

Agrobiotechnology in the Age of Climate Change

1. PURPOSE OF THE COURSE

The purpose of this course is to develop biotechnology experts, who create the applied techniques for food, agriculture and stock farming, fisheries, forest, and medical care and eventually the course would contribute to improvement of agriculture productivity through a research project organized by these experts. This technology is especially useful in the age of climate change.

2. TRAINING PROGRAM

(1) General Orientation and Japanese Language Program

The General Orientation and Japanese Program are organized at the JICA Chubu International Center prior to the technical training, to assist participants in understanding Japan and adjusting themselves to the life in Japan, and thus to facilitate an effective training.

(2) Technical Training

- 1) Role of biotechnology in agriculture
 - a. Outline of the difference between conventional breeding and genetic engineering
 - b. Overview of the biotechnology industry

- 2) Biotechnology in plant breeding
 - a. General steps in recombinant DNA technology
 - b. Landmark discoveries in the application of molecular biology
 - c. Introduction to genetic mapping
 - d. Gene transfer
 - e. Plant genomics

- 3) Issues in the application of biotechnology in plant breeding
 - a. Patents in plant breeding and biotechnology
 - b. Protecting plant varieties

3. NUMBER OF PARTICIPANTS TO BE ENROLLED

Up to two (2) persons

4. TRAINING DURATION	From March 11, 2013 to October 9, 2013
(1) Arrival in Japan	March 11, 2013
(2) Briefing	March 12, 2013
(3) General Orientation	From March 13, 2013 to March 15, 2013
(4) Japanese Language Program	From March 18, 2013 to May 2, 2012
(5) Technical Training	From May 8, 2013 to October 8, 2013
(6) Departure from Japan	October 9, 2013

5. TRAINING INSTITUTION

(1) General Orientation / Japanese Language Program

Chubu International Center, JICA

60-7, Hiraike-cho, 4-chome, Nakamura-ku, Nagoya City, Aichi Prefecture 453-0872

Tel: +81(*) -52 (**)-533-0220 Fax: +81(*)-52(**)-564-3751

Email: jicacbic@jica.go.jp

URL: <http://www.jica.go.jp/english/contact/domestic/>

(2) Technical Training

Kansai International Center, JICA

1-5-2 Wakino-hama Kaigandori, Chuo-ku, Kobe City, Hyogo Prefecture 651-0073

Tel: +81(*) -78 (**)-261-0341 Fax: +81(*)-78(**)-261-0465

Email: jicaksic@jica.go.jp

URL: <http://www.jica.go.jp/english/contact/domestic/>

(*) country code of Japan (**) area code

6. CONDITION OF APPLICATION

- (1) Applicants must be experts working in one of the following; Governmental Organization, University, Research Institute or Business Enterprise which take active roles in the area of Agro Biotechnology.
- (2) Applicants must be university graduate or equivalent.
- (3) Applicants must have an adequate ability in English conversation to be able to perform satisfactorily in the course.
- (4) Applicants must be of sound mind and body. (pregnant women cannot be accepted.)

(5) Applicants must not be presently serving in the military.

(6) Applicants must attach a research report (summary) together with the nomination form.

Note: Applicants who do not observe above conditions may be subject to cancel.