The Cooperative Education and Career Development Program Between Thammasat University, Thailand and Mie University, Japan From the 15th of March to the 19th of April, 2012 Hosted by Mie University

I arrived at Mie University on March 15 by taxi that Mr. Preuk Chutimanukul picked up me at Chubu Centaire Nagoya airport and took me to the International Student's House. Next day, I received orientation from Vice Director, Prof. Hiroshi Ehara at CIER. On Monday, Ms. Haruna Tanaka guided me for laboratory information and activities, I learned on equipment using in many room of laboratory. Then she took me and introduced around the campus. I got Japanese culture information from her; for example, lunch or dinner and see sakura blossom in Japanese was called Ohanami (お花見), she was really friendly and helpful when I wanted helping. The beginning of spring, I went to Yuki shrine (神社) by bike with my senior and junior for seeing plum blossom. I walked around and saw plum blossom garden. It was my first time to be here, they were so beautiful. I think at that time, I will back here again in next year. I really like Japanese flower because they were so pretty and beautiful, almost of them not have in my country, so I saw them at first time in Japan and then I fell in love with them. In addition, I saw close up at plum blossom, it look like sakura flower, but theirs petal and branch were different. They had 3 colors at here: white, light-pink and dark-pink. On the way return trip, we met bakery, so I bought sakura cake, it so beauty and delicious. In that day, I'm so very happy because I went to beautiful place and ate delicious cake.



Fig. 1 Plum blossom at Yuki shrine where had 3 colors: white, light-pink and dark-pink.



Fig. 2 My senior and junior who went to Yuki shrine together.

On March 27, I joined in the presentation of Double degree program between Mie University, Japan and Sriwijaya University, Indonesia. Two master student presented in this presentation: Mrs. Siska Arie Santy Siahaan from Sriwijaya University, Indonesia and Ms. Haruna Tanaka from Mie University, Japan. They were talk about theirs master thesis that they done in university partnership. They stayed in university partnership for 1 year where they done experiment of master degree. Then they came back to own university, they would complete master thesis and present them to professor of two university. Finally, they got 2 graduated certificates from Sriwijaya University and Mie University. This project was so great for student who will get more experience in aboard. I hope my university and Mie University will do this project in the future.



Ms. Haruna Tanaka from Mie University



Mrs. Siska Arie Santy Siahaan from Sriwijaya University

Fig. 3 Presenter of Double degree program between Mie University, Japan and Sriwijaya University, Indonesia.

In laboratory activities, I was trained for collect data of Sago palm with Mr. Preuk because he studies on Sago palm for his research. He taught me measuring leaf and leaflet number, plant length and plant height. Plant length and plant height were a little different measurement. Namely, we measured plant height by tape measure for measured from the end of trunk to the top of plant by not gather together leaf of plant. But plant length must gather together leaf of plant for measurement. Leaf and leaflet number were recorded by counted expansible leaf and leaflet per plant. I helped him recorded data and practiced for measure plant height. Besides, He suggested me about recording Sago palm that we should be careful while measure Sago palm because they have many spines in theirs leaf and trunk. It that first time for measured and recorded data of Sago palm for me which was the new and good knowledge and experience for me. Sago palm was the most one that have more powder in theirs trunk which was important source of carbohydrate of human food. In the south of Thailand also had Sago palm in forest that people in that area consume them.



Fig. 4 Training for collects data of Sago palm

On March 26, I jointed in Graduate ceremony of Mie University. In present year, my 2 doctoral seniors of laboratory were graduated. They are from Thailand. One of her was graduated of bachelor degree in same my university in Thailand (Thammasat University). In that day, I went into Sansui Hall where had graduated ceremony of university, I saw students wore Japanese clothing, it's so beautiful both hagama and gimmono. At Mie University, almost bachelor student wore "hagama" for this ceremony. But In Thai, all bachelor students wore academic gown. It was different between Japan and Thailand, including ceremony procedure too.





Fig. 5 Graduate ceremony of Mie University

I participated in Crop Science Society of Japan at Tokyo University of Agriculture and Technology on March 29-30, 2012. The main discussion is Food security of the world that is the big problem of the world for now. Especially, East Timor, North Korea, Afghanistan and Cambodia where were hunger country. All of countries have been civil war, so there are people still be in trouble and deficient food. In this conference, many professors and participants were tried to discussing and finding for resolve this problem. In this seminar had show the new technology for experiment in agriculture and environment.



Fig. 6 Crop Science Society of Japan at Tokyo University of Agriculture and Technology

In Tokyo, I participated in other conference, Tropical Agricultural conference. In this conference, Prof. Hiroshi Ehara presented on the topic "Early Growth of *Vigna vexillata* under Low pH Condition". Moreover, I met Prof. Norihiko Tomooka and his student Mr. Yutaro Yoshida who I done my experiment with him in last year. Mr.Yutaro Yoshida presented on the topic "Mappingg of QTL for traits related to salt tolerance using interspecific hybrid population between azuki bean and its wild relatives (*V. nakashimae* and *V. riukiuensis*)".



Fig. 7 Tropical Agricultural conference.

After that, I went to meet my Japanese senior at University of Tokyo. Now, he is post-doctoral at Todai. He took me and my friend to visit his laboratory and this campus. This University is the number one and oldest in Japan. I was excited to visit there.



Fig. 8 Laboratory and campus of University of Tokyo

Rusama Marubodee

Next week, I went to Field Science Center of Mie University. They have four fields where is experimental farm, forest station, fisheries research laboratory and training ship "Seisuimaru". I went to main office of experimental farm where has farmer market near the office. It open every third Wednesday monthly at nine thirty to eleven a.m. Experimental farm has many fields in here: rice field, greenhouse for some vegetable and fruit, vegetable field, wind mill, tractor practice line, green tea field, pastoral field, crop field, dormitory, orange field and tropical greenhouse. Finally, I tasted some produce from here such as canned orange, it's so delicious. After that, I went to green tea field. There is planted only kanayamidori. They are same species with yabukita that is number one of green tea of Japan. But this here look after method was different with green tea planted for sale because it was planted for experiment only. Next area had wind mill that used for experiment only. At stable, there have six matsusaka cattles, now. Matsusaka cattle is big black cattle for producing beef. Around Matsusaka City had got permission for use name "Matsusaka beef" which is the number one delicious beef of Japan. When I went to paddy field and tropical plant greenhouse, they were not planted anything in there because it was still cold.







Fig. 10 Many fields of experimental farm

Then other next week, I went to Hanami with Prof. Dr. Ehara and laboratory's members at Kairaku-en. We bought Obento and beverage for dinner together at this park. When we ate and talked for a while, Prof. Dr. Ehara ordered 2 big pizzas for us, we were really thankful for his kindness. At that time, we were ate together, talked together and took pictures together; we were very happy and funny.



Fig. 11 Hanami with Prof. Dr. Ehara and laboratory's members at Kairaku-en

Next 2 days, I threshed rice; IR 64 by machine with laboratory's members. Finally, we got un-milled rice about 50 kilograms. Moreover, Prof. Dr. Ehara taught me to used rotary engine for cultivate in paddy field. It's my first time to drive it.





Fig. 12 Thresher (IR 64) and studied to used rotary engine.

Next, I practiced to measure photosynthesis of Sago palm. Laboratory member taught me for how to set; record and view data. From this equipment, we could measure CO_2 in and out per unit of Sago palm leaf area.



Fig. 13 Practiced to measure photosynthesis of Sago palm.

In same day, I practiced with 2 laboratory's members for tissue culture of IR 64 and Koshihikari seeds of rice in clean bench. They prepared material for undergraduate student class. They taught me to put seed on the medium in the tube and close the cap. We should sterilize by fire before done step by step and all of equipments have aseptic to avoid contaminating.



Fig. 14 Practiced to tissue culture of IR 64 and Koshihikari seeds of rice

Finally, I presented my master thesis in student seminar of laboratory that I done in last year at here. I got important suggestion from Prof. Dr. Ehara and other 2 student in my laboratory for my presentation and experiment. I will follow improve them. Therefore, I hope to come back at Mie University again for doctoral course in next year.

In 5 weeks, I stayed at Plant production and ecology laboratory, Mie University. I got much knowledge from several trainings and 3 seminars. I studied instruction of many types of equipment that I never had been use them before. In my future experiment, I can use many types of equipment more easily. In laboratory, all members were being kind and friendly with me. They taught Japanese language, culture and society for me. I could see them that were different from Thailand. Moreover, I really thankful Japan Student Service Organization (JASSO), Mie University, Thammasat University; especially, Prof. Dr. Hiroshi Ehara and Assoc. Prof. Somchai Chakhatrakan which gave a great opportunity and supported scholarship for me. Then thank you all staffs of CIER and laboratory's members for helped and took care me.