

QUESTION SHEET FOR EX-PARTICIPANTS

(Please write down in block letter)

1. Name in Full Endang Hadipoentyanti Age 42

M 19 M 19

2. Training Japan From Feb, 1995 to June, 1995 (2) Years ago

I. Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
Researcher at Germplasm Resources and Plant Breeding Division	1983 - present time	Coordinator of research activities in Spice and Medicinal Crops (in Vanilla breeding) (in Clove breeding)

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
Researcher at Germplasm Resources and Plant Breeding Division	1995 - present time • • • • now	Coordinator of research activities in vanilla breeding

3. Your present job (現在の仕事内容)

Your responsibility : Research on genetic improvements of spice and medicinal crops by conventional method e.g. selection, mutation, breeding and unconventional methods e.g. isoenzyme electrophoresis, protein electrophoresis, etc.

Study subjects :

- Selection in Vanilla germplasm resources for high production and diseases resistance.
- Mutation by irradiation and chemical mutagenic, for improvement genetic variation in Vanilla.
- Hibridization between cultivated and wild vanilla.
- Isozyme variation in cultivated and wild vanilla.

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

Research on transgenic plant is started in order to improved resistance to disease characters, especially on food crops. (Blast and Bluster Blight on rice, resistance of iron)

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

Creating new variety of many crops (food, vegetable, ornamental, medicinal and spice) through biotechnology / transgenic.

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

Production of transgenic plant have not started yet, so the regulation is still proposed.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力の入れている分子遺伝学の分野)

Research on genetic aspects are mostly emphasized on identifying of disease resistance, environmental stress (drought and flood)

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job ?

(現在の仕事内容との関わり)

Yes.

In what way?

Electrophoresis technique of nucleic acids and protein and DNA amplification by the PCR method.

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?

please check below (X) (知識の普及方法)

(X)seminar ()report (X)lecture

(X)others (please give example)

Practice.

3. Is your study applied in the commercial field? (商業レベルへの応用)

Not yet.

How?

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)

(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture" and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

Of course, because after attended training course we could transfer the experience and knowledge to my colleagues through seminar, lecture and practice.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

Vertical and horizontal electrophoresis

One set of tissue culture equipment

6. what kind of problems do you have when you proceed your study?

(研修を進める上での阻害要因)

So many equipments in my laboratory is old and not available to support research in gene manipulation.

7. What do you expect in technical information exchange with Osaka Prefecture University?

(帰国後の情報交流で期待するもの)

Collaboration / joint research, Exchange publication in research

Human Resources Development

- Scholarship of Master and Ph.D. Program

- Training course (short-term / Long-term)

8. Other comments.

I hope the government of Japan and means JICA could help, support equipment and facilities of gene manipulation laboratory. If possible would you please (JICA/Osaka Prefecture University) to sent your senior researcher / expert, who has specialized in gene manipulation to go to our institute for joint research with using tropical trees, especially in spices and medicinal crops.

Thank you for cooperation.

QUESTION SHEET FOR EX-PARTICIPANTS

(Please write down in block letter)

1. Name in Full Flor de Maria Rodriguez Garcia Age 34

M 19 M 19

2. Training Japan From Feb , 1995 to June , 1995 (2) Years ago

I. Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
Teacher	Academy of Mathematics "Wisconsin" 1985-1988	To instruct high school students applying to universities.
Research Assistant	International Potato Center Genetic Researches 1989-1995	Characterization of potato and sweet potato germ plasm by Isozyma analysis

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
Research Assistant	International Potato Center Genetic Resources 1995 - 1997 • • • • now	Analysis of potato and sweet potato germplasm using DNA finger printing.

3. Your present job (現在の仕事内容)

Your responsibility :

- Characterization of potato and sweet potato germplasm using DNA finger printing, AFIP and microsattelitas.

- Identification of duplicates in CIP's sweet potato germplasm bank.

- Assessment of genetic diversity among South American sweet potato germplasm.

Study subjects :

- DNA finger printing, gene cloning, gene manipulation, plant transformation and genetic analysis of transgenic plants.

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

It is limited to few institutions. CIP(International Potato Center member of CGIAR) is applying biotechnology (gene mapping and genetic engineering) in routinely research for conferring resistance to pests and diseases in potato and sweet potato and is starting to apply these techniques in other andean root and tuber crops.

National Agrarian University "La Molina" is working on transformation of Uncaria tomentosa(specie with high pharmacological value). National University "San Marcos" in collaboration with advanced research institutions is working in molecular characterization of several Andean root and tuber crops. Finally, Agricultural Ministry is implementing a biotechnology laboratory mainly for genetic engineering at Experimental Station "Kiyotada Miyagawa"(Huaral). This approach will intensify the application of this techniques in several crops.

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

One of the highest priorities world-wide is to reduce yield losses due to plant pest and diseases, for that purpose identification of resistance genes is in process to be able to confer such resistance to agroeconomic important species. This is more important in the case of potato because is a staple food in many developing countries.

Crop damage by the fungus Phytophthora infestans is the main problem in potato fields. To overcome this problem at CIP we are identifying molecular markers that correlates with resistance genes. This work is being carried out in diploid hybrid population of S. phureja to develop genetic maps and perform screening for resistance at early stages. Eventually identified resistance genes would be introduced to important commercial varieties by genetic transformation techniques.

One successful approach is the resistance developed against the potato tuber moth by introduction of Bt genes in important potato cultivars. Transformation work is also focused to develop resistance against bacterial diseases (i.e. Erwinja carotovora) through the use of lytic peptides genes and viral diseases using capsid proteins genes, and also the introduction of foreign genes to increase protein content and quality.

In the case of sweet potato we are introducing proteinase inhibitor genes to confer resistance to weevil. This is pest causes the major losses of this crop around the world. Up to date evaluations of this material have shown promising results.

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

There are private and governmental institutions that are applying biotechnology tools to make rationale use of plant genetic resources.

One example is the application of the genetic transformation techniques to obtain secondary metabolites for pharmacological use.

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

In Peru biosafety regulations for genetically modified organisms are being developed by government. Being CIP one of the main research centres in potato and being this crop original from the Andes we have taken special care for the manage of transgenic plants and let us to the formulation of severe rules for their field release and evaluation. These biosafety rules were approve by Peruvian government.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力の入れている分子遺伝学の分野)

In my country:

Gene mapping of Phytophthora infestans resistance genes, and virus X and Y resistance genes.

Gene cloning of genes for genetic transformation purposes.

Genetic engineering techniques for parasitaries diseases (i.e. Leishmania, Trypanosoma and Fasciola).

At CIP(by myself):

Molecular characterization of potato and sweet potato.

Collaboration in genetic engineering projects on potato and sweetpotato.

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job ?

(現在の仕事内容との関わり)

Techniques (routinely used):

- DNA amplification by PCR method
- DNA sequence analyses
- Transformation method

In what way?

Germplasm characterization and improvement require the use of DNA-based techniques such

as DNA finger printing, gene cloning, plant transformation and analysis of transgenic plants.
All of this techniques are routinely used in the biotechnology unit of my institution.

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?

please check below (X) (知識の普及方法)

() seminar (X) report () lecture

() others (please give example)

3. Is your study applied in the commercial field? (商業レベルへの応用)

No.

How?

Since, CIP is a scientific, autonomous, and no-profit Institution dedicated to develop and disseminate knowledge for greater use of the potato and other tuber and root crops as basic foods in the developing world: my work is not for commercial matters.

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)

(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture" and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

Yes. The knowledge acquired in the course has been useful to collaborate in the advising of different students thesis work focused on genetic engineering CIP projects.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

- Power supplies
- electrophoresis equipment
- video analyser
- PCR machine
- centrifuges
- eppendorf centrifuges
- water bath
- freezers
- refrigerators
- freeze dryer
- spectrophotometer
- pHmeter
- destilator
- desionizador

- Milli-Q water purification system
- electroporation equipment
- bacteriological laminar flow chamber
- precision balance
- analytical balance
- incubators
- extractor chamber

6. what kind of problems do you have when you proceed your study?

(研修を進める上での阻害要因)

Even, no really big problems were in the course. I suggest to optimise the techniques demonstration and to emphasis in the results discussion.

7. What do you expect in technical information exchange with Osaka Prefecture University?

(帰国後の情報交流で期待するもの)

- To receive update information about new developed protocols.
- To receive suggestions to analyze statistic data of finger printing studies.

8. Other comments.

Since, the biotechnology techniques are continuously changing I suggest to analyze the possibility of organising other course with higher level.

Thank you for cooperation.

QUESTION SHEET FOR EX-PARTICIPANTS

(Please write down in block letter)

1. Name in Full Helen Corpuz Ramos Age 36

M 19 M 19

2. Training Japan From Feb , 1995 to June , 1995 (2) Years ago

I . Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
Instructor with concurrent work as CAS research coordinator	1990-1993	Conducts research in basic science Coordinates with the research dept of the university -as representative of the college of arts and sciences.

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
Assistant Professor	July 1994 to Present now	Teaches subjects ie. Genetic Biology cell and Molecular Biology. Ecology, Plant Physiology, Genetics Conducts research in Collaborative with the research dept. of the Isabela state university.

3. Your present job (現在の仕事内容)

Your responsibility : At the moment, I have no special assignment (until y.y.1999 - 2000)

because I am pursuing my Ph.D. on full-time basis. On my recently to the Isabela State

University, I will resume with my teaching and research activities.

Study subjects :

Molecular Biology

Plant Physiology

Genetics

Gen. Biology

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

IRRI and PHILRICE are two institutes that are now actively involved in researches on gene manipulation.

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

Incorporation of resistance genes to rice is being done at IRRI using particle gun bombardment.

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

Gene manipulation would be the centerpiece of researches aimed to improve and increase productivity but the safety of using transgenics should be established first.

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

Transgenic plants are not yet allowed or released but the biosafety commission had been organized to formulate rules and regulations on how these transformed organisms will be dealt with.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力の入れている分子遺伝学の分野)

RFLP RAPD, identification of DNA markers. Construction of DNA libraries.

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job?

(現在の仕事内容との関わり)

Extraction of DNA and Plasmids, Transformation, Detection, Identification technique for transformed products. protein analyses DNA sequence Analysis.

In what way?

Having a hands on experience on these give me the confidence to discuss them during my lectures.

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?
please check below (X) (知識の普及方法)

seminar report lecture
others (please give example)

3. Is your study applied in the commercial field? (商業レベルへの応用)

Not yet.

How?

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)
(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture"
and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

Yes.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

The special equipments for gene manipulation are not available.

6. what kind of problems do you have when you proceed your study?
(研修を進める上での阻害要因)

7. What do you expect in technical information exchange with Osaka Prefecture University?
(帰国後の情報交流で期待するもの)

I hope that there would be continuous exchange of technical information, through trainings
and consultation.

It is expected that the experts in the university will openly share the recent advances in the
field of genetic engineering so that our knowledge and skills at the third world will be
upgraded.

8. Other comments.

Thank you for cooperation.

QUESTION SHEET FOR BX-PARTICIPANTS

(Please write down in block letter)

1. Name in Full Omur CAN Age 39

M 19 M 19

2. Training Japan From Feb, 1995 to June, 1995 (2) Years ago

I. Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
Plant Breeder	1982 - 1995	Second Crop Project Maize Improvement Program Food Legume Program

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
Head of Industrial Crops and Biotechnology Department	1995 now	Breeding activities on: 1. Industrial Crops 2. Non-conventional methods

3. Your present job (現在の仕事内容)

Your responsibility : I am presently head of Industrial Crops Dept. I am in charge of carrying on breeding activities to improve varieties with high yielding, quality and adaptation of those varieties where we are responsible for. The species we work on: Opium poppy (P. Somme:ferum) sunflower and safflower.

Study subjects : 1. Improving Opium Poppy varieties with high morphine content.

2. Testing high level Sunflower varieties.

3. Breeding safflower varieties with high oil content and different oil acid composition.

4. Performing biotechnology projects to aid breeding programs such as: a) Obtaining and testing doubled haploid wheat and barley lines via anther culture and bulbous technique
b) Identifying chickpea varieties and lines resistant to Assochyta blight via RAPD

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

Gene manipulations for agriculture have been mostly by 9 lab.s belonging 3 universities and Turkey's Scientific and Technique R.I. TUBITAK.

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

1. Resistance to bacterial diseases (Tobacco, potato and cotton)
2. High essential amino acid content on potato.
3. Transferring kanamycine resistant Genes (potato, and etc.)

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

Turkey has very distinct climatic conditions so a great deal of species is under cultivation, for detailed info. See "Priority of Plant Biotechnology in Turkey", July 1995, TTGV, ISBN 975-75878

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

There is no regulation for production of transgenic plants in Turkey yet.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力の入れている分子遺伝学の分野)

Most important and strategic crop is wheat in Turkey. For that reason, improving wheat varieties with resistance to biotic and abiotic stress through molecular genetics is the most important aspects.

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job?

(現在の仕事内容との関わり)

Extraction and isolation of genetic DNA +DNA amplification via PCR

In what way?

We try to identify resistant lines by screening DNA fragments amplified with PCR.

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?

please check below (X) (知識の普及方法)

- seminar report lecture
others (please give example)

3. Is your study applied in the commercial field? (商業レベルへの応用)

No.

How?

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)

(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture" and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

Yes.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

1. Adequate level of tissue culture equipment
2. Some basic gene manipulation equipment such as centrifuges, PCR and chemicals

6. what kind of problems do you have when you proceed your study?

(研修を進める上での阻害要因)

7. What do you expect in technical information exchange with Osaka Prefecture University?







(帰国後の情報交流で期待するもの)

8. Other comments.

Thank you for cooperation.

平成7年度 農業生産のための遺伝子操作技術コース 研修員名簿
 LIST OF PARTICIPANTS FOR GENE MANIPULATION FOR AGRICULTURE
 平成7年7月31日 - 平成7年12月1日
 July 31, 1995 - December 1, 1995

国際協力事業団
 大阪国際センター
 JAPAN INTERNATIONAL COOPERATION AGENCY
 OSAKA INTERNATIONAL CENTRE

NO.	國名 COUNTRY	氏名 NAME	生年月日 DATE OF BIRTH	現職及び勤務先 PRESENT POST & EMPLOYER	最終学歴 FINAL EDUCATION	自宅住所 HOME ADDRESS
1	 7767 Argentina	Ms. Liliann del Valle Di Feo 7777 (9505316)	Jun. 29, 1959	Researcher Technician National Institute for Agricultural Technology, Institute for Plant Pathology and Physiology (INTA-IPPIVE) 国家農牧技術院、植物病理学・生理学院 研究員	University of Córdoba Agricultural Engineering 国立コルドバ総合大学 (農業工学専攻)	Juramento 2524 B. Parque Chacabuco (5008), Córdoba Argentina
2	 7777 Chile	Mr. Ivan Ariel Matus Tejos 4777 (9505397)	Oct. 18, 1960	Researcher Genetic Resources Agricultural Research Institute (INIA) 遺伝資源機関 (INIA) 遺伝資源部 研究員	Colegio de Postgraduados Genetics (M.Sc.) モンテシオン・大学院 大学 (メキシコ) (遺伝学・修士)	Casilla 426 Chillán, Chile
3	 7777 Colombia	Ms. Luisa Marina Matheus Merino 7777 (9505220)	Jan. 27, 1966	Researcher Instituto de Biotecnología Universidad Nacional de Colombia 国立コロロンビア大学、 バイオテクノロジー研究所研究員	Universidad de Los Andes Biology ロス・アンデス大学 (生物学専攻)	Calle 22 C N° 43 A 55 (Zona 6), Santafé de Bogotá Colombia
4	 7777 Egypt	Mr. Ahmed Gaber Ahmed Mahmoud 7777 (9504956)	Apr. 16, 1972	Instructor Dept. of Genetics, Faculty of Agriculture, Cairo University カイロ大学農学部遺伝学科 実務助手	Faculty of Agriculture Cairo University Horticulture カイロ大学農学部 (園芸学専攻)	Dept. of Genetics Faculty of Agriculture Cairo University Giza, Egypt
5	 7777 India	Mr. Sena Munuswamy Balachandran 7777 (9505519)	Oct. 26, 1958	Scientist Directorate of Rice Research Indian Council of Agricultural Research インド農業研究審議会稲研究理事会 研究員	Annamalai University Botany (M. Sc.) アナンマイ大学 (植物学・修士)	Directorate of Rice Research Rajendranagar, HYDERABAD-500030 India
6	 7777 Indonesia	Mr. Made Iasma 7777 (9505295)	Dec. 23, 1961	Researcher, Plant Breeding Research Institute for Spice and Medicinal Crops (RISMC) 香料医用植物研究所 植物育種部研究員	Iowa State University Biotechnology (M. Sc.) アイオワ州立大学 (バイオテクノロジー・修士)	Balitro Jl. Tentara Pelajar 3 Bogor- 16111 Indonesia

NO.	国名 COUNTRY	氏名 NAME	生年月日 DATE OF BIRTH	現職及び勤務先 PRESENT POST & EMPLOYER	最終学歴 FINAL EDUCATION	自宅住所 HOME ADDRESS
7	イラン Iran	Mr. Aziz Fouman Ajirlou 7-77 (9505095)	Mar. 21, 1960	Plant Breeder & Geneticist Seed and Plant Improvement Institute 種苗改良研究所 植物育種技師	Tabriz University Plant Breeding タブリーズ大学 (植物育種専攻)	Seed & Plant Improvement Institute Mard abad Ave. Karaj Iran
8	ネパール Nepal	Mr. Mohan Prasad Sharma 7-77 (9505375)	Oct. 11, 1957	Lecturer (Assistant Professor) Tribhuvan University Institute of Agriculture & Animal Science (IAAS) トリブバン大学農芸・獣医学研究所 講師	Central Luzon State University (CLSU) Animal Breeding (M. Sc.) フィリピン中部ルソン州立大学 (動物繁殖学・博士)	Institute of Agriculture & Animal Science (IAAS) Rampur Nepal
9	パキスタン Pakistan	Dr. Muhammad Lalif 7777 (9505714)	Mar. 2, 1962	Scientific Officer Pakistan Agricultural Research Council パキスタン農業研究協議会 研究員	Nottingham University Botany (Ph. D.) Somatic Hybridization & Plant transformation ノッティンガム大学 (材料カクシ・博士)	Tissue Culture Lab. National Agri. Res. Centre Park Road, Islamabad Pakistan
10	フィリピン Philippines	Ms. Dorothy Navarro 7777 Cudiamat (9505381)	Nov. 23, 1964	Assistant Professor Rizal State College Head of Tissue Culture Research and Development Center リサール州立大学講師 組織培養研究開発センター長	Marikina Institute of Science and Technology Biology (M. Sc.) マリキナ科学技術大学 (生物学・修士)	Rizal State College Sampaloc, Tanay, 1980 Rizal Philippines
11	タイ Thailand	Mr. Somsak Apisitwanich 7777 (9505285)	Sep. 24, 1962	Lecturer Department of Genetics, Faculty of Science, Kasetsart University カセサート大学理学部遺伝学科 講師	Polish Academy of Sciences Plant Genetics (Ph. D.) ポーランド科学学院 (植物遺伝学・博士)	Dept. of Genetics Faculty of Science Kasetsart University Bangkok 10900 Thailand
12	トルコ Turkey	Ms. Serife Kocabas 7777 (9505678)	Jun. 11, 1965	Research Assistant Ankara University Faculty of Agriculture Dept. of Animal Husbandry アンカラ大学農学部畜産学科 研究助手	Middle East Technical University Biology (M. Sc.) ミドルイースト工科大学 (生物学・修士)	Haciyolu Sok. 14/5 Küçükcesat Ankara, Turkey

QUESTION SHEET FOR EX-PARTICIPANTS

H7

(Please write down in block letter)

1. Name in Full Ivan Ariel Matus Tejos Age 36

M 19 M 19

2. Training Japan From July, 1995 to Dec, 1995 (2) Years ago

I. Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
Plant Genetic Resources	04, 94 to now	Researcher and Curator of Active Germoplasm Bank

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
Plant Genetic Resources	04, 94 to now now	Researcher and Curator of Active Germoplasm Bank

3. Your present job (現在の仕事内容)

Your responsibility : Researcher and Curator of Active Germoplasm Bank

Study subjects : To put in order the information of the accessions which are in the bank.

Characterizing the germplasm using morphological descriptors and utilizing molecular techniques. To obtain germplasm in collection activities.

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

Is relative new in Chile. We don't have a good number of researcher and only few laboratories.

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

Genetic characterization using molecular markers.

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

Develop a National Biotechnology Program.

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

It is a early stage. There are a set of regulations for introduction of transgenic plant.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力の入れている分子遺伝学の分野)

By myself molecular characterization of native germoplasm.

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job?

(現在の仕事内容との関わり)

- Molecular techniques like RFLP's, RAPD

- Data analysis

In what way?

This techniques are very important in characterizing germoplasm.

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?

please check below (X) (知識の普及方法)

(X)seminar

()report

(X)lecture

()others (please give example)

3. Is your study applied in the commercial field? (商業レベルへの応用)

Yes.

How?

Plant breeding

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)

(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture" and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

If the participants have the similar technical level, not Ph.D. and I think is important to concentrate in a few topics.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

Laboratory equipment form biochemical and molecular markers and tissue culture work.

6. what kind of problems do you have when you proceed your study?

(研修を進める上での阻害要因)

Lack of some equipment

Analysis of data

7. What do you expect in technical information exchange with Osaka Prefecture University?

(帰国後の情報交流で期待するもの)

To carry out project in tissue culture, plant criopreservation, gene mapping.

8. Other comments.

I think could be organize courses with specific subjects such as: plant criopreservation, gene mapping, etc.

To participated in collaborative project between Osaka Prefecture University and INIA.

Would be important to know more about other department in Osaka Prefecture University, like Agronomy Department.

Thank you for cooperation.

QUESTION SHEET FOR EX-PARTICIPANTS

(Please write down in block letter)

1. Name in Full Luisa Marina Matheus Merino Age 31

M 19 M 19

2. Training Japan From July, 1995 to Dec, 1995 (2) Years ago

I . Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
Instituto De Biotechnologia Researcher	January 1992 to October 1996	Research in Basic Area of Molecular Biology

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
Instituto De Biotechnologia Researcher	November 1996 to June 1997 now	Research in Transgenic Plants

3. Your present job (現在の仕事内容)

Your responsibility : In my last job, finished on June 1997, I developed research in transgenic plants. I also advised the development of one undergraduated thesis and one graduated (M.Sc) thesis. Both of them in the area of transgenic plants.

Study subjects : Potato plants resistant to viral diseases.

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

In my country our research group, as well as others, are working on transgenic plants.

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

Development and pursue of different transgenic plants.

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

Crops with economical significance which are attacked by different plagues. Production of new resistant plants.

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

Transgenic plants are produced and grown isolated from others crops.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力の入れている分子遺伝学の分野)

Control of problems with economical significance.

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job?

(現在の仕事内容との関わり)

Transformation with *Agrobacterium tumefaciens*

In what way?

It helps me on the development of my work.

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?

please check below (X) (知識の普及方法)

(X)seminar ()report ()lecture

(X)others (please give example)

Advising the development of two thesis.

3. Is your study applied in the commercial field? (商業レベルへの応用)

Yes.

How?

We are working on commercial varieties.

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)

(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture" and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

Yes, the course will be very useful for a beginner researcher.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

Basic equipment for molecular biology.

6. what kind of problems do you have when you proceed your study?

(研修を進める上での阻害要因)

Economical restrictions for reagent acquisition.

7. What do you expect in technical information exchange with Osaka Prefecture University?

(帰国後の情報交流で期待するもの)

Besides the training it would be important to establish cooperation between the participants and the institutions involved.

8. Other comments.

The modifications made to the training program will improve the course.

Thank you for cooperation.

QUESTION SHEET FOR EX-PARTICIPANTS

(Please write down in block letter)

1. Name in Full Ahmed Gaber Ahmed Mahmoud Age 25

M 19 M 19

2. Training Japan From July, 1995 to Dec, 1995 (2) Years ago

I. Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
Demonstrator in Dept. of Genetics, Fac. of Agri. Cairo Uni.	1994 to date	Carried out some specific experiment on the field of molecular genetics.

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
Demonstrator in Dept. of Genetics, Fac. of Agri. Cairo Uni.	until now	- helping in training project. - teaching undergraduate student principal of genetics course.

3. Your present job (現在の仕事内容)

Your responsibility : Demonstrator

- Teaching under graduate student.

- Preparing my Ms.C thesis.

- Carried experiment in the field of Molecular Genetics.

Study subjects : Attempts to screen Vicia faba somaclonal variation.

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

good in some scientific institutes.

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

The present level is still in moderate situation.

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

The target is how to obtain transgenic plants tolerant to biotic and abiotic stresses.

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

According to International standard system.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力の入れている分子遺伝学の分野)

The most emphasized is carrying up specific advanced techniques.

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job?

(現在の仕事内容との関わり)

How to handle specific technique, such as southern hybridization, transformation with Agrobacterium, how to use biolystic gun and DNA sequencing.

In what way?

by handling.

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?

please check below (X) (知識の普及方法)

() seminar

() report

(X) lecture

() others (please give example)

3. Is your study applied in the commercial field? (商業レベルへの応用)

No.

How?

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)

(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture" and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

Yes.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

PCR-Electrophoresis equipments - balances

Laminar flow hot-Amino Acid analyser -DNA sequencer -HPLC

6. what kind of problems do you have when you proceed your study?

(研修を進める上での阻害要因)

Lack some material (chemical material)

7. What do you expect in technical information exchange with Osaka Prefecture University?

(帰国後の情報交流で期待するもの)

I expect some exchange with some journals or report from Osaka Prefecture University and visitors.

8. Other comments.

Thank you for cooperation.

QUESTION SHEET FOR EX-PARTICIPANTS

(Please write down in block letter)

1. Name in Full SENA MUNUSWAMY BALACHANDRAN Age 39

M 19 M 19

2. Training Japan From July , 1995 to Dec , 1995 (2) Years ago

I . Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
Scientist	18/4/1986 to 29/4/1995	Rice improvement through tissue and another culture techniques.

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
Scientist	1/12/95 to till date · · · · now	Genetic transformation of rice and tissue/another culture studies.

3. Your present job (現在の仕事内容)

Your responsibility : Currently I am working as a research scientist in the project on Improvement of rice using Biotechnology Tools'. My responsibility includes, production and testing of doubled haploid lines, optimization of tissue culture system for transformation and standardization of protocols for genetic transformation of rice.

Study subjects :

Another culture

Somatic cell culture

Genetic transformation using Agrobacterium

and Biolistic methods

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

In India, several national laboratories / institutes and universities are engaged in gene manipulation research. Crop based institutes are particularly involved in improving various crops using tissue/anther culture and other biotechnological tools like genetic transformation and gene tagging.

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

Genetic transformation for obtaining transgenic plants and marker aided selection strategies are being attempted in crops like rice, chick pea, cotton and several agri-horticultural crops.

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

Obtaining transgenic plants which are resistant to problem pests and diseases and also abiotic stresses like salinity one to be addressed in the future programme.

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

The Dept-of Biotechnology (DBT), Ministry of Science and Technology of the Govt. of India is the nodal agency which regulates production and evaluation of transgenic plants in the country.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力の入れている分子遺伝学の分野)

Genetic transformation and Molecular Marker aided selection.

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job?

(現在の仕事内容との関わり)

Laboratory course was most useful.

In what way?

That course gave me practical oriented experience in the field of gene manipulation.

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?

please check below (X) (知識の普及方法)

(X)seminar

(X)report

(X)lecture

()others (please give example)

3. Is your study applied in the commercial field? (商業レベルへの応用)

No, not yet.

How?

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)

(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture" and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

The course would be certainly beneficial to my colleagues, as it would further enhance the capability of the researcher.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

We have all the equipments required for any modern Biotechnology Lab, which include, Ultracentrifuge, spectrophotometer, PCR machine, Laminar air flow, Growth chambers, shakers, computers, ultra sonicator, Gel documentation system etc.

6. what kind of problems do you have when you proceed your study?

(研修を進める上での阻害要因)

The main problem is only the supply important enzymes and some biochemicals which take more time to import from other countries.

7. What do you expect in technical information exchange with Osaka Prefecture University?

(帰国後の情報交流で期待するもの)

Close collaboration with the University Professors in terms of collaborative projects and free exchange of technical details and gene constructs (at least public domain constructs) will be very much useful.

8. Other comments.

Practical course may be given more importance in the training curriculum. If possible a small project work on a specific problem may be concluded as per the trainee's interest. Besides, a topic which discusses the application of biotechnological tools in increasing crop productivity may be included.

Thank you for cooperation.

QUESTION SHEET FOR EX-PARTICIPANTS

(Please write down in block letter)

1. Name in Full SHARMA, MOHAN PRASAD Age 37

M 19 M 19

2. Training Japan From July, 1995 to Dec, 1995 (2) Years ago

I. Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
Teaching - Lecturer (Assistant Professor)	1982 to date	*Teaching Animal Sc. *Research *Lab and Farm improvement

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
Teaching - Lecturer (Assistant Professor)	1995 to date ... now	*Teaching Genetics *Research *Lab. establishment

3. Your present job (現在の仕事内容)

Your responsibility : Basically I am a teacher so I am teaching principle of Genetics and Animal breeding for Breeding Science and Animal Health students. Another subject Animal breeding and biotechnology for Brsc and AH students and animal breeding and techniques of , , for B. Sc. Agstudents. (研修後)

Study subjects : Biotechnology; Genetics; Animal breeding and other.

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

Just Lab. are establishing in RO NAST, NARC, TU and IAAS very few are working in the field.

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

Although country gives top priority and many scientist study in abroad and some research are conducting in the country.

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

Production and development of transgenic animal and plants (in the disease resistance and production traits)

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

No one can produce without permission of HMG Nepal although there is no any bills approved by parliament.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力の入れている分子遺伝学の分野)

- *Nucleic acid attraction and Isolation
- *Cloning
- *Selection screening and analysis of recombinants
- *Analysis of gene structure and function
- *Biology of genetic engineering
- *Transgenic animal and plants

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job?

(現在の仕事内容との関わり)

All the topics was very useful for me because I am a teacher; both theory and practical teaching most useful for me and my knowledge which I got from training was distributed to many students.

In what way?

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?
please check below (X) (知識の普及方法)

()seminar (X)report (X)lecture

()others (please give example)

Lab. Instruction

3. Is your study applied in the commercial field? (商業レベルへの応用)

Yes,

How?

By teaching and working in lab.

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)

(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture" and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

It is most useful and helpful. I think it is essential to train all my departmental faculties so that our country will produce such type of main power and our research enhanced.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

Water bath, centrifuge, Refrigiater, Electrophoretic sets, Environmental Controlled, Computers, Balance, Glassware, Chemicals and oven, incubator etc.

6. what kind of problems do you have when you proceed your study?

(研修を進める上での阻害要因)

*Computer

*Advanced Lab. techniques

*Technique 'know how' about advanced equipment

*Equipment problems

7. What do you expect in technical information exchange with Osaka Prefecture University?

(帰国後の情報交流で期待するもの)

I expect one advanced training (individual) in sequence determination of nucleic acid and proteins. Use of computer in biotechnology or genetics i.e. computer training in gene manipulation, Lab manuals about gene manipulation and Biotechnology.

8. Other comments.

The training was very useful for me for teaching my students in this IOInstitute, although that was not enough to teach all courses. Organization part of training was very good. Instructors and prof., teachers are excellent on teaching, practical know how, manner good behaviour, lovely but they have not all some are weak in English language but I never felt that problems to get information from them.

Finally If JICA can arranged one training not in group at least 3 months period on "Advanced training in gene manipulation and computer use in gene manipulation " for me. I can serve more effectively...

Thank you for cooperation.

QUESTION SHEET FOR EX-PARTICIPANTS

(Please write down in block letter)

1. Name in Full Serife KOCABAS Age 31
M 19 M 19
2. Training Japan From July, 1995 to Dec, 1995 (2) Years ago

I. Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
Research Assistant at the University	1988-1995	carry out research project assist practical student course

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
University	1995 - 1997 June	Research Assistant
Ministry of Agriculture Veterinary Research Inst.	1997 June now	Researcher at Tissue Culture and vaccine Production lab.

3. Your present job (現在の仕事内容)

Your responsibility : Now, I am a researcher at the tissue culture and vaccine production laboratory.

Study subjects : Production of vaccines against IBR, cattle plague (render pest) production of Monoclonal antibodies, diagnosis of diseases with PCR and recombinant vaccine production.

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

There are a lot of institutes and universities still making researches on gene manipulation for agriculture but most of the studies does not applied to commerce field yet. In general, we have no difficulties in laboratory part.

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

Our institute have no common policy about their research programme, because of this it is difficult to decide which researches carrying out with top priority. Different institutes have different projects according to their own fields. E.g. Recombinant Vaccine Production, embryo manipulation, transgenic plants etc.

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

All the ministries and Research Institutes have their own plans for future. Because of this our government is doing coordination and cooperation programme.

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

There is no formal regulation for the production of transgenic plants. Because in my country most of the studies at laboratory level and field experiment there is no production yet.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力を入れている分子遺伝学の分野)

Now, the most emphasized aspects in molecular genetics in my country is the production of transgenic plants and animals for the improvement of yields.

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job?

(現在の仕事内容との関わり)

As I mentioned above, now I am working for the production of monoclonal antibodies and production of recombinant vaccine production against common disease of big ruminants. Not directly related with the training that I have participated. But during general training programme I transferred my experience that I have received from JICA training to other researches.

In what way?

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?

please check below (X) (知識の普及方法)

(X)seminar ()report ()lecture

()others (please give example)

3. Is your study applied in the commercial field? (商業レベルへの応用)

No, not yet. Because I have studied genetic transformation in model systems. Before applying to commercial field we have to make some field study.

How?

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)

(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture" and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

Of course, I have transferred all the knowledge to my colleagues during seminars and lectures.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

Now, we have all basic instruments in our laboratories. But still we don't have thermocycler, ultracentrifuge etc. We have to go some other institutes to use these instruments.

6. what kind of problems do you have when you proceed your study?

(研修を進める上での阻害要因)

I have difficulties on financial support and sometimes to find qualified supervisor to ask questions related to my problems faced during experiments.

7. What do you expect in technical information exchange with Osaka Prefecture University?

(帰国後の情報交流で期待するもの)

I have still communication with some members of OPU, personally I try to get information about recent literature but of course not regularly. OPU may be informed us regularly about technical development. I can not say exchange because they are more qualified (both technical and theoretical) than us.

8. Other comments.

Thank you for cooperation.



平成8年度 農業生産のための遺伝子操作コース 研修員名簿
 LIST OF PARTICIPANTS FOR INTRODUCTORY GENE MANIPULATION FOR AGRICULTURE, FY1996

国際協力事業団
 大阪国際センター

平成8年7月29日 - 12月1日
 July 29 - Dec. 1, 1996

JAPAN INTERNATIONAL COOPERATION AGENCY
 OSAKA INTERNATIONAL CENTRE

No.	国名 COUNTRY	氏名 NAME	年齢 AGE (Y/M/D)	現職及び勤務先 PRESENT POSITION & EMPLOYER	最終学歴・専攻 EDUCATION & MAJOR	住所 ADDRESS	O:Office H:Home
1	中国 China	Mr. Li Bo 李博 (9605072)	27	Deputy Director of Biological Technology Div. Shijiazhuang Agriculture Modernization Institute Chinese Academy of Sciences 中国科学院石家庄农业近代化研究所生物工程学部 部长 代理	Hebei Agriculture University Genetics and Breeding 河北农业大学 (遗传学及管理学専攻)	O: No. 39 Huaizhong Middle Road, Shijiazhuang, Hebei 050021 H: - do -	
2	韓国 Korea	Mr. Park Chung Heon 朴正熙 (9605239)	33	Agricultural Researcher, Industrial Crop Division, National Crop Experiment Station 農作物改良研究所作物改良場特用作物科 研究士	Presently Attending, Chungbuk National University Graduate School, Horticulture 国立忠北大学 (園芸学・博士課程 在学中)	O: Industrial Crop Div., National Crop Experiment Station, 209, Seadun, Suwon, 441-100 H: 272, Hamyeol, Hamra, Iksan, Jeonbuk 572-840	
3	インド India	Ms. Sandhya Kranchi कंचि संध्या (9604460)	32	Scientist, Biotechnology Section, Central Institute for Cotton Research 中央綿花研究所 研究員	Indian Agricultural Research Institute Entomology Ph.D. インド農薬研究所(昆虫害学・博士)	O: Central Institute for Cotton Research, Post Box No. 225, GPO, Nagpur-440001 H: B-3, 26 Nit Layout, Swawalambinagar, Nagpur 440022 Maharashtra	
4	インドネシア Indonesia	Ms. Puspita Deswina プスピタ デスウィナ (9605049)	29	Researcher in Plant Biotech. Lab., R & D Centre for Biotechnology, Indonesian Institute of Sciences (LIPI) インドネシア科学技術院バイオテクノロジー/ロジック研究開発 センター-植物バイオテクノロジー/ロジック 研究員	University of Andalas Phytopathology アンダラス大学 (植物病理学専攻)	O: Jl. Raya Bogor Km. 46, Cibinong, Kab. Bogor 16911, P. O. Box 422 H: Perumahan Widyatama Indah Blok A, No. 13, Pondok Rajeg, Cibinong, Kab. Bogor	
5	エジプト Egypt	Mr. Mohammed Abdel Hameed Mohammed El- Awady エイワード (9605261)	24	Instructor, Dept. of Genetics, Faculty of Agriculture, Cairo University カイロ大学農学部遺伝学専攻 実験助手	Faculty of Agriculture, Cairo University Agronomy カイロ大学農学部 (農藝学専攻)	O: Dept. of Genetics, Faculty of Agric., Cairo University, Giza H: 13, Old Zedan St. Abokatata, Giza	
6	トルコ Turkey	Mr. Bilal Gurbuz ビラル グルブズ (9605165)	33	Researcher, Faculty of Agriculture, Field Crops Department, University of Ankara アンカラ大学農学部農作物学専攻 研究員	Graduate School of Natural and Applied Science, Ankara Univ. Sunflower Breeding Ph.D. アンカラ大学大学院 (ひまわり育 種学・博士)	O: A.U. Faculty of Agriculture Field Crops Department 06110 -Ankara H: Kardesler Koop 4. Cad. 43. Sok. No. 12, Asagi Ayvali - Ankara	
7	アルゼンティン Argentina	Ms. Verónica Ongaro オングアロ (9605126)	24	Researcher, Biological Research Institute (INSIBIO) 生物学研究所 研究員	National University of Tucuman Plant Biology 国立ツクマン総合大学 (植物生物学専攻)	O: Chacabuco 461 4000 San Miguel de Tucumán, Tucumán H: Av. Ejército del Norte 315 5°B 4000 S. M. de Tucumán	
8	ヴェネズエラ Venezuela	Ms. Lils Betzalca Perez ベツアルカ アルメイダ (9605177)	29	Researcher I, National Center for Agricultural Research (CENIAP) 農業遺伝学研究所 研究員(I)	Central University of Venezuela Agronomy M.Sc. ヴェネズエラ中央大学 (農業遺伝 学・修士)	O: CENIAP, Apdo 4653 Maracay 2101-A H: C. Aracuaney #03-14A Urb. Villas del Centro San Joacuin Edo. Carabobo 2018	

QUESTION SHEET FOR EX-PARTICIPANTS

H8

(Please write down in block letter)

1. Name in Full PUSPITA DESWINA Age 30
 M 19 M 19

2. Training Japan From July , 1996 to Dec , 1996 (1) Years ago

I. Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
Researcher at Cell and Plant tissue Culture Lab.	1993 to 1996	Micropropagation

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
Researcher at Plant Molecular Biology at Rice research.	1996 to now	Analyze of gene exspression of rich transgenic plant.

3. Your present job (現在の仕事内容)

Your responsibility :

As an responsible person for analyze of gene expression at rice transgenic plant for blast and pest resistance.

Study subjects :

Establishment of transgenesis systems for the improvement of rice cultivars important to Indonesian agricultures.

This include the gene transfer experiment using particle bombardment and Agrobacterium.

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

The study on gene manipulation in agriculture in Indonesia has been initial stage in 1993. Since then several some programme have been achieved.

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

Indonesia still relies heavily upon primary agricultural product with and soybean being important commodities because we are an agriculturally - base country.

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

- Mastering the gene manipulation technique. e.g. in plant disease and pest control.
- To upgrade and improve skills of many laboratory technicians as well as pursue higher degree for researchers in the field of gene manipulation.

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

We have not yet till now.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力の入れている分子遺伝学の分野)

We are still lag behind in the mastering of gene manipulation technique so we need many opportunity to learn and to upgrade our skills in this field.

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job?

(現在の仕事内容との関わり)

Almost all of the subjects.

In what way?

Particularly practice in the Laboratory.

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?
please check below (X) (知識の普及方法)

() seminar (X) report () lecture

(X) others (please give example)

Practice in the Laboratory.

3. Is your study applied in the commercial field? (商業レベルへの応用)

Not yet.

How?

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)

(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture"
and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

Of course, I do.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

We have already a modern equipments like PCR machine DNA sequencer, centrifuge.

6. what kind of problems do you have when you proceed your study?

(研修を進める上での阻害要因)

An opportunity how to get a scholarship to continue my study.

7. What do you expect in technical information exchange with Osaka Prefecture University?

(帰国後の情報交流で期待するもの)

Even though, we have a modern equipments, but we also have to upgrade and improve our
skills in the field of gene manipulation.

We hope a collaboration between Osaka Prefecture Univ. and our institute.

8. Other comments.

If there is any chance to follow the individual training in plant Molecular genetic like gene
manipulation I will be appreciate to follow it and of course to continue my study for Master
program, too.

Thank you for cooperation.

QUESTION SHEET FOR EX-PARTICIPANTS

(Please write down in block letter)

1. Name in Full Brial GURBUZ Age 35

M 19 M 19

2. Training Japan From July, 1996 to Dec, 1996 (1) Years ago

I. Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
Researcher at Agriculture Faculty	1985 - 1996	make research on medicinal and aromatic plants.

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
Researcher at Agriculture Faculty	1985 now	make research on medicinal and aromatic plants.

3. Your present job (現在の仕事内容)

Your responsibility :

I am making researches about medicinal and aromatic plants growing, adaptation and their breeding.

Study subjects :

Medicinal and aromatic plants.

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

Gene manipulation and genetic engineering works have been carried out about last five years.

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

Some molecular gene cloning works have been done many genes such as herbicide resistance and insect resistance.

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

The target in gene manipulation in Turkey is to produce transgenic plants.

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

Like many other countries, the production of transgenic plants is restricted in Turkey. However, there has been no governmental regulations so far.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力の入れている分子遺伝学の分野)

To produce transgenic plants resistant to especially insect and disease in my country.

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job?

(現在の仕事内容との関わり)

Gene transfer and expression.

In what way?

In practice for our laboratory.

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?

please check below (X) (知識の普及方法)

()seminar ()report (X)lecture

()others (please give example)

3. Is your study applied in the commercial field? (商業レベルへの応用)

Not yet.

How?

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)
(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture" and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

Yes, I definitely believe that this course is very beneficial to people who have some background in plant biotechnology.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

We have basic tissue culture, gene transfer and gene cloning equipments.

6. what kind of problems do you have when you proceed your study?

(研修を進める上での阻害要因)

We have problems in obtaining chemicals like enzymes, hormones etc.

7. What do you expect in technical information exchange with Osaka Prefecture University?

(帰国後の情報交流で期待するもの)

We can expect to get information on very recent developmetns in plant moleculair biology.

8. Other comments.

The course and other activities in Japan were very successful. Thank you very much for everything.

Thank you for cooperation.

QUESTION SHEET FOR EX-PARTICIPANTS

(Please write down in block letter)

1. Name in Full VERONICA ONGARO Age 25

M 19 M 19

2. Training Japan From June , 1996 to Dec , 1996 (1) Years ago

I. Employment / Work experience

1. Work experience : Before attending training at JICA (研修前職歴)

Work / Job Position	Dates (from to)	Responsibilities
- Teaching Assistant UNT.	March 1993 to Sep 1994	Research and teaching
- Fellowship	March 1995 to June 1996	Research

2. Work experience : After attending training at JICA (研修後職歴)

Work / Job Position	Dates (from to)	Responsibilities
Graduate Student	April 1996 to present now	Research and Teaching

3. Your present job (現在の仕事内容)

Your responsibility : I am working in a plant breeding project doing research activities.

Study subjects : The project called "Criteria for the selection of forage grasses for semiarid zones affected by salinity". In this project we are looking for molecular markers associated with tolerance to salinity in Chloris payans.

II. Country situation (Please give us information below) (国別状況)

1. On the present situation of gene manipulation for agriculture in your country.

(遺伝子操作技術の現状)

The level of gene manipulation for agriculture in my country is overall good. However there not many research groups working on this area and most of them are located in Buenos Aires area.

2. Present level of gene manipulation which is being carried out with top priority and its background. (遺伝子操作技術のレベル、プライオリティーとそのバックグラウンド)

In Buenos Aires province there are several groups working in: genomic fingerprinting of important agricultural species, resistance to plant virus, plant defense protein related to pathogenic plant responses, molecular biology of the metabolims and glucides. In Rosario (Santa Fe province) others groups work in molecular biology of fruit maturation, transgenic plant. Our group work in plant molecular biology.

3. The target of national development and the future planning of gene manipulation.

(目標と将来計画)

The target of gene manipulation is to obtain important varieties of local crops. Research plans are orientated to improve yield and resistance to pathogens (virus, fungi, bacteria).

4. Regulation for production of transgenic plants. (組み換え植物の生産に関する規制)

According to international regulation.

5. What is the most emphasized aspects in molecular genetics in your country / by yourself?

(力の入れている分子遺伝学の分野)

The most emphasized aspects is obtain plant species resistant to biotic and abiotic stress.

III. Evaluation of the JICA training programme. (JICA研修コース評価)

1. Which part of JICA training was most useful in relation with your present job?

(現在の仕事内容との関わり)

Many parts were useful, for example: extraction of DNA, agrobacterium handling, transformation methods, PCR method, western and southern blot, etc.

In what way?

Because in my return I could applied the techniques learned in Japan.

2. In what way did you transfer the knowledge you learned in Japan to your colleagues?

please check below (X) (知識の普及方法)

- seminar report lecture
others (please give example)

3. Is your study applied in the commercial field? (商業レベルへの応用)

Not yet.

How?

But the original plan involves the transference of the technology to commercial exploitation this will be accomplished by INTA.

4. Do you think our course beneficial to your colleague? (同僚が参加するのに適当か)

(In F.Y.1996, we changed our course title to "Introductory Gene Manipulation for Agriculture" and added "not have Ph.D. in genetic engineering" in the qualification of applicants.)

Yes, because I could transfer to my group the knowledge acquired during the course.

5. What kind of equipments do you have in your laboratory? (保有機材状況)

We have: PCR machine, electrophoresis cells (protein and DNA), set for DNA sequence, spectrophotometer, centrifugal, FPLC, HPLC, phytotron, Liophilizator, Liquid scintillator counter, Image analyzer, Hybridization oven, etc.

6. what kind of problems do you have when you proceed your study?

(研修を進める上での阻害要因)

Many equipment are old and service are not available. Great delay to get chemicals and supplies when they have to be imported.

7. What do you expect in technical information exchange with Osaka Prefecture University?

(帰国後の情報交流で期待するもの)

I expect keep in contact with the university and with the professors. I think it could be very useful if we can have some work in common or get involved in any project in collaboration with colleagues from Osaka Prefecture University.

8. Other comments.

Thank you for cooperation.

1. コース名など

(1) コース名

和 文 : 農業生産のための遺伝子操作技術

英 文 : Introductory Gene Manipulation for Agriculture

(2) 研修期間

a. 全体受入期間:平成9年7月28日(月)~平成9年11月30日(日)

b. 技術研修期間:平成9年8月18日(月)~平成9年11月28日(金)

(3) 定 員

8名

2. コースの目的・背景

(1) 目 的

農業関連分野において直面している諸問題を解決するために、開発途上国ではバイオテクノロジー技術の導入が求められている。

研修員は本コースでアグロバクテリウムを用いた高等植物細胞の細胞育種技術について講義および実習し、遺伝子操作の基本技術を習得する。

(2) 背 景

地球規模で見られる急激な人口増加は多くの解決すべき問題をわれわれに突きつけている。特に開発途上国では農業生産環境の悪化に伴う食糧危機や栄養失調症の増加は深刻な事態に至っている。

これらの諸問題を解決する手段として遺伝子操作技術を含むバイオテクノロジーがある。しかし開発途上国にはこれらの問題解決のために必要なバイオテクノロジーを研究する技術者が絶対的に不足しているのが現状である。したがってこのようなバイオテクノロジー技術の開発途上国への移転が進めば食糧増産に大きく貢献するものとして期待されている。

3. 到達目標

遺伝子操作に関連する基礎的技術を習得する。

核酸の抽出・分離、制限酵素によるDNAの処理、目的遺伝子発現物の同定と定量、アグロバクテリウムを使った形質転換、PCR法によるDNAの増幅、核酸・タンパク質の配列決定など

4. 研修項目 (カリキュラム)

(1) オリエンテーション

大学組織、施設、設備、職員の紹介/コンピュータLANの紹介・説明

(2) 講義

- a) 機器の取り扱い
- b) 生物の取り扱い (組み換え体実験指針を含む)
- c) 遺伝子操作の農業および工業的利用の概論
- d) 微生物培養法、植物細胞の培養法
- e) DNA抽出と分離法
- f) 核酸、タンパク質の電気泳動
- g) 形質転換法
- h) 核酸の酵素処理法
- i) 形質転換産物の検出と同定法
- j) PCR法、DNA合成法と配列決定法
- k) 微生物組み換え体の応用 (農薬としての利用、廃棄物からの有用成分への変換etc.)
- l) 微生物転換酵母の応用
- m) 植物細胞の育種および有用成分生産への応用
- n) 藻類と高等植物の遺伝子操作

(3) 実習

a) 基礎実習

I. 微生物培養法

- 1) 滅菌法
- 2) 培養技術
- 3) 集菌・洗浄

II. 核酸の抽出・分離技術

- 1) トータルDNAの抽出
- 2) プラスミドの抽出
- 3) プラスミドの分離

III. タンパク質の精製と抗体の作成

- 1) タンパク質の精製
- 2) 抗体の作成
- 3) 抗体の検出

IV. 核酸・タンパク質の電気泳動技術

- 1) アガロースゲル
- 2) アクリルアミドゲル

V. 形質転換法

- 1) エレクトロポレーション法

VI. DNA酵素処理技術

- 1) 制限酵素処理技術
- 2) ライゲーション
- 3) リン酸化

VII. 形質転換体の産物の検出と同定

- 1) プレート技術 (X-Galの検出)
- 2) ELISA
- 3) ウェスタンブロッティング法

VIII. PCR法によるDNAの増幅

IX. 核酸・タンパク質の配列決定

b) 応用実習

- I. 転換酵母による澱粉からのアルコール発酵
- II. 植物培養細胞のアグロバクテリウムを用いた形質転換
- III. 遺伝子銃による形質転換
- IV. コンピュータ解析法
- V. 機器分析の方法 (アミノ酸分析、アミノ酸配列、イメージアナライザー)
- VI. RI実習 (一時立入り)

(4) 見学

地球産業技術研究所 (京都)

農林水産省果樹試験場安芸津支場 (広島県安芸津)

大阪府立農林技術センター (羽曳野市)

大阪府立大学附属研究所 (生物資源センター含む) (堺市)

近畿大学農学部 (奈良)

奈良先端技術大学院大学 (奈良)

農林水産省農業生物資源研究所 (つくば市)

日本たばこ産業株式会社 (静岡)

その他

5. 研修員参加資格要件

(1) 応募要件

- a. 所定の手続きに基づき各国政府が推薦する者
- b. 大学を卒業した者、又はこれと同等の資格を有する者（遺伝子工学のPh.D.取得者は対象外）
- c. 政府の農業研究機関において農業生産分野の研究に携わっている研究者
- d. 微生物の取扱、培養の経験がある者
- e. 年齢35才以下の者
- f. 十分な英会話及び英文読解力を有する者
- g. 心身ともに健康な者（ただし、妊娠中の者は除く）
- h. 軍籍にある者は不可

(2) 割当国（10カ国）

インドネシア、マレーシア、タイ、パキスタン、スリ・ランカ、アルゼンティン、ボリヴィア、チリ、ペルー、ウルグアイ

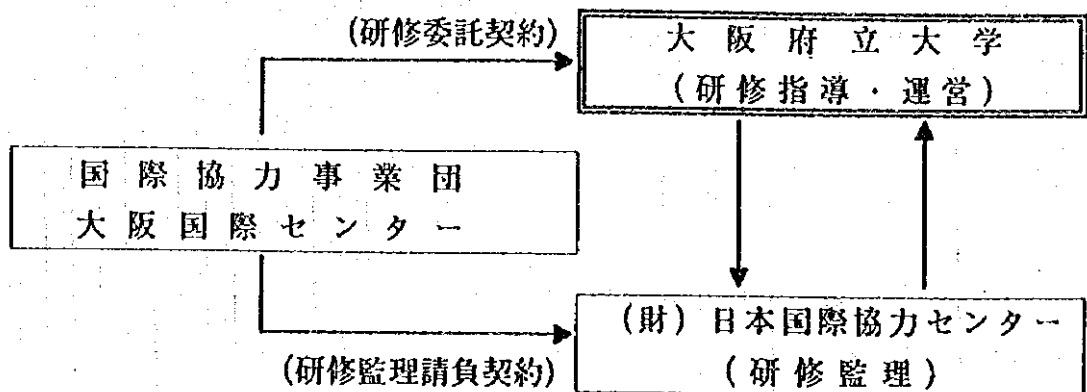
6. 研修実施体制

(1) 実施体制概略

国際協力事業団は研修委託契約に基づき、大阪府立大学に本コースの研修指導・運営を委託する。

また本コースを効果的に運営するために研修監理業務（通訳・同行業務など）を財団法人日本国際協力センターに委託し、研修監理員の配置を行う。

これらの業務の流れは以下のとおりである。



(2) 研修運営機関

a. 研修実施機関

国際協力事業団 大阪国際センター

(OSIC : Osaka International Centre)

〒567 大阪府茨木市西豊川町25-1

電話：0726-41-6900

FAX：0726-41-6910

b. 研修委託機関

大阪府立大学 農学部応用生物化学科

〒593 堺市学園町1-1

電話：0722-52-1161

FAX：0722-52-0341

大阪府立大学農学部は、100余年前に創設された大阪府立農学校にそのルーツを持つ。同学部には4学科41講座と附属農場および附属家畜病院があり、その充実した講座編成とそのスタッフの配置は、全国農学部中有数のものである。

c. 研修監理業務委託機関

(財) 日本国際協力センター

(JICE : Japan International Cooperation Center)

(財) 日本国際協力センターは、国際協力事業の実施に関する協力、国際協力に関する広報などにおいて、わが国の国際協力事業の推進に貢献するために昭和52年に設立された公益法人である。

同大阪支所

〒567 大阪府茨木市中穂積1-1-59 茨木田中ビル5階

電話：0726-24-8686

FAX：0726-24-8681

7. 宿 舎

国際協力事業団 大阪国際センター (OSIC)

住所：〒567 大阪府茨木市西豊川町25-1

電話：0726-41-6900

8. 研修付帯プログラム

(1) 集合ブリーフィング (原則として火曜日)

来日の翌日OSICにおいて、事業団規則の説明、滞在費送金用銀行口座の開設手続き、健康保険証 (Medical Card) の交付など、研修員が本邦で研修生活を送るために必要な関連事項の説明および所要の手続きを行う。

(2) 一般オリエンテーション

日本への理解を助け、短期間に日本社会になじませ、本邦での研修生活を実りあるものにするため、上記 (1) のブリーフィングのあとに日本を紹介するプログラムを実施している。

日	時間	内容
第1日 (水曜日)	10:00~12:00 13:30~15:00 15:15~17:15	日本の社会と日本人 日本語の特質から見た日本人と社会 日本の歴史・文化
第2日 (木曜日)	終日	関西バスツアー
第3日 (金曜日)	9:45~11:45 13:15~15:15 15:30~17:00	日本の教育 日本の経済 日本の政治・行政機構

(3) コース・オリエンテーション

本コースの到達目標、カリキュラム構成、研修日程について、コース・オリエンテーションを実施する。

(4) 日本語講座

①目的

日本語の学習を通じて日本人の考え方、行動様式を学び、以て日本における生活を円滑なものとするため、OSICにおいて日本語講習を行う。

②講義時間および参加形態

a. 集中講習

技術研修に先立ち、8月4日~8月15日まで、1日5時間計50時間実施する。

集中講座は、正規の研修プログラムの一環として実施するものであり、本コースの研修員全員に受講が義務付けられている。

b. 一般講習

集中講習を補完し研修員の知的興味をさらに満たす目的で、集中講習修了後の技術研修期間中の夜間に希望者を対象に実施する。

9. 研修の評価

主として、本コースで設定した到達目標をどの程度達成できたかという視点から、研修を構成する諸要素について評価を行う。その結果は、次年度以降のコース改善に役立てることとする。

(1) ファイナルレポート

国際協力事業団所定の様式を用い、コースに参加した研修員が研修全般についての所感を取りまとめる。

(2) デイリーエバリュエーション

研修員による評価

付表-2の評価表を使用して、コースに参加した研修員の各講義および見学についての所感を取りまとめ、ファイナルレポートと相互補完の形で研修の全体評価の資料とする。

10. 修了証書

このコースを修了した研修員に対し、国際協力事業団は修了証書を授与する。

11. 研修員の待遇

(1) 入国資格

日本で技術研修を受けることを許可された者。なお、日本滞在中は日本国法令の適用を受けるとともに、働いて収入を得ることはできない。

(2) 支給手当

国際協力事業団の規程に基づき、本コースの研修員に下記の通り滞在費、その他の手当が支給される。

- a. 各国と日本の間の正規運賃航空券。
- b. 生活費として1日あたり3,594円（宿泊費、朝食／夕食費は別途支給）。
- c. その他、支度費（15,000～40,000円期間別）、書籍費（5,000～17,000円期間別）、資料送付料（4,000～25,000円地域別）。
- d. 日本に到着後に発生した傷病に対する医療サービス（保険により無料治療）。
- e. 研修のための移動にともなう通勤費および研修旅行の旅費。



なお研修員の日本での滞在は、国際協力事業団のセンターでの宿泊を原則とするが、研修旅行などで最寄りのセンターを利用できない場合は一般のホテルを利用する。ホテル利用の場合、国際協力事業団指定のホテルは、研修員の宿泊料を国際協力事業団がホテルに直接支払い、指定外ホテルの場合は宿泊料の実費を研修員の口座に振り込む。

