DIRECTIONS FOR APPLICATION

FOR

THE SPECIAL PROGRAM FOR BIORESOURCE UTILIZATION SCIENCE OF FUNGUS AND MUSHROOM, 2020

(THREE-YEAR DOCTORAL COURSE)

The United Graduate School of Agricultural Sciences

Tottori University

Japan

The United Graduate School of Agricultural Sciences (UGSAS), Tottori University, was founded in 1989 as an independent three-year Doctoral course. The UGSAS is organized on the basis of the three Master's Courses of Tottori, Shimane and Yamaguchi Universities, and the research facilities at the Universities. The UGSAS is operated in close alliance and cooperation with the Master's Courses of the three constituent Universities.

The Special Program (SP) for bioresource utilization science of fungus and mushroom in the UGAS is designed for those students who have finished the Special Program of the Master's courses (Pre-Doctoral Courses) at the constituent Universities; Tottori, Shimane and Yamaguchi. Because the SP at the UGAS is to be open as of October 2020, the UGAS invites application from prospective foreign students who wish to study bioresource utilization science of fungus and mushroom.

１．PURPOSE OF THE SPECIAL PROGRAM

This Special Program (SP) is designed to provide academically advanced education to study bioresource utilization science of fungus and mushroom, and aims to contribute to the development of superior human resources, promoting research on bioresource utilization science of fungus and mushroom.

２．FIELDS OF STUDY AND NUMBER OF STUDENTS TO BE ADMITTED

(1) Fields of Study: Applications for any field in bioresource utilization science of fungus and mushroom and related sciences are accepted, provided that each applicant finds a suitable academic major advisor in the annexed "List of Supervisors and Their Research Interests".

(2) Number of Students to be admitted: A limited number of students funded privately or by the other sources (hereafter "Personal Funds").

３．QUALIFICATIONS

(1) Nationality: Applicants with Personal Funds are welcome to apply for the SP regardless of their nationality or residential experiences in Japan.

(2) Age: There is no age limitation for applicants with Personal Funds.

(3) Academic career: Applicants should have or be expected to earn a Master's degree or equivalent qualifications by the end of September, 2020. Admission may be canceled, if successful applicants do not hold a Master's or equivalent degree by the end of September, 2020.

(4) Health: Applicants should be in good mental and physical health.

(5) Language proficiency: A good working level in English is required.

(6) Arrival in Japan: The admitted students must arrive in Japan between October 1 and 7, 2020.

(7) Note: Military related personnel are not eligible to apply, if they are to remain on duty during the period of study.

４．APPLICATION PROCEDURE

Applicants should submit the following documents through the desired major advisor to the School by April 24, 2020. Applications directly mailed to the School will not be accepted.

Documents:

(1) Application in prescribed form, APPLICATION FOR ADMISSION To THE SPECIAL PROGRAM FOR BIORESOURCE UTILIZATION SCIENCE OF FUNGUS AND MUSHROOM, 2020 (Form No. 5).

(2) LETTER OF RECOMMENDATION in the prescribed form by those students who know the applicant’s research/study capability, addressed to the Dean of the United Graduate School (Form No. 6).

(3) LETTER OF APPLICATION (about 1,200 words). Use A4 paper and attach a cover sheet (Form No. 3).

(4) One copy of the applicant's Master's degree certificate or a certificate issued by the applicant's graduate school indicating that the applicant will be receiving a Master's degree.

(5) Transcript of academic record issued by university authorities and its English translation.

(6) A summary of the Master's thesis in English (about 1,200 words), or a summary of the research program in English (about 1,200 words) in the case of applicants who anticipate a Master's degree. Use A4 paper and attach a cover sheet (Form No.4).

(7) Certificate of citizenship issued by municipal authorities.

(8) One copy of the record showing English ability such as TOEFL, TOEIC or IELTS objectively.

(9) Photocopies of publications described in #10 in APPLICATION FOR ADMISSION.

(10) Passport size Photograph (5 x 4cm), showing a picture taken from the front, from the chest up, bare-headed, and taken within 6 months of the application date, indicating name and nationality on the reverse side (should be attached to the designated place on the application form).

(11) Entrance examination fee of 30,000 yen (to be paid in cash or a postal money order, but waived for current Master students at the constituent Universities).

Notes:

①These documents should either be typed or printed neatly in English. Application forms can be downloaded from the Website (http://rendai.muses.tottori-u.ac.jp/english/recruit/index.html).

②Applications will not be accepted unless all the documents mentioned above are fully and correctly completed and delivered in due time.

③The letters of recommendation should include the writer's assessment of the applicant's English proficiency as Excellent, Good or Fair.

④The above-mentioned information for documents (1), (2), and (3) should be submitted on the forms provided, and others on A4 size paper. Only originals, not photocopies, will be accepted.

⑤None of the documents submitted will be returned to the applicants.

⑥Each applicant should select a professor as a prospective major advisor from the annexed "List of Supervisors and Their Research Interests" and contact professor in advance in preparing the application documents. Application failing to nominate a professor as a major advisor will not be accepted.

⑦The application fee is nonrefundable once paid.

５．FEES ON ENTRANCE

(1) Admission fee: 282,000 yen (proposed) (waived for students continuing from the Master's course at the constituent Universities).

(2) Tuition: 267,900 yen (proposed) for the first semester (annually 535,800 yen). Tuition may be revised each school year.

(3) ①Personal accident insurance for students pursuing education and research (Hereafter "Gakkensai"): This insurance compensates for physical injuries suffered students in their intra-curricular activities both on and off campus, and extra-curricular activities on campus. All students enrolled have to pay the premium of 2,600 yen for three years.

For details, please refer to Health Science Center (TEL (0857)31-5065).

②Insurance for International Students (Type B)：This insurance covers (1) in case of causing injury to another person or damaging the property of others, (2) compensate for the payment of transportation and accommodation expenses in case family members come to Japan to support the insured if he/she is hospitalized due to injury or illness for more than 3 days. (Unlike "Gakkensai", there is no restriction on time and place)

All International students enrolled have to pay the insurance premiums (3 years): 4, 680 yen

For details, please refer to Student Exchange Section, International Affairs Division. (TEL (0857)31-5056).

(4) Medical insurance of the National Health Insurance Program: The National Health Insurance scheme is a fundamental part of Japan's medical care system. It is designed to cover a portion of the medical expenses incurred by citizens. To apply for National Health Insurance, go to your local municipal government offices and follow the required procedures as instructed. After joining the scheme, you will only be responsible for

paying 30% of any medical expenses you incur. (Exceptions apply in some cases.)

6. SELECTION

(1) Examination period

From May 27, 2020 to June 10, 2020

(2) Candidates will be selected through a comprehensive evaluation of the oral examination, the documents submitted, and other elements.

(3) During an interview for the oral exam, or via videoconference in case the applicant is a residence of foreign country, at least three members of the oral exam committee (who are one or more faculty members of each of the constituent universities and which include the prospective major supervisor) will spend about 50 minutes reviewing the master's thesis and the research proposal (roughly 30 minutes for the description of the Master's thesis and 20 minutes for questions and answers).

(4) The method of the oral exam is subject to approval by the board of representatives following the submission of the Notice of the Method of the Oral Exam (Form No. 12) by the prospective major supervisor to the dean of the faculty.

(5) Notification will be sent by the beginning of July to applicants.

7. EDUCATION

The successful applicants will be enrolled as full-time graduate students and expected to complete their thesis research for a doctoral degree within three years, under supervision and instruction mainly in English. Each student is supervised by the faculty members of the three constituent Universities; a professor as a major advisor and two professors as sub-advisors. Although each student studies at the constituent University where the student's major advisor resides, the applicant can use training and research facilities at the other two constituent Universities.

8. ENROLLMENT DATE: October, 2020

9. RESERVATIONS

(1) If false statements were made in the application documents, the applicant's admission shall be canceled even after having been accepted in the United Graduate School.

(2) With enrollment, new students are advised to become well informed about the Japanese climate, customs, manners, and other cultural aspects in general before coming to Japan. It is strongly recommended that they study the Japanese language. Knowledge of the Japanese language is very helpful to new-comers to Japan.

More detailed information and all correspondence about this program is available from:

The United Graduate School of Agricultural Sciences

Tottori University

4-101, Koyama-Minami, Tottori, 680-8553 Japan

Tel: 81-857-31-5446 (81 is the international code for Japan)

Fax: 81-857-31-5683 (81 is the international code for Japan)

E-mail: ag-rengaku@ml.adm.tottori-u.ac.jp

Addressess of Constituent Universities:

*Tottori University

Faculty of Agriculture, Tottori University

4-101, Koyama-Minami, Tottori, 680-8553 Japan

Tel: 81-857-31-5446 (81 is the international code for Japan)

Fax: 81-857-31-5683 (81 is the international code for Japan)

*Shimane University

Graduate School of Natural Science and Technology, Shimane University

1060, Nishikawatsu, Matsue, 690-8504 Japan

Tel: 81-852-32-6492 (81 is the international code for Japan)

Fax: 81-852-32-6499 (81 is the international code for Japan)

*Yamaguchi University

Faculty of Agriculture, Yamaguchi University

1677-1, Yoshida, Yamaguchi, 753-0841 Japan

Tel: 81-83-933-5800 (81 is the international code for Japan)

Fax: 81-83-933-5820 (81 is the international code for Japan)

List of Major Supervisors and their Research Interests

The United Graduate School of Agricultural Sciences offers doctoral programs in the following three major courses : Bioproduction and Bioenvironmental Sciences ; Bioresource and Life Sciences and Global Dryland Science. Each course contains one to four Divisions ; and each Division offers basic and applied research programs. Faculty members (Professors and Associate Professors who serve as Major Supervisors) and their active research programs are listed below.

1. THE COURSE OF BIOPRODUCTION AND BIOENVIRONMENTAL SCIENCES

(a) Division of Agricultural Production Science

Toshiki ASAO(SN)	Vegetable and Ornamental Science	Production of vegetables and ornamentals
Hideki ARAKI(YG)	Agronomy	Function of plant production under environmental stresses and its agronomical application
Katsumi OHTA(SN)	Horticultural Plant Science	Studies on growth control in horticultural plants
Ichiro KITA(SN)	Water and Vegetation use Planning	Water use planning and management, and improvement by vegetation
Nobuo KOBAYASHI(SN)	Horticultural Breeding	Evaluation of plant genetic resources and applications for breeding
Tadashi TAKAHASHI(YG)	Crop Science	Establishment of low-cost and low-input crop cultivation systems
Yoko TSURUNAGA(SN)	Food Processing	Studies on manufacturing method and functionality in food processing
Akira NAKATSUKA(SN)	Molecular Breeding of Horticultural Crop	Molecular breeding for agriculturally useful traits in horticulture crops
Yoshimichi FUKUTA*(TT)	Crop Breeding and Genetics	Breeding sciences for diversity, differentiation, and genetic mechanism for agricultural traits in rice
Shingo MATSUMOTO(SN)	Biochemistry of Soil and Plant Nutrition	Studies on the mechanism of plant nutrient acquisition in relation to soil fertility
Toshikazu MATSUMOTO(SN)	Fruit Science	Studies on fruit growing and processed food
Akira YANO(SN)	Bioenvironmental Electrical Engineering	Application of electrical engineering to bioenvironmental technologies
Haruhiko YAMAMOTO(YG)	Environmental Information Science	Growth diagnosis of plant canopies by optical measuring methods

Abbreviations; TT : Tottori University, SN : Shimane University, YG : Yamaguchi University.

＊ ; Cooperation with Japan International Research Center for Agricultural Sciences

(b) Division of Managerial Economics

Yasuhiro ITO (SN)	History of Fisheries	Study on history of agricultural, fisheries and rural problems in modern Japan
Norikazu INOUE (SN)	Farm Management	Farming practices and resource management on farm businesses
Yutaka TANEICHI (YG)	Agricultual Marketing	Study on distribution of agricultural products and agricultural materials
Makoto NOHMI (TT)	Rural Economics	Development and application of regional analysis methods
Toshinobu MATSUDA (TT)	Economics of Consumer Behavior	Empirical analysis of consumer behavior, especially food demand
Ichizen MATSUMURA (TT)	Farm Management	Studies on the relationship between farm management and rural society
Li WAN (TT)	Marketing Information Analytics	Agricultural products distribution channels and econometric analysis of market information
Kumi YASUNOBU(TT)	International Agricultural Development Studies	Agricultural and rural development in Southeast Asia

(c) Division of Forest and Watershed Environmental Sciences

Masayuki ISHII (SN)	Regional Infrastructure Engineering	Development of designing method for renovation of irrigation facilities
Katsuhisa ITO (SN)	Forest Policy	Forests, forestry and less-favored area problems and policy
Tomoyuki KUWABARA (SN)	Water Environmental Conservation	Studies on conservation and restoration of water environment, and purification of waste water and environmental water
Ikuo TAKEDA (SN)	Water Quality and Hydrology	Evaluation and control of nonpoint sources in watersheds
Nobuo TSURUSAKI (TT)	Animal Taxonomy	Biodiversity, chromosomes, evolution, and conservation of land invertebrates
Ryota NAGASAWA (TT)	Landscape Ecology	Landscape ecological analysis on the physical and human environment in mountainous regions
Dai NAGAMATSU (TT)	Plant Ecology	Population dynamics of forest and grassland, vegetation science and biodiversity conservation.
Yoshiyuki HIOKI (TT)	Conservation and Restoration Planning of Ecosystem	Ecological planning and engineering for conservation and restoration of biodiversity
Takaaki FUJIMOTO(TT)	Wood Physics	Analysis of wood property variation, and development of measurement techniques
Hiroshi YAJIMA (SN)	Environmental Fluid Dynamics	Water environment and hydrodynamics in a water body

(d) Division of Environmental Bioscience

Futoshi ARANISHI (SN)	Genetic Ecology	Molecular evolutionary, ecological and conservative genetics of aquatic organisms
Kazuhito ITOH (SN)	Soil Microbiology	Plant- microbe interaction
Shinichi ITO (YG)	Plant Pathology	Functional genomics of plant pathogens
Makoto UENO (SN)	Plant Pathology	Studies on the expression of resistance in plant-microbe interaction
Hironori KAMINAKA (TT)	Plant-Microbe Interactions	Molecular mechanisms of immune response and mycorrhizal symbiosis in plants

Junichi KIHARA (SN)	Plant Pathology	Photoresponces of the phytopathogenic fungi
Motoichiro KODAMA (TT)	Plant Pathology	Molecular mechanisms in plant-microbe interactions and plant disease resistance
Yoko TAKEMATSU (YG)	Ecological Entomology	Biodiversity and ecology of termites
Ryoichi MIYANAGA(SN)	Insect Ecology	Biology and management of wild bees
Keiko YAMAGUCHI (SN)	Aquatic Ecology	Studies on ecology of benthic animals and aquatic environments

2. THE COURSE OF BIORESOURCE AND LIFE SCIENCES

(a) Division of Fungus and Mushroom Sciences

Tadanori AIMI (TT)	Biochemical Technology of Microorganisms	Biochemistry, molecular biology and biotechnology of microbial production
Norihiro SHIMOMURA (TT)	Mushroom Breeding and Cultivation	Studies on breeding and cultivation of mushroom resources
Kozue SOTOME (TT)	Mushroom Phylogeny and Taxonomy	Phylogenetic taxonomy of mushrooms, and ecological researches of wood-decaying basidiomycetes.
Akira NAKAGIRI (TT)	Fungal Biodiversity	Taxonomy, ecology and evolution of fungi adapted to aquatic habitats

(b) Division of Bioscience and Biotechnology

Kazuhito AKAMA (SN)	Plant Molecular Biology	Study on regulatory mechanism of tRNA gene expression and physiological function of γ-aminobutyric acid in plants
Masaaki AZUMA (TT)	Molecular Entomology	Molecular analysis of insect cell functions and their application to insect control
Jiro ARIMA (TT)	Bio-Functional Chemistry	Functional analysis of enzymes and microorganisms, and their application to industry
Takahiro ISHIKAWA (SN)	Plant Molecular Physiology	Biosynthesis pathway of antioxidants and metabolism of reactive oxygen species in photosynthetic organisms
Takashi IWASAKI (TT)	Bioregulatory Chemistry	Development and screening of bioactive substances regulating biological function
Makoto KAWAMUKAI (SN)	Genetic Engineering	Signal transduction, cell cycle control and biosynthesis of coenzyme Q in yeasts
Akihiko KOSUGI* (TT)	Applied Microbiology	Development of biomass utilization technology using microbial functions
Yuuki KODAMA (SN)	Symbiotic Biology	Elucidation of the mechanism that establishes endosymbiosis between the Paramecium bursaria and Chlorella spp.
Takahiro SHIOTSUKI (SN)	Insect Chemical Biology and Agrobio-Regulators	Chemical biology and molecular mechanisms in regulation of insect development and their applications
Tsuyoshi NAKAGAWA (SN)	Plant Molecular Genetics	Molecular mechanisms of plant development and technology for analysis of plant genes
Akio NISHIKAWA (SN)	Developmental Biology-Animal	Studies using amphibian about cell growth, differentiation, apoptosis, and morphogenesis
Jun'ichi MANO (YG)	Mechanisms of Environmental Stress-tolerance in Plants	Elucidation and application of plant tolerance mechanisms against abitotic environmental stresses
Takanori MARUTA (SN)	Plant Physiology	Redox metabolism network and stress response in plants

(c) Division of Applied Bioresource Chemistry

Hiroyuki AZAKAMI (YG)	Molecular Microbiology	Molecular mechanisms of bacterial colonization to host surface
Atsushi ISHIHARA (TT)	Natural Product Chemistry	Function, Biological activity, and Biosynthesis of metabolites produced by plants and microorganisms
Tsuyoshi ICHIYANAGI(TT)	Organic Chemistry	The molecular design and functional analysis of bioactive compounds
Tsuyoshi KAWANO (TT)	Bioorganic Chemistry	Regulation of diapause, metabolism and longevity corresponding to the growth environment
Hidehisa SHIMIZU (SN)	Nutritional Pathophysiology	Study on the relationship between food-derived bacterial metabolites or cyanobacteria-derived toxins, and pathogenesis of diseases
Jun-ichi TAMURA (TT)	Organic Chemistry	Chemical synthesis of bioactive glycans and isolation/characterization of natural glycans
Kaeko MUROTA (SN)	Bioavailability and Food Function	Bioavailability and physiological function of lipophilic food factors
Tatsuyuki YAMAMOTO (SN)	Bio-molecular Spectroscopy	Spectroscopic studies on life science and medical applications
Kazushige YOKOTA (SN)	Biochemistry and Molecular Cell Biology	Molecular cell biology of food and related substances involved in bioinformation, nutrition, and health
Fumio WATANABE (TT)	Food Science	Chemistry and nutrition of vitamin B12 and related compounds in food

3. THE COURSE OF GLOBAL DRYLAND SCIENCE

(a) Division of Global Dryland Science

Kinya AKASHI (TT)	Molecular and Cellular Biology	Molecular responses of drought-tolerant plants and their application to molecular breeding
Nigussie Haregeweyn AYEHU (TT)	Land Management	Watershed processes monitoring, modeling and management
AN Ping (TT)	Plant Eco-Physiology	Physiological responses and relative mechanisms of plants and plant ecophysiology in dry lands.
Toshiyoshi ICHINOHE (SN)	Livestock Feeding	Evaluation of ruminants production system
Koji INOSAKO(TT)	Soil and Water Management	Conservation, restoration and sustainable use of soil and water environment
Yasuomi IBARAKI (YG)	Bio-environmental Control Engineering	Environmental control in plant production
Tsuneyoshi ENDO (TT)	Soil Chemistry	Influence of soil properties and irrigation water quality on soil salinization/sodication in irrigated farmlands of arid regions
Hidehiko OGATA (TT)	Irrigation and Drainage Facilities Engineering	Evaluation of construction materials and structural performance of irrigation and drainage structures
Toshihiko KINUGASA (TT)	Dryland Restoration and Conservation Ecology	Ecology and ecophysiology of plants in arid and semi-arid grasslands
Reiji KIMURA (TT)	Boundary Layer Meteorology	Heat and water balance in arid lands
Katsuyuki SHIMIZU (TT)	Water Use and Management	Monitoring and assessment of irrigation water management

Kenji SUZUKI（YG）	Meteorology	Observational study on precipitation mechanisms and development of instruments for hydrometeor measurements
Takeshi TANIGUCHI（TT）	Microbial Ecology	Soil and root microbial ecology and the application
Hisashi TSUJIMOTO（TT）	Molecular Breeding	Breeding of drought tolerant crop lines by gene and chromosome engineering
Atsushi TSUNEKAWA（TT）	Conservation Informatics	Monitoring and modeling of plant production and ecosystem change in drylands
Mitsuru TSUBO（TT）	Climate Risk Management	Dryland agrometeorology and climate-smart agriculture
Eiji NISHIHARA（TT）	Crop Production in Drylands	Construction of crop production system in areas including drylands
Masahiro HYODO（TT）	Facilities and Environmental Materials	Rehabilitation management of agricultural irrigation facilities and development of environmental materials
Haruyuki FUJIMAKI（TT）	Soil Conservation	Development of methods for proventing salt accumulation and erosion and remediation of degraded soils
Tsugiyuki MASUNAGA（SN）	Pedosphere Ecological Engineering	Control and use of soil functions of environmental protection-restoration and plant production
Satoshi YAMADA（TT）	Plant Nutrition	Mechanisms of Response to Stresses of Plants in Arid Regions
Norikazu YAMANAKA（TT）	Revegetation in Arid Land	Ecological studies on woody plants in arid lands
Sadahiro YAMAMOTO（TT）	Environmental Soil Science	Conservation of soil environment and sustainable use of farmland in arid regions