

2. 研究業績/ Research Achievements

(April 2018 – March 2019)

2.1 論文・著書/Journal Articles/Books/Book Chapters

Journal Articles

- Abd El Baki, H. M., Fujimaki, H., Tokumoto, I. and Saito, T.: A new scheme to optimize irrigation depth using a numerical model of crop response to irrigation and quantitative weather forecasts. *Computers and Electronics in Agriculture*, **150**: 387-393 (Jul., 2018)
- Anwar, Z., An, P., Haroon, B., Irshad, M. and Owens, G.: Nutrients losses via runoff from soils amended with cow manure composted with leaf litter. *Journal of Soil Science and Plant Nutrition*, **18**: 851-864 (Sep., 2018)
- Anwar, Z., Irshad, M., An, P., Hafeez, F. and Shao, Y.: Water extractable plant nutrients in soils amended with cow manure co-composted with maple tree residues. *International Journal of Agricultural and Biological Engineering*, **11**: 167-173 (Sep., 2018)
- Asma, S., Irshad, M., An, P. and Haroon, B.: Loss of phosphorus by runoff from soils after amendment with poultry litter co-composted with wastes. *International Journal of Recycling of Organic Waste in Agriculture*, **7**: 211-215 (Apr., 2018)
- Cochrane, L. and Nigussie, Z.: The state of knowledge on food security in Ethiopia: Knowledge production trends and publication accessibility. *Journal of Rural and Community Development*, **13**: 152-166 (Sep., 2018)
- Ebabu, K., Tsunekawa, A., Haregeweyn, N., Adgo, E., Meshesha, D. T., Aklog, D., Masunaga, T., Tsubo, M., Sultan, D., Fenta, A. A. and Yibeltal, M.: Effects of land use and sustainable land management practices on runoff and soil loss in the Upper Blue Nile basin, Ethiopia. *Science of the Total Environment*, **648**: 1462-1475 (Jan., 2019)
- Edet, O. U., Gorafi, Y. S. A., Cho, S. W., Kishii, M. and Tsujimoto, H.: Novel molecular marker-assisted strategy for production of wheat-*Leymus mollis* chromosome addition lines. *Scientific Reports*, **8**: 16117 (Oct., 2018)
- Edet, O. U., Gorafi, Y. S. A., Nasuda, S. and Tsujimoto, H.: DArTseq-based analysis of genomic relationships among species of tribe Triticeae. *Scientific Reports*, **8**(1): 16397 (Nov., 2018)
- Feng, X. H., An, P., Guo, K., Li, X. G. and Liu, X. J.: Differences in responses of moderately salt-tolerant and salt-sensitive tree species to heterogeneous salinity. *Biologia Plantarum*, **62**: 589-594 (Sep., 2018)
- Feng, X. H., An, P., Li, X. G., Guo, K., Yang, C. and Liu, X. J.: Spatiotemporal heterogeneity of soil water and salinity after establishment of dense-foliage *Tamarix chinensis* on coastal saline land. *Ecological Engineering*, **121** (special issue): 104-113 (Oct., 2018)
- Fenta, A. A., Yasuda, H., Shimizu, K., Ibaraki, Y., Haregeweyne, N., Kawai, T., Belayf, A. S., Sultana, D. and Ebabua, K.: Evaluation of satellite rainfall estimates over the Lake Tana basin at the source region of the Blue Nile River. *Atmospheric Research*, **212**: 43-53 (Nov., 2018)
- Fujimaki, H., Inoue, M., Mamedov, A. I., Ikeguchi, N. and Nakai, R.: Salinity management under a capillary-driven automatic irrigation system. *Journal of Arid Land Studies*, **28**(S): 115-118 (Dec., 2018)
- Gorafi, Y. S. A., Kim J. S., Elbashir, A. A. E. and Tsujimoto, H.: A population of wheat multiple synthetic derivatives: an effective platform to explore, harness and utilize genetic diversity of *Aegilops tauschii* for wheat improvement. *Theoretical and Applied Genetics*, **131**: 1615-1626 (Aug., 2018)
- Gülser, C., Ekberli, I., Mamedov, A. I. and Özdemir, N.: Investigating of heat conductivity equation with consideration of phase change and effect of soil moisture on heat diffusivity. *Anadolu Journal of Agricultural Sciences*, **33**: 261-269 (Nov., 2018)
- Haroon, B., Abbasi, A. M., Faridullah, An, P., Pervez, A. and Irshad, M.: Chemical characterization of cow manure and poultry manure after composting with privet and cypress residues. *Communications in Soil Science and Plant Analysis*, **49**: 2854-2866 (Nov., 2018)
- Haroon, B., An, P., Pervez, A., Faridullah and Irshad, M.: Characterization of heavy metal in soils as affected by long-term irrigation with industrial wastewater. *Journal of Water Reuse and Desalination*, **9**: 47-56 (Mar., 2019)
- Haroon, B., Irshad, M., Hafeez, F., Pervez, A. and Faridullah: Fractionation of heavy metals in contaminated soil after amendment with composted cow manure and poultry litter. *Arabian Journal of Geosciences*, **12**: 209 (Mar., 2019)
- Huang, C., Peng, F., Shibata, I., Luo, J., Xue, X., Akashi, K., Tsunekawa, A. and Wang, T.: Increase in medium-size rainfall events will enhance the C-sequestration capacity of biological soil crusts. *Sciences in Cold and Arid Regions*, **11**(1): 81-92 (Feb., 2019)
- Inoue, Y., Tanaka, K., Tamai, S., Yamamoto, F., Yamanaka, N. and Ichie, T.: Drought tolerance of three fabaceous seedlings grown under different soil water conditions in semi-arid land of South America. *Journal of the Japanese Society of Revegetation Technology*, **43**: 499-508 (Apr. 2018) [井上裕太・田中憲蔵・玉井重信・山本福壽・山中典和・市栄智明：異なる乾燥条件下で育苗した南米半乾燥地のマメ科 3 樹種の当年生実生の耐乾性評価. *日本緑化工学会誌*, **43**: 499-508 (2018年4月)]
- Irshad, M., Hafeez, F., Naseem, M., Rizwan, M. and Al-Wabel, M. I.: Extractability of phosphorus from soils supplemented with coal ash and wood ash after application of organic and inorganic P sources. *Arabian Journal of Geosciences*, **11**: 536-543 (Sep., 2018)
- Ishii, T., Schubert, V., Khosravi, S., Dreissig, S., Metje-Sprink, J., Sprink, T., Fuchs, J., Meister, A. and Houben, A.: RNA-guided endonuclease – in situ labelling (RGEN-ISL): a fast CRISPR/Cas9 based method to label genomic sequences in various species. *The New phytologist*, **222**: 1652-1661 (Mar., 2019)
- Iwaoka, C., Imada, S., Taniguchi, T., Du, S., Yamanaka, N. and Tateno, R.: The impacts of soil fertility and salinity on soil nitrogen dynamics mediated by the soil microbial community beneath the halophytic shrub *Tamarisk*. *Microbial Ecology*, **75**: 985-996 (May, 2018)
- Kamal, N. M., Gorafi, Y. S. A., Mega, R. and Tsujimoto, H.: Physiological response of wheat to chemical desiccants

- used to simulate post-anthesis drought stress. *Agronomy*, **8(4)**: 44 (Apr., 2018)
- Kamal, N. M., Gorafi, Y. S. A., Tsujimoto, H. and Ghanim, A. M. A.: Stay-green QTLs response in adaptation to post-flowering drought depends on drought severity. *BioMed Research International*, **2018**: Article ID 7082095 (Nov., 2018)
- Kelishadi, H., Mosaddeghi, M. R., Ayoubi, S. and Mamedov, A. I.: Effect of temperature on soil structural stability as characterized by high energy moisture characteristic method. *Catena*, **170**: 290-304 (Jul., 2018)
- Kimura, R.: Global distribution of degraded land area based on dust erodibility determined from satellite data. *International Journal of Remote Sensing*, **39**: 5859-5871 (Sep., 2018)
- Kimura, R.: Satellite-based mapping of dust erodibility in northeast Asia. *Natural Hazards*, **92**: 19-25 (Nov., 2018)
- Kobayashi, N., Hou, F. J., Tsunekawa, A., Chen, X. J., Yan, T. H. and Ichinohe, T.: Appropriate level of alfalfa hay in diets for rearing Simmental crossbred calves in dryland China. *Asian-Australasian Journal of Animal Sciences*, **31(12)**: 1881-1889 (Dec., 2018)
- Koji, T., Fujita, M., Cho, S. W. and Tsujimoto, H.: Development of DNA markers in 'Evergreen Kirinso' (*Phedimus* sp.), a roof greening plant, for cultivar identification and breeding. *Breeding Research*, **20**: 11-15 (Jun., 2018) [糶妙子・藤田道明・Seong-Woo Cho・辻本壽：屋上緑化植物「常緑キリンソウ」(*Phedimus* sp.)の品種保護および品種開発に向けた DNA マーカー開発。育種学研究, **20**: 11-15 (2018年6月)]
- Kusakabe, R., Taniguchi, T., Goomaral, A., Undarmaa, J., Yamanaka, N. and Yamato, M.: Arbuscular mycorrhizal fungal communities under gradients of grazing in Mongolian grasslands of different aridity. *Mycorrhiza*, **28(7)**: 621-634 (Oct., 2018)
- 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., Pecina-Quintero, V., Zamarripa, A. and Fukui, K.: Association study of seed-yield related traits for *Jatropha curcas* L. in Mexico. *Tropical Agriculture and Development*, **62**: 68-77 (Oct., 2018)
- 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. and Shimizu, H.: Differential influence of elevated CO₂ on gas exchange and water use efficiency of four indigenous shrub species distributed in different sandy environments in central Inner Mongolia. *Ecological Research*, **33**: 863-871 (Sep., 2018)
- Li, W. Q., Nishiyama, R., Watanabe, Y., Ha, C. V., Kojima, M., An, P., Tian, L., Tian, C. J., Sakakibara, H. and Tran, L. S. P.: Effects of overproduced ethylene on the contents of other phytohormones and expression of their key biosynthetic genes. *Plant Physiology and Biochemistry*, **128**: 170-177 (Jul., 2018)
- Liu, J. and Kimura, R.: Wind speed characteristics and blown sand flux over a gravel surface in a compact wind tunnel. *Aeolian Research*, **35**: 39-46 (Dec., 2018)
- Ma, Q., Chai, L., Hou, F., Chang, S., Ma, Y., Tsunekawa, A. and Cheng, Y.: Quantifying grazing intensity using remote sensing in alpine meadows on Qinghai-Tibetan Plateau. *Sustainability*, **11(2)**: 417 (Jan., 2019)
- Mahdavi, S. M., Neyshabouri, M. R. and Fujimaki, H.: Water vapour transport in a soil column in the presence of an osmotic gradient. *Geoderma*, **315**: 199-207 (Apr., 2018)
- Mahmood, A., Amaya, R., Turgay, O. C., Yaprak, A. E., Taniguchi, T. and Kataoka, R.: High salt tolerant plant growth promoting rhizobacteria from the common ice-plant *Mesembryanthemum crystallinum* L. *Rhizosphere*, **9**: 10-17 (Mar., 2019)
- Mamedov, A. I. and Levy, G. J.: Soil erosion-runoff relationships in cultivated lands: insights from laboratory studies. *European Journal of Soil Science*, **70**: 686-696 (Nov., 2018)
- Marambane, G., Tsujimoto, H. and Akashi, K.: The cDNA structure and expression profile of ascorbate peroxidase gene family during drought stress in wild watermelon. *Journal of Agricultural Research*, **10**: 56-71 (Jun., 2018)
- Mega, R., Abe, F., Kim, J. S., Tsuboi, Y., Tanaka, K., Kobayashi, H., Sakata, Y., Hanada, K., Tsujimoto, H., Kikuchi, J., Cutler, S. and Okamoto, M.: Tuning water-use efficiency and drought tolerance in wheat using abscisic acid receptors. *Nature Plants*, **5**: 153-159 (Feb., 2019)
- Mekuriaw, S., Tegegne, F., Tsunekawa, A. and Ichinohe, T.: Effects of substituting concentrate mix with water hyacinth (*Eichhornia crassipes*) leaves on feed intake, digestibility and growth performance of Washera sheep fed rice straw-based diet. *Tropical Animal Health and Production*, **50(5)**: 965-972 (Jun., 2018)
- Miyazawa, Y., Du, S., Taniguchi, T., Yamanaka, N. and Kumagai, T.: Gas exchange by the mesic-origin, arid land plantation species *Robinia pseudoacacia* under annual summer reduction in plant hydraulic conductance. *Tree Physiology*, **38(8)**: 1166-1179 (Aug., 2018)
- Mohiuddin, M., Irshad, M., An, P., Hussain, Z. and Shahzad, M.: Bioavailability of iodine to mint from soil applied with selected amendments. *Environmental Pollutants and Bioavailability*, **31**: 138-144 (Mar., 2019)
- Morii, T., Fujimaki, H., Kobayashi, K., Matsumoto, K. and Takeshita, Y.: Small-scale rainwater harvesting using capillary barrier of soil. *Geotechnical Engineering Magazine*, **66(4)**: 20-23 (Apr., 2018) [森井俊廣・藤巻晴行・小林薫・松元和伸・竹下祐二：土のキャピラリーバリア機能を利用した小規模雨水ハーベスティング。土と基礎, **66(4)**: 20-23 (2018年4月)]
- Murata, K., Watanabe, S., Tsujimoto, H. and Nasuda, S.: Cytological observation of chromosome breakage in wheat male gametophytes caused by gametocidal action of *Aegilops triuncialis*-derived chromosome 3C^t. *Genes & Genetic Systems*, **93**: 111-118 (Jun., 2018)
- Okuda, Y., Onishi, J., Shirokova, Y., Kitagawa, I., Kitamura, Y. and Fujimaki, H.: Salt removal technology by shallow subsurface drainage in combination with a cut-drain. *Journal of Arid Land Studies*, **28(S)**: 127-130 (Dec., 2018)
- Onishi, J., Okuda, Y., Paluashova, G., Shirokova, Y., Kitamura, Y. and Fujimaki, H.: Salt pushing effect to the side of the ridge by fixed skip furrow irrigation—case study in the Republic of Uzbekistan—. *Journal of Arid Land Studies*,

- 28 (S):** 155-158 (Dec., 2018)
- Onishi, K., Sekiyama, T. T., Nojima, M., Kurosaki, Y., Fujitani, Y., Otani, S., Maki, T., Shinoda, M., Kurozawa, Y. and Yamagata, Z.: Prediction of health effects of cross-border atmospheric pollutants using an aerosol forecast model. *Environment International*, **117**: 48-56 (Aug. 2018)
- Otie, V., An, P. and Eneji, A. E.: Interactive effect of brassinolide and lime on growth and yield of maize (*Zea mays* L.) on acid soils of South-East Nigeria. *Communications in Soil Science and Plant Analysis*, **49**: 2918-2931 (Nov., 2018)
- Peng, F., Xue, X., You, Q. G., Huang, C. H., Dong, S. Y., Liao, J., Duan, H. C., Tsunekawa, A. and Wang, T.: Changes of soil properties regulate the soil organic carbon loss with grassland degradation on the Qinghai-Tibet Plateau. *Ecological Indicators*, **93**: 572-580 (Oct., 2018)
- Qian, T., Tsunekawa, A., Peng, F., Masunaga, T., Wang, T. and Li, R.: Derivation of salt content in salinized soil from hyperspectral reflectance data: A case study at Minqin Oasis, Northwest China. *Journal of Arid Land*, **11(1)**: 111-122 (Feb., 2019)
- Saito, H., Kuroda, S., Iwasaki, T., Fujimaki, H., Nagai, N. and Sala, J.: Tracking infiltration front depth using time-lapse multi-offset gathers collected with array antenna ground penetrating radar. *Journal of Visualized Experiments*, **135**: e56847, (May, 2018)
- Sugimoto, T., Ito, T. Y., Taniguchi, T., Lkhagvasuren, B., Oyunsuren, T., Sakamoto, Y. and Yamanaka, N.: Diet of sympatric wild and domestic ungulates in southern Mongolia by DNA barcoding analysis. *Journal of Mammalogy*, **99(2)**: 450-458 (Apr., 2018)
- Sultan, D., Tsunekawa, A., Haregeweyn, N., Adgo, E., Tsubo, M., Meshesha, D. T., Masunaga, T., Aklog, D., Fenta, A. A. and Ebabu, K.: Efficiency of soil and water conservation practices in different agro-ecological environments in the Upper Blue Nile Basin of Ethiopia. *Journal of Arid Land*, **10(2)**: 249-263 (Apr., 2018)
- Sultan, D., Tsunekawa, A., Haregeweyn, N., Adgo, E., Tsubo, M., Meshesha, D. T., Masunaga, T., Aklog, D., Fenta, A. A. and Ebabu, K.: Impact of soil and water conservation interventions on watershed runoff response in a tropical humid highland of Ethiopia. *Environmental Management*, **61(5)**: 860-874 (May, 2018)
- Tanaka-Oda, A., Endo, I., Ohte, N., Eer, D., Yamanaka, N., Hirobe, M., Shonhor, N., Koyama, A., Jambal, S., Katsuyama, M., Nakamura, T., Matsuo, N., Undarmaa, J., Okuro, T. and Yoshikawa, K.: A water acquisition strategy may regulate the biomass and distribution of winter forage species in cold Asian rangeland. *Ecosphere*, **9(12)**: e02511 (Dec., 2018)
- Taniguchi, T., Kitajima, K., Douhan, G. W., Yamanaka, N. and Allen, M. F.: A pulse of summer precipitation after the dry season triggers changes in ectomycorrhizal formation, diversity, and community composition in a Mediterranean forest in California, USA. *Mycorrhiza*, **28(7)**: 665-677 (Oct., 2018)
- Toderich, K., Shuyskaya, E., Rakhmankulova, Z., Roman, B., Khujanazarov, T., Zhapaev, R., Ismail, S., Gupta, S. K., Yamanaka, N. and Boboev, F.: Threshold Tolerance of New Genotypes of *Pennisetum glaucum* (L.) R. Br. to Salinity and Drought. *Agronomy*, **8(10)**: 230 (Oct., 2018)
- Yasuda, H.: Groundwater use of invasive alien plant, Mesquite in Sudan. *Journal of the Japanese Society of Revegetation Technology*, **43 (4)**: 590-595 (Jun., 2018) [安田裕: スーダンの侵略的外来植物メスキートの地下水利用. 日本緑化工学会誌, **43 (4)**: 590-595 (2018年6月)]
- Yasuda, H., Panda, S. N., Mohamed Abd Elbasit, A. M., Kawai, T., Elgamri, T., Fenta, A. A. and Nawata, H.: Teleconnection of rainfall time series in the central Nile Basin with sea surface temperature. *Paddy and Water Environment*, **16**: 805-821 (Oct., 2018)
- Yousif, L. A., Khatir, A. A., El-Hag, F. M., Abdelkarim, A. M., Adam, H. S., Abdelhadi, A. W., Kurosaki, Y. and Ali-Babiker, I. A.: Length of the growing season for dry rainfed farming under Monsoon climate in Gedarif, Sudan. *African Journal of Agricultural Research*, **13(42)**: 2311-2323 (Oct., 2018)
- Yousif, L. A., Khatir, A. A., El-Hag, F. M., Abdelkarim, A. M., Adam, H. S., Wahab, A. A., Kurosaki, Y. and Ali-Babiker, I. A.: Rainfall variability and its implications for agricultural production in Gedarif State, Eastern Sudan. *African Journal of Agricultural Research*, **13(31)**: 1577-1590 (Aug., 2018)
- Books**
- Fujiyama, H., (ed.): *Toward Sustainable Dryland Agriculture - Preventing Salt Accumulation in Soil and Remediating Salt-affected Soil*. (ISBN: 978-4-7655-3473-4). Gihodo Shuppan, Tokyo, 202p. (Feb., 2019) [藤山英保編: 持続可能な乾燥地農業のためにー土壤塩類化防止と塩類土壌修復ー (ISBN: 978-4-7655-3473-4). 技報堂出版, 東京, 202p. (2019年2月)]
- Tsujimoto, H., Tomemori, H. and Yamanaka N. (eds.): *Useful Plants in Drylands: Plants for Human Life*. (ISBN: 978-4-86611-125-4). IMAISHUPPAN, Yonago, 104p. (Sep., 2018) [辻本壽・留森寿士・山中原和編: 乾燥地の有用植物 使う植物: 乾燥地フォトブックシリーズ 3 (ISBN: 978-4-86611-125-4). 今井出版, 米子, 104p. (2018年9月)]
- Book Chapters**
- Taniguchi, T. and Kataoka, R.: 5.4. Prevention and restoration using microorganisms. *In Toward sustainable dryland agriculture - Preventing salt accumulation in soil and remediating salt-affected soil* (Edited by Fujiyama, H., ISBN: 978-4-7655-3473-4), Gihodo, Tokyo, pp. 155-174. (Feb., 2019) [谷口武士・片岡良太: 5.4. 微生物を用いた防止と修復. 持続可能な乾燥地農業のためにー土壤塩類化防止と塩類土壌修復ー (藤山英保編, ISBN: 978-4-7655-3473-4). 技報堂出版, 東京, pp. 155-174 (2019年2月)]
- 2.2 会議・シンポジウム・学会発表 /Conferences/Symposium/ Presentations**
- International (国際)**
- Ekberli, I., Gulser, C., Mamedov, A. I. and Ozdemir, N.: Effect

- of soil moisture on heat diffusivity under the different phase change conditions. International Agricultural Science Congress. Van, Turkey (May, 2018)
- Fujimaki, H., Kawai, T. and Mamedov, A. I.: Influence of polyacrylamide application on structure stability of Ethiopian soils. International Soil Science Congress on “Environment and Soil Resources Conservation.” Almaty, Kazakhstan (Oct., 2018)
- Fujita, T., Maki, T., Kai, K., Kurosaki, Y., Hasegawa, H. and Iwasaka, Y.: Comparison of microbial isolates collected from bioaerosol over KOSA source region (Gobi Desert) and down region (Noto Peninsula). 15th Annual Meeting Asia Oceania Geosciences Society (AOGS). Honolulu, USA (Jun., 2018)
- Irshad, M. and An, P.: Climate Change: A serious threat to the biodiversity in Pakistan. 2nd International Conference. Saidu Sharif, Pakistan (Sep., 2018)
- Ishii, T.: Manipulation of centromere specific histone H3 (CENH3) in crop plants for haploid breeding: towards sustainable food production in dryland. 13th International Conference on Development of Drylands (ICDD). Jodhpur, India (Feb., 2019)
- Ishii, T., Dreissig, S., Khosravi, S., Puchta, H. and Houben, A.: CRISPR/Cas9-mediated labelling of genomic sequences in living and fixed cells. 22nd International Chromosome Conference. Prague, Czech Republic (Sep., 2018)
- Ishii, T. and Houben, A.: Dynamics of two CENH3 variants in cowpea (*Vigna unguiculata*). 25th International Congress on Sexual Plant Reproduction. Gifu, Japan (Jun., 2018)
- Ishizuka, M., Gantsetseg, B., Kurosaki, Y. and Buyantogtokh B.: Dust observations in topographically depressed valley, Gobi Desert, Mongolia. The 10th International Conference on Aeolian Research (ICAR X). Bordeaux, France (Jun., 2018)
- Iwaoka, C., Taniguchi, T., Du, S., Yamanaka, N. and Tateno, R.: Does the response of soil nitrogen dynamics and microbial community to an artificial rainfall differ depending on the forest type, especially the mycorrhizal type? Annual Meeting of Ecological Society of America. New Orleans, USA (Aug., 2018)
- Kimura, R. and Moriyama, M.: Development of global desertification map. The Joint PI Meeting of JAXA Earth Observation Missions FY2018. Tokyo, Japan (Jan., 2019)
- Kimura, R. and Moriyama, M.: Recent trends of annual aridity indices and classification of arid regions with satellite-based aridity indices. International Symposium on Agricultural Meteorology 2019. Shizuoka, Japan (Mar., 2019)
- Mamedov, A. I., Fujimaki, H. and Ekberli, I.: Aggregate and structure stability of six Ethiopian soils: influence of polyacrylamide application. International Agricultural Science Congress. Van, Turkey (May, 2018)
- Mamedov, A. I., Fujimaki, H. and Tsunekawa, A.: Structure stability of long-term cultivated soils in the Ethiopian highland: effect of lime and polyacrylamide. 21st ISTRO International Conference. Paris, France (Sep., 2018)
- Mega, R.: Water-saving wheat: tuning water use efficiency and drought tolerance using ABA receptors. The 13th International Conference on Development of Drylands (ICDD). Jodhpur, India (Feb., 2019)
- Mega, R., Abe, F., Kikuchi, J., Kim, J. S., Tanaka, K., Kobayashi, H., Sakata, Y., Tsujimoto, H., Hanada, K. and Okamoto, M.: Water-saving wheat: tuning water use efficiency and drought tolerance using ABA receptors. Plant Biology 2018. Montreal, Canada (Jul., 2018)
- Nakahara, Y., Ishizuka, M., Kurosaki, Y., Hagino, H., Batdelger, G., Nanko, K., Suzuki, S. and Nakamura, K.: Experimental study on motion characteristics of saltating grains under crusted soils related to the dust emission in drylands. The 2018 joint 14th iCACGP Quadrennial Symposium/15th IGAC Science Conference. Takamatsu, Japan (Sep., 2018)
- Ohmori, Y., Yamazaki, K., Tsuda, M., Kajiya-Kanegae, H., Toda, Y., Yamasaki, Y., Tsujimoto, H., Kaga, A., Nakazono, M., Iwata, H. and Fujiwara, T.: Ionome patterns of soybean under drought stress in field conditions. International Plant Phenotyping Symposium. Adelaide, Australia (Oct., 2018)
- Taniguchi, T.: How to find effective root symbiotic microbes for crops? —Toward the use of customized microbes for sustainable agriculture in an object area—. 13th International Conference on Development of Drylands (ICDD). Jodhpur, India (Feb., 2019)
- Tatsumi, C., Taniguchi, T., Du, S., Yamanaka, N. and Tateno R.: Soil N cycling is more strongly determined by forest type due to the difference of their mycorrhizal type than by the geographical distance along the aridity gradient. Fall meeting of American Geophysical Union (AGU). Washington, D.C., USA (Dec., 2018)
- Toda, Y., Sasaki, H., Ohmori, Y., Yamasaki, Y., Takahashi, H., Takanashi, H., Kamiya-Kanegae, H., Tsuda, M., Sawada, Y., Tsujimoto, H., Kaga, A., Nakazono, M., Fujiwara, T. and Iwata, H.: Toward the integrative modeling of drought tolerance in soybean: Collaborative phenotyping and multi-omics measurements. International Plant Phenotyping Symposium. Adelaide, Australia (Oct., 2018)
- Tsubo, M. and Moeletsi, M.: A crop-livestock-bioenergy system for rural farmers in South Africa. 13th International Conference on Development of Drylands (ICDD). Jodhpur, India (Feb., 2019)
- Tsujimoto, H.: Wheat germplasm enhancement to combat climate change. 25th ICSPP Satellite Symposium. Yokohama, Japan (Jun., 2018)
- Tsujimoto, H., Gorafi, Y. S. A., Kim, J. S., Elbashir A. A. E. and Tahir I. S. A.: Development of innovative germplasm for wheat breeding for dry and heat-prone agro-environment of Sub-Saharan Africa. 13th International Conference on Development of Drylands (ICDD). Jodhpur, India (Feb., 2019)
- Wu, J., Kurosaki, Y., Du C. and Wang, T.: Evaluation of the effect of climate change and human activities on aeolian desertification in Xilingol Grassland, Inner Mongolia. The 10th International Conference on Aeolian Research (ICAR X). Bordeaux, France (Jun., 2018)

Domestic (国内)

秋山恵里・近藤謙介・山口武視・野波和好・松添直隆・安萍：塩水を利用した間断施肥管理がミズナの生育と品質に及ぼす影響。日本砂丘学会第 64 回大会（つくば）（2018 年 8 月）

An, P.: Selection of plant species as indicators of desertification in Mu Us sandy land, China. 日本砂丘学会第 64 回大会（つくば）（2018 年 8 月）

Asargew, F., Tsunekawa, A., Tsuji, W., Tsubo, M., Haregeweyn, N., Bayable, M. and Adgo, E.: Variations in growth, physiology and dry matter allocation of teff (*Eragrostis tef*) accessions. The 247th Meeting of the Crop Science Society of Japan. Tsukuba (Mar., 2019)

土井安寿・Omer, B.・Onuoha, S. C.・Eltayeb, M. M.・磯部一夫・山中典和・谷口武士：メタゲノム解析を利用したソルガムに有用な内部根圏微生物の探索。日本土壤肥料学会 2018 年度神奈川大会（藤沢）（2018 年 8 月）

藤巻晴行・猪迫耕二・齊藤忠臣・北村義信・塩沢 昌：貯水槽使用型ウォーターハーベスティングにおける貯水槽の容量の最適化。日本沙漠学会第 29 回大会（石巻）（2018 年 5 月）

Fujimaki, H., Mamedov, A. I. and Kobayashi, M.: Structure stability of long-term cultivated soils from Guder watershed, Ethiopia: Effect of Soil Amendments. Annual conference of the Japanese Society of Irrigation, Drainage and Rural Engineering (JSIDRE). Kyoto (Sep., 2018)

藤巻晴行・坂口巖・井上光弘・野尻和紀・黒田賢一：天然ゴムラテックスを用いた浸透抑制膜による砂丘砂の保水性向上。日本砂丘学会第 64 回大会（つくば）（2018 年 8 月）

藤原昂樹・高山成・劉佳啓・木村玲二：UAV 空撮を活用した天然記念物鳥取砂丘の砂面変動および植被率の時空間解析。日本農業気象学会中国四国支部・近畿支部合同大会（徳島）（2018 年 12 月）

古戸翔也・Luo, D.・山中典和・梅村和弘・篠田雅人・吉原佑：冬季におけるモンゴル放牧ヒツジの消費エネルギー推定。2019 年度日本草地学会広島大会。（広島）（2019 年 3 月）

Ishii, T., Juranic, M., How, T., Koltunow, A. and Houben, A.: Characterization of the two CENH3 variants of cowpea (*Vigna unguiculata*) – a prerequisite to generate a haploid inducer. 第 134 回日本育種学会(岡山) (2018 年 9 月)

Itam, M.・松永幸子・妻鹿良亮・山崎裕司・辻本壽：Wheat response to progressive drought stress at the oowering stage. 日本育種学会第 135 回大会（千葉）（2019 年 3 月）

岩田洋佳・戸田悠介・佐々木剛志・成瀬敏也・山崎裕司・高橋宏和・高梨秀樹・鐘ヶ江弘美・津田麻衣・澤田有司・辻本壽・加賀秋人・中園幹生・藤原徹：ダイズ乾燥耐性の統合的モデリングに向けた協調フェノタイプング。日本育種学会第 134 回大会(岡山) (2018 年 9 月)

小林智生・松岡延浩・木村玲二：乾燥土を基準とした露出補正による表面土壌水分量の近接リモートセンシング。日本農業気象学会 2019 年全国大会（静岡）（2019 年 3 月）

黒崎泰典・Wu, J.・Buyantogtokh, B.・石塚正秀・Gantsetseg, B.: 現地調査等によるダスト発生条件解明の試み。日本気象学会 2018 年度秋季大会（仙台）（2018 年 11 月）

日下部亮太・谷口武士・Goomaral, A.・Jamsran, U.・山中典和・大和政秀：モンゴル草原植生における家畜食害はアーバスキュラー菌根菌の優占種を減少させる。菌根研究会（佐賀）（2018 年 12 月）

劉佳啓・木村玲二：植物体の形状と被覆率が飛砂の堆積量に与える影響。日本農業気象学会 2019 年全国大会（静岡）（2019 年 3 月）

劉佳啓・木村玲二・宮脇真美・衣笠利彦：植物体の形状と被覆率が飛砂量分布に与える影響。日本農業気象学会中国四国支部・近畿支部合同大会（徳島）（2018 年 12 月）

前田雄一・河合隆行・矢部浩・小山敢・土屋竜太：鳥取県におけるモミの分布。樹木医学会第 23 回大会（福岡）（2018 年 11 月）

牧輝弥・大西一成・洪天祥・黒崎泰典・Lee, K. C.・河合慶・甲斐憲次・篠田雅人・Pointing, S. B.・岩坂泰信：東アジアを風送されるバイオエアロゾルの細菌群集構造の変化：韓国龍仁と日本米子の比較。第 35 回エアロゾル科学・技術研究討論会（名古屋）（2018 年 7 月）

松本一穂・立石麻紀子・沖田総一郎・阿部隼人・友田遵・山中典和：沖縄島億首川流域のマングローブ林の衰退原因の検討。第 66 回日本生態学会大会（神戸）（2019 年 3 月）

松永幸子・山崎裕司・妻鹿良亮・辻本壽：高温ストレス耐性コムギ育成に向けた代謝物プロファイリング。日本育種学会第 135 回大会（千葉）（2019 年 3 月）

松島大・木村玲二・黒崎泰典・篠田雅人：複数のモデルとデータベースを用いた土壌水分量に応じたダスト発生臨界風速の推定法。日本農業気象学会 2019 年全国大会（静岡）（2019 年 3 月）

妻鹿良亮・岡本昌憲・菊地淳・坪井裕理・Itam, M.・山崎裕司・辻本壽：節水型耐乾性コムギの MSD 集団からの選抜。第 13 回ムギ類研究会（横浜）（2018 年 11 月）

妻鹿良亮・岡本昌憲・菊地淳・坪井裕理・Itam, M.・山崎裕司・辻本壽：節水型耐乾性コムギの MSD 集団からの選抜。第 10 回中国地域育種談話会（鳥取）（2018 年 12 月）

森永由紀・土屋竜太・河合隆行・ツェレンブレブ バトユン・ブレブドルジ ヤダムジャブ・高槻成紀・篠田雅人・伊藤健彦：モンゴルの牧民の馬乳酒製造法 II-名産地モゴド郡におけるウマの飼養法の GPS による調査。2018 年度日本地理学会秋季学術大会（和歌山）（2018 年 9 月）

中原優祐・石塚正秀・黒崎泰典・中村公一・Gantsetseg, B.: 砂落下実験による土壌クラストの崩壊実験。平成 30 年度土木学会四国支部第 24 回技術研究発表会（徳島）（2018 年 5 月）

中原優祐・石塚正秀・黒崎泰典・中村公一・Gantsetseg, B.・萩野裕章・南光一樹・鈴木寛：PTV 法を用いた風洞装置を用いた飛砂粒子の運動解析。土木学会第 73 回年次学術講演会（札幌）（2018 年 8 月）

- 中山珠洲・吉岡佑一郎・井上佳子・市川伸次・中島大賢・柏木純一・安萍：干ばつ環境下のコムギ収量におけるソースとしての穂の重要性. 日本作物学会第 247 回講演会 (つくば) (2019 年 3 月)
- 成瀬敏也・高橋宏和・平野恒・戸田悠介・大森良弘・津田麻衣・加賀秋人・辻本壽・澤田有司・藤原徹・岩田洋佳・松岡信・中園幹生：鳥取砂丘圃場を利用したダイズコアコレクションの根系解析. 日本育種学会第 134 回大会 (岡山) (2018 年 9 月)
- 岡元英樹・笹木正志・松原哲也・安萍：火山性土における草地雑草 2 種の根系発達と土壌水分が及ぼす影響は台地土とは異なる. 日本作物学会第 247 回講演会 (つくば) (2019 年 3 月)
- 大森良弘・山崎清・津田麻衣・鐘ヶ江弘美・戸田悠介・山崎裕司・辻本壽・加賀秋人・中園幹雄・岩田洋佳・藤原徹：蛍光 X 線分析による迅速・簡便なダイズ葉のイオノーム解析. 日本土壌肥料学会関東支部大会 (新潟) (2018 年 12 月)
- 佐々木剛志・戸田悠介・大森良弘・山崎裕司・高橋宏和・高梨秀樹・津田麻衣・鐘ヶ江弘美・辻本壽・加賀秋人・中園幹生・藤原徹・岩田洋佳：ダイズの干ばつ応答評価のためのマルチスペクトル画像解析. 日本育種学会第 135 回大会 (千葉) (2019 年 3 月)
- 清水克之・吉岡有美・松村一善・木村玲二・染谷祥：スプリンクラー灌漑地区における配水管理に関する考察. 日本砂丘学会第 64 回全国大会 (つくば) (2018 年 8 月)
- Takahashi, K., Kawada, K., Yamanaka, N., Tseden-Ish, N. and Jamsran, U.: モンゴルの耕作放棄地における草原優占種の導入と定着. 第 66 回日本生態学会大会 (神戸) (2019 年 3 月)
- 田中 (小田) あゆみ・遠藤いず貴・大手信人・矢野翠・眞壁明子・木庭啓介・Jamsran, U.・山中典和・吉川 賢：北東アジアの乾燥地生態系における窒素同位体比を用いた窒素循環過程と植物窒素源の推定. 日本地球惑星科学連合 2018 年大会 (千葉) (2018 年 5 月)
- 谷口武士・Eltayeb, M. M.・今田省吾・磯部一夫・Allen, M.・Hermamdez, R.・Aronson, E.: コロラド砂漠で生育する乾燥地植物 6 種の内部根圏微生物とその宿主特異性. 第 66 回日本生態学会大会 (神戸) (2019 年 3 月)
- 谷口武士・Omer, B.・Onuoha, S. C.・土井安寿・Eltayeb, M. M.・磯部一夫：スーダンの天水栽培地で生育するソルガムの内部根圏微生物特性. 日本土壌肥料学会 2018 年度神奈川県大会 (藤沢) (2018 年 8 月)
- 戸田悠介・佐々木剛志・大森良弘・山崎裕司・高橋宏和・高梨秀樹・津田麻衣・鐘ヶ江弘美・辻本壽・加賀秋人・中園幹生・藤原徹・岩田洋佳：UAV リモートセンシングを用いたダイズの成長過程の経時的観察とゲノミック予測への応用. 日本育種学会第 135 回大会 (千葉) (2019 年 3 月)
- 内田開・澤田有司・鐘ヶ江弘美・岡本真美・佐藤心郎・山田豊・津田麻衣・戸田悠介・山崎裕司・辻本壽・加賀秋人・中園幹生・岩田洋佳・藤原徹・平井優美：乾燥ストレス処理したダイズコアコレクションのメタボロミックゲノムワイド関連解析. 第 60 回日本植物生理学会 (名古屋) (2019 年 3 月)
- 山崎裕司・Gorafi, Y. S. A.・Tahir, I. S.・辻本壽：未利用遺伝資源を含んだ節肥性コムギ系統の作成. 日本育種学会第 135 回大会 (千葉) (2019 年 3 月)
- 安田裕・Amhamsry, A. A. T.・Fenta, A. A.・河合隆行・清水克之：海水面温度とのテレコネクションによる青ナイル源流域夏季降雨量の予測. 日本沙漠学会第 29 回大会 (石巻) (2018 年 5 月)
- 米田亜沙美・岩永史子・芳賀弘和・沖田総一郎・山中典和・山本福壽：イタヤカエデとウリハダカエデの樹液溢出と辺材温度との関係. 樹木医学会第 23 回大会 (福岡) (2018 年 11 月)
- Wu, J. and Kurosaki, Y.: Contributions of climate and human factors to aeolian desertification in Xilingol Grassland. 日本気象学会 2018 年度春季大会 (つくば) (2018 年 5 月)

Invited Lectures (招待講演)

- Fujimaki, H.: Precision irrigation as a smart technology. International Workshop by Asia Productivity Organization on "Innovative Technologies for Increasing Agricultural Water Productivity." Colombo, Sri Lanka (Jul., 2018)
- Fujimaki, H.: Determination of irrigation depths using a numerical model (WASH_1D/2D) and weather forecast. International training seminar on "Crop diversification and modeling for climate-resilient agriculture and food security management in Central Asia." Samarkand, Uzbekistan (Oct., 2018)
- Ishii, T., Schubert, V., Fuchs, J., Dreissig, S., Khosravi, S., Puchta, H. and Houben, A.: CRISPR/Cas9-mediated labelling of genomic sequences in living and fixed cells. 第 13 回麦類研究会 (横浜) (2018 年 11 月)
- 石井孝佳：動原体改変による半数体植物作成法の開発. 第 10 回中国地域育種談話会 (鳥取) (2018 年 12 月)
- 妻鹿良亮：ABA 受容体の機能強化によって創出された節水型耐乾性コムギの解析. 戦略的創造研究推進事業 (さきがけ) 研究領域「情報科学との協働による革新的な農産物栽培手法を実現するための技術基盤の創出」第 6 回領域会議 (鳥取) (2018 年 8 月)
- Tsujimoto, H.: Mining wild genes for wheat improvement under climate change. AgRisearch, Christ Church, New Zealand (Nov., 2018)
- Tsunekawa, A.: Sustainable Land Management (SLM) to reduce soil erosion in the Upper Blue Nile basin, Ethiopia. Global Soil Erosion Research Forum 2018 (GSERF 2018). Yangling, China (Sep., 2018)
- Tsunekawa, A.: Sustainable Land Management (SLM) to combat desertification: a case study of the Upper Blue Nile basin, Ethiopia. Forum on Innovation and Development of Desertification Control and Ecological Restoration. Dunhuang, China (Sep., 2018)
- Tsunekawa, A.: Sustainable Grassland Management: trade-offs and synergies between ecosystem services. 4th International Grassland Agro-ecosystems Conference (4th IGAC). Lanzhou, China (Sep., 2018)
- Tsunekawa, A.: Sustainable land management in Ethiopia. International Workshop of Global Dryland Ecosystem Programme. Beijing, China (Oct., 2018)
- Tsunekawa A.: Sustainable Land Management to convert areas

from grey into green. 13th International Conference on Development of Drylands (ICDD). Jodhpur, India (Feb., 2019)

恒川篤史: 砂漠化対処に向けた次世代型「持続可能な土地管理 (SLM)」フレームワークの開発 (エチオピア). 日本砂丘学会第 64 回全国大会シンポジウム(つくば) (2018 年 8 月)

2.3 報告書/Reports

Tsujimoto, H.: Breeding research in Japan to save developing countries – its tasks and perspectives Breeding research, 20: 49-52 (Jun., 2018) [辻本壽: 途上国を救う日本の育種学研究～その課題と展望～. 育種学研究, 20:49-52 (2018 年 6 月)]

2.4 公開セミナー/Open Seminar

1) Open seminar

1. Crop modeling from global level to cell level (Apr. 2, 2018)

全球レベルから細胞レベルまでの作物のモデル化

Gen SAKURAI 櫻井 玄

Senior Researcher, Institute for Agro-Environmental Sciences, National Agriculture and Food Research Organization (NARO)

農業・食品産業技術総合研究機構農業環境変動研究センター・主任研究員

2. The Blue Nile Grand Ethiopian Renaissance Dam (BN-GERD): shortcomings and sustainability in a climate change perspective (Apr. 19, 2018)

Paolo BILLI

Specially Appointed Professor, International Platform for Dryland Research and Education (IPDRE), Tottori University

鳥取大学国際乾燥地研究教育機構・特命教授

Imad-eldin Ahmed ALI BABIKER

Visiting Professor, Arid Land Research Center, Tottori University

鳥取大学乾燥地研究センター・客員教授

3. Measurement of greenhouse gas emissions in fields and on ocean (Jun. 4, 2018)

Kosuke NOBORIO 登尾 浩助

Professor, Department of Agriculture, Meiji University/ Visiting Professor, Arid Land Research Center, Tottori University

明治大学農学部・教授/ 鳥取大学乾燥地研究センター・客員教授

4. Climate and Agriculture in East Africa: Argo-Meteorology and Crop Modeling (Jun. 20, 2018)

Robel Takele MITEKU

Assistant Researcher, Ethiopian Institute of Agricultural Research

エチオピア農業研究所・研究助手

5. MRA Project -Special Seminar (Jul. 5, 2018)

(1) Genome-wide sequence information reveals multiple events of reticulation that shaped the relatives of wheat

Nadine Bernhardt and Jonathan Brassac
Scientists, Leibniz Institute of Plant Genetics and Crop Plant Research (IPK)

(2) Hybrid Wheat

Takashi OKADA

School of Agriculture, Food and Wine, Faculty of Science, The University of Adelaide

6. Investigating warming of spring wheat growing season in Sudan (Aug. 17, 2018)

Robel Takele MITEKU

Assistant Researcher, Ethiopian Institute of Agricultural Research

エチオピア農業研究所・研究助手

7. Advances in Fertilization (Sep. 18, 2018)

Uri Yermiyahu

Head, Gilat Research Center, Agricultural Research Organization of Israel

イスラエル農業研究機構 Gilat 研究センター・所長

8. In vitro fertilization in plants (Oct. 3, 2018)

Takashi OKAMOTO 岡本 龍史

Professor, Tokyo Metropolitan University

首都大学東京・教授

9. ARC Industrial Transformation Research Hub for Wheat in a Hot and Dry Climate (Oct. 15, 2018)

Jessica Schmidt

Ph.D course student, the University of Adelaide.

アデレード大学・博士課程学生

10. Flow cytometry in wheat genome research (Oct. 31, 2018)

Cápal Petr

Postdoctoral Researcher, Institute of Experimental botany CAS, Olomouc, Czech Republic

11. Capacitive-Touch-Based Soil Monitoring Device with Exchangeable Sensor Probe (Nov. 30, 2018)

Ryo SHIGETA 繁田 亮

Project Researcher, Graduate School of Information Science and Technology, The University of Tokyo

東京大学大学院情報理工学系研究科・特任研究員

2) Colloquium

Msizi DLAMINI

Master's student, Graduate School of Sustainability Science,
Tottori University

20th Colloquium (Nov. 22, 2018)

(1) Challenges and Management Options for Water Resources in Arid and Semi-arid Conditions of Pakistan

Muhammad IRSHAD

Visiting Professor, Arid Land Research Center, Tottori University

鳥取大学乾燥地研究センター・客員教授

(2) Assessment of Aeolian Desertification in Inner Mongolia, China and Mongolia

Jing WU 武 靖

Project Researcher, Arid Land Research Center, Tottori University

鳥取大学乾燥地研究センター・プロジェクト研究員

21st Colloquium (Jan. 28, 2019)

(1) Physical quality of Ethiopian soils: effect of amendments

Amrakh MAMEDOV

Visiting Professor, Arid Land Research Center, Tottori University

鳥取大学乾燥地研究センター・客員教授

(2) Application of wind tunnel in blown sand research

Jiaqi LIU 劉 佳啓

Project Researcher, Arid Land Research Center, Tottori University

鳥取大学乾燥地研究センター・プロジェクト研究員

3) Science Café

66th Science Café (Nov. 7, 2018)

The Diversity of Inner Mongolia

Qing QING

Research student, Arid Land Research Center, Tottori University

67th Science Café (Nov. 21, 2018)

The Qinghai-Tibet Plateau ~Past and Present~

Fei PENG

Specially Appointed Associate Professor, International Platform for Dryland Research and Education (IPDRE), Tottori University

68th Science Café (Dec. 5, 2018)

Status of Rural Livelihoods in Kenya from Sustainable Rural Development Perspective

Benedict NZIOKI Maurice

Master's student, Graduate School of Sustainability Science, Tottori University

69th Science Café (Dec. 19, 2018)

A general comparison of South African and Japanese Forestry (personal observation)

2.5 受賞

賞の名称：日本砂丘学会論文賞
受賞者：安 萍
受賞年月日：2018年8月21日
授与団体：日本砂丘学会
研究タイトル：中国ムウス砂地における沙漠化指標植物の選抜

賞の名称：農村農業工学会優秀報文賞
受賞者：藤巻 晴行
受賞年月日：2018年9月4日
授与団体：農村農業工学会
研究タイトル：ウズベキスタン国の土壌条件下におけるカットドレーンの適用上の課題と対策

賞の名称：Springer社 Journal of Soils and Sediments
最優秀査読者賞
受賞者：Amrakh Mamedov
受賞年月日：2018年12月23日
授与団体：Journal of Soils and Sediments. (Springer社)
研究タイトル：最優秀査読者としての顕著な貢献のため

賞の名称：鳥取大学長表彰
受賞者：辻本 壽
受賞年月日：2019年1月7日
授与団体：鳥取大学
研究タイトル：乾燥・高温耐性コムギの系統選抜に関する研究が国際的に高い評価

2.5 Honors and Awards

Name of Prize: Japanese Society of Sand Dune Research Awards
Name of Recipient: Ping An
Date: Aug. 21, 2018
Name of Offering Organization: Japanese Society of Sand Dune Research
Research Title: Selection of plant species as indicators of desertification in Mu Us sandy land, China.

Name of Prize: Technical Paper Award for Excellence
Name of Recipient: Haruyuki Fujimaki.
Date: Sep. 4, 2018
Name of Offering Organization: The Japanese Society of Irrigation, Drainage and Rural Engineering
Research Title: Problems and measures for the adoption of cut-drain and its applicability to soil conditions in Uzbekistan

Name of Prize: Springer, Journal of Soils and Sediments.
Journal Top Reviewer Awards
Name of Recipient: Amrakh Mamedov
Date: Dec. 23, 2018
Name of Offering Organization: Springer, Journal of Soils and Sediments.
Research Title: Significant contribution as a top reviewer

Name of Prize: Tottori University President's Award
Name of Recipient: Hisashi Tsujimoto.
Date: Jan. 7, 2019
Name of Offering Organization: Tottori University
Research Title: Highly evaluated research on dry and heat tolerant wheat selection

2.6 外部資金 / External Funds

平成 30 年度科学研究費補助金 / Grants-in-Aid for Scientific Research in FY2018

研究種目 Research categories	氏名 Name	研究課題名 Research Title
基盤研究 (A) Scientific Research(A)	恒川 篤史 Tsunekawa, Atsushi	国際河川・青ナイル川流域における土壌侵食・土壌流亡緩和のための土地管理 Land Management to mitigate soil erosion and loss in the Blue Nile basin
		研究分担者 Co-Investigators
基盤研究 (B) Scientific Research(B)	黒崎 泰典 Kurosaki, Yasunori	ゴビ砂漠の詳細観測に基づく黄砂-地表面過程モデルの構築 Development of a land surface - dust emission process model based on a detailed observation in the Gobi Desert
		研究分担者 Co-Investigators
基盤研究 (B) Scientific Research(B)	辻本 壽 Tsuji moto, Hisashi	高温耐性コムギ系統の QTL 解析と選抜マーカーの開発 QTL analysis of high-temperature tolerant wheat lines and development of selection markers
若手研究 (A) Young Scientists(A)	谷口 武士 Taniguchi, Takeshi	メタゲノム解析と難培養微生物利用を基盤とした有用な植物-複合微生物共生系の構築 Development of effective plant-symbiotic microbes system by metagenome and cultivation of non-culturable microbes
若手研究 (B) Young Scientists(B)	妻鹿 良亮 Mega, Ryosuke	アブシジン酸の蓄積が引き起こす生殖組織の形態異常と不稔のメカニズムの解明 Identification of the mechanism of abnormal reproductive tissue development and sterility caused by accumulation of Abscisic acid
若手研究 Early-Career Scientists	山崎 裕司 Yamasaki, Yuji	パンコムギのキャノピー温度関連形質とその多面発現効果の遺伝育種的解析 Breeding analysis for pleiotropic effects on canopy temperature and related traits in bread wheat
挑戦的研究 (萌芽) Challenging Research (Exploratory)	辻本 壽 Tsuji moto, Hisashi	共生関係が成立するコムギおよびエンドファイトの遺伝子型の探索 Exploration of wheat and endophyte genotypes that enable the symbiotic relationship
		研究分担者 Co-Investigator
特別研究員奨励費 (外国人特別研究員) JSPS Research Fellows (JSPS International Research Fellow)	辻本 壽 Tsuji moto, Hisashi	高温耐性を示すハマニンニク染色体添加コムギの RNA-Seq とメタボロミックス解析 RNA-seq and metabolomic analyses of Leymus chromosome added wheat lines showing heat tolerance

他機関からの研究分担者 / Co-Investigator

研究種目 Research categories	氏名 Name	研究課題名 Research Title	研究代表者 Principal Investigator
基盤研究 (A) Scientific Research(A)	黒崎 泰典 Kurosaki, Yasunori	ダストフラックス長期変動に寄与する人為的影響の定量的評価 Long-term Fluctuations of Dust Flux and Quantitative Assessments of Human Activities	鹿島 薫 (九州大学) Kashima, Kaoru (Kyushu University)

研究種目 Research categories	氏名 Name	研究課題名 Research Title	研究代表者 Principal Investigator
基盤研究 (A) Scientific Research(A)	藤巻 晴行 Fujimaki, Haruyuki	複合的物理探査による農業用施設及び地盤中の流体・物質移動の高速可視化技術の開発 Developing fast visualization technology for fluid and mass movement under ground and agricultural constructions with compound physical sensing	黒田 清一郎 (農業・食品産業技術総合研究機構) Kuroda, Seiichiro (National Agriculture and Food Research Organization)
基盤研究 (A) Scientific Research(A)	河合 隆行 Kawai, Takayuki	複合的物理探査による農業用施設及び地盤中の流体・物質移動の高速可視化技術の開発 Developing fast visualization technology for fluid and mass movement under ground and agricultural constructions with compound physical sensing	黒田 清一郎 (農業・食品産業技術総合研究機構) Kuroda, Seiichiro (National Agriculture and Food Research Organization)
基盤研究 (A) Scientific Research(A)	黒崎 泰典 Kurosaki, Yasunori	東アジア沙漠地帯における黄砂バイオエアロゾルの発生過程とその越境輸送ルート の解明 Bioaerosols transported for long range distance over East Asia	牧 輝弥 (金沢大学) Maki, Teruya (Kanazawa University)
基盤研究 (A) Scientific Research(A)	木村 玲二 Kimura, Reiji	北アフリカ乾燥地域における持続可能な地下水利用システムの構築 Development of the sustainable underground water use in arid regions of North Africa	岩崎 えり奈 (上智大学) Iwasaki, Erina (Sophia University)
基盤研究 (B) Scientific Research(B)	山中 典和 Yamanaka, Norikazu	降雨パターンの変化にたいする中国黄土高原の半乾燥地生態系の脆弱性の評価 Evaluation for vulnerability of semi-arid ecosystem on the Loess Plateau against changing precipitation regime	館野 隆之輔 (京都大学) Tateno, Ryunosuke (Kyoto University)
基盤研究 (B) Scientific Research(B)	谷口 武士 Taniguchi, Takeshi	降雨パターンの変化にたいする中国黄土高原の半乾燥地生態系の脆弱性の評価 Evaluation for vulnerability of semi-arid ecosystem on the Loess Plateau against changing precipitation regime	館野 隆之輔 (京都大学) Tateno, Ryunosuke (Kyoto University)
基盤研究 (B) Scientific Research(B)	藤巻 晴行 Fujimaki, Haruyuki	土壌・水環境技術の高度化に資する農業工学とコロイド化学の融合域における課題の解明 Solving tasks in inter-disciplinary zone between agricultural engineering and colloid chemistry for advancement of soil-water-environmental technology	小林 幹佳 (筑波大学) Kobayashi, Motoyoshi (University of Tsukuba)
基盤研究 (B) Scientific Research(B)	辻本 壽 Tsujiimoto, Hisashi	遺伝資源から有用遺伝変異を高効率に見出すための新しい方法論の開発 Development of a new method for discovering useful genetic variations from genetic germplasm efficiently	岩田 洋佳 (東京大学) Iwata, Hiroyoshi (The University of Tokyo)
基盤研究 (B) Scientific Research(B)	河合 隆行 Kawai, Takayuki	モンゴルのアイラグ (発酵馬乳) の製造法の地理学的・生態学的検証 Geographical and ecological study of fermented mare's milk in Mongolia	森永 由紀 (明治大学) Morinaga, Yuki (Meiji University)
基盤研究 (B) Scientific Research(B)	木村 玲二 Kimura, Reiji	Air Irrigation : 乾燥地の大気由来の未利用水資源で実現する節水農業 Air Irrigation: Water-saving agriculture using unutilized water resource derived from atmosphere in arid regions	森 牧人 (高知大学) Mori, Makito (Kochi University)

研究種目 Research categories	氏名 Name	研究課題名 Research Title	研究代表者 Principal Investigator
基盤研究 (C) Scientific Research(C)	木村 玲二 Kimura, Reiji	風食発生の指標となるごく薄い地表面の 土壌水分モデルの開発 Development of soil moisture model of extremely thin ground surface which is an indicator and influence for occurrence of wind erosion	鈴木 純 (信州大学) Suzuki, Jun (Shinshu University)
基盤研究 (C) Scientific Research(C)	谷口 武士 Taniguchi, Takeshi	日本国内の林地にみられるアーバスキュ ラー菌根菌群集に関する研究 Research on arbuscular mycorrhizal fungal community of forest in Japan	大和 政秀 (千葉大学) Yamato, Masahide (Chiba University)
基盤研究 (C) Scientific Research(C)	谷口 武士 Taniguchi, Takeshi	根圏での樹木と林床植生間の競争緩和が 窒素動態と菌根を介した樹木の生長に及 ぼす影響 Effects of mitigation of competition in rhizosphere between tree and understory vegetation on nitrogen dynamics and tree growth through mycorrhiza	福澤 加里部 (北海道大学) Fukuzawa, Karibu (Hokkaido University)
挑戦的研究(萌芽) Challenging Research (Exploratory)	杉本 太郎 Sugimoto, Taro	草原棲哺乳類の異なる移動戦略共存機構 の解明と移動誘発ホルモン検出の試み Coexistence mechanism analysis of different migration strategies of grassland mammals and detection of hormones inducing migration	伊藤 健彦 (明治大学) Ito, Takehiko (Meiji University)