hojun Sung¹、Min-Soo Kim¹、Woorim Kang¹、Pil Soo Kim¹、Na-Ri Shin¹、Dong-Wook Hyun¹、Hoon Je Seong²、Woo Jun Sul²、Jin-Woo Bae¹

1) Department of Biology and Department of Life and Nanopharmaceutical Sciences, Kyung Hee University, 26 Kyunghedae-ro, Dongdaemun-gu, Seoul 02447, Republic of Korea 2) Department of Systems Biotechnology, Chung-Ang University, 4726 Seodong-daero, Daedeok-myeon, Anseong-si, Gyeonggi-do 17546, Republic of Korea

P1-136~P1-150 Physiology and Metabolism

P1-136 Promotion of antibiotic production by *Bacillus* sp. IA in the presence of rice husk biochar
燻炭による*Bacillus*属細菌IA株の抗生物質生産の促進
 ○Shohei Ebe, Tatsuya Ohike, Masahiro Okanami, Takashi Ano
 Grad. Sch. BOST, Kindai Univ.

* **P1-137 Investigation of culture conditions for isolation of nitrifying bacteria**
硝化細菌の分離のための培養条件の検討
 ○Akinori Ando^{1), 2)}, Wakako Okada¹⁾, Kenji Miyamoto³⁾, Yasuo Kato⁴⁾, Makoto Shinohara⁵⁾, Jun Ogawa^{1), 2)}
 1) Div. Appl. Life Sci., Grad. Sch. Agric., Kyoto Univ. 2) Res. Unit Physiol. Chem. Kyoto Univ. 3) Dept. Biosci. Inform., Keio Univ. 4) Biotech. Res. Cent., Toyama Pref. Univ. 5) NARO

* **P1-138 Early responses in carbon-starvation and induction of the photosynthetic apparatus in *Roseateles depolymerans***
***Roseateles depolymerans*の炭素源飢餓と光合成器官誘導における初期反応の解析**
 ○Tetsushi Suyama¹⁾, Satoko Matsukura¹⁾, Nanako Kanno²⁾, Satoshi Hanada²⁾, Naohiro Noda¹⁾
 1) BMRI, AIST 2) Tokyo Metropolitan Univ.

* **P1-139 Hydrogen gas production using anaerobic hot groundwater containing a subterranean microbial community**
地下圏微生物群集を含む嫌気性地下温水を用いた水素ガス生成
 ○Takuya Tsubuku¹⁾, Hiroyuki Kimura^{1), 2)}
 1) Graduate School of Integrated Science and Technology, Shizuoka Univ. 2) Research Institute of Green Science and Technology, Shizuoka Univ.

P1-140 Mechanism of greigite-dependent enhancement of methanogenesis
メタン菌の代謝が磁硫化鉄greigiteによって促進される機構の解明
 ○Kensuke Igarashi
 BPRI, AIST

* **P1-141 Adaptive mechanism of heterotrophic soil bacteria toward ultra-oligotrophic conditions**
従属栄養性土壌細菌の超貧栄養環境に対する適応機構
 ○Shinnosuke Inaba, Hiromi Kato, Yoshiyuki Ohtsubo, Masataka Tsuda, Yuji Nagata
 Tohoku Univ.

P1-142 Characterization of a yeast-like fungus *Aureobasidium pullulans* TL-6 isolated from flowers on Mt. Tateyama
立山の花より単離した酵母様真菌*Aureobasidium pullulans* TL-6株のキャラクタリゼーション
 ○Yohei Nishikawa, Akihiro Sakatoku, Daisuke Tanaka, Hiroshi Ishii, Shogo Nakamura
 Graduate School of Science and Engineering, Univ. of Toyama

* **P1-143 The observation of "MIZUMOTO (SAKE)" using NGS metagenomic analysis and the brewing technique of TOJI**
NGSで読み解く水酏造りにおける杜氏の微生物フローラ制御技術
 ○Shinnosuke Okuhama¹⁾, Masataka Aoki³⁾, Yuga Hirakata⁴⁾, Takashi Yamaguchi⁴⁾, Masataka Kusube^{1), 2)}
 1) Department of Ecosystem Engineering, National Institute of Technology, Wakayama College, Advanced Course 2) Department of Applied Chemistry and Biochemistry, National Institute of Technology, Wakayama College 3) Department of Civil Engineering, National Institute of Technology, Wakayama College 4) Department of Science Technology Innovation, Nagaoka University of Technology

* **P1-144 Extracellular electron transfer in a methanotrophic bacterium *Methylococcus capsulatus* (Bath)**
メタン酸化細菌*Methylococcus capsulatus* (Bath) における外膜シトクロムを介した細胞外電子移動
 ○Kenya Tanaka¹⁾, Masahito Ishikawa^{2), 3)}, Sho Yokoe²⁾, Katsutoshi Hori²⁾, Shuji Nakanishi^{1), 3)}, Souichiro Kato^{3), 4)}
 1) Grad. Sch. Eng. Sci., Osaka Univ 2) Grad. Sch. Eng., Nagoya Univ. 3) RCSEC, Osaka Univ. 4) AIST

- * **P1-145 Growth controlling mechanism of *Nitrospira* -dormancy and resuscitation-**
亜硝酸酸化細菌 *Nitrospira* の休眠と覚醒 – 未知増殖制御の解明 –
○Hiroyasu Terachi¹⁾、Chiho Murakami¹⁾、³⁾、Atsushi Tamura²⁾、Tomonori Kindaichi¹⁾、
Akiyoshi Ohashi¹⁾、Yoshiteru Aoi²⁾
1) Dept Civil & Environm Engn, Univ. of the Hiroshima 2) Dept Mol Biotechnol, Univ. of
the Hiroshima 3) Dept Pharmacy, Yasuda Women's University

 - * **P1-146 [ASME] Completion of aerobic estrone degradation pathway in Alphaproteobacteria**
○Kan Wu、Yi-Lung Chen、Yin-Ru Chiang
Academia Sinica

 - * **P1-147 [ASME] Interaction between bovine hormones and intestinal microorganisms**
○Hyun Sik Kim、Tae Woong Whon、Jin-Woo Bae
Department of Life and Nanopharmaceutical Sciences, and Department of Biology,
Kyung Hee University

 - P1-148 [ASME] Diversity and antibacterial activity of culturable *Micromonospora* sp
isolated from *Monochoria korsakowii* plant in freshwater, Korea**
○Sanghwa Park、Yoonjong Nam、Mi-hwa Lee
Bacterial Resources Research Division, Freshwater Bioresources Research Bureau,
Nakdonggang National Institute of Biological Resources(NNIBR),

 - P1-149 [ASME] The role of commensal bacterium Star 2018 in modulation of immune
cell response.**
○Yu-Ling Tsai¹⁾、²⁾、³⁾、Hsin-Chih Lai¹⁾、²⁾、³⁾
1) Microbiota Research Center, College of Medicine, Chang Gung University, Gueishan,
Taoyuan 33302, Taiwan 2) Department of Medical Biotechnology and Laboratory
Science, Chang Gung University, Gueishan, Taoyuan 33302, Taiwan. 3) Department
of Laboratory Medicine, Linkou Chang Gung Memorial Hospital, Gueishan, Taoyuan
33305, Taiwan.

 - * **P1-150 Development of environmental preservation with Urease productive microbe**
微生物機能を用いた環境保全技術の開発
○Yuki Nakashima、Kazuyuki Hayashi、Masataka Aoki、Shinya Maki、Masataka Kusube
National Institute of Technology, Wakayama College
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