

平成30年度成果(論文等)一覧

論文情報
Iwaoka, C., Imada, S., Taniguchi, T., Du, S., Yamanaka, N., Tateno, R. (2018): The Impacts of soil fertility and salinity on soil nitrogen dynamics mediated by the soil microbial community beneath the halophytic shrub tamarisk. <i>Microbial Ecology</i> , 75(5), 985–996.
Miyazawa, Y., Du, S., Taniguchi, T., Yamanaka, N., Kumagai, T. (2018): Gas exchange by the mesic-origin, arid land plantation species <i>Robinia pseudoacacia</i> under annual summer reduction in plant hydraulic conductance. <i>Tree Physiology</i> , 38(8), 1166–1179.
Katayama, A., Enoki, T., Kume, T., Otsuki, K. (2018): Characteristics of soil respiration in upper and lower slope positions with different aboveground biomass: a case study in a Japanese cypress forest. <i>Journal of Agricultural Meteorology</i> , 74(2), 63–70.
Tsuruta, K., Kume, T., Komatsu, H., Otsuki, K. (2018): Effects of soil water decline on diurnal and seasonal variations in sap flux density for differently aged Japanese cypress (<i>Chamaecyparis obtusa</i>) trees. <i>Annals of Forest Research</i> , 61(1), 5–18.
何秋月, 闫美杰, 张建国, 杜盛 (2018): 黄土高原半湿润区刺槐树干液流对人工截留降雨输入及环境因子的响应, 植物生态学报, 42(4), 466–474.
刘潇潇, 何秋月, 闫美杰, 李国庆, 王仕稳, 杜盛 (2018): 黄土丘陵区辽东栎群落优势种和主要伴生种树干液流动特征, 生态学报, 38(21), 4744–4751.
吕金林, 何秋月, 闫美杰, 李国庆, 杜盛 (2018): 黄土丘陵区辽东栎树干液流特征对边材面积和土壤水分的响应, 应用生态学报, 29(3), 725–731.
Kikuchi DM, Kinoshita K. Feasibility study of a novel camera trap and hormone analysis on snow leopards in Kyrgyzstan, Himalayan Study Monographs, 19, pp.179–184, 2018.
Condon, B. J., Elliott, C., González, J. B., Yun, S. H., Akagi, Y., Wiesner-Hanks, T., Kodama, M. & Turgeon, B. G. (2018). Clues to an evolutionary mystery: The genes for T-toxin, enabler of the devastating 1970 Southern corn leaf blight epidemic, are present in ancestral species, suggesting an ancient origin. <i>Molecular Plant-Microbe Interactions</i> , 31(11): 1154–1165.
Okada, R., Ichinose, S., Takeshita, K., Urayama, S.-I., Fukuhara, T., Komatsu, K., Arie, T., Ishihara, A., Egusa, M., Kodama, M. and Moriyama, H. (2018) Molecular characterization of a novel mycovirus in <i>Alternaria alternata</i> manifesting two-sided effects: Down-regulation of host growth and up-regulation of host plant pathogenicity.
Narita, K., Minami, A., Ozaki, T., Liu, C., Kodama, M. and Oikawa, H. (2018) Total biosynthesis of antiangiogenic agent (-)-terpestatin by artificial reconstitution of the biosynthetic machinery in <i>Aspergillus oryzae</i> . <i>The Journal of Organic Chemistry</i> , 83(13): 7042–7048.
Onishi, K., T. T. Sekiyama, M. Nojima, Y. Kuroaki, Y. Fujitani, S. Otani, T. Maki, M. Shinoda, Y. Kurozawa, and Z. Yamagata, 2018: Prediction of health effects of cross-border atmospheric pollutants using an aerosol forecast model. <i>Environ. Int.</i> , 117, 48–56, doi:10.1016/j.envint.2018.04.035.
Benedetti, A., T. T. Sekiyama, T. Tanaka, その他27名, 2018: Status and future of Numerical Atmospheric Aerosol Prediction with a focus on data requirements, <i>Atmos. Chem. Phys.</i> , 18, 10615–10643, doi:10.5194/acp-18-10615-2018.
Kajino, M., T. T. Sekiyama, T. Tanaka, T. Maki, その他21名, 2019: NHM-Chem, the Japan Meteorological Agency's Regional Meteorology-Chemistry Model: Model Evaluations toward the Consistent Predictions of the Chemical, Physical, and Optical Properties of Aerosols, <i>J. Meteor. Soc. Japan</i> , 97, doi:10.2151/jmsj.2019-020.
Nakano, T. and Shinoda, M., Interannual variation in net ecosystem CO ₂ exchange and its climatic controls in a semiarid grassland of Mongolia. <i>Journal of Agricultural Meteorology</i> , 74, 92–96, 2018.
Kishii, M., Huerta, J., Tsujimoto, H. & Matsuoka, Y. Stripe rust resistance in wild wheat <i>Aegilops tauschii</i> Coss.: genetic structure and inheritance in synthetic allohexaploid <i>Triticum</i> wheat lines. <i>Genet Resour Crop Evol</i> (2019). doi:10.1007/s10722-019-00758-w
Li W., Nishiyama R., Watanabe Y., Ha C.V., Kojima M., An P., Tian L., Tian C., Sakakibara H. and Tran LSP. (2018). Effects of overproduced ethylene on the contents of other phytohormones and expression of their key biosynthetic genes. <i>Plant Physiology and Biochemistry</i> 128, 170-177.
Miki NH, Sato K, Aoki M, Yang L, Matsuo N, Zhang G, Wang L, Yoshikawa K (2018) Water movement via adventitious roots of the prostrate shrub <i>Juniperus sabina</i> in semiarid areas of China. <i>Acta Horticulturae</i> , 1222:137-146.
三木直子(2018)樹木の木部通水機能にもとづく耐乾性の仕組み. GREEN AGE 5:22-24.
Mega R, Abe F, Kim JS, Tsuboi Y, Tanaka K, Kobayashi H, Sakata Y, Hanada K, Tsujimoto H, Kikuchi J, Cutler SE, and Okamoto M (2019) Water-saving wheat: tuning water use efficiency and drought tolerance using ABA receptors. <i>Nature Plants</i> , 5: 153–159.
Gorafi YSA, Kim JS, Elbashir AAE, and Tsujimoto H (2018) A population of wheat multiple synthetic derivatives: an effective platform to explore, harness and utilize genetic diversity of <i>Aegilops tauschii</i> for wheat improvement. <i>Theoretical and Applied Genetics</i> , 131: 1615–1626.
Edet OU, Kim JS, Okamoto M, Hanada K, Takeda T, Kishii M, Gorafi YSA, and Tsujimoto H (2018) Efficient anchoring of alien chromosome segments introgressed into bread wheat by new <i>Leymus racemosus</i> genome-based markers. <i>BMC Genetics</i> , 27: 18.
Kim JS, Yamaguchi-Shinozaki K, and Shinozaki K (2018) ER-anchored transcription factors bZIP17 and bZIP28 regulate root elongation, <i>Plant Physiology</i> , 176: 2221–2230.
Yi G, Kim JS, Park JE, Shin H, et al. (2018) MYB1 transcription factor is a candidate responsible for red root skin in radish (<i>Raphanus sativus</i> L.), <i>PLoS ONE</i> , 13: e0204241.
Li H, Tsuchimoto S, Harada K, Yamasaki M, Sakai H, Wada N, Alipour A, Sasai T, Tsunekawa A, Tsujimoto H, Ando T, Tomemori H, Sato S, Hirakawa H, Quintero VP, Zamarripa A, and Fukui K. (2018) Association Study of Seed-Yield Related Traits for <i>Jatropha curcas</i> L. in Mexico. <i>Tropical Agriculture and Development</i> 62 (2) 68–77
Ahmad Mahmood, Rio Amaya, Oğuz Can Turgay, Ahmet Emre Yaprak, Takeshi Taniguchi, Ryota Kataoka (2019) High salt tolerant plant growth promoting rhizobacteria from the common ice-plant <i>Mesembryanthemum crystallinum</i> L., <i>Rhizosphere</i> 9: 10–17.
Hijiri Fujioka, Hiroaki Samejima, Hideyuki Suzuki, Masaharu Mizutani, Masanori Okamoto, Yukihiro Sugimoto: Aberrant protein phosphatase 2C leads to abscisic acid insensitivity and high transpiration in parasitic <i>Striga</i> . <i>Nature Plants</i> , 5 (3), 258–262, 2019 Mar. IF11.471 DOI: 10.1038/s41477-019-0362-7
Kotomi Ueno, Hitomi Nakashima, Masaharu Mizutani, Hirosato Takikawa, Yukihiro Sugimoto: The bioconversion of 5-deoxystrigol isomers to monohydroxylated strigolactones by plants, <i>Journal of Pesticide Science</i> 43 (3), 198–206, 2018 Dec. IF0.764 DOI: 10.1584/jpestics.D18-021
Misa Yamauchi, Kotomi Ueno, Toshio Furumoto, Takatoshi Wakabayashi, Masaharu Mizutani, Hirosato Takikawa, Yukihiro Sugimoto: Reductive metabolism of the D-ring in strigolactones by plants, <i>Bioorganic and Medicinal Chemistry</i> , 26, 4225–4233, 2018 Aug. IF2.881 doi.org/10.1016/j.bmc.2018.07.016
Moe Iseki, Kasumi Shida, Takatoshi Wakabayashi, Masaharu Mizutani, Hirosato Takikawa, Yukihiro Sugimoto: Evidence for species-dependent biosynthetic pathways for converting carlactone to strigolactones in plants, <i>Journal of Experimental Botany</i> , 69 (9), 2305–2318, 2018 Apr. IF5.830 doi.org/10.1093/jxb/erx428
Li, Q.Y., Lai, L.M., Zhou, J.H., Du, H., Guan, T.Y., Zhang, X.L., Jiang, L.H., Zheng, Y.R., Yu, Y., Gao, Y., An, P., Shimizu, H. (2018) Differential influence of elevated CO ₂ on gas exchange and water use efficiency of four indigenous shrub species distributed in different sandy environments in central Inner Mongolia. <i>Ecological Research</i>
Lai, L.M., Chen, L.J., Zheng, M.Q., Jiang, L.H., Zhou, J.H., Zheng, Y.R., Shimizu, H. (2019) Seed germination and seedling growth of five desert plants and their relevance to vegetation restoration. <i>Ecology and Evolution</i> 9(4): 2160–2170.
Tateno R et al. (2019) Temperature effects on the first three years of soil ecosystem development on volcanic ash. <i>Catena</i> 172:1-12
Nakayama, M, Tateno R (2018) Solar radiation strongly explains the quantity of forest tree root exudates. <i>Trees</i> 32: 871-879.
Tateno R Takeda, H. (2018) Nitrogen resorption efficiency of 13 tree species of a cool temperate deciduous forest in Central Japan. <i>Journal of Forest Research</i> 23: 91-97
Isobe K, Oka H, Watanabe T, Tateno R, Urakawa R, Liang C, Senoo K, Shibata H (2018) Microbial nitrogen cycling in the winter season in a cool-temperate deciduous forest. <i>Soil Biology and Biochemistry</i> 124: 90-100.
Chiwa M, Tateno R, Hishi T, Shibata H (2019) Nitrate leaching from Japanese temperate forest ecosystems in response to elevated atmospheric N deposition. <i>Journal of Forest Research</i> 24(1), 1-15.
Watanabe T, Tateno R et al. (2019). The effect of a freeze-thaw cycle on dissolved nitrogen dynamics and their relation to dissolved organic matter and soil microbial biomass in the forest soil of a northern hardwood forest. <i>Biogeochemistry</i> 142: 319-338.
Hiroshi Takagi, Shunsuke Watanabe, Shoma Tanaka, Takakazu Matsuura, Izumi C. Mori, Takashi Hirayama, Hiroshi Shimada, Atsushi Sakamoto (2018) Disruption of ureide degradation affects plant growth and development during and after transition from vegetative to reproductive stages. <i>BMC Plant Biology</i> 18(1): 287 (DOI: 10.1186/s12870-018-0770-0)
渡邊俊介, 坂本 敦(2018)植物のプリン分解—最近の進展と見えてきたストレス適応における役割. 植物の生長調節第53卷2号116-123頁 (DOI: 10.18978/jscrp.53.2_116)

論文情報

Shunsuke Watanabe, Muneyuki Sato, Yuji Sawada, Maho Tanaka, Akihiro Matsui, Yuri Kanno, Masami Hirai, Motoaki Seki, Atsushi Sakamoto, Mitsunori Seo (2018) <i>Arabidopsis molybdenum cofactor sulfurase ABA3 contributes to anthocyanin accumulation and oxidative stress tolerance in ABA-dependent and independent ways.</i>
Jun Tominaga, Yasuhito Nakahara, Daisuke Horikawa, Ayumi Tanaka, Maki Kondo, Yasuhiro Kamei, Tsuneaki Takami, Wataru Sakamoto, Kazutoshi Unno, Atsushi Sakamoto, Hiroshi Shimada (2018) Overexpression of the protein disulfide isomerase AtCYO1 in chloroplasts slows dark-induced senescence in Arabidopsis. <i>BMC Plant Biology</i> 18(1): 80 (DOI: 10.1186/s12870-018-1294-5)
Mega R. Abe F. Kim JK. Tsuboi Y. Tanaka K. Kobayashi H. Sakata, Y. Hanada K. Tsujimoto H. Kikuchi J. Cutler S.R. Okamoto M. Tuning water use efficiency and drought tolerance using abscisic acid receptors. <i>Nature Plants</i> , 5: 153-159 (2019)
Takeuchi J. Mimura N. Okamoto M. Yajima S. Sue M. Akiyama T. Monda K. Iba K. Ohnishi T. Todoroki Y. Structure-Based Chemical Design of Abscisic Acid Antagonists That Block PYL-PP2C Receptor Interactions. <i>ACS Chemical Biology</i> 13: 1313-1321 (2018)
Nakaminiemi K. Okamoto M. Higuchi M. Takeuchi M. Yoshizumi T. Yamaguchi Y. Fukao Y. Shimoizumi M. Ohashi C. Tanaka M. Matsui M. Shinozaki K. Seki M. Hanada K. AtPep3 is a hormone-like peptide that plays a role in the salinity stress tolerance of plants. <i>Proc. Natl. Acad. Sci. USA.</i> 115: 5810-5815 (2018)
Yoneyama K. Mori N. Sato T. Yoda A. Xie X. Okamoto M. Iwanaga M. Ohnishi T. Nishiwaki H. Asami T. Yokota T. Akiyama K. Yoneyama K. Nomura T. Conversion of carlactone to carlactonic acid is a conserved function of MAX1 homologs in strigolactone biosynthesis. <i>New Phytologist</i> 218: 1522-1533 (2018)
Dejonghe W. Okamoto M. Cutler SR. Small molecule probes of ABA biosynthesis and signaling. <i>Plant Cell Physiology</i> Vol.59: 1490-1499 (2018)
鹿島薰 世界の乾燥地域における様々な「さまざまなる湖」から地球環境の将来を俯瞰する、科学、87巻7号、672-674、岩波書店 2018
T. Maki, S. Furumoto, Y. Asahi, K.C. Lee, K. Watanabe, K. Aoki, M. Murakami, T. Tajiri, H. Hasegawa, A. Mashio, Y. Iwasaka, Long-range transported bioaerosols captured in snow cover on Mount Tateyama, Japan: Impacts of Asian-dust events on airborne bacterial dynamics relating to ice-nucleation activities. <i>Atmospheric Chemistry and Physics.</i> (2017) 検証有. https://doi.org/10.5194/acp-2017-1241
K. Tang, Z. Huang, J. Huang, T. Maki, S. Zhang, X. Ma, J. Shi, J. Bi, T. Zhou, G. Wang, and L. Zhang: Characterization of atmospheric bioaerosols along the transport pathway of Asian dust during the Dust-Bioaerosol 2016 Campaign, <i>Atmos. Chem. Phys.</i> , https://doi.org/10.5194/acp-2017-1172 , in review, 2017.
S. Archer, K. Lee, T. Caruso, T. Maki, C. Lee, D. Cowan, F. Maestre, S.B. Pointing, Microbial dispersal limitation to isolated soil habitats in the McMurdo Dry Valleys of Antarctica, <i>bioRxiv</i> , 2018, 493411. doi: https://doi.org/10.1101/493411
Igarashi, Y., K. Kita, T. Maki, T. Kinase, N. Hayashi, K. Hosaka, K. Adachi, M. Kajino, M. Ishizuka, T. Sekiyama, Y. Zaizen, C. Takenaka, K. Ninomiya, H. Okochi, and A. Sorimachi, Fungal spore involvement in resuspension of radio cesium in summer, <i>Scientific Reports</i> , 9, 1954 (2019). doi.org/10.1038/s41598-018-37698-x
S.D.J. Archer, K.C. Lee, T. Caruso, T. Maki, Charles K. Lee, S.C. Cary, D.A. Cowan, F.T. Maestre, S.B. Pointing, Airborne microbial transport limitation to isolated Antarctic soil habitats. <i>Nature Microbiology</i> (2019), doi.org/10.1038/s41564-019-03704-4, 04 March 2019
牧輝弥、市瀬孝道、東アジアを越境輸送されるバイオエアロゾル:韓国龍仁と日本米子における大気浮遊細菌群の比較(Long-range transport of bioaerosols over East Asia: Airborne bacterial communities of continental and island regions),クリーンテクノロジー, 29, 8-12 (2019)
Nandintsetseg, B., M. Shinoda, C. Du, and M. Erdenebadrakh: Cold-season disasters on the Eurasian steppes: Climate-driven or man-made. <i>Scientific Reports</i> , Vol. 8, 14769, 3 October 2018.
Shinoda, M., T. Sternberg, and B. Nandintsetseg: Multiple climate hazards in Eurasian drylands . <i>Natural Hazards</i> , Special Issue "Multiple climate hazards in Eurasian drylands", Vol. 92, Suppl. 1, 1-2, November 2018.
Du, C., M. Shinoda, K. Tachiiri, B. Nandintsetseg, H. Komiyama, and S. Matsushita: Mongolian herders' vulnerability to dzud: A study of record livestock mortality levels during the severe 2009/2010 winter. <i>Natural Hazards</i> , Special Issue "Multiple climate hazards in Eurasian drylands", Vol. 92, Suppl. 1, 3-17, November 2018.
Jugder, D., B. Gantsetseg, E. Davaanyam, and M. Shinoda: Developing a soil erodibility map across Mongolia. <i>Natural Hazards</i> , Special Issue "Multiple climate hazards in Eurasian drylands", Vol. 92, Suppl. 1, 71-94, November 2018.
Nandintsetseg, B., M. Shinoda, and B. Erdenetsetseg: Contributions of multiple climate hazards and overgrazing to the 2009/2010 winter disaster in Mongolia. <i>Natural Hazards</i> , Special Issue "Multiple climate hazards in Eurasian drylands", Vol. 92, Suppl. 1, 109-126, November 2018.
依田清胤、齋藤忠臣、辻渉、安田裕、繩田浩史 2018 スーダンの侵略的外来植物メスキートの生理と生態 特集「乾燥地の生態系とその課題」7. スーダンで乾燥地を支える樹木—アカシアとメスキート— 日本緑化工学会誌43(4): 586-589
加納靖之, 1854年伊賀上野地震の際に伏見で発生した局所的な液状化被害地点の検討, 自然災害科学, 37, 205-217, 2018.
竹之内健介・加納靖之・矢守克也, 平成29年九州北部豪雨において地域独自の判断基準が果たした役割—災害時におけるスイッチ機能—, 土木学会論文集F6(安全問題), 31-39, 2018.
加納靖之・水島和哉, 『伏見酒造組合資料』にみえる明治期の地震, 歴史地震, 33, 213-219, 2018.
Malambane, G., Tsujimoto, H., Akashi, K.* (2018) The cDNA structures and expression profile of the ascorbate peroxidase gene family during drought stress in wild watermelon. <i>Journal of Agricultural Science</i> , 10(8), 56-71, https://doi.org/10.5539/jas.v10n8p56 , 2018.8.
Nanasta, Y. *, Uenoyama, R., Tomooka, K., Kato, A., Akashi, K.* (2018) Nuclear isolation and purification using SDS/urea (NIPSU) method for efficient and rapid extraction of high-purity genomic DNAs from <i>Jatropha curcas</i> L: A comparative analysis of DNA isolation protocols. <i>African Journal of Biotechnology</i> , 17(32), 981-988, https://doi.org/10.5897/AJB2017.16325 . (*, co-corresponding authors. 2018.8
Masukujane, M., Coetzee, T., Ngwanathebe, R.B., Ishimoto, Y., Akashi, K.* (2018) Diversity and seasonal variation of insect pests of <i>Jatropha</i> in Gaborone, Botswana. <i>International Journal of Tropical Insect Science</i> , 38(4), 294-298, https://doi.org/10.1017/S1742758418000279 . 2018.12.
Kawai, K., Y. Nishio, K. Kai, J. Noda, E. Munkhjargal, M. Shinoda, N. Sugimoto, A. Shimizu, E. Davaanyam, and D. Batdorj, 2019: Ceilometer observation of a dust event in the Gobi Desert on 29–30 April 2015: Sudden arrival of a developed dust storm and trapping of dust within an inversion layer. <i>SOLA</i> , 15, 52-56, doi:10.2151/sola.2019-011.
Tsedendamba, P., J. Dulam, K. Baba, K. Hagiwara, J. Noda, K. Kawai, G. Sumiya, C. McCarthy, K. Kai, and B. Hoshino, 2019: Northeast Asian dust transport: A case study of a dust storm event from 28 March to 2 April 2012. <i>Atmosphere</i> , 10, 69 (16 pp.), doi:10.3390/atmos10020069.
Sakuma, S., G. Golani, Z. Guo, T. Ogawa, A. Tagiri, K. Sugimoto, N. Bernhardt, J. Brassac, M. Mascher, G. Hensel, S. Ohnishi, H. Jinno, Y. Yamashita, I. Ayalon, Z. Peleg, T. Schnurbusch and T. Komatsuda. Unleashing floret fertility in wheat through the mutation of a homeobox gene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> (2019), 116, 5182–5187.
Pourkheirandish, M., H. Kanamori, J. Wu, S. Sakuma, F. R. Blattner, T. Komatsuda. Elucidation of the origin of 'agriocrithon' based on domestication genes questions the hypothesis that Tibet is one of the centers of barley domestication. <i>The Plant Journal</i> (2018) 94: 525-534.
Casas, A. M., B. Contreras-Moreira, C. P. Cantalapiedra, S. Sakuma, M. P. Gracia, M. Moralejo, J. L. Molina-Cano, T. Komatsuda, E. Igartua. Resequencing the Vrs1 gene in Spanish barley landraces revealed reversion of six-rowed to two-rowed spike. <i>Molecular Breeding</i> (2018) 38: 51.
Abd EL Bakr H.M., H. Fujimaki, I. Tokumoto, and T. Saito (2018): Optimizing Irrigation Depth Using a Plant Growth Model and Weather Forecast., <i>Journal of Agricultural Science</i> , 10, 55–66.
Abd EL Bakr H.M., H. Fujimaki, I. Tokumoto, and T. Saito (2018): A new scheme to optimize irrigation depth using a numerical model of crop response to irrigation and quantitative weather forecasts <i>Computers and Electronics in Agriculture</i> , 150: 387-393.
I. Tokumoto, J.L. Heilman, S. Schwinnning, K.J. McInnes, M.E. Litvak, C.L.S. Morgan (2018): Soil water storage and root water uptake by invasive species in a karst savanna, Texas. <i>J. Japanese sand dune Res.</i> 64: 89-99
Jing Pan, Fei Peng, Xian Xue , Quangang You, Wenjuan Zhang, Tao Wang and Cuihua Huang, 2018,The Growth Promotion of Two Salt-Tolerant Plant Groups with PGPR Inoculation: A Meta-Analysis. <i>Sustainability</i> , 11, 378; doi:10.3390/su11020378