

日本大学生物資源科学部生命科学研究所
平成27年度研究業績一覧

1. Higo M., Isobe K., Yamaguchi M., Torigoe Y. Impact of a soil sampling strategy on the spatial distribution and diversity of arbuscular mycorrhizal communities at a small scale in two winter cover crop rotational systems. *Annals of Microbiology*, 65(2): 985-993, 2015.
2. Higo M., Isobe K., Kondo T., Yamaguchi M., Takeyama S., Drijber RA., Torigoe Y. Temporal variation of the molecular diversity of arbuscular mycorrhizal communities in three different winter cover crop rotational systems. *Biology and Fertility of Soils*, 51(1): 21-32, 2015.
3. Higo M., Isobe K., Matsuda Y., Ichida M., Torigoe Y. Influence of sowing season and host crop identity on the community structure of arbuscular mycorrhizal fungi colonizing roots of two different gramineous and leguminous crop species. *Advances in Microbiology*, 5: 107-116, 2015.
4. Higo M., Isobe K., Miyazawa Y., Matsuda Y., Drijber RA., Torigoe Y. Molecular diversity and distribution of indigenous arbuscular mycorrhizal communities colonizing roots of two different winter cover crops in response to their root proliferation. *Journal of Microbiology*, 54(2): 86-97, 2016.
5. Isobe K., Ozaki K., Saito K., Hatoya D., Higo M., Torigoe Y. Varietal difference in the occurrence of delayed stem senescence and cytokinin level in the xylem exudate in soybeans. *Plant Production Science*, 18(3): 356-364, 2015.
6. Chotangui AH., Sugahara K., Okabe M., Kasuga S., Isobe K., Higo M., Torigoe Y. Evaluation of NO₃-N leaching in commercial fields of leafy vegetables by the soil nitrogen balance estimation system. *Environmental Control in Biology*, 53(3): 145-157, 2015.
7. 磯部勝孝, 佐藤竜司, 坂本成吾, 新井達也, 宮本美沙, 肥後昌男, 鳥越洋一. 光エネルギー利用効率と物質生産および子実収量からみたキノア品種「NL-6」の最適栽植密度の検討. *日本作物学会紀事*. 84(4): 369-377, 2015.
8. Isobe K., Sugiyama H., Okuda D., Murase Y., Harada H., Miyamoto M., Koide S., Higo M., Torigoe Y. Effects of sowing time on the seed yield of Quinoa (*Chenopodium quinoa* Willd) in south Kanto, Japan. *Agricultural Sciences*, 7: 146-153, 2016.
9. Hirano T., Uehara R., Shiraishi H., Hakamata W., Nishio T. Chitin oligosaccharide deacetylase from *Shewanella woodyi* ATCC51908. *Journal of Applied Glycoscience*, 62(4): 153-157, 2015.
10. 西尾俊幸. 糖質関連酵素の機能を活用した特殊オリゴ糖の作出とその利用. *応用糖質科学*. 6(1): 2-14, 2016.

11. Noguchi A., Houman Y., Shinmachi F., Chen RF., Zhao XQ., Shen RF., Hasegawa I. Exudation of fumarate from roots contributes to high aluminum resistance in *Melaleuca cajuputi*. *Plant Root*, 9: 15-23, 2015.
12. Kobayashi Y., Horie M., Nakano A., Murata K., Itou T., and Suzuki Y. Exaptation of bornavirus-like nucleoprotein elements in afrotherians. *PLoS Pathogens*, 12(8): e1005785, 2016.
13. 五十嵐太郎, 藤村龍至, 黒石いずみ, 中谷礼仁, 伊東豊雄, 辻琢磨, 饗庭伸, 小嶋一浩, 塚本由晴, 藤原徹平, 塩崎太伸, 堀越英嗣, 松葉一清, 内田祥士, 横河健, 糸長浩司, 保坂陽一郎, 榎文彦, 真壁智治. 大震災後の建築と人. 応答漂うモダニズム. 368(307-323), 左右社(株), 2015.
14. 糸長浩司. 飯館村民の苦闘, 農林地及び住宅内外の放射能汚染実態と除染の課題. *農村計画学会誌*, 33(4): 441-445, 2015.
15. 糸長浩司. 家族・コミュニティの再建と除染限界—飯館村から考える. *環境情報科学*, 44(2): 39-45, 2015.
16. 糸長浩司. 原発事故放射能被曝農村の5年, 邑の復興を問う. *農村計画学会誌*, 34(4): 387-388, 2016.
17. 糸長浩司. 震災後5年目, 飯館村民の生活・コミュニティ再建に向けて——除染の限界と自然共生居住権の再構築——. *生活協同組合研究*, 482: 5-8, 2016.
18. 糸長浩司. 自然との共生居住権の喪失と二重居住権の確立を—原発事故による放射能汚染被災地飯館村等の支援活動を通して—. *日本災害復興学会*, 復興 14号, 7(2): 36-44, 2016.
19. 森永康, 平山悟, 古川壮一. 伝統発酵にみる微生物の共生と進化. *日本乳酸菌学会誌*, 26(2): 101-108, 2015.
20. 森永康, 平山悟, 太田瑛美, 柳原希枝子, 古川壮一. 食品関連微生物が形成するバイオフィルムの制御と利用. *化学療法の領域*, (株)医薬ジャーナル社. 31(11): 78-87, 2015.
21. Takano H., Hagiwara K., Ueda K. Fundamental role of cobalamin biosynthesis in the developmental growth of *Streptomyces coelicolor* A3 (2). *Appl Microbiol Biotechnol*, 99(5): 2329-2337, 2015.
22. Takano H., Mise K., Hagiwara K., Hirata N., Watanabe S., Toriyabe M., Shiratori-Takano H., Ueda K. Role and Function of LitR, an Adenosyl B₁₂-Bound Light-Sensitive Regulator of *Bacillus megaterium* QM B1551, in Regulation of Carotenoid Production. *J Bacteriol*, 197(14): 2301-2315, 2015.

23. 上田賢志. 放線菌が生産する小型ラッカーゼ. 木材工業技術短信, 33(1): 14-22, 2015.
24. Takano H., Nishiyama T., Amano S., Beppu T., Kobayashi M., Ueda K. *Streptomyces* metabolites in divergent microbial interactions. J Ind Microbiol Biotechnol, 43(2-3): 143-148, 2016.
25. Sasaki Y., Oguchi H., Kobayashi T., Kusama S., Sugiura R., Moriya K., Hirata T., Yukioka Y., Takaya N., Yajima S., Ito S., Okada K., Ohsawa K., Ikeda H., Takano H., Ueda K., Shoun H. Nitrogen oxide cycle regulates nitric oxide levels and bacterial cell signaling. Sci Rep, 6: 22038, 2016.
26. Takano H. The regulatory mechanism underlying light-inducible production of carotenoids in nonphototrophic bacteria. Biosci Biotechnol Biochem, 11: 1-10, 2016.
27. Uchida K., Akashi T., Aoki T. Functional expression of cytochrome P450 in *Escherichia coli*: An approach to functional analysis of uncharacterized enzymes for flavonoid biosynthesis. Plant Biotechnology, 32: 205-213, 2015.
28. Waki T., Yoo DC., Fujino N., Mameda R., Denessiouk K., Yamashita S., Motohashi R., Akashi T., Aoki T., Ayabe S., Takahashi S., Nakayama T. Identification of protein-protein interactions of isoflavonoid biosynthetic enzymes with 2-hydroxyisoflavanone synthase in soybean (*Glycine max* (L.) Merr.). Biochemical and Biophysical Research Communications, 469(3): 546-551, 2016.
29. Yohda M., Yagi O., Takechi A., Kitajima M., Matsuda H., Miyamura N., Aizawa T., Nakajima M., Sunairi M., Daiba A., Miyajima T., Teruya M., Teruya K., Shiroma A., Shimoji M., Tamotsu H., Juan A., Nakano K., Aoyama M., Terabayashi Y., Satou K., Hirano T. Genome sequence determination and metagenomic characterization of a *Dehalococcoides* mixed culture grown on *cis*-1, 2-dichloroethene. Journal of Bioscience and Bioengineering, 120(1): 69-77, 2015.
30. Iwabuchi N., Takiguchi H., Hamaguchi T., Takihara H., Sunairi M., Matsufuji H., Transformation of lignin-derived aromatics into nonaromatic polymeric substances with fluorescent activities (NAPSFA) by *Pseudomonas* sp. ITH-SA-1. ACS Sustainable Chemistry & Engineering, 3: 2678-2685, 2015.
31. Takihara H., Akase Y., Sunairi M., Iwabuchi N. Mg²⁺-Dependent Control of the Spatial Arrangement of *Rhodococcus erythropolis* PR4 Cells in Aqueous-Alkane Two Phase Culture Containing *n*-Dodecane. Microbes Environ, 31(2): 178-81, 2016.
32. 高橋恭子. 抗感染・抗アレルギー作用. 乳の科学. 第4章 第6節: 213(195-202), (株)朝倉書店, 2015.

33. Miyazato S., Kishimoto Y., Takahashi K., Kaminogawa S., Hosono A. Continuous intake of resistant maltodextrin enhanced intestinal immune response through changes in the intestinal environment in mice. *Bioscience of Microbiota, Food and Health*, 35(1): 1-7, 2016.
34. Hirano K., Nihei S., Hasegawa H., Haruki M., Hirano N. Stoichiometric Assembly of the Cellulosome Generates Maximum Synergy for the Degradation of Crystalline Cellulose, as Revealed by *In Vitro* Reconstitution of the *Clostridium thermocellum* Cellulosome. *Appl Environ Microbiol*, 81(14): 4756-4766, 2015.
35. 舩廣善和. タンパク質の安定的発現や分解耐性を可能にするスタビロンタグの開発. 特願 2015-095480, 2015 年 5 月 8 日.