

Faculty of Applied Biological Sciences
Gifu University

Annual Report of Research Activities 2017

Vol. 14

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I Research Achievement

1) Academic Paper

【Course of Applied Life Science】

- [1] Ando H, Komura N, **Imamura A**, Kiso M, **Ishida H**.
“A Synthetic Challenge to the Diversity of Gangliosides for Unveiling Their Biological Significance”
J. Synth. Org. Chem. Jpn., Vol.75(11), pp.1162-1170, 2017
- [2] Chantarasrivong C, Ueki A, Ohyama R, Unga J, Nakamura S, Nakanishi I, Higuchi Y, Kawakami S, Ando H, **Imamura A**, **Ishida H**, Yamashita F, Kiso M, Hashida M.
“Synthesis and Functional Characterization of Novel Sialyl LewisX Mimic-Decorated Liposomes for E-selectin-Mediated Targeting to Inflamed Endothelial Cells.”
Mol. Pharmaceutics, Vol.14(5), pp.1528-1537, 2017/05/01
- [3] Fitriyanto NF, Winarti A, Imara FA, Erwanto Y, **Hayakawa T**, **Nakagawa T**.
“Identification and growth characters of nitrifying Pseudomonas sp., LS3K isolated from odorous region of poultry farm”
J Biol Sci, Vol.17(1), pp.1-10, 2017/01
- [4] Fukui H, **Iwahashi H**, Endoh S, Nishio K, Hagihara Y, Yoshida Y, Horie M.
“Ascorbic acid prevents zinc oxide nanoparticle-induced intracellular oxidative stress and inflammatory responses.”
Toxicol Ind Health., Vol.33(9), pp.687-695, 2017/09
- [5] Fitriyanto NA, Permadi A, Erwanto Y, **Hayakawa T**, **Nakagawa T**.
“Characteristics of high ammonium-tolerant *Arthrobacter* sp. LM1KK isolated from high ammonia odorous region of laying hens farm in the tropical area”
Res J Microbiol, Vol.12(2), pp.118-127, 2017
- [6] Fitriyanto NF, Winarti A, Imara FA, Erwanto Y, **Hayakawa T**, **Nakagawa T**.
“Identification and growth characters of nitrifying Pseudomonas sp., LS3K isolated from odorous region of poultry farm”
J Biol Sci, Vol.17(1), pp.1-10, 2017/01
- [7] Fukui H, **Iwahashi H**, Nishio K, Hagihara Y, Yoshida Y, Horie M.
“Ascorbic acid prevents zinc oxide nanoparticle-induced intracellular oxidative stress and inflammatory responses”
Toxicology and industrial health, Vol.33(9), pp.687-695, 2017/09
- [8] Gumilar J, Yusiat LM, Pertwinningrum A, **Nakagawa T**, Triatmojo S.
“A novel extracellular keratinase from *Exiguobacterium* sp. Dg1: enzyme production and dehairing application”
Leather and Footwear Journal, Vol.17(4), pp.209-216, 2017/12
- [9] Hattori H, **Yamauchi K**, Onwona-Agyeman S, **Mitsunaga T**.
“Effect of Grains of Paradise (GP) Extract Intake on Obesity and Sympathetic Nerve Activity.”
American Journal of Plant Sciences, Vol.8(2), pp.85-95, 2017/01
- [10] **Inagaki M**, Kawai S, Xijier, Fukuoka M, **Yabe T**, **Iwamoto S**, Kanamaru Y.
“Effects of heat treatment on conformation and cell growth activity of alpha-lactalbumin and beta-lactoglobulin from market milk.”
Biomed. Res., Vol.38(1), pp.53-59, 2017
- [11] Ishisono K, **Yabe T**, **Kitaguchi K**.
“Citrus pectin attenuates endotoxin shock via suppression of Toll-like receptor signaling in Peyer's patch myeloid cells”
J. Nutr. Biochem, Vol.50, pp.38-45, 2017/12

- [12] **Katsuno N**, Fujimura M, Hanya A, **Nishizu T**.
“The effects of water absorption and roasting conditions on fracture properties and internal structure of sesame seeds.”
Bioscience, Biotechnology, Biochemistry, Vol.81, pp.774-778, 2017
- [13] Kitamura K, Okada Y, Okada K, Kawaguchi Y, **Nagaoka S**.
“Epigallocatechin gallate induces an up-regulation of LDL receptor accompanied by a reduction of PCSK9 via the annexin A2-independent pathway in HepG2 cells.”
Mol Nutr Food Res., Vol.61(8), 2017/08
- [14] Kitagawa E, Yamamoto T, Fujishita M, Ota Y, Yamamoto K, **Nakagawa T**, **Hayakawa T**.
“Choline and betaine ameliorate liver lipid accumulation induced by vitamin B₆ deficiency in rats.”
Biosci Biotechnol Biochem., Vol.81(2), pp.316-322, 2017/02
- [15] Kobayashi Y, Tanahashi R, Yamaguchi Y, Hatae N, Kobayashi M, **Ueno Y**, Yoshimatsu M.
“Ni-Pd Catalyzed Cyclization of Sulfanyl 1,6-Diynes: Synthesis of 1' -Homonucleoside Analogues”
The Journal of organic chemistry, Vol.82(5), pp.2436-2449-2017/03
- [16] Komura N, Suzuki KGN, Ando H, Konishi M, **Imamura A**, **Ishida H**, Kusumi A, Kiso M.
“Chapter Eight - Syntheses of Fluorescent Gangliosides for the Studies of Raft Domains”
Methods Enzymol., Vol.597, pp.239-263, 2017
- [17] Komura N, Yamazaki A, **Imamura A**, **Ishida H**, Kiso M, Ando H.
“Syntheses of bifunctional photoaffinity ganglioside probes for studying raft-associated interactions.”
Trends Carbohydr. Res., Vol.9(2), pp.1-26, 2017
- [18] Luo F, Shinzawa-Itoh K, Hagimoto K, **Shimada A**, Shimada S, Yamashita E, Yoshikawa S, Tsukihara T.
“Structure of bovine cytochrome c oxidase crystallized at a neutral pH using a fluorinated detergent.”
Acta crystallographica. Section F, Structural biology communications, Vol.73(Pt7), pp.416-422, 2017/07
- [19] Maeda Y, Niwa N, **Ueno Y**.
“Synthesis of the Phosphoramidite Units for Benzene-Glycol Nucleic Acid.”
Current Protocols in Nucleic Acid Chemistry, Vol.70, pp.1.42.1-1.42.18, 2017/09/18
- [20] Mahomud MS, **Katsuno N**, **Nishizu T**.
“Role of whey protein-casein complexes on yoghurt texture”
Reviews in Agricultural Science, Vol.5, pp.1-12, 2017
- [21] Mahomud MS, **Katsuno N**, **Nishizu T**.
“Formation of soluble protein complexes and yoghurt properties influenced by the addition of whey protein concentrate”
Innovative Food Science and Emerging Technologies., Vol.44, pp.173-180, 2017/12
- [22] Mahomud MS, **Katsuno N**, Zhang L, **Nishizu T**.
“Physical, rheological and microstructural properties of whey protein-enriched yoghurt influenced by heating at different pH values”
Journal of Food Processing and Preservation, Vol.41(6), pp.e13236, 2017/12
- [23] Matsuoka T, Kawashima T, Nakamura T, **Yabe T**.
“Characterization and comparison of recombinant honeybee chymotrypsin-like protease (HCLPase) expressed in Escherichia coli and insect cells.”
Biosci. Biotechnol. Biochem., Vol.81(7), pp.1401-1404, 2017
- [24] Miura S, Himaki T, Takahashi J, **Iwahashi H**.
“The role of transcriptomics: physiological equivalence based on gene expression profiles.”
Reviews in Agricultural Science, Vol.5, pp.21-35, 2017
- [25] Mohieldin EAM, Muddathir AM, **Mitsunaga T**.
“Inhibitory activities of selected Sudanese medicinal plants on Porphyromonas gingivalis and matrix metalloproteinase-9 and isolation of bioactive compounds from Combretum hartmannianum (Schweinf) bark.”
BMC Complement Altern Med., Vol.17(1), pp.224, 2017/04/20

- [26] Mohieldin EAM, Muddathir AM, **Yamauchi K, Mitsunaga T.**
 “Anti-caries activity of selected Sudanese medicinal plants with emphasis on Terminalia laxiflora”
Brazilian Journal of Pharmacognosy, Vol.27(5), pp.611-618, 2017/09
- [27] Muddathir AM, Yamauchi K, Batubara I, Mohieldin EAM, **Mitsunaga T.**
 “Anti-tyrosinase, total phenolic content and antioxidant activity of selected Sudanese medicinal plants”
South African Journal of Botany, Vol.109, pp.9-15, 2017/03
- [28] Muhammad Makky, Santosa, Renny Eka Putri, **Kohei Nakano.**
 “Nondestructive evaluation of Simauang paddy grains with different moisture contents by means of spectrophotometry.”
API conference proceedings, Vol.1813(1), 2017
- [29] **Nakagawa T**, Suzuki-Nakagawa C, Watanabe A, Asami E, Matsumoto M, Nakano M, **Ebihara A**, Uddin MN, Suzuki F.
 “Site-1 protease is required for the generation of soluble (pro)renin receptor.”
Journal of biochemistry, Vol.161(4), pp.369-379, 2017/04/01
- [30] **Nishizu T**, Tomatsu E, **Katsuno N.**
 “Airflow resistance measurement for a layer of granular material based on the Helmholtz resonance phenomenon”
Bioscience, Biotechnology, Biochemistry, Vol.81(4), pp.823-830, 2017
- [31] Niu L, Nomura K, **Iwahashi H**, Matsuoka H, Kawachi S, Suzuki Y, Tamura K.
 “Urea cycle is enhanced by petit-high pressure carbon dioxide stress in yeast *Saccharomyces cerevisiae*”
High Pressure Research, Vol.37(1), pp.70-77, 2017
- [32] Niu L, Nomura K, **Iwahashi H**, Matsuoka H, Kawachi S, Suzuki Y, Tamura K.
 “Petit-High Pressure Carbon Dioxide stress increases synthesis of S-Adenosylmethionine and phosphatidylcholine in yeast *Saccharomyces cerevisiae*”
Biophysical chemistry, Vol.231, pp.79-86, 2017/12/20
- [33] Niwa N, Shimizu S, Maeda Y, Hiroaki H, **Ueno Y.**
 “Benzene-glycol nucleic acid (BGNA)-DNA chimeras: synthesis, binding properties, and ability to elicit human RNase H activity”
RSC Advances, Vol.7, pp.25378-25386, 2017
- [34] Ogata A, Maeda Y, **Ueno Y.**
 “Synthesis of antisense oligonucleotides containing acyclic alkynyl nucleoside analogs and their biophysical and biological properties”
Bioorganic & medicinal chemistry, Vol.25(7), pp.2035-2042, 2017/04
- [35] Pastawan V, Erwanto Y, Yusiat LM, Jamhari, **Hayakawa T, Nakagawa T**, Fitriyanto NA.
 “The ability of indigenous microbial consortium in the process of ammonia oxidation of livestock waste”
Asian Journal of Animal Sciences, Vol.11(2), pp.74-81, 2017/02
- [36] Peanparkdee M, **Iwamoto S**, Yamauchi R.
 Preparation and Release Behavior of Gelatin-Based Capsules of Antioxidants from Ethanolic Extracts of “Thai Riceberry Bran”
Food Bioprocess Technology, Vol.10(9), pp.1737-1748, 2017/09
- [37] Shimabukuro J, Makyio H, Suzuki T, Nishikawa Y, Kawasaki M, **Imamura A, Ishida H**, Ando H, Kato R, Kiso M.
 “Synthesis of seleno-fucose compounds and their application to the X-ray structural determination of carbohydrate-lectin complexes using single/multi-wavelength anomalous dispersion phasing.”
Bioorg. Med. Chem., Vol.25(3), pp.1132-1142, 2017/02
- [38] **Shimada M**, Hibino M, Takeshita A.
 “Dietary supplementation with myo-inositol reduces hepatic triglyceride accumulation and expression of both fructolytic and lipogenic genes in rats fed a high-fructose diet”
Nutrition Research, Vol.47, pp.21-27, 2017/11

- [39] **Shimada A**, Kubo M, Baba S, Yamashita K, Hirata K, Ueno G, Nomura T, Kimura T, Shinzawa-Itoh K, Baba J, Hatano K, Eto Y, Miyamoto A, Murakami H, Kumasa T, Owada S, Tono K, Yabashi M, Yamaguchi Y, Yanagisawa S, Sakaguchi M, Ogura T, Komiya R, Yan J, Yamashita E, Yamamoto M, Ago H, Yoshikawa S, Tsukihara T.
 “A nanosecond time-resolved XFEL analysis of structural changes associated with CO release from cytochrome c oxidase”
Sci. Adv., Vol.3(7), pp.e1603042, 2017/07
- [40] Tahoun A, Masutani H, El-sharkawy H, Gillespie T, Honda RP, Kuwata K, **Inagaki M**, **Yabe T**, Nomura I, **Suzuki T**.
 “Capsular polysaccharide inhibits adhesion of *Bifidobacterium longum* 105-A to enterocyte-like Caco-2 cells and phagocytosis by macrophages.”
Gut Pathog., Vol.9, pp.27, 2017/05/01
- [41] Takahashi J, **Iwahasi H**.
 “Introduction to 5-Aminolevulinic Acid-Protoporphyrin IX-Mediated Radiodynamic Therapy (RDT)”
Clinics in Oncology, Vol.2, pp.1330, 2017
- [42] Tanase M, **Imamura A**, Ando H, Kiso M, **Ishida H**.
 “Linear synthesis of the Chol-1 ganglioside core tetrasaccharide and disialyl T antigen glycan using a 5-ureido-sialyl donor.”
Biosci. Biotechnol. Biochem., Vol.81(12), pp.2268-2278/2017/12
- [43] **Teppei Imaizumi**, Monika Szymańska-Chargot, Piotr M. Pieczywek, Monika Chylińska, Arkadiusz Koziół, Diana Ganczarenko, Fumihiko Tanaka, Toshitaka Uchino, Artur Zdunek.
 “Evaluation of pectin nanostructure by atomic force microscopy in blanched carrot”
LWT - Food Science and Technology, Vol.84, pp.658-667, 2017/10
- [44] Wang J, **Shimada M**, Nagaoka S.
 “Identification of the active protein in rice bran protein having an inhibitory activity of cholesterol micellar solubility.”
Biosci. Biotechnol. Biochem., Vol.81(6), pp.1216-1219, 2017/02
- [45] Yagami N, Tamai H, Udagawa T, Ueki A, Konishi M, **Imamura A**, **Ishida H**, Kiso M.
 “A 1,2-trans-selective glycosyl donor bearing cyclic protection at the C2 and C3 hydroxyl groups.”
Eur. J. Org. Chem., Vol.2017(32), pp.4778-4785, 2017/09/01
- [46] Yamauchi K, Afroze HS, **Mitsunaga T**, McCormick CT, Kuehl JT, Zawieja CD, Uddin NM.
 “3,4',7-O-trimethylquercetin Inhibits Invasion and Migration of Ovarian Cancer Cells.”
Anticancer Research, Vol.37(6), pp.2823-2829, 2017/06
- [47] Yamauchi K, **Mitsunaga T**, Afroze HS, Uddin NM.
 “Structure-Activity Relationships of Methylquercetin on Anti-migration and Anti-proliferation Activity in B16 Melanoma Cells.”
Anticancer Researc, Vol.37(4), pp.1575-1579, 2017/04
- [48] Yenrina R, Sayuti K, **Nakano K**, **Thammawong M**, Anggraini T, Fahmy K, Syukri D.
 “Cyanidin, Malvidin and Pelargonidin Content of “Kolang-kaling” Jams Made with Juices from Asian Melastome (*Melastoma malabathricum*) Fruit, Java Plum (*Syzygium cumini*) Fruit Rind or Mangosteen (*Garcinia mangostana*) Fruit Rind”
Pakistan Journal of Nutrition, Vol.16(11), pp.850-856, 2017
- [49] Yokoyama C, Nakamoto K, **Ueno Y**.
 “Design and synthesis of novel photoinduced electron transfer-based hybridization probes”
Bioorganic & medicinal chemistry, Vol.25(13), pp.3574-3582, 2017/07

【Course of Agricultural and Environmental Science】

- [1] Arlinghaus R, Alós J, Beardmore B, Daedlow K, Dorow M, Fujitani M, Huhn D, Haider W, Hunt LM, Johnson BM, Johnston F, Klefoth T, **Matsumura S**, Monk C, Pagel T, Post JR, Rapp T, Riepe C, Ward H, Wolter C.
“Understanding and managing freshwater recreational fisheries as complex adaptive social-ecological systems.”
Rev Fish Aquacult, Vol.25(1), pp.1-41, 2017
- [2] Chen S, Komiyama A, **Kato S**, Cao R, Yoshitake S, Ohtsuka T.
“Stand dynamics and biomass increment in a Lucidophyllous forest over a 28-year period in central Japan.”
Forests, Vol.8(10), pp.397, 2017
- [3] Chowra U, **Yanase E**, Koyama H, Panda SK.
“Aluminium-induced excessive ROS causes cellular damage and metabolic shifts in black gram *Vigna mungo* (L.) Hepper.”
Protoplasma., Vol.254(1), pp.293-302, 2017/01
- [4] Daspute AA, Sadhukhan A, Tokizawa M, **Kobayashi Y**, Panda SK, **Koyama H**.
“Transcriptional Regulation of Aluminum-Tolerance Genes in Higher Plants: Clarifying the Underlying Molecular Mechanisms.”
Front Plant Sci., Vol.8, pp.1358, 2017/08/08
- [5] Duy Quan Tran, **Shinichi Nishimura**, **Masateru Senge**, **Tatsuro Nishiyama**.
“Research on cause of dam failure from viewpoint of hydraulic fracturing - Case study of a dam failure in Vietnam”
International Journal of GEOMATE, Vol.14(41), pp.86-94, 2017/12
- [6] Emura S, Sugiyama K, **Kusuda S**.
“Morphology of the lingual papillae of the polar bear (*Ursus maritimus*)”
Okajimas Folia Anatomica Japonica, Vol.94(2), pp.55-59, 2017
- [7] Hassan N, Nakasuji S, Elsharkawy MM, Naznin HA, Kubota M, Ketta H, **Shimizu M**.
“Biocontrol potential of an endophytic *Streptomyces* sp. strain MBCN152-1 against *Alternaria brassicicola* on cabbage plug seedlings.”
Microbes Environ., Vol.32(2), pp.133-141, 2017/06/24
- [8] Hieno A, Matsuo M, Oelmüller R, **Yamamoto YY**.
“Prediction of direct targets of *Arabidopsis* RRTF1, a H₂O₂ responsive AP2/ERF transcription factor which mediates multiple stress signals.”
Endocytobiosis Cell Res, Vol.28(1), pp.9-13, 2017
- [9] Hiraki Y, **Matsubara Y**.
“Effect of secondary metabolites in lemon balm on anthracnose control in strawberry.”
Acta Hort., 2017
- [10] Hiraki Y, **Matsubara Y**, Ikezawa T.
“Effect of AMF symbiosis on growth of Asian ginseng.”
Acta Hort., 2017
- [11] **Hirota I**.
“Local records of gregarious flowering of six major bamboo species over forty years and the flowering scale of *Dendrocalamus membranaceus* in northern Laos”
Journal of Mountain Science, Vol.14(6), pp.1058-1064, 2017
- [12] Ikeru A, Tsuruta M, **Mukai Y**.
“Identification of Cupressaceae species from airborne pollen grains using chloroplastic markers: implications for reproductive interference evaluation in a remnant natural population of *Chamaecyparis pisifera* (Sieb. et Zucc.) Endl”
Journal of Forest Research, Vol.22(5), pp.320-324, 2017

- [13] Kader MA, **Senge M**, Mojid MA, **Ito K**.
 “Recent advances in mulching materials and methods for modifying soil environment”
Soil & Tillage Research, Vol.168, pp.155-166, 2017/05
- [14] Kader MA, **Senge M**, Mojid MA, Nakamura K.
 “Mulching type-induced soil moisture and temperature regimes and water use efficiency of soybean under rain-fed condition in central Japan”
International Soil and Water Conservation Research, Vol.5(4), pp.302-308, 2017/12
- [15] Kader MA, **Senge M**, Mojid MA, **Onishi T**, **Ito K**.
 “Effects of plastic-hole mulching on effective rainfall and readily available soil moisture under soybean (*Glycine max*) cultivation”
Paddy and Water Environment, Vol.15, pp.659-668, 2017
- [16] **Komiyama A**, **Kato S**, Poungparn S.
 “Methods for sampling coarse roots of an individual tree in forest ecosystems.”
Reviews in Agricultural Science, Vol.5 ,pp.77-82, 2017
- [17] **Komiyama A**, **Kato S**, Poungparn S, Sangtienan T, Maknual C, Piriayotha S, Jintana V, Prawiroatmodjo S, Sastrosuwondo P, Ogino K.
 “Comprehensive dataset of mangrove tree weights in Southeast Asia.”
Ecological Research, Vol.32(1), pp.3, 2017/01
- [18] Kusunoki K, Nakano Y, Tanaka K, Sakata Y, **Koyama H**, **Kobayashi Y**.
 “Transcriptomic variation among six *Arabidopsis thaliana* accessions identified several novel genes controlling aluminium tolerance.”
Plant Cell Environ., Vol.40(2), pp.249-263, 2017/02
- [19] Kusunoki K, **Yamamoto YY**.
 “ppdb, Plant Promoter Database.”
Methods in Molecular Biology, Vol.1533, pp.299-314, 2017
- [20] Liu J, Taniguchi A, **Matsubara Y**, Kojima T, Takahashi K.
 “PCR-SSCP analysis and disease control by the application of biological and chemical agents in asparagus decline.”
Acta Hort., 2017
- [21] **Matsubara Y**, Liu J, Haque SI.
 “Antifungal effect of Lamiaceae herbs on Fusarium wilt in strawberry.”
Acta Hort., Vol.1156, pp.715-720, 2017
- [22] Maruyama K, Ogata T, Kanamori N, Yoshiwara K, Goto S, **Yamamoto YY**, TokoroY, Noda C, Takaki Y, Urawa N, Iuchi S, Urano K, Sakurai T, Kojima M, Sakakibara H, Shinozaki K, Yamaguchi-Shinozaki K.
 “Design of an optimal promoter involved in the heat-induced transcriptional pathway in *Arabidopsis*, soybean, rice, and maize.”
Plant J, Vol.89(4), pp.671-680, 2017/02
- [23] Muren, **Kusuda S**, **Doi O**, Naito H, Hashikawa H.
 “Puberty, ovarian cycle, pregnancy, and postpartum ovulation in captive Sichuan golden monkeys (*Rhinopithecus roxellana*) based on changes in urinary and fecal gonadal steroid metabolites”
Theriogenology, Vol.87, pp.179-186, 2017/01/01
- [24] **Nishiyama T**.
 “Analysis of the strength of rock foundations for the safety of dams”
Proceedings of the 5th International Workshop on Recent Progress in Agriculture and Water Management in Asia, pp.1-4, 2017/11
- [25] Nunome M, Nakano M, **Tadano R**, Kawahara-Miki R, Kono T, Takahashi S, Kawashima T, Fujiwara A, Nirasawa K, Mizutani M, Matsuda Y.
 “Genetic Divergence in Domestic Japanese Quail Inferred from Mitochondrial DNA D-Loop and Microsatellite Markers”
PLOS ONE, Vol.12(1), pp.e0169978, 2017

- [26] Ohta A, **Yamane K**, Kawahara T.
“Relationship between spike morphology and habitat of four Aegilops species of section Sitopsis”
Genetic resources and crop evolution, Vol.64(5), pp.889-899, 2017
- [27] Sadhukhan A, **Kobayashi Y**, Nakano Y, Iuchi S, Kobayashi M, Sahoo L, **Koyama H**.
“Genome-wide Association Study Reveals that the Aquaporin NIP1;1 Contributes to Variation in Hydrogen Peroxide Sensitivity in *Arabidopsis thaliana*.”
Mol Plant., Vol.10(8), pp.1082-1094, 2017/08/07
- [28] Suchewaboripont V, **Ando M**, Yoshitake S, Iimura Y, Hirota M , Ohtsuka T.
“Spatial Upscaling of Soil Respiration under a Complex Canopy Structure in an Old-Growth Deciduous Forest, Central Japan”
forests, Vol.8(2), pp.36, 2017
- [29] Tajima H, Yoshizawa M, Sasaki S, Yamamoto F, Narushima E, Tsutsui T, Funahashi T, **Kusuda S**, **Doi O**, Tateyama Y, Kobayashi M, Hori T, Kawakami E.
“Intrauterine insemination with fresh semen in Amur leopard cat (*Pionailurus bengalensis eutilura*) during non-breeding season”
J Vet Med Sci., Vol.79(1), pp.92-99, 2017
- [30] Tokizawa M, Kusunoki K, **Koyama H**, Kurotani A, Sakurai T, Suzuki Y, Kurata T, **Yamamoto YY**.
“Identification of *Arabidopsis* genic and non-genic promoters by pair-end sequencing of TSS tags.”
Plant J, Vol.90(3), pp.587-605, 2017/05
- [31] Too HC, Shibata M, **Yayota M**, Darras VM, **Iwasawa A**.
“Expression of thyroid hormone regulator genes in the yolk sac membrane of the developing chicken embryo.”
J Reprod Dev., Vol.63(5), pp.463-472, 2017/10/18
- [32] Too HC, Shibata M, **Yayota M**, **Iwasawa A**.
“Iodothyronine deiodinases: Key enzymes behind the action of thyroid hormone.”
Rev Agr Sci., Vol.5'1), pp.45-55, 2017
- [33] Usijima T, Hanada K, Gotoh E, Yamori W, Kodama Y, Tanaka H, Kusano M, Fukushima A, Tokizawa M, **Yamamoto YY**, Suzuki Y, Matsushita T.
“Light Controls Protein Localization through Phytochrome-Mediated Alternative Promoter Selection.”
Cell, Vol.171(6), pp.1316-1325, 2017/11/30
- [34] Xu W, **Iwasawa A**, **Yayota M**.
“Effects of early experience with low-quality roughage on liver metabolome in lambs”
Metabolomics., Vol.13(90), pp.1-17, 2017/08
- [35] Xu W, Okayama N, **Iwasawa A**, **Yayota M**.
“Temporal changes in liver tissue metabolome of lambs fed low-quality roughage”
Animal Science Journal, Vol.88(9), pp.1352-1363, 2017/09
- [36] **Yamamoto YY**, Ichida H, Hieno A, Obata D, Tokizawa M, Nomoto M, Tada Y, Kusunoki K, **Koyama H**, Hayami N.
“Prediction of bipartite transcriptional regulatory elements using transcriptome data of *Arabidopsis*.”
DNA Res, Vol.24(3), pp.271-278, 2017/02/01
- [37] Yan H, Zhang B, Zhang Y, Chen X, Xiong H, **Matsui T**, Tian X.
“High Temperature Induced Glume Closure Resulted in Lower Fertility in Hybrid Rice Seed Production”,
Front Plant Sci., Vol.7, pp.1960, 2017/01/05
- [38] ZHANG Pengfei, DAI Yanyan, **SENGE Masateru**, MORI Natsumi, **ITO Kengo**.
“Interactions of Salinity Stress and Flower Thinning on Tomato Growth, Yield, and Water Use Efficiency”
Communications in Soil Science and Plant Analysis, Vol.48(22), pp.2601-2611, 2017
- [39] ZHANG Pengfei, **SENGE Masateru**, DAI Yanyan.
“Effects of salinity stress at different growth stages on tomato growth, yield and water use efficiency”
Communications in Soil Science and Plant Analysis, Vol.48(6), pp.624-634, 2017/02

- [40] ZHANG Pengfei, **SENGE Masateru**, YOSHIYAMA Kohei, **ITO Kengo**, DAI Yanyan, ZHANG Fuping. “Effects of Low Salinity Stress on Growth, Yield and Water Use Efficiency of Tomato under Soilless Cultivation” *Journal of Irrigation, Drainage and Rural Engineering*, Vol.85(1), pp.I_15-I21, 2017
- [41] Zuhud Rozaki, Komariah, Sumani, Widiyatmi Sih Dewi, Kohei Yoshiyama, **Kengo Ito, Masateru Senge**. “Indonesian Farmers' Perception on Climate Change- Case, study in Karanganyar Regency, Central Java Province, Indonesia-” *Journal of rural planning*, Vol.36(1), pp.59-66, 2017
- [42] Zuhud Rozaki, **Masateru Senge, Kengo Ito**, Dwi Priyo Ariyanto, Komariah. “Evaluation on Rainwater Harvesting Suitability in Indonesia : Case Study of Four Small Farm Reservoirs in Wonosari Village, Central Java, Indonesia” *Journal of rainwater catchment systems*, Vol.22(2), pp.19-24, 2017/01
- [43] Zuhud Rozaki, **Masateru Senge**, Kohei Yoshiyama, Komariah Komariah. “Feasibility and Adoption of Rainwater Harvesting by Farmers” *Reviews in Agricultural Science*, Vol.5, pp.56-64, 2017

【Joint Department of Veterinary Medicine】

- [1] Abd-Ellatief HA, Abou -Rawash AA, Ellakany HF, **Yanai T.** “Th1 and Th2 cytokines activity during transformation and lymphoma formation Stage in chicken naturally infected with Marek's disease virus.” *IOSR J. Agri. Vet. Sci.*, Vol.10, pp.72-80, 2017
- [2] Abdel-Sabour MA, Al-Ebshahy EM, Khaliel SA, Abdel-Wanis NA, **Yanai T.** “Isolation and Molecular Characterization of Novel Infectious Bronchitis Virus Variants from Vaccinated Broiler Flocks in Egypt.” *Avian Dis.*, Vol.61(3), pp.307-310, 2017/09
- [3] Almadaly EA, El-Sharawy ME, Atta ME, Farrag FA, Gewaily MS, Saadeldin IM, **Murase T.** “Desalting and lyophilized seminal plasma increases protein tyrosine-phosphorylation of frozen-thawed bull spermatozoa incubated with a cell-permeable cyclic AMP (cAMP) analog (cBiMPS)” *Jap. J. Vet. Res.*, Vol.65(3), pp.113-126, 2017/08
- [4] Asahina R, **Maeda S.** “A review of the roles of keratinocyte-derived cytokines and chemokines in the pathogenesis of atopic dermatitis in humans and dogs” *Vet Dermatol.*, Vol.28(1), pp.16-e5, 2017/02
- [5] Baba M, Batanova T, **Kitoh K, Takashima Y.** “Adhesion of Toxoplasma gondii tachyzoite-infected vehicle leukocytes to capillary endothelial cells triggers timely parasite egression” *Sci Rep.*, Vol.7, pp.5675, 2017
- [6] Eguchi-Ogawa T, **Matsubara T**, Toki D, Okumura N, Ando A, **Kitagawa H**, Uenishi H. “Distribution of the CD4 Alleles in *Sus scrofa* Demonstrates the Genetic Profiles of Western Breeds and Miniature Pigs” *Anim Biotechnol.*, pp.1-7, 2017/10
- [7] EL-Nahass E, EL-Habashi N, EL-Dakhly KM, Tsuchiya Y, **Yanai T.** “Effect of Mouse Strain on Equine Herpesvirus 9 Infection” *J. Comp. Pathol.*, Vol.157(1), pp.67-74, 2017/07
- [8] *¹Goto S, **Murakami M, Kawabe M**, Iwasaki R, Heishima K, **Sakai H, Mori T.** “Hypofractionated radiation therapy in the treatment of canine thymoma:Retrospective study of eight cases.” *Vet Radiol Ultrasound.*, Vol.58(5), pp.613-620, 2017/09

- [9] Hara K, Iio A, Asahina R, Takahashi M, **Mori T**, **Nishida H**, **Kamishina H**, **Sakai H**, **Kitoh K**, Mizuno T, Tsujimoto H, **Maeda S**.
“Characterization of a novel canine T-cell line established from a dog with cutaneous T-cell lymphoma.”
J Dermatol Sci., Vol.88(2), pp.254-256, 2017/11
- [10] *²Heshima K, Ichikawa Y, Yoshida K, Iwasaki R, **Sakai H**, Nakagawa T, Tanaka Y, Hoshino Y, Okamura Y, **Murakami M**, Maruo K, Akao Y, **Mori T**.
“Circulating microRNA-214 and -126 as potential biomarkers for canine neoplastic disease.”
Scientific reports, Vol.7(1), pp.2301, 2017/05
- [11] **Inoshima Y**, Tashiro M, **Ishiguro N**.
“N-terminal region of serum amyloid A3 is responsible for up-regulation of MUC2 mRNA expression in mouse epithelial cells.”
Amyloid, Vol.24(sup1), pp.18-19, 2017
- [12] **Ishiguro N**, **Inoshima Y**, Sasaki M.
“Computed tomography examination and mitochondrial DNA analysis of Japanese wolf skull covered with skin”
J Vet Med Sci., Vol.79(1), pp.14-17, 2017/01
- [13] Itoh T, **Kawabe M**, Nagase T, Matsushita H, Kato M, Miyoshi M, Miyahara K.
“Body surface area measurement in juvenile miniature pigs using a computed tomography scanner”
Exp Anim, Vol.66(3), pp.229-233, 2017
- [14] Izume S, Kirisawa R, **Ohya K**, Ohnuma A, Kimura T, Omatsu T, Katayama Y, Mizutani T, **Fukushi H**.
“The full genome sequences of 8 equine herpesvirus type 4 isolates from horses in Japan”
J Vet Med Sci., Vol.79(1), pp.206-212, 2017/01
- [15] Kimura A, Yossapol M, **Shibata S**, Asai T.
“Selection of broad-spectrum cephalosporin-resistant Escherichia coli in the feces of healthy dogs after administration of first-generation cephalosporins.”
Microbiol Immunol., Vol.61(1), pp.34-41, 2017/01
- [16] Kinoshita KI, Muroi Y, **Unno T**, Ishii T.
“Ropipram improves facilitation of contextual fear extinction in the 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced mouse model of Parkinson's disease.”
J Pharmacol Sci., Vol.134(1), pp.55-58, 2017/05
- [17] **Kitoh K**, Nakamura H, **Kitagawa H**, **Unno T**, Komori S, Chiou Shin-Pin, **Takashima Y**.
“Heartworm extract induces relaxation of isolated rat thoracic aorta”
J Vet Med Sci., Vol.79(4), pp.740-744, 2017/04
- [18] Kobatake Y, **Sakai H**, Tsukui T, Yamato O, Kohyama M, Sasaki J, Kato S, Urushitani M, **Maeda S**, **Kamishina H**.
“Localization of a mutant SOD1 protein in E40K-heterozygous dogs: Implications for non-cell-autonomous pathogenesis of degenerative myelopathy”
J. Neurol. Sci., Vol.372, pp.369-378, 2017/01/15
- [19] Kohyama K, **Inoshima Y**.
“Normal hematology and serum chemistry of northern fur seals (*Callorhinus ursinus*) in captivity.”
Zoo Biol., Vol.36(5), pp.345-350, 2017/09
- [20] Kohyama M, Kitagawa M, **Kamishina H**, Kobatake Y, Yabuki A, Sawa M, Kakita S, Yamato O.
“Degenerative myelopathy in the Collie breed: a retrospective immunohistochemical analysis of superoxide dismutase 1 in an affected Rough Collie, and a molecular epidemiological survey of the SOD1: c.118G>A mutation in Japan”
J. Vet. Med. Sci., Vol.79(2), pp.375-379, 2017/02/28

- [21] Komoto S, Kanai Y, Fukuda S, Kugita M, Kawagishi T, **Ito N, Sugiyama M**, Matsuura Y, Kobayashi T, Taniguchi K.
“Reverse Genetics System Demonstrates that Rotavirus Nonstructural Protein NSP6 Is Not Essential for Viral Replication in Cell Culture.”
J. Virol., Vol.91(21), pp. pii: e00695-17, 2017/10/13
- [22] Khan MSI, Nabeka H, Islam F, Shimokawa T, **Saito S**, Li X, Kawabe S, Hamada F, Tachibana T, Matsuda S.
“Early neonatal loss of inhibitory synaptic input to the spinal motor neurons confers spina bifida-like leg dysfunction in a chicken model.”
Dis Model Mech., Vol.10(12), pp.1421-1432, 2017/12/19
- [23] Mahmud MN, Oda M, Usui D, **Inoshima Y, Ishiguro N**, Kamatari YO.
“A multispecific monoclonal antibody G2 recognizes at least three completely different epitope sequences with high affinity.”
Protein Sci., Vol.26(11), pp.2162-2169, 2017
- [24] Miyabe-Nishiwaki T, Hirata A, Kaneko A, Ishigami A, Miyamoto Y, Yamanaka A, Owaki K, **Sakai H**, Yanai T, Suzuki J.
“Hepatocellular carcinoma with intracranial metastasis in a Japanese macaque (*Macaca fuscata*)”
J. Med. Primatol., Vol.46(3), pp.93-100, 2017/06
- [25] Nabeka H, **Saito S**, Li X, Shimokawa T, Khan MSI, Yamamiya K, Kawabe S, Doihara T, Hamada F, Kobayashi N, Matsuda S.
“Interneurons secrete prosaposin, a neurotrophic factor, to attenuate kainic acid-induced neurotoxicity”
IBRO Rep., Vol.3, pp.17-32, 2017/12
- [26] Nakagawa K, Kobayashi Y, **Ito N**, Suzuki Y, Okada K, Makino M, Goto H, Takahashi T, **Sugiyama M**.
“Molecular Function Analysis of Rabies Virus RNA Polymerase L Protein by Using an L Gene-Deficient Virus”
J. Virol., Vol.91(20), pp.e-00826-17, 2017
- [27] Nakagawa K, Nakagawa K, Omatsu T, Katayama Y, Oba M, Mitake H, Okada K, Yamaoka S, Takashima Y, Masatani T, Okadera K, **Ito N**, Mizutani T, **Sugiyama M**.
“Generation of a novel live rabies vaccine strain with a high level of safety by introducing attenuating mutations in the nucleoprotein and glycoprotein.”
Vaccine, Vol.35(42), pp.5622-5628, 2017/10/09
- [28] Nakashima M, Tsuzuki S, Awazu H, Hamano A, **Okada A**, Ode H, Maejima M, Hachiya A, Yokomaku Y, Watanabe N, Akari H, Iwatani Y.
“Mapping region of human restriction factor APOBEC3H critical for interaction with HIV-1 Vif.”
J Mol Biol., Vol.429(8), pp.1262-1276, 2017/04/21
- [29] Nakata K, Miura H, **Sakai H**, Mori T, Shibata S, Nishida H, Maeda S, Kamishina H.
“Vertebral replacement for the treatment of vertebral osteosarcoma in a cat.”
J Vet Med Sci., Vol.79(6), pp.999-1002, 2017/06
- [30] Nishii N, **Takashima S**, Kobatake Y, Tokuda M, **Kitagawa H**.
“The long-term safety of D-allulose administration in healthy dogs.”
J Vet Med Sci., Vol.79(11), pp.1780-1784, 2017/11/10
- [31] Ohtani A, Yokoyama A, Narushige H, **Inoshima Y**.
“First isolation and genetic characterization of pseudocowpox virus from cattle in Japan.”
Virol. J., Vol.14, pp.172, 2017
- [32] Okuwa Y, Miyamoto-Hayashi M, Tanaka T, Hayakawa Y, **Inoshima Y**.
“Simple and rapid method for routine screening of bovine leukemia virus by loop-mediated isothermal amplification assay”
J Vet Med Sci., Vol.79(1), pp.137-140, 2017/01

- [33] **Saito S, Shiina T, Shimizu Y.**
 “NeuN immunoreactivity in the brain of *Xenopus laevis*.”
Tissue Cell, Vol.49(4), pp.514-519, 2017/08
- [34] **Sakai H**, Goto M, Komatsu T.
 “Basal cell adenocarcinoma in the gland of the third eyelid of a brown bear (*Ursus arctos*).”
J Vet Med Sci., Vol.79(8), pp.1348-1351, 2017
- [35] Sakai O, Sakurai M, **Sakai H**, Kubo M, Hiraoka H, Baba K, Okuda M, Mizuno T.
 “Molecular cloning of canine Wilms' Tumor 1 for immunohistochemical analysis in canine tissues.”
J Vet Med Sci., Vol.79(7), pp.1272-1277, 2017
- [36] Sakamoto M, **Shibata S**, Asahina R, **Yamazoe K, Kamishina H**, Ishigaki K, Asano K, **Maeda S**.
 “Contrast-enhanced ultrasonographic findings of hepatic arterioportal fistulas in a dog”
J Small Anim Pract., Vol.58(7), pp.419, 2017
- [37] Saleh AG, Abas OM, Nasr MY, Beder NA, Bakeer NM, El-Habashi N, **Yanai T**.
 “Clinical effect of three important cytokines on the pathogenesis of equine herpes virus 9 (EHV-9), equine herpes virus 1 (EHV-1) and Zebra borne EHV-1”
IOSR J. Agri. Vet. Sci., Vol.10, pp.48-57, 2017/04
- [38] Saleh AG, Anwar SI, Abas OM, Abd-Ellatiff HA, Nasr M, Saleh I, **Fukushi H, Yanai T**.
 “Effect of a single point mutation on equine herpes virus 9 (EHV-9) neuropathogenicity after intranasal inoculation in a hamster model.”
J Vet Med Sci., Vol.79(8), pp.1426-1436, 2017/08/18
- [39] Senju N, Tozaki T, Kakoi H, Almunia J, Maeda M, Matsuyama R, **Takasu M**.
 “Genetic characterization of the Miyako horse based on polymorphisms of microsatellites and mitochondrial DNA.”
J Vet Med Sci., Vol.79(1), pp.218-223, 2017/01
- [40] Senju N, Tozaki T, Kakoi H, Shinjo A, Matsuyama R, Almunia J, **Takasu M**.
 “Genetic diversity of the Yonaguni horse based on polymorphisms in microsatellites and mitochondrial DNA.”
J Vet Med Sci., Vol.79(2), pp.425-431, 2017/02/28
- [41] Su C, Gius JP, Van Steenberg J, Haskins AH, Heishima K, Omata C, Iwayama M, **Murakami M, Mori T**, Maruo K, Kato TA.
 “Hypersensitivity of BRCA2 deficient cells to rosemary extract explained by weak PARP inhibitory activity”
Scientific reports, Vol.7(1), pp.16704, 2017/12
- [42] **Takashima Y**, Onoda I, Chiou Shin-Pin, **Kitoh K**.
 “In vitro canine platelet aggregation caused by *Dirofilaria immitis* extract”
J Vet Med Sci., Vol.79(2), pp.387-392, 2017/02
- [43] Tashiro M, Iwata A, Yamauchi M, Shimizu K, **Okada A, Ishiguro N, Inoshima Y**.
 “The N-terminal region of serum amyloid A3 protein activates NF-κB and up-regulates MUC2 mucin mRNA expression in mouse colonic epithelial cells.”
PLoS One, Vol.12(7), pp.e0181796, 2017
- [44] Usui T, Sakurai M, Nishikawa S, Umata K, Nemoto Y, Haraguchi T, Itamoto K, Mizuno T, Noguchi S, **Mori T**, Iwai S, Nakagawa T, Yamawaki H, Ohama T, Sato K.
 “Establishment of a dog primary prostate cancer organoid using the urine cancer stem cells”
Cancer science, Vol.108(12), pp.2383-2392, 2017/12
- [45] Xuan Li, Hiroaki Nabeka, **Shouichiro Saito**, Tetsuya Shimokawa, Md. Sakirul Islam Khan, Kimiko Yamamiya, Fengping Shan, Huiling Gao, Cheng Li, Seiji Matsuda.
 “Expression of prosaposin and its receptors in the rat cerebellum after kainic acid injection”
IBRO reports, Vol.2, pp.31-40, 2017/06

- [46] Yamaoka S, Okada K, **Ito N**, Okadera K, Mitake H, Nakagawa K, **Sugiyama M**.
“Defect of rabies virus phosphoprotein in its interferon-antagonist activity negatively affects viral replication in muscle cells.”
J. Vet. Med. Sci., Vol.79(8), pp.1394-1397, 2017/08/10

※1 Also recorded on Animal Medical Center
※2 Also recorded on Animal Medical Center

【Animal Medical Center】

- [1] ※¹Goto S, Murakami M, Kawabe M, **Iwasaki R**, Heishima K, Sakai H, Mori T.
“Hypofractionated radiation therapy in the treatment of canine thymoma:Retrospective study of eight cases.”
Vet Radiol Ultrasound., Vol.58(5), pp.613-620, 2017/09
- [2] ※²Heishima K, Ichikawa Y, Yoshida K, Iwasaki R, **Sakai H**, Nakagawa T, Tanaka Y, Hoshino Y, Okamura Y, **Murakami M**, Maruo K, Akao Y, **Mori T**.
“Circulating microRNA-214 and -126 as potential biomarkers for canine neoplastic disease.”
Scientific reports, Vol.7(1), pp.2301, 2017/05

※1 Also recorded on Joint Department of Veterinary Medicine
※2 Also recorded on Joint Department of Veterinary Medicine

【Research Center for Wildlife Management】

- [1] Matsuo K, **Moribe J**, Abe N.
“Molecular Detection and Characterization of *Anaplasma* Species in Wild Deer and Boars in Gifu Prefecture, Japan”
Japanese Journal of Infectious Diseases, Vol.70(3), pp.354-356, 2017/05
- [2] Yamamoto M, Tobiume M, Akamatsu S, Matsuo K, **Moribe J**, Ike K.
“Hepatozoon apri n. sp. (Adeleorina: Hepatozoidae) from the Japanese wild boar Sus scrofa leucomystax (Mammalia: Cetartiodactyla)”
International Journal for Parasitology: Parasites and Wildlife, Vol.6(3), pp.354-360, 2017/12
- [3] Yamamoto M, Tokiwa T, Tobiume M, Akamatsu S, Matsuo K, **Moribe J**, Ike K.
“International Journal for Parasitology: Parasites and Wildlife”
International Journal for Parasitology: Parasites and Wildlife, Vol.6(3), pp.354-360, 2017/12

2) Book

【Course of Applied Life Science】

- [1] Nishio Y, **Teramoto Y**, Kusumi R, Sugimura K, Aranishi Y.
“Blends and Graft Copolymers of Cellulosics: Toward the Design and Development of Advanced Films and Fibers”
Springer, 2017

【Course of Agricultural and Environmental Science】

- [1] **Okamoto T.**
“Species specific floral scents as olfactory cues of pollinator moths. Obligate Pollination Mutualism in Phyllanthaceae. 5 chapter”
Springer, 2017

II Lectures, Conference Presentation, etc.

1) Conference Presentation

【Course of Applied Life Science】

- [1] **Akio Ebihara, Tsutomu Nakagawa, Fumiaki Suzuki.**
“Biotechnological production of protein and structure-based evaluation of protein quality”
BIOPROCESSING INDIA 2017 (5th BPI conference)(IIT GUWAHATI), 2017/12/09-11
- [2] Andriyana Setyawati, Kae Hirabayashi, **Kosei Yamauchi**, Hiroyuki Hattori, **Tohru Mitsunaga**, Irmanida Batubara, Rudi Heryanto, Hiroshi Hashimoto, Mitsuyuki Hotta.
“Melanogenesis Inhibitory Acivity of components from Salam Leaf (*Syzygium polyanthum*) Extract”
The 64th Japanese Society of Pharmacognosy annual convention(Toho University), 2017/09/09-10
- [3] Asano S, Yamaguchi E, Komura N, Ando H, **Imamura A, Ishida H**, Kiso M.
“Synthesis of fluorescent probes of globo-series gangliosides.”
19th European Carbohydrate Symposium(Barcelona, Spain), 2017/07/02-06
- [4] Hattori H, **Yamauchi K, Mitsunaga T.**
“Grains of Paradise Extract Affects on Obesity and Sympathetic Nerve Activity in Brown Adipose Tissue”
International symposium on Natural Medicines 2017(Bogor, Indonesia), 2017/08/24
- [5] **Imaizumi T.**
“Structural changes of vegetables by blanching”
UGSAS-GU & UNAND The 4th International Workshop 2017(Padang, Indonesia), 2017/07/17
- [6] Komura N, **Imamura A**, Ando H, **Ishida H**, Kiso M.
“An attempt of glycosidation using a novel macro-bicyclic sialic acid donor.”
19th European Carbohydrate Symposium(Barcelona, Spain), 2017/07/02-06
- [7] Misaki Natsume, Kae Hirabayashi, **Kosei Yamauchi, Tohru Mitsunaga**, Irmanida Batubara.
“Melanogenesis Inhibitory Activities of the Methanol Extract of Jahe merah from Indonesia”
International symposium on Natural Medicines 2017(Bogor, Indonesia), 2017/08/24
- [8] Mohammad Nuruzzaman Masum, **Kosei Yamauchi, Tohru Mitsunaga**.
“Melanogenesis Controlling Mechanisms Using Constituents in Bangladeshi Medicinal Plant”
The 64th Japanese Society of Pharmacognosy annual convention(Toho University), 2017/09/09-10
- [9] Peanparkdee M, Yamauchi R, **Iwamoto S.**
“In vitro digestion of gelatin-based capsulesfrom Thai riceberry bran extract”
25th International Conference on Bioencapsulation(Nantes, France), 2017/07/03-06
- [10] Rui Zhang, **Akio Ebihara**, Seiki Kuramitsu.
“Crystal structures of PF01887 family proteins from *Thermus thermophilus* HB8 and *Thermotoga maritima*: implications for hydroxide adenosyltransferase”
The 81st Japanese Biochemical Society central part Branch regular meeting(Nagoya City Uneversity), 2017/05/21
- [11] Saito Y, Yamane K, Nishizaki T, Peanparkdee M, Nakagawa T, Yamauchi R, **Iwamoto S.**
“Viabilitiesof yeast cells encapsulated into emulsions prepared by microchannel”
25th International Conference on Bioencapsulation(Nantes, France), 2017/07/03-06
- [12] Shinyama N, **Yamauchi K, Mitsunaga T.**
“Mechanism of melanogenesis accelerated activity using quercetin derivatives”
International symposium on Natural Medicines 2017(Bogor, Indonesia), 2017/08/24
- [13] Siwattra Choodej, Khanitha Pudhom, Kosei Yamauchi, Tohru Mitsunaga.
“Evaluation of sesquiterpene lactones from *Saussurea lappa* on TNF- α inhibition”
The 64th Japanese Society of Pharmacognosy annual convention(Toho University), 2017/09/09-10
- [14] Yagami N, Tamai H, Ueki A, Konishi M, Ando H, **Imamura A, Ishida H**, Kiso M.
“1,2-trans-Selective glycosyl donor bearing cyclic protection at the C2 and C3 hydroxyl groups.”
19th European Carbohydrate Symposium(Barcelona, Spain), 2017/07/02-06

【Course of Agricultural and Environmental Science】

- [1] Chen Fang, Hideyoshi Shimizu, **Shin-Ichi Nishimura, Ken Hiramatsu, Takeo Onishi, Tatsuro Nishiyama.**
"Seismic risk evaluation of irrigation tanks -Case study of two irrigation tanks in Ibigawa-cho, Gifu Prefecture, Japan-"
International Symposium on Soil Management for Sustainable Agriculture 2017, UGSAS-GU & BWEL Joint Poster Session on Agricultural and Basin Water Environmental Sciences(Gifu), 2017/08/28
- [2] Kusunoki K, Tokizawa M, Ushijima T, Matsushita T, Kanesaki Y, Suzuki Y, **Koyama H, Yamamoto YY.**
"Massive identification of promoter switching in Arabidopsis and rice"
Taiwan-Japan Plant Biology 2017(Taipei, Taiwan), 2017/11/03-06
- [3] Makino K, Itoigawa S, Imai H, **Matsumura S.**
"Analysis of bitter taste receptor genes in Asian black bear to prevent forest damage by bears."
The 51st Annual Meeting of the Japanese Association for the Study of Taste and Smell (Kobe) , 2017/09/25-27
- [4] Naito K, **Onishi T**, Yasutaka T, Nakamura K, Miyazu S.
"Quantitative estimate of 137Cs load characteristics in Kuchibuto river watershed"
JpGU (Makuhari) , 2017/05/20-25
- [5] Nusrat Ahsan, Tomoki Nishioka, Haruhisa Suga, **Hiroyuki Koyama, Masafumi Shimizu.**
"Isolation of plant probiotic Bacillus spp. from tea rhizosphere"
Environmental microbe system combination meet 2017 (Tohoku University), 2017/08/29-31
- [6] **Onishi T.**
"Evaluation of climate change and land cover change impacts on water quality of the Ise Bay and its watershed"
International Conference on Climate Change, 2017(Sebelas Maret University, Indonesia), 2017/10/22-26
- [7] **Onishi T, Hiramatsu K**, Somura H.
"Assessment of watershed scale nitrogen cycling and dynamics by hydrochemical modeling"
American Geophysical Union Fall Meeting, 2017(New Orleans, USA), 2017/12/10-16
- [8] Ronilo O. De Castro, Satoshi Ohkura, **Akemi Yamamoto**, Analyn M. Punzalan, Rommel C. Sulabo.
"Nutritive Values Analysis of Philippine-produced Coconut co-products"
54th PSAS Scientific Seminar and Annual Convention (Cebu, Philippines), 2017/10/18-21
- [9] **Shimizu M.**
"Use of endophytic Streptomyces as biocontrol agents."
2017 Asian Conference on Plant Pathology(Jeju-do, Korea), 2017/09/12-15
- [10] **Takeo Onishi**, Vladimir Shamov, Takayuki Shiraiwa, Muneoki Yoh, Seiya Nagao, Vladimir I Kim, Vladimir P Shesterkin, Takumi Kubo, Yuto Tashiro.
"Linking Dynamics of Permafrost and Dissolved Iron Production in the Amur River basin"
The 2nd Asian Conference on Permafrost(Sapporo, Hokkaido), 2017/07/02-06
- [11] Tarusawa Y, **Matsumura S.**
"Comparative analysis of the umami taste receptor gene tas1r1 in mustelidae."
NIG International Symposium 2017 - Commemorating the 30th Anniversary of DDBJ (Mishima, Japan), 2017/05/27-29

【Joint Department of Veterinary Medicine】

- [1] Akter QS, Rajabi-Toustani R, Shimizu K, Kuwahara Y, **Murase T.**
"Effect of magnesium on exocytosis of boar sperm acrosome stimulated by calcium and the calcium inophore A23187"
4th World Congr. Reprod. Biol. (Okinawa), 2017/09/27-29
- [2] Horii K, **Shiina T**, Naitou K, Nakamori H, Sano Y, Shimaoka H, **Shimizu Y.**
"A novel in vivo method is useful for investigating central mechanisms of esophageal peristalsis in rats."
ISAN2017(Nagoya), 2017/09/01
- [3] Khin Myo Aye, Baba M, Nagayasu E, Yoshida A, **Takashima Y**, Maruyama H
"Development of luciferase immunoprecipitation systems (LIPS) for serodiagnosis of Toxoplasmosis"
The 86th Annual Meeting of the Japanese Society of Parasitology (Sapporo) , 2017/05/28-29

- [4] Naitou K, Nakamori H, **Shiina T**, Sano Y, Shimaoka H, Horii K, **Shimizu Y**.
“Identification of neurotransmitters acting on the spinal defecation center in rats.”
ISAN2017(Nagoya), 2017/09/01
- [5] Nakamori H, Naitou K, Sano Y, Shimaoka H, Horii K, **Shiina T**, **Shimizu Y**.
“Serotonin in the lumbosacral defecation center regulates colorectal motility in rats.”
ISAN2017(Nagoya), 2017/09/01
- [6] Paulina Duhita Anindita, Sasaki M, **Ito N**, **Sugiyama M**, Minamikawa N, Shuto S, Otokuro S, Ichikawa S, Matsuda A, Maenaka K, Ohba Y, Sawa H
“Examination of antiviral activity of 5-ethynyl-1-ribofuranosylimidazole-4-carboxamide (EICAR) against rabies virus in vitro”
The 160th meeting of the Japanese Society of Veterinary Science (Kagoshima) , 2017/09/14
- [7] Rajabi-Toustani R, Akter QS, Hoshino Y, Mukoujima K, Sakaguchi S, **Murase T**.
"Comparison among standard semen analysis, acrosomal integrity by FITC-PNA and the ability to undergo the acrosome reaction in response to calcium and the calcium ionophore A23187 in frozen-thawed Japanese Black Bull spermatozoa"
4th World Congr. Reprod. Biol. (Okinawa), 2017/09/27–29
- [8] Sarkar Sonjoy, **Saito S**, **Atoji Y**
“Distribution of vesicular glutamate transporter 2 mRNA in the turtle brain”
The 160th meeting of the Japanese Society of Veterinary Science (Kagoshima) , 2017/09/13
- [9] Shimaoka H, Hattori S, Sano Y, Naitou K, Nakamori H, Nakagawa K, Okada K, Ito N, Sugiyama M, **Shiina T**, **Shimizu Y**.
“The effect of hypothermia on symptoms of rabies in mice.”
The 5th Sapporo Summer Seminar for One Health (SaSSOH) (Sapporo), 2017/09/20

2) Academic lecture

【Course of Applied Life Science】

- [1] **Imamura A.**
“Di-tert-butylsilylene (DTBS)-directed α -galactosylation”
The 9th Asian Community of Glycoscience and Glycotechnology (ACGG) Conference(Hong Kong, China), 2017/12/17-20 (Invitation lecture)
- [2] **Yabe T.**
“Pectin induces proliferation of intestinal cells through the alteration of cell-surface heparan sulfate”
ISNFF2017 The 10th International Conference and Exhibition on Nutraceuticals & Functional Foods “Platform for Foods, Nutrition and Medical Science”(Gunsan, Jeonbuk, Korea), 2017/10/22-25 (Invitation lecture)
- [3] **Yamauchi K, Mitsunaga T.**
“Effects of Quercetin Derivatives in B16 Melanoma Cells”
International symposium on Natural Medicines 2017, 2017/08/24 (Invitation lecture)
- [4] **Teramoto Y.**
“Advanced utilization of nano-cellulose/chitin by multi-composing and processing.”
11th Pure Appl. Chem. Int. Conf. 2017 (PACCON2017)(Bangkok, Thailand), 2017/02/02 (Invitation lecture)

【Course of Agricultural and Environmental Science】

[1] **Yamamoto YY.**

“Empirical identification of the transcriptional regulatory network for the H₂O₂ response in Arabidopsis”
Indo-Japan Workshop on Translational Agriculture -avenues for international cooperation(Guwahati,
India),2017/03/29 (Invitation lecture)

[2] **Yamamoto YY.**

“Determination of the transcriptional regulatory network for the H₂O₂ response in Arabidopsis”
International Conference on Plant Development Biology and National Arabidopsis Meeting
2017(Bhubaneswar, India), 2017/12 (Invitation lecture)



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