

Microbial Ecology & Environmental Response 部門

総説

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1. S. Hara, R. V. Desyatkin, and **Y. Hashidoko***. Investigation of the mechanisms underlying the high acetylene-reducing activity exhibited by the soil bacterial community from BC2 horizon in the permafrost zone of the East Siberian larch forest bed. *Journal of Applied Microbiology*, **116**, 865-876 (2014).
2. M. Wang, **M. Hashimoto**, and **Y. Hashidoko***. Repression of Tropolone Production and Induction of a *Burkholderia plantarii* Pseudo-Biofilm by Carot-4-en-9, 10-diol, a Cell-to-Cell Signaling Disrupter Produced by *Trichoderma virens*. *PLOS ONE* **8**, e78024, DOI: 10.137 (2013).
3. D. Kim, A. Rahman, IR. Sitep, and **Y. Hashidoko***. Accelerated Degradation of Exogenous Indole by *Burkholderia unamae* Strain CK43B Exposed to Pyrogallol-Type Polyphenols. *Bioscience Biotechnology and Biochemistry*, **77**, 1722-1727 (2013).
4. D. Kim, IR Sitepu, and **Y. Hashidoko***. Induction of Biofilm Formation in the Betaproteobacterium *Burkholderia unamae* CK43B Exposed to Exogenous Indole and Gallic Acid. *Applied and Environmental Microbiology*, **79**, 4845-4852 (2013).
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8. H. Takeda, N. Takahashi, R. Hatano, and **Y. Hashidoko***. Active N₂O emission from bacterial biome of Andisol farmland and characterization of some N₂O emitters. *Journal of Basic Microbiology*, **51** (1), online published (2012). (DOI: 10.1002/jobm.201100241)

9. M. Kobayashi, D. Choi, **Y. Hashidoko** and T. Koike*. The growth of *Larix gmelinii* seedlings as affected by charcoal produced at two different temperatures. *Biology and Fertility of Soils*, **47** (4), 467-472 (2011).
10. S. Hara, R.V. Desyatkin, T. Morishita, R. Hatano, and **Y. Hashidoko***. Clear increase of acetylene reduction in soil bacteria of East Siberian Taiga forest bed under appropriate conditions mimicking the natural soil environments. *Soil Science and Plant Nutrition*, **57** (5), 716-724 (2010).
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16. J. Kasuga, **Y. Hashidoko**, A. Nishioka, M. Yoshida, K. Arakawa and S. Fujikawa*. Deep supercooling xylem parenchyma cells of katsura tree (*Cercidiphyllum japonicum*) contain flavonol glycosides exhibiting high anti-ice nucleation activity. *Plant and Cell Environment*, **31**, 1335-1348 (2008).
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Chemical Biology 部門

総説

- 1) **M. Hashimoto***, Y. and Murai, Synthesis of photoreactive aromatic α -amino acids and effective hydrogen-deuterium exchange for aromatic α -amino acids, (光反応性芳香族 α -アミノ酸誘導体の合成と芳香族 α -アミノ酸を標的とした効率的な水素—重水素交換反応), *J. Syn. Org. Chem. Jpn.* (有機合成化学協会誌), **72**, 360-369 (2014)
- 2) L. Wang, Y. Murai, T. Yoshida, M. Okamoto, Z. P. Tachrim, **Y. Hashidoko**, and **M. Hashimoto***, Utilization of acidic α -amino acids as acyl donors: an effective stereocontrollable synthesis of aryl-keto α -amino acids and their derivatives, *Molecules*, **19**, 6349-6367 (2014).
- 3) **M. Hashimoto***, and Y. Hatanaka, Recent progress in diazirine-based photoaffinity labeling, *Eur. J. Org. Chem.*, 2513-2523 (2008)

著書

1. **M. Hashimoto***, Y. Murai, G. D. Holman, Y. Hatanaka, Selective hydrogenation and transfer hydrogenation for post-functional synthesis of trifluoromethylphenyl diazirine derivatives for photoaffinity labeling, Hydrogenation, Edited by Iyad Karamé, ISBN 978-953-51-0785-9, pp.121-136, Hard cover, 326 pages, Publisher: InTech, Published: October 10, (2012) .

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4. Y. Murai, K. Masuda, Y. Ogasawara, L. Wang, **Y. Hashidoko**, Y. Hatanaka, S. Iwata, T. Kobayashi, and **M. Hashimoto***. Synthesis of photoreactive 2-phenethylamine derivatives –synthesis of adenosine derivatives enabling functional analysis of adenosine receptors via photoaffinity labeling-. *Eur. J. Org. Chem.*, 2428-2433 (2013).
5. L. Wang, W. Hisano, Y. Murai, M. Sakurai, Y. Muto, H. Ikemoto, M. Okamoto, T. Murotani, R. Isoda, D. Kim, **Y. Sakihama**, I. R. Sitepu, **Y. Hashidoko**, Y. Hatanaka, and **M. Hashimoto***, Distinct metabolites for photoreactive l-phenylalanine derivatives in *Klebsiella* sp. CK6 isolated from rhizosphere of a wild dipterocarp sapling,

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6. Y. Murai, L. Wang, K. Masuda, **Y. Sakihama**, **Y. Hashidoko**, Y. Hatanaka, and **M. Hashimoto***, Rapid and controllable hydrogen-deuterium exchange on aromatic rings of α -amino acids and peptides, *Eur. J. Org. Chem.*, 5111–5116 (2013).
7. Y. Murai, L. Wang, Y. Muto, **Y. Sakihama**, **Y. Hashidoko**, Y. Hatanaka, and **M. Hashimoto***, Simple and stereocontrolled preparation of benzoylated phenylalanine using Friedel–Crafts reaction in trifluoromethanesulfonic acid for photoaffinity labeling, *Heterocycles*, **87**, 2119-2126 (2013).
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9. Y. Muto, Y. Murai, **Y. Sakihama**, **Y. Hashidoko**, and **M. Hashimoto***. Effective Friedel-Crafts acylation of biotin acid chloride in trifluoromethanesulfonic acid., *Biosci. Biotechnol. Biochem.*, **76**, 2162-2164 (2012).
10. Y. Ogasawara, Y. Murai, **Y. Sakihama**, **Y. Hashidoko**, and **M. Hashimoto***. Quantitative determination of click reaction in the presence of glycine derivatives and in dilute solution. *International Journal of Organic Chemistry*, **2**, 302-304 (2012).
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Plant Response 部門

原著論文

1. S. Prama Putri, K. Ishido, H. Kinoshita, S. Kitani, F. Ihara, **Y. Sakihama**, Y. Igarashi, and T. Nihira, Production of antioomycete compounds active against the phytopathogens *Phytophthora sojae* and *Aphanomyces cochlioides* by clavicipitoid entomopathogenic fungi. *J. Biosci. Bioengin.*, **117**, 557-562 (2014).
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