## 2025 年度 10 月入学

鳥取大学大学院連合農学研究科

後期3年のみの博士課程

# 学生募集要項

PROSPECTUS FOR ADMISSION OCTOBER TO THE UNITED GRADUATE SCHOOL OF AGRICULTURAL SCIENCES, TOTTORI UNIVERSITY (THREE-YEAR DOCTORAL COURSE) 2025

## 鳥取大学大学院連合農学研究科 (構成大学:鳥取大学・島根大学・山口大学)

THE UNITED GRADUATE SCHOOL OF AGRICULTURAL SCIENCES TOTTORI UNIVERSITY

> MEMBER UNIVERSITIES TOTTORI UNIVERSITY SHIMANE UNIVERSITY YAMAGUCHI UNIVERSITY

## The Admission Policy of the United Graduate School of Agricultural Sciences, Tottori University

The United Graduate School of Agricultural Sciences, Tottori University was founded in 1989 as an independent three-year Doctoral Course at Tottori University. The participating universities are the graduate schools (Master's Course) of three universities, Tottori, Shimane and Yamaguchi, in the Chugoku district of Japan.

The United Graduate School of Agricultural Sciences, Tottori University, widely accepts people who: (1) have the basic knowledge and scholastic ability equivalent to the master's degree, which is required in each of the Courses of Bioproduction and Bioenvironmental Sciences, Bioresource and Life Sciences, and Global Dryland Science; (2) seek to obtain higher and broader expertise and skills and more comprehensive viewpoints, and further desire to engage in original studies through the application of these skills; (3) seek to acquire high morality based on social responsibility, contribute to the development of science and technology, and cater to the needs of the local and international communities; and (4) seek to obtain professional and advanced capacities to identify and solve problems and communicate effectively and lead the research activities in the specialized area to deal with problems faced by the local and international communities.

In order to accept applicants who meet these requirements, the United Graduate School of Agricultural Sciences, Tottori University will select candidates based on a multifaceted and comprehensive evaluation of application documents (including research plan) and oral examination.

Each course seeks the following qualities in students:

The Course of Bioproduction and Bioenvironmental Sciences:

A strong interest in problems in production, distribution, consumption, and production environment in agriculture and forestry, as well as in other areas related to forest and watershed environments, and the desire to solve such problems. The Course of Bioresource and Life Sciences:

A strong interest in the diverse vital functions found in animals, plants, fungi, etc. and the desire to challenge advanced bioscience studies focusing on the identification of such vital functions at molecular and genetic levels, as well as their utilization as resources. The Course of Global Dryland Science :

A strong interest in problems surrounding the environment and food in drylands across the world and the desire to utilize the broad viewpoint, expertise, and professional skills in international activities.

## 1. Doctoral Course

Doctoral Course	No. of students admitted annually
Bioproduction and Bioenvironmental Sciences	a few
Bioresource and Life Sciences	a few
Global Dryland Science	a few

## 2. Application Requirements

Applicants must meet one of the following requirements or anticipate attaining one of the following requirements by September, 2025.

- (1) Have been awarded a Master's degree.
- (2) Have been awarded a degree equivalent to a Master's degree from a foreign university.
- (3) Have taken lessons in Japan through a correspondence course provided by a foreign institute and have attained a degree equivalent to a Master's degree in addition to 16 years of basic education in foreign country.
- (4) Have completed a course of study at the United Nations University and have received a Master's degree or equivalent.
- (5) Those who are selected by the Japanese Ministry of Education, Culture, Sports, Science and Technology. (Those who have been engaged in research at universities and institutes for more than two years and whose academic achievements are judged to be equal to or higher than those of a person with a Master's degree (A) after graduation from a university, or (B) after finishing 16 years of basic education in a foreign country.)
- (6) Those whose academic achievements are judged to be equal to or higher than those of a person with a Master's degree by a separate qualification screening and who are 24 years old or will be 24 years old by September 30, 2025.

\* Refer Section 7 if you are under items (5) and (6)

## 3. Application Procedures

(1) Application Period: July 15 to July 18, 2025 (office hours: 9:00-12:00 and 13:00-16:00).

All original application documents must be submitted in person or by mail. In addition, electric files of (H),(I),(J) and (K) in pdf and word format should be submitted by email. We will not accept any application documents after the deadline.

 Mailing Address : Academic Affairs Section of the United Graduate School of Agricultural Sciences, Tottori University, 4-101 Koyama-Minami, Tottori, 680-8553, Japan.

Tel: 81-857-31-5446; Email:ag-rengaku@ml.adm.tottori-u.ac.jp

- (3) Application Documents Forms can be downloaded from our website. http://rendai.muses.tottori-u.ac.jp/
  - (A) Application Form (Use Form No. 1)
  - (B) Photograph : One photograph (4 cm×3cm), taken within the last three months, should be pasted on the application form, respectively.
  - (C) Curriculum Vitae (Use Form No. 2)
  - (D) A copy of the Master's degree or a letter that certifies the anticipated graduation. This required is waived for applicants whose academic achievements are certified by evaluation (see G).
  - (E) Academic Records : The record must be certified by the dean or the president of the applicant's university (only for candidates qualifying under items 5 and 6 in the Section 2).
  - (F) Evaluation : This evaluation must be written by the dean of the applicant's graduate school (Form No. 3 can be used).
  - (G) Application Fee: 30,000 JPY

Complete the payment transfer at any bank in Japan and use the enclosed slip, Attach the payment receipt slip (the right part of the form : 検定料振込済証明書) on Form No. 4. Applicants who will graduate from the Master's course of member universities (Tottori, Shimane and Yamaguchi Univ.) in September, 2025 and foreign students who have been granted a Japanese Government Scholarship are exempted from paying the application fee.

- (H) Master's Thesis
  - (a) Applicants who have completed a Master's course :
    - i) A copy of the Master's thesis, or published manuscript (s) equivalent to the thesis.
    - ii) A summary of the Master's thesis in English (about 1,200 words). Use A4 paper and attach a cover sheet (Form No. 5).
  - (b) Applicants who anticipate receiving a Master's degree :
    - i) Describe your research program in English (A4 size, about 5,000 words). This report may include tables and figures.
    - ii) A summary of the research program in English. details are as same in (a)-ii)
  - (c) Candidates qualifying under items (5) and (6) in the Section 2 :
    - i) Copies of manuscript(s) equivalent to a Master's thesis.
    - ii) A summary of the manuscript(s) equivalent to the thesis in English. details are as same in (a)-ii)
  - (d) Copies of published manuscript (s), if any.
- (I) Research Proposal : Describe your research proposal (goal, objectives, experimental design). Use A4 paper and attach a cover sheet (Form No. 6)
- (J) Letter of Application (Use Form No. 7) : Describe why you choose our graduate course, and state your future goals. Use A4 paper and attach a cover sheet (Form No. 7)
- (K) Short essay on Self-assessment (Use Form No. 8): Describe your self-assessment of the Admission Policy of the United Graduate School of Agricultural Sciences in about 500 words.
- (L) Letter of Permission for Application (Use Form No. 9): If you are working for a public or private institution, arrange a letter of permission from your supervisor at your place of employment.
- (M) Certificate of Residence: Applicants must submit a copy of the "Certificate of Residence" issued by the local government office in Japan or a copy of a valid visa.

Applicants who are not residence of Japan at the time of application for admission should register immediately after arriving in Japan and submit it. If you are a foreign student who is supported by a Japanese Government Scholarship, submit a certificate of foreign student supported by a Japanese Government Scholarship.

\* Applicants for section 7 do not need to resubmit the overlapping documents.

## [Notes]

- Applicants should select one professor as a major supervisor from the "List of Major Supervisors and their Research Interests" and make contact prior to making an application. We will not accept applications without a nominating professor.
- (2) For those with physical and other handicaps : If you have any physical and/or other handicaps, we suggest that you notify us about your situation in advance. We can consider take your condition at the time of the entrance examination and thereafter. Therefore, those with physical and other handicaps are requested to submit a description of your condition along with a doctor's diagnosis. Our staff at Academic Affairs Section of the United Graduate School of Agricultural Sciences will be available for consultation after June 20, 2025. There are no fixed forms for the description of your condition; you can choose the most suitable way to describe them. However, please be sure to include:
  - (i) Your name, your present address and phone number
  - (ii) The major and the division you are applying to, and the name of the probable major supervisor
  - (iii) The name of the department, the faculty and the university you graduated from
  - (iv) The type and degree of your handicap
  - (v) Any considerations you wish us to make for you at the time of the entrance examination
  - (vi) Any considerations you wish us to make for you after you have been accepted to our Graduate School
  - (vii) Description of any treatment you have thus far received at your former university
  - (viii) Any comments about your daily life in term of your condition that you want us to know about
- (3) No modifications to the application documents will be allowed after submission.
- (4) The application fee is not refundable.
- (5) Long-term enrollment system is facilitated at our graduate school for a student who has difficulty completing the course within the standard study period, which is three years, due to having work or other relevant reason. A student applicable under this system is given an opportunity to extend study period at longest two more years. Those who wish to use this system, please contact Academic Affairs Section of the United Graduate School of Agricultural Sciences, Tottori University.
- (6) Further inquiries should be made directly to Academic Affairs Section of the United Graduate School of Agricultural Sciences, Tottori University.
- (7) None of the documents submitted will be returned to the applicants.

## 4. Selection Procedures

Students will be selected based on evaluation of the oral examination and submitted documents.

13:00 - 17:00

(1) Oral Examination

Oral presentation (about 30 min) on the applicant's Master's research and the research proposal at the United Graduate School. Questions and discussion (about 20 min) will follow the presentations. It is recommended that you use your own laptop computer for your presentation.

Online or face to face

(-) -	(-),			
	Date	Time	Method of examination	
	August 20 (Wed), 2025	13:00 - 17:00		

(2) Time, Date and Place of Oral Examination

\* The time and method of each presentation will be notified beforehand.

## 5. Notification of Acceptance

August 21 (Thus), 2025

Accepted applicants will be notified by mail. In addition, the examinees' number of the accepted applicants will be posted on our website: <u>https://rendai.muses.tottori-u.ac.jp/</u> at 15:00, August 29, 2025.

## 6. Admission Procedures

(1) Admission

Documents for admission will be sent to each applicant with the letter of acceptance. The documents for admission must be submitted in person or by mail during the period of September 10 to September 11, 2025 (office hours: 9:00-12:00 and 13:00-16:00).

- (2) Admission Expenses
  - (A) Admission fee : 282,000 JPY. Students who will be awarded a master's degree from member universities in September, 2025 are exempted from paying the admission fee.
  - (B) Tuition fee: 267,900 JPY for the second semester (535,800 JPY per year).

\* The admission and tuition fees are estimates. If the fees are revised upon your entrance or during the program the revised entrance and tuition fees will be put into effect.

## [Notes]

- (1) The admission fee is not refundable. There are no exceptions.
- (2) The tuition fee must be paid by November 30, 2025.
- (3) The students who want to apply for exemption of the admission and tuition fees should not pay during the admission procedures period.
- (4) The tuition fee is refundable, if cancellation is made before September 30, 2025.
- (5) Foreign students with Japanese Government Scholarship are exempt from paying the admission and tuition fees.

## 7. Persons Qualifying under items 5 and 6 in the Section 2

Those who falls under items 5 and 6 in the section 2, Application Requirements, will be reviewed by following documents.

- (1) Application Documents
  - (A) Application for the Certification of Qualifications (Use Form No. 10)
  - (B) Academic Records : The records must be certified by the dean or the president of the applicant's university.
  - (C) Curriculum Vitae (Use Form No. 2)
  - (D) Research History (Use Form No. 11) History of research needs to be certified by the dean(s) or the director(s) of the institutions where the applicant has worked or works at present. The history of research written by the applicant may be accepted, if it cannot be certified at the relevant institution(s).
  - (E) Research Experience : Refer to (3)-(I)-(c)-ii) in the Section 3 (Application Procedures). Describe current and past research experience in English (in about 1,200 words). Use A4 paper and attach a cover sheet (Form No. 12).
  - (F) Publication : Submit the list and reprints (copies) of significant publications. In case that you have co-authors on any significant publication(s), specify your role and work.
- (2) Submission Period

Application documents will be accepted during the period of June 16 to June 20, 2025 (office hours : 9:00-12:00 and 13:00-16:00).

(3) Address

Refer to item (2) in the Section 3 (Mailing Address).

(4) Notification of Successful CandidatesEach candidate will be notified by telephone before July 7, 2025.

## Outline of the United Graduate School of Agricultural Sciences, Tottori University

The United Graduate School was founded as an independent three-year doctoral course at Tottori University. The participating Universities are the graduate schools (Master Course) of three Universities, Tottori, Shimane and Yamaguchi, in the Chugoku district of Japan. In addition, the School cooperates with Incorporated Administrative Agency, Japan International Research Center for Agricultural Sciences (JIRCAS) for promoting education and research activities. The School consists of three doctoral courses : Bioproduction and Bioenvironmental Sciences, Bioresource and Life Sciences, and Global Dryland Science. Each doctoral course consists of Research Divisions, and each Division offers basic and applied research programs.

The mission of the United Graduate School is to extend, evaluate, preserve, and transmit ideas and knowledge through teaching and research at an advanced level for the particular benefit of the Chugoku district, and for the good of the broader national and international community. The School accepts not only admissions of graduate students and qualified researchers from private and public organizations in Japan, but also from foreign students and researchers, especially those from developing countries.

The Graduate School provides comprehensive teaching, training and research in agricultural and life sciences. Our major objectives are to train and develop young scientists who are committed to the pursuit of excellence in the research fields of Agriculture, Forestry, Applied Biochemistry and Chemistry, and Bioresources Technology.

Each student is supervised by three faculty members : one professor or associate professor as a major supervisor and two professor or associate professors as associate supervisors. Although students study at the University of the major supervisor, they are able to use training and research facilities at the other two Universities.

## **Summaries of Divisions**

#### 1. The Course of Bioproduction and Bioenvironmental Sciences

#### (a) Division of Agricultural Production Science

The goal of this Division is to develop systematic programs for agricultural production. The Division offers research programs in the following areas : crop physiology plant genetics and breeding agricultural and horticultural production, and livestock science. Research facilities for crops of tropical and semi-arid lands are also available.

#### (b) Division of Managerial Economics

The goal of this Division covers two fields : to investigate agricultural and forestry problems in national and international economies and the rational development of management organization based on analyses of factors for production and marketing, to conduct development of information management techniques necessary for agriculture and forestry, as well as making predictions of supply and demand for agricultural and forestry products in the world.

#### (c) Division of Forest and Watershed Environmental Sciences

The goal of this division is to analyze the conservation, regeneration and sustainable use of watershed environment systematically and comprehensively by grasping watershed system as one geographical unit. Of the watershed environment, forests are an important environment and resources. Therefore, basic and applied researches on various functions such as land and water conservation, biodiversity preservation, renewable and sustainable resources management, atmospheric environmental stability, health recreation are performed in this division. In addition, water quality of inland waters such as rivers and lakes is also discussed from the viewpoint of ecosystem conservation and sustainable management of watershed system.

#### (d) Division of Environmental Bioscience

The mission of this division is to develop ecologically sound practices that facilitate stable agricultural, forestry and fisheries production. Major research programs are as follows; physiology and ecology of microorganisms, insects, plants and aquatic organisms; plant-microbe interactions; plant disease and pest controls; assessment and management of resource organisms in the agricultural environment.

#### 2. The Course of Bioresource and Life Sciences

#### (a) Division of Fungus and Mushroom Sciences

The major goal of this division is to foster human resources who can contribute to promote research by utilizing various useful functions and developing unused functions of fungi including mushrooms in the fields of environmental preservation, biotechnology, health promotion, and food production. To achieve this goal, the division develops a wide range of advanced education and research on fungus/mushroom resource sciences from basic research field related to the search, evaluation and preservation of fungus/mushroom resources to applied research field.

#### (b) Division of Bioscience and Biotechnology

The major focus of this Division is on molecular and cellular characterization and functional analysis of living organisms and on their biotechnological applications to agricultural production. This Division offers basic and applied research programs to study plants, insects, microorganisms, and mammals. The research subjects are applied microbiology, biochemistry, biotechnology, entomology, molecular biology, and radiation biology.

#### (c) Division of Applied Bioresource Chemistry

The major goal of this division is to develop advanced utilization of biological resources using chemical and biological techniques and tools (chemical biology). This division has basic and applied research programs to characterize biologically active compounds (from small molecules to macromolecules) from the biological resources in the fields of bioorganic chemistry, bioinorganic chemistry, biochemistry, food and nutritional chemistry, molecular and cellular biology, and structural biology. These programs contribute to the improvement of agricultural production or the development of the compounds related to functional food and medicine.

#### 3. The Course of Global Dryland Science

#### (a) Division of Global Dryland Science

It is an important task for humans to have secure food supply to support the increasing population while protecting the environment. We believe that one of the keys to accomplish this goal is to enhance food productivity in dryland and to combat desertification in the world. This division is interdisciplinary one including water-use planning, ecological climatology, livestock feeding, pedosphere ecological engineering, bio-environmental control engineering. This division offers research programs and trainings to become excellent researchers and engineers who have practical skills and capacity for leadership in dryland sciences and solving problems in dryland such as food scarcity or desertification.

## 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

ARAKI Hideki (Y)	Agronomy	Function of plant production under environmental stresses and its agronomical application
KOBAYASHI Nobuo (S)	Horticultural Breeding	Evaluation of plant genetic resources and applications for breeding
TAKAHASHI Tadashi (Y)	Crop Science	Establishment of low-cost and low-input crop cultivation systems
TAKEMURA Yoshihiro (T)	Horticultural Science	Studies on the crop ecophysiology in horticultural crops
TANAKA Hiroyuki (T)	Plant Genetics	Genetic and breeding studies on improving quality of wheat flour
TSURUNAGA Yoko (S)	Food Processing	Studies on manufacturing method and functionality in food processing
NAKATSUKA Akira (S)	Molecular Breeding of Horticultural Crop	Molecular breeding for agriculturally useful traits in horticulture crops
NONAMI Kazuyoshi (T)	Agricultural Production Engineering	Mechanization of agricultural work
MATSUMOTO Shingo (S)	Biochemistry of Soil and Plant Nutrition	Studies on the mechanism of plant nutrient acquisition in relation to soil fertility
MATSUMOTO Toshikazu (S)	Fruit Science	Studies on fruit growing and processed food
YANO Akira (S)	Bioenvironmental Electrical Engineering	Application of electrical engineering to bioenvironmental technologies
(b) Division of Manageri	al Economics	
TSUTSUI Kazunobu (T)	Rural Geography	Studies on regional economy and community development in Rural areas
MATSUDA Toshinobu (T)	Economics of Consumer Behavior	Empirical analysis of consumer behavior, especially food demand

#### (a) Division of Agricultural Production Science

TSUTSUI Kazunobu (T)	Rural Geography	Studies on regional economy and community development in Rural areas
MATSUDA Toshinobu (T)	Economics of Consumer Behavior	Empirical analysis of consumer behavior, especially food demand
MATSUMURA Ichizen (T)	Farm Management	Studies on the relationship between farm management and rural society
WAN Li (T)	Marketing Information Analytics	Agricultural products distribution channels and econometric analysis of market information
YASUNAGA Nobuyoshi(S)	Regional Economics	Sustainability of farmlands, communities, and economies in less favored areas
YASUNOBU Kumi (T)	International Agricultural Development Studies	Agricultural and rural development in Southeast Asia

ISHII Masayuki (S)	Regional Infrastructure Engineering	Development of designing method for renovation of irrigation facilities
IWASAKI Nobusuke (T)	Geographic Information Science	Application of Free and Open Source Software for Geospatial (FOSS4G) and Open Data for analyzing historical landscape changes in Satochi-Satoyama (traditional rural areas)
KUBO Masako(S)	Plant Ecology	Plant ecology, vegetation and conservation
NAGAMATSU Dai (T)	Plant Ecology	Population dynamics of forest and grassland, vegetation science and biodiversity conservation.
FUJIMOTO Takaaki (T)	Wood Physics	Analysis of wood property variation, and development of measurement techniques
YOSHIMURA Tetsuhiko (S)	Forest Utilization	Social and technological issues in forest utilization and wood harvesting

#### (c) Division of Forest and Watershed Environmental Sciences

#### (d) Division of Environmental Bioscience

ARANISHI Futoshi(S)	Conservation ecology	Conservation genetics and evolutionary ecology of hydrobiosphere	
UENO Makoto (S)	Plant Pathology	Studies on the expression of resistance in plant-microbe interaction	
KAMINAKA Hironori (T)	Plant-Microbe Interactions	Molecular mechanisms of immune response and mycorrhizal symbiosis in plants	
KARASAWA Shigenori (T)	Biodiversity	Genetic diversity and species diversity of invertebrates	
KIHARA Junichi (S)	Plant Pathology	Photoresponces of the phytopathogenic fungi	
NAKA Hideshi (T)	Applied Entomology	Revealing the chemical ecology of insects, mainly moths, and their application to agricultural pest control	
TAKEMATSU Yoko (Y)	Ecological Entomology	Biodiversity and ecology of termites	
HOSOI Eiji (Y)	Applied Animal Ecology	Ecological study of pest and/or endangered animal species for conservation and management	
YAMAGUCHI Keiko (S)	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

AIMI Tadanori (T)	Biochemical Technology of Microorganisms	Biochemistry, molecular biology and biotechnology of microbial production
SHIMOMURA Norihiro (T)	Mushroom Breeding and Cultivation	Studies on breeding and cultivation of mushroom resources
SOTOME Kozue (T)	Mushroom Phylogeny and Taxonomy	Phylogenetic taxonomy of mushrooms, and ecological researches of wood-decaying basidiomycetes.

## (b) Division of Bioscience and Biotechnology

ARIMA Jiro (T)	Bio-Functional Chemistry	Functional analysis of enzymes and microorganisms, and their application to industry
ISHIKAWA Takahiro (S)	Plant Molecular Physiology	Biosynthesis pathway of antioxidants and metabolism of reactive oxygen species in photosynthetic organisms

IWASAKI Takashi (T)	Bioregulatory Chemistry	Development and screening of bioactive substances regulating biological function
SHIOTSUKI Takahiro (S)	Insect Chemical Biology and Agrobio-Regulators	Chemical biology and molecular mechanisms in regulation of insect development and their applications
MATSUO Yasuhiro (S)	Microbial Genetics	Cell signaling and cell cycle control in fission yeast
MARUTA Takanori (S)	Plant Physiology	Redox metabolism network and stress response in plants

## (c) Division of Applied Bioresource Chemistry

AZAKAMI Hiroyuki (Y)	Molecular Microbiology	Molecular mechanisms of bacterial colonization to host surface
ISHIHARA Atsushi (T)	Natural Product Chemistry	Function, Biological activity, and Biosynthesis of metabolites produced by plants and microorganisms
ICHIYANAGI Tsuyoshi (T)	Organic Chemistry	The molecular design and functional analysis of bioactive compounds
KAWANO Tsuyoshi (T)	Bioorganic Chemistry	Regulation of diapause, metabolism and longevity corresponding to the growth environment
JISAKA Mitsuo (S)	Chemistry in Food Function	Modification of functional components in foods using enzymes and microorganisms
SHIMIZU Hidehisa (S)	Nutritional Pathophysiology	Study on the relationship between food-derived bacterial metabolites or cyanobacteria-derived toxins, and pathogenesis of diseases
TAMURA Jun-ichi (T)	Organic Chemistry	Chemical synthesis of bioactive glycans and isolation/characterization of natural glycans
BITO Tomohiro (T)	Food Function	Research on the biological functions of vitamins and other food components contained in foods
MUROTA Kaeko (S)	Bioavailability and Food Function	Bioavailability and physiological function of lipophilic food factors
YABUTA Yukinori (T)	Nutritional Science	Studies on the function of antioxidant vitamins and oxidative stress response
YAMAMOTO Tatsuyuki (S)	Bio-molecular Spectroscopy	Spectroscopic studies on life science and medical applications

## **3**. THE COURSE OF GLOBAL DRYLAND SCIENCE

## (a) Division of Global Dryland Science

AKASHI Kinya (T)	Molecular and Cellular Biology	Molecular responses of drought-tolerant plants and their application to molecular breeding
AYEHU Nigussie Haregeweyn (T)	Land Management	Watershed processes monitoring, modeling and management
AN Ping (T)	Plant Eco-Physiology	Physiological responses and relative mechanisms of plants and plant ecophysiology in dry lands
ISHII Takayoshi(T)	Plant Cytogenetics	Improving crops through cellular engineering methods
ICHINOHE Toshiyoshi (S)	Livestock Feeding	Evaluation of ruminants production system
INOSAKO Koji (T)	Soil and Water Management	Conservation, restoration and sustainable use of soil and water environment
IBARAKI Yasuomi (Y)	Bio-environmental Control Engineering	Environmental control in plant production

ENDO Tsuneyoshi (T)	Soil Chemistry	Influence of soil properties and irrigation water quality on soil salinization/sodication in irrigated farmlands of arid regions
OGATA Hidehiko (T)	Irrigation and Drainage Facilities Engineering	Evaluation of construction materials and structural performance of irrigation and drainage structures
KISHII Masahiro (T)*	Plant Genetic Resource Development	Research and utilization of plant genetic resources with high environmental tolerance for breeding
KINUGASA Toshihiko (T)	Dryland Restoration and Conservation Ecology	Ecology and ecophysiology of plants in arid and semi-arid grasslands
KIMURA Reiji (T)	Boundary Layer Meteorology	Heat and water balance in arid lands
KUROSAKI Yasunori (T)	Dryland Climatology	Climate change and variability, wind erosion, dust emission in drylands, and impacts of aeolian dust on climate
SHIMIZU Katsuyuki (T)	Water Use and Management	Monitoring and assessment of irrigation water management
SUZUKI Kenji (Y)	Meteorology	Observational study on precipitation mechanisms and development of instruments for hydrometeor measurements
TAGAWA Kotaro (T)	Renewable Energy Engineering	Technological development and optimal design of renewable energy systems and components
TANIGUCHI Takeshi (T)	Microbial Ecology	Soil and root microbial ecology and the application
TSUBO Mitsuru (T)	Climate Risk Management	Dryland agrometeorology and climate-smart agriculture
NISHIHARA Eiji (T)	Crop Production in Drylands	Construction of crop production system in areas including drylands
HYODO Masahiro (T)	Facilities and Environmental Materials	Rehabilitation management of agricultural irrigation facilities and development of environmental materials
FUJIMAKI Haruyuki (T)	Soil Conservation	Development of methods for preventing salt accumulation and erosion and remediation of degraded soils
YAMADA Satoshi (T)	Plant Nutrition	Mechanisms of Response to Stresses of Plants in Arid Regions
YAMAMOTO Sadahiro (T)	Environmental Soil Science	Conservation of soil environment and sustainable use of farmland in arid regions

Abbreviations; T: Tottori University, S: Shimane University, Y: Yamaguchi University.

\* ; Cooperation with Japan International Research Center for Agricultural Sciences