



**SECRETARÍA DE AGRICULTURA Y DESARROLLO RURAL  
AGENCIA MEXICANA DE COOPERACIÓN INTERNACIONAL PARA EL DESARROLLO  
INSTITUTO NACIONAL DE INVESTIGACIONES FORESTALES, AGRÍCOLAS Y PECUARIAS**

**TECHNICAL SHEET**

Technical summary of the Cooperation Program for the Training of Human Resources in the Global Strategic Partnership México–Japón, Nichiboku

**MÉXICO – JAPÓN**

**WORKSHOPS AND TEACHING**

**“Agroecological and phytosanitary management of rice and sugarcane”**

**IMPLEMENTING INSTITUTION**

**Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP)**

**TRAINING MODALITY AND LOCATION**

**IN PERSON – INIFAP, EXPERIMENTAL ZACATEPEC, MORELOS**

**DATE: September 22 to September 28, 2026**

# **COURSE**

## **Agroecological and phytosanitary management of rice and sugarcane**



**INIFAP CIRPAS – Zacatepec Experimental Field**

**Zacatepec, Morelos**

**September 22 to September 28, 2026**



## I. Background

### Title of course

Agroecological and phytosanitary management of sugar cane and rice.

### Objective

Develop in training participants basic knowledge and skills for the identification, diagnosis and agroecological management of pests and diseases of rice and sugar cane in the tropics and subtropics.

### Goals

At the end of the course, participants will have acquired basic knowledge and skills to carry out sampling, identification, diagnosis and management of pests and diseases of economic importance in rice and sugar cane grown in the tropics and subtropics.

### Expected results

At the end of the training and technical assistance, it is expected that participants will acquire a complete vision of agroecology and its importance in the phytosanitary management of crops characteristic of the tropics and subtropics such as rice and sugar cane.

Likewise, the technical and cultural exchange between the participants and collaborators of the program will facilitate the understanding of the different agricultural production systems between Japan and Mexico.

### For whom it is?

Undergraduate and postgraduate students in careers related to agriculture and natural resource management.

## II. Training Course Description

The course includes classroom activities on the basic knowledge of agroecological phytosanitary management of economically important crops such as rice and sugar cane. The main topics will be genetic improvement with emphasis on disease resistance, management of unwanted plants, identification of fungi, use of beneficial microorganisms and agroecological management of the main pests and diseases of rice and sugar cane in the tropics and subtropics.

Also, practical activities are planned in the laboratory and field, as well as a technical visit to a rice mill for the recognition of agricultural activities in the region.

## III. General data

### Period

September 22 to September 28, 2026, 2026

### Location

INIFAP-Campo Experimental Zacatepec

Km. 0.5 Carretera Zacatepec, Galeana - Cuautla S/N, Centro, 62780 Zacatepec, Mor.

### Language

English

### Modality

In person

### Capacity (Maximum number of participants)

10 participants

## IV. Eligibility

### 1. Expectations towards participants

Interested students are expected to have the following skills and abilities:

- Previous knowledge: in agriculture and the management of natural resources.
- Commitment to learning shows a high level of commitment to the course, attending classes regularly and actively participating in learning activities.
- Enthusiasm and collaboration: Students must be enthusiastic about hands-on learning in the field and be able to collaborate with peers and instructors proactively.
- Problem-solving skills: being able to apply techniques to address technical field problems and research development on related topics.
- Presentation of results: Students are expected to be able to apply the knowledge acquired in any technical and social field.

### 2. Requirements for candidates

Interested parties must meet the following requirements.

1. Undergraduate and/or postgraduate students in careers related to agriculture and natural resource management.
2. Age: between 18 and 50 years old
3. Health: The candidate must be in good health, both physically and mentally, to participate in this program.
4. Language: English
5. Participants must bring laptops and USB memory
6. Computer Skill: You will need to be proficient in MS Word, Excel, Power Point, etc.
7. Gender consideration: INIFAP promotes gender equality. The application of women to training is encouraged.

### 3. Conditions for assistance

Participants must:

1. Have the acceptance notice.
2. Strictly observe the course calendar.
3. Training will take place only in the state of Morelos.

4. Do not bring or invite any additional members to the registered one.
5. Respect and follow the instructions and comply with the stipulated conditions.

## **IV. Information about the training center**

The Experimental Station Zacatepec is 85 years old, during which time research programs have been developed in sugar cane, rice, ornamentals, corn, sorghum and vegetables, as well as the livestock area in major species, minor species and beekeeping, in addition to transversal topics such as phytosanitary and plant nutrition.

The facilities have a field surface with availability of irrigation to carry out research, validation and technology transfer work. In addition to greenhouses, an auditorium and laboratories for plant health, in vitro cultivation and beneficial microorganisms, as well as the national germplasm bank for rice and small grain cereals.

### **Other important information**

- 1) Bring appropriate clothing and footwear for going out into the field, preferably with UV sun protection.
- 2) Given that the climate in the state of Morelos its raining and can reach 38°C in the month of September, it is recommended to consider personal supplements for hydration.
- 3) It is advisable to indicate allergies and bring the necessary medications with you. Also, bring a file with health instructions in English.
- 4) Review the relevance of medical insurance and/or financial resources to cover.



**Agricultura**  
Secretaría de Agricultura y Desarrollo Rural



**SECRETARÍA DE AGRICULTURA Y DESARROLLO RURAL  
AGENCIA MEXICANA DE COOPERACIÓN INTERNACIONAL PARA EL DESARROLLO  
INSTITUTO NACIONAL DE INVESTIGACIONES FORESTALES, AGRÍCOLAS Y PECUARIAS**

**WORK PROGRAM**

Technical summary of the Cooperation Program for the Training of Human Resources in the Global Strategic Partnership México–Japón, Nichiboku

**MEXICO – JAPON**

**WORKSHOPS AND TEACHING**

**“Agroecological and phytosanitary management of rice and sugarcane”**

**MEXICAN INSTITUTION:**

**Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP)**

**WORKSHOP MODE AND MAIN LOCATION**

**IN- PERSON**

**INIFAP, CAMPO EXPERIMENTAL ZACATEPEC, MORELOS**

**DATE: September 22 to September 28, 2026**

## **WORK PROGRAM**

### **“Agroecological and phytosanitary management of rice and sugarcane”**

#### **INTRODUCTION**

Sugarcane cultivation in Mexico occupies more than 850,000 hectares and is socially important, benefiting over 150,000 producers. Rice cultivation, meanwhile, is part of the basic food basket for the Mexican population and has been promoted through national public policies.

A limiting factor in agricultural production is the presence of phytosanitary problems, mainly caused by insects, fungi, and bacteria. Agroecological management offers a series of strategies that allow for the sustainable management of crops, benefiting soil, water, and environmental conservation, as well as rural populations and consumers, by obtaining products with fewer toxic inputs.

#### **OBJETIVE**

Develop in training participants basic knowledge and skills for the identification, diagnosis and agroecological management of pests and diseases of rice and sugar cane and rice in the tropics and subtropics.

#### **EXPECTATIVE**

At the end of the training and technical assistance, it is expected that participants will acquire a complete vision of agroecology and its importance in the phytosanitary management of crops characteristic of the tropics and subtropics such as rice and sugar cane.

Likewise, the technical and cultural exchange between the participants and collaborators of the program will facilitate the understanding of the different agricultural production systems between Japan and Mexico.

## PARTICIPATING RESEARCHERS

NAME/email	SPECIALTY	ASSIGNMENT	COUNTRY
<p><b>Dra. Marianguadalupe Hernández Arenas</b> hernandez.marian@inifap.gob.mx</p>	<p>PhD in Phytopathology</p>	<p>National Institute of Forestry, Agricultural and Livestock Research (INIFAP) South Pacific Regional Research Center Zacatepec Experimental Field</p>	México
<p><b>Dr. Roberto de la Cruz Díaz Juárez</b> diaz.roberto@inifap.gob.mx</p>	<p>PhD in Plant Genetics</p>	<p>National Institute of Forestry, Agricultural and Livestock Research (INIFAP) South Pacific Regional Research Center Zacatepec Experimental Field</p>	México
<p><b>Dra. Petra Andrade Hoyos</b> andrade.petra@inifap.gob.mx</p>	<p>PhD in Phytopathology</p>	<p>National Institute of Forestry, Agricultural and Livestock Research (INIFAP) South Pacific Regional Research Center Zacatepec Experimental Field</p>	México

## WORK PROGRAM

### SESSION 1: September 22, 2026

SCHEDULE TOPIC	OVERVIEW	ACTIVITY	LOCATION
9:00 to 15:00 h	Participants will learn about the main characteristics of agricultural production of rice and sugarcane crops, as well as the main factors that affect production.	Welcome and introduction of participants and instructors.  Introduction to the production system and economic importance of rice and sugarcane in Mexico.	Experimental Field Zacatepec, Morelos

### SESSION 2: September 23, 2026

SCHEDULE TOPIC	OVERVIEW	ACTIVITY	LOCATION
9:00 to 15:00 h	Participants will be able to acquire practical skills in the recognition of pests and diseases in agricultural fields in the state of Morelos.	Field trip and visit to rice and sugarcane cultivation areas at different phenological stages of the crop. Practical exercise in quantifying the incidence and severity of diseases and insect pest populations.	Cultivation areas of Jojutla and Zacatepec, Morelos

### SESSION 3: September 24, 2026

SCHEDULE TOPIC	OVERVIEW	ACTIVITY	LOCATION
9:00 to 15:00 h	Participants will conduct laboratory practice in the isolation, purification and identification of beneficial endophytic microorganisms.	Roots, stems, and leaves of rice and sugarcane will be collected. These will be processed in the laboratory to promote the growth of beneficial microorganisms.	Laboratory of beneficial microorganisms Experimental Field Zacatepec, Morelos

#### SESSION 4: September 25, 2026

SCHEDULE TOPIC	OVERVIEW	ACTIVITY	LOCATION
9:00 to 15:00 h	Participants will learn about the genetic improvement process of rice and sugarcane with an emphasis on selecting for disease tolerance and adaptation to different agroecological environments.	Theoretical presentation on the genetic improvement of rice and sugarcane. Field practice in plots of rice and sugarcane varieties.	Experimental Field Zacatepec, Morelos

#### SESSION 5: September 26, 2026

SCHEDULE TOPIC	OVERVIEW	ACTIVITY	LOCATION
9:00 to 15:00 h	Participants will be able to conduct confrontation tests to evaluate the biological effectiveness of beneficial microorganisms.	The purified beneficial microorganisms will be tested against phytopathogens to determine their control potential. Additionally, a demonstration will be conducted to learn about the small-scale production process of beneficial microorganisms.	Laboratory of beneficial microorganisms Experimental Field Zacatepec, Morelos

#### SESSION 6: September 28, 2026

SCHEDULE TOPIC	OVERVIEW	ACTIVITY	LOCATION
9:00 to 15:00 h	Closing ceremony and awarding of training certificates	Closing remarks by INIFAP authorities. Closing remarks by a representative of the Japanese visitors. Awarding of training certificates. Group photograph of all participants.	Experimental Field Zacatepec, Morelos