

## 研究業績目録 2015年1月～12月

荻田 信二郎

Mori, Daisuke; Ogita, Shinjiro; Fujise, Kouhei; Inoue, Aya; Sasamoto, Hamako. Protoplast co-culture bioassay for allelopathy in leguminous plants, *Leucaena leucocephala* and *Mucuna gigantea*, containing allelochemical amino acids, mimosine and L-DOPA. *Journal of Plant Studies* (2015), 4(1), 1-11.

Ogita, Shinjiro; Lee, Jung-Bum; Kuroaki, Fumiya; Kato, Yasuo. The biosynthetic activities of primary and secondary metabolites in suspension cultures of *Aquilaria microcarpa*. *Natural Product Communications* (2015), 10(5), 779-782.

Ogita, Shinjiro; Shichiken, Masahito; Ito, Chizuru; Yamashita, Toshiyuki; Nomura, Taiji; Kato, Yasuo. A stepwise protocol for induction and selection of prominent coniferous cell cultures for the production of  $\beta$ -thujaplicin. *Natural Product Communications* (2015), 10(5), 783-787.

Ogita, Shinjiro. Plant cell, tissue and organ culture: the most flexible foundations for plant metabolic engineering applications. *Natural product communications* (2015), 10(5), 815-820.

Nomura, Taiji; Murase, Tatsunori; Ogita, Shinjiro; Kato, Yasuo. Molecular identification of tuliposide B-converting enzyme: a lactone-forming carboxylesterase from the pollen of tulip. *Plant Journal* (2015), 83, 252-262.

奥 尚

Kashi, Ryoko; Yumiyama, Hikaru; Takemoto, Takuma; Oku, Takashi. Occurrence of physiologic races in *Plasmodiophora brassicae* in Hiroshima Prefecture. Symposium on Food Agricultural Natural Resources 2015. March 26,(2015), Abstract Book, 10, Jember, Indonesia.

Kimura, Hiromi; Arima, Toshi-Hide; Okamura, Yoshiko; Oku, Takashi; Sakaguchi, Toshifumi. Selenium recovery and conversion by a filamentous fungus, *Aspergillus oryzae* strain RIB-40. Symposium on Food Agricultural Natural Resources 2015. March 26, (2015), Abstract Book, 13,Jember, Indonesia.

Oku, Takashi. Genetic resources for plant disease resistance: The light and the shadow: Compatibility of *Blumeria* (*Erysiphe*) *graminis* hybrid f.sp. *secalis* x f.sp. *tririci* with wheat lines involving resistance genes from rye. International Conference on Food, Agriculture and Natural Resources. August 31 - September 1, (2015), Program Book, 12, Jember, Indonesia.

Oku, Takashi. Molecular biology of pathogenicity in *Xanthomonas oryzae* pv. *oryzae*. 3rd International Conference on Sustainable Agriculture, Food and Energy. November 17 - 19, (2015), Conference Programme Papers SA-25, Ho Chi Minh City, Vietnam.

片山 圭巳

Katayama, Tamami. How Do Listeners Discriminate Compound Words from Noun Phrases Using Syllable Duration? *Annual Review of English Language Education in Japan* (2015), 26, 1-11.

Katayama, Tamami. Effect of Phonotactic Constraints on L2 Speech Processing. *i-Perception* (2015). (in press)

上水流久彦

Kamizuru, Hisahiko. The way history is told in Taiwan: reassessing a survey in Taipei. *Notandam(São Paulo, Brasil)* (2015) 39 : 83-98.

上水流久彦, 2015, 「フレッシュジュースは不健康?」, 『VESTA 特集 やわらかく飲み物』 99:26-27.

上水流久彦, 2015, 「台湾人のパラオ観光からみる観光研究の展望」, 『日本オセアニア学会 NEWSLETTER』

110:1-11.

上水流久彦, 2015, 「新刊紹介 清水純・潘宏立・庄国土編『現代アジアにおける華僑・華人ネットワークの新展開』」, 『華僑華人研究』 12:76-79.

### 甲 村 浩 之

大地有城・二又友紀・石原陽平・入船浩平・甲村浩之 2015. 水稲育苗ハウス遊休期間の活用を目的としたもみ殻混用による軽量安価なトマト袋利用栽培法の開発 生命環境学術誌 7 : 31-43

大地有城・石原陽平・宮永竣介・加來朋子・入船浩平・甲村浩之 2015. 水稲育苗ハウス遊休期間の活用を目的としたもみ殻混用による軽量安価なトマト袋利用栽培法の開発

園芸学研究 14 別 1 : 336

甲村浩之・高橋智史・前野智帆・清水康平・久保田絢香・小次啓二・菊地聖永 2015. アスパラガス促成栽培のための袋利用株養成における品種、培地量および根部内生菌の影響 園芸学研究 14 別 1 : 361

甲村浩之・前野智帆・久保田絢香・高橋智史・小次啓二・菊地聖永 2015. アスパラガスの袋利用株養成後の促成栽培収量における品種および根部内生菌の影響 平成 27 年度日本園芸学会中四国支部会 米子市 54 : 22

北條怜子・染谷美和・鈴木玲美・樋口洋子・青木理佐・岩崎美和・荻原綾乃・清水雅司・藤尾拓也・甲村浩之・山初仁志・加藤正一・松永邦則・元木 悟 2015. 異なる地域におけるソバージュ栽培が露地夏秋どりミニトマトの収量および品質に及ぼす影響 園芸学研究 14 別 2 : 235

甲村浩之・大前良美・久保田絢香・高下翔太・狩野智美・小川裕貴 2015. ホワイトアスパラガスの露地長期採り栽培法における全雄品種の収量性 園芸学研究 14 別 2 : 465

### 小 林 謙 介

小林謙介・河上慎太郎・石田昌平・田原聖隆・井上隆. 2015 「建築物の LCA における評価精度の検討 建築学会原単位データベースに優先的に追加 すべき項目の抽出と追加による精度の改善 『日本建築学会環境系論文集』 No.707 : 91-98.

清家剛・兼松学・小林謙介・磯部孝行・名取発. 2015 「LCCM を指向とした環境配慮住宅の LCCO2 評価に関する研究 データの不確実性と精度を考慮した CO2 削減目標の実現性検証手法」『日本建築学会環境系論文集』 No.707 : 55-65.

小林謙介. 2015 「建築における木質資源の利活用にかかるマテリアルフローと LCA」『木材学会誌』 61(3) (60 周年記念号) : 111-116 (総説記事) .

小林謙介. 2015 『演習で学ぶ LCA -ライフサイクル思考から、LCA の実務まで- 図表集』未踏科学技術協会 (教科書) .

小林謙介・河上慎太郎・田原聖隆・井上隆. 「住宅建築時における投入資材の CO2 排出量の評価においてバックグラウンドデータの利用によって生じる誤差 建築物の LCA における評価精度の検討」『日本建築学会環境系論文集』 No.718 (印刷中) .

## 五 味 正 志

Gomi, Tadashi; Natsuyama, Masashi; Sasaki, Norihito. Effects of sibling egg cannibalism on the development and survival of *Chrysomela populi* (Coleoptera: Chrysomelidae). *Applied Entomology and Zoology* (2015), 50 : 451-455.

Asama, T.; Arima, T.-H.; Gomi, T.; Keishi, T.; Tani, H.; Kimura, Y.; Tatefuji, T.; Hashimoto, K. *Lactobacillus kunkeei* YB38 from honeybee products enhances IgA production in healthy adults. *Journal of Applied Microbiology* (2015), 119: 818–826.

五味正志, 2015, 「ドロノキハムシの生活史と食卵行動の適応的意義」『昆虫と自然』 50(12): 4-7.

## 斎 藤 靖 和

Saitoh, Yasukazu; Yoshimoto, Tomoya; Kato, Shinya; Miwa, Nobuhiko. Combined treatment with ascorbic acid and a capacitive-resistive electric transfer hyperthermic apparatus induces synergistically carcinostatic effects on Ehrlich ascites tumor cell. *Exp Oncol.* (2015), 37(2), 94-99.

Li Qiang, Tanaka Yoshiharu, Saitoh Yasukazu, Tanaka Hiroshi, Miwa Nobuhiko. Carcinostatic effects of platinum nanocolloid combined with gamma irradiation on human esophageal squamous cell carcinoma. *Life Sci.* (2015), 127, 106-114.

Kato, Shinya; Kato, Yuko; Shibata Hiroki; Saitoh, Yasukazu; Miwa, Nobuhiko. Repressive effects of oat extracts on intracellular lipid-droplet formation in adipocytes and a three-dimensional subcutaneous adipose tissue model. *Materials science and engineering C.* (2015), C49, 269-273.

Ishikura, Hideki; Ono, Takeya; Oki, Sadaaki; Saito, Yasukazu; Umei, Namiko; Tsumiyama, Wakako; Tasaka, Atsushi; Aihara, Kazuki; Sato, Yuta; Matsumoto, Tomohiro; Otsuka, Akira. Effect of stretch on improvement of muscular contractures in rats. *J Phys Ther Sci.* (2015), 27(9), 2821–2823.

藤原守, 岡本茉佑美, 堀正人, 岡田薰, 斎藤靖和, 達家雅明, 2015, 「広島県における大規模災害に備えた生産地域型バックアップ機能の必要性」『県立広島大学 生命環境学雑誌』 7:1-18.

## 崎 田 省 吾

Sakita, Shogo; Nishimura, Kazuyuki. Physical containment of municipal solid waste incineration bottom ash by accelerated carbonation, *J Mater. Cycles Waste Manag.* (2015), on line published, doi: 10.1007/s10163-015-0369-8.

## 四 方 康 行

山崎 怜・四方康行, 2015, 「外国人技能実習生の現状と課題—インドネシアからの受け入れの事例—」『生命環境学術誌』 7 : 51-57.

やまねよしみ・四方康行編著, 2015, 『新聞の鬼山根眞治郎 : 資料集』クリエイティブ・ワイツー, ISBN : 978-4-9908027-1-4.

やまねよしみ・四方康行編集, 2015, 『山根家文書 玖珂代官陣屋と町民のくらし』クリエイティブ・ワイツー, ISBN:978-4-9908027-0-7.

菅 裕

Suga, H.; Ruiz-Trillo, I. (2015) “2.2. Filastereans and Ichthyosporeans: Models to Understand the Origin of Metazoan Multicellularity in Evolutionary Transitions to Multicellular Life (Ruiz-Trillo & Nedelcu, A. M. eds. ISBN 978-94-017-9641-5) 117-128 Springer, New York.

Suga, H.; Ruiz-Trillo, I. Unraveling the origin of animal multicellularity (in Japanese). *Jikken Igaku (Experimental Medicine)* (2015), 33: 968-973.

Hayakawa, S.; Takaku, Y.; Hwang, J. S.; Horiguchi, T.; Suga, H.; Gehring, W. J.; Ikeo, K.; Gojobori, T. Function and evolutionary origin of unicellular camera-type eye structure. *PLoS ONE* (2015), 10, e0118415.

De Mendoza, A.; Suga, H.; Permanyer, J.; Irimia, M.; Ruiz-Trillo, I. Functional genomics of Creolimax fragrantissima reveals complex transcriptional regulation and independent evolution of fungal traits in a close relative of animals. *eLife*, (2015) (accepted).

内藤佳奈子

内藤佳奈子・本田達志・増山悦子・中村健一. 2015, 「熊野池における植物プランクトンとアルカリフオスファターゼの季節変化」『生命環境学術誌』7 : 19-29.

Hasegawa, Hiroshi; Nakagawa, Koichi; Rahman, M. Azizur; Takemura, M.; Maki, Teruya; Naito, Kanako; Rahman M. Mamunur. A fluorescent-based HPLC assay using 4-Chloro-7-nitrobenzo-2-oxa-1, 3-diazole as derivatization agent for the determination of iron bioavailability to red tide phytoplankton. *Chromatographia* (2015), 78, 65-72.

西村和之

Shogo, SAKITA; Kazuyuki, NISHIMURA. Physical containment of municipal solid waste incineration bottom ash by accelerated carbonation, *J. Mater Cycles Waste Manag.*, DOI:10.1007/s10163-015-0369-8, 2015

Gusmini; Kazuyuki, Nishimura1; Taizo, Masuda; Adrinal; Tesshu, Tamai; Tomio, Itani. Nitrogen Balance in Forage Rice (*Oryza sativa* L. cv. *Tachisuzuka*) Cultivation in Pots with Animal Manure Application 【Short Report】 , *Plant Prod. Sci.* 18(4): 529—534, 2015

原田浩幸

Akagi, Koutarou ; Uemoto, Seigo, ; Harada, Hiroyuki ; Oura Seichiro; Biswas Biplob ; Watari Takanori ; Mitoma Yoshiharu. Simultaneously solidification of potassium and phosphorus using rice straw charcoal and saturated phosphorus adsorbent. *International journal of Recycling of Organic Waste in agriculture* (2015), 4(2), 467-472.

Hiroaki, Tsuchioka; Atsushi, Hashimoto; Kotaro, Akagi; Yumi, Katayama; Biplob, Biswas; Hiroyuki, Harada. Extraction of Extracellular Polymer in the Ariake Sea (Kyushu, Japan) Tidal Flat Sediments and Effects of the Polymers on Sediment Aggregation. (2015), 4(2), 25-29.

福 永 健 二

- Inoue, Takahiko; Yuo, Takahisa; Ohta, Takeshi; Hitomi, Eriko; Ichitani, Katsuyuki; Kawase, Makoto; Taketa, Shin; Fukunaga, Kenji. Multiple origins of the phenol reaction negative phenotype in foxtail millet, *Setaria italica* (L.)P.Beauv., were caused by independent loss-of-function mutations of the polyphenol oxidase (*Si7PPO*) gene during domestication. *Molecular Genetics and Genomics* (Springer Berlin Heidelberg) (2015), 290 (4), 1563-1574.
- Fukunaga, Kenji; Izuka, Naoko; Hachiken, Takehiro; Mizuguchi, Satoshi; Ito, Hidemi; Ichitani ,Katsuyuki. A nucleotide substitution at the 5' splice site of intron 1 of rice *HEADING DATE 1 (HDI)* gene homolog in foxtail millet broadly found in landraces from Europe and Asia. *The Crop Journal* (Elsevier) (2015), 3 (6), 481-488.

藤 井 宣 彰

- 藤井宣彰, 2015, 「小規模中学校における部活動設置と教育活動の状況」『教育学研究紀要（CD-ROM版）』60: 54-59.
- 藤井宣彰, 2015, 「幼児期体験と小学校高学年における学習意欲の関連」『福山平成大学福祉健康科学研究』10(1):65-70.

松 本 拓 也

- Matsumoto, Takuya; Kiriake, Aya; Ishizaki, Shoichiro; Watabe, Shugo; Nagashima, Yuji. Biliary excretion of tetrodotoxin in the cultured pufferfish *Takifugu rubripes* juvenile after intramuscular administration. *Toxicon* (2015), 93, 98-102.
- 長島裕二, 松本拓也, 2015, 「フグ毒テトロドキシンの体内動態解析：トラフグを用いた毒化モデル実験」『LABIO21』 62: 24-27.

三 苛 好 治

- Mallampati, Srinivasa Reddy; Mitoma, Yoshiharu; Simion, Cristian; Lee, Byoung Ho. Immobilization and volume reduction of heavy metals in municipal solid waste fly ash using nano-size calcium and iron-dispersed reagent, *J. Air Waste Manage.* (2015), 65(10), 1247-1255.
- Mitoma, Yoshiharu; Simion, Alina M.; Mallampati, Srinivasa Reddy; Miyata, Hideaki; Kakeda, Mitsunori; Simion, Cristian. Hydrodechlorination of PCDD/PCDF/PCB contaminants by simple grinding of contaminated soils with a nano-size calcium reagent, *Environ. Prog. Sustain. Energy* (2015), *in press*.
- Mallampati, Srinivasa, Reddy; Mitoma, Yoshiharu; Okuda, Tetsuji; Simion, Cristian; Lee , Byeong, Kyu. Solevnt-free synthesis and application of nano-Fe/Ca/Cao/[PO4] composite for dual separation and immobilization of stable and radioactive cesium in contaminated soils. *J. Hazar. Mater.* (2015), 297, 74-82.
- Lee, Chi-Hyeon; Nguyen Thi Thanh Truc; Mitoma, Yoshiharu; Mallampati, Srinivasa, Reddy. Evaluation of heavy metals in hazardous automobile shredder residue thermal residue and immobilization with novel nano-size calcium dispersed reagent. *J. Hazar. Mater.* (2015), 297, 239-247.

Akagi, Koutarou; Ueno, Seigo; Harada, Hiroyuki; Oura, Seichiro; Biplob, Kumar, Biswas; Watari, Takanori; Mitoma, Yoshiharu. Simultaneous solidification of potassium and phosphorus using rice straw charcoal and saturated phosphorus adsorbent. *Int. J. Recycl. Org. Waste Agricult.* (2015), 4, 67-72.

Mitoma, Yoshiharu; Mallampati, Srinivasa, Reddy; Okuda, Tetsuji; Simion, Cristian. 2015, *Metal Nanoparticles Metallic Nanoparticles Used in Soil Remediation Procedures*, Boris ildusovich Kharisov Ed., CRC Concise Encyclopedia of Nanotechnology, 481-493. ISBN 9781466580343. .

八木俊樹

Ichikawa, Muneyoshi; Saito, Kei; Yanagisawa, Haru-aki; Yagi, Toshiki; Kamiya, Ritsu; Yamaguchi, Shin; Yajima, Junichiro; Kushida, Yasuharu; Nakano, Kentaro; Numata, Osamu; Y. Toyoshima, Yoko. Axonemal dynein light chain-1 locates at the microtubule binding domain of the  $\gamma$  heavy chain. *Molecular Biology of the Cell* (2015), **26** (23), 4236-4247.

山本幸弘

Kousuke, Kotani; Yukihiro, Yamamoto; Setsuko, Hara. Enzymatic preparation of human milk fat substitutes and their oxidation stability. *J. Oleo Sci.* (2015), 64(3), 275-281.