

The report of international internship program in Thailand

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My purpose of internship

In the beginning, I'd like to introduce my purpose of this program. I have three purposes. First is to experience working in abroad country. I have worked in farming company in Japan for a short time. I want to know differences between Japan and Thai companies by working in practice.

Second is to acquire language ability. I think the ability to communicate with foreigner is becoming more and more important in recent years. So by joining this program, I want to improve my English speaking ability.

Third is to learn and feel some various characters of people and culture of foreign country. These three purposes are my reasons for participating in this international internship program.

The reason of choosing Kasetsart University

Many Japanese companies conduct business in Thailand. I could actually see many different name of Japanese company such as TOYOTA, HONDA, SHARP, and CANON in Thailand. I think Thailand is the most important country to Japan. Table.1 indicates number of Japanese company operating in each country. Many companies incorporate a business in countries of Asia. It shows Thailand is the second selected as country conducting business after China on Asia. I chose Thailand by this reason. Next is the reason why I chose Kasetsart University. It is the first agricultural university and the third oldest university in Thailand. It is the most famous university for agronomy in Thailand. My major is agronomy. I thought I want to communicate superb students of this university. So I chose this university.

Table.1 Number of Japanese company incorporated in Asia

| Nation or regional name | Number of company |
|-------------------------|-------------------|
| India | 333 |
| Pakistan | 18 |
| Bangladesh | 15 |
| Sri Lanka | 13 |
| Myanmar | 10 |
| Malaysia | 646 |
| Singapore | 866 |
| Thailand | 1,443 |
| Indonesia | 628 |
| Philippines | 394 |
| Cambodia | 13 |
| Laos | 6 |
| Hong Kong | 970 |
| Taiwan | 750 |
| Viet Nam | 432 |
| South Korea | 622 |
| Nepal | 3 |
| Brunei | 4 |
| China | 4,908 |
| Macao | 7 |
| Other countries of Asia | 8 |

Introduce Kasetsart University and my life style

Kasetsart University is one of the oldest and most prestigious university in Thailand. It has four campuses and more than twenty faculties. The campus I had stayed at was Kamphaeng Saen campus that is about 80 km away from Bangkok. There is this campus in rural area that engaged in agriculture actively. There are not many places to play around campus.



That's why some students go to this campus from Bangkok. But it has large area, and hospital, gym, cafeteria, market and so on. Picture.1 is the international dormitory I had lived. This dormitory is built open. That's why it was airy and cool. The room was quite clear like hotel and was cleaned by housekeeper on once a week. My room was a double room and I lived alone. So I felt a bit large but I could stay comfortably. The season I had stayed was rainy season and it was heavy rain almost every night. The temperature was slight lower than the summer of Japan. It seems getting gradually hot after this.

Table.2 is my schedule. This schedule is quite different with the schedule adviser firstly made. Because he thought he wants me to experience a lot of things in Thailand in short term. Therefore, I often had to change my schedule at the last minute. Table.2 indicates final schedule. I appreciate my adviser that I could experience many things finally.

Table.2 My schedule of international internship program

| | | |
|------------|---------------------------------|--|
| Period: | September 15 - October 11(2013) | |
| September: | Week 1 | |
| | 15(Sun.) | Arriving KU campus |
| | 16(Mon.) | Orientation and campus tour |
| | 17(Tue.) | Lecture of Ph. D Am-On and preparing for visiting farmer |
| | 18(Wed.) | Visiting farmer |
| | 19(Thu.) | Discussion |

| | | |
|---------|-------------------|---|
| | 20(Fri.) | Presentation |
| | 21(Sat.) | Sightseeing(Bangkok) |
| | 22(Sun.) | Free day |
| Week 2 | | |
| | 23(Mon.) | Lab work |
| | 24(Tue.) | Field work to Pacific seeds |
| | 25(Wed.)-27(Fri.) | Lab work |
| | 28(Sat.)-29(Sun.) | Participating in Seminar |
| Week 3 | | |
| October | 30(Mon.)-2(Wed.) | Lab work |
| | 3(Thu.) | Work to SCG paper company |
| | 4(Fri.) | Lab work |
| | 5(Sat.) | Sightseeing(Ayutthaya) |
| | 6(Sun.) | Sightseeing(Kanchanaburi) |
| Week 4 | | |
| | 7(Mon.)-9(Wed.) | Lab work |
| | 10(Thu.) | Presentation and Farewell dinner with laboratory member |
| | 11(Fri.) | Sightseeing(Bangkok) and departure to Japan |

Visiting Thai local farmers and Presentation

On first week, I acted with other Japanese students who had been KU under academic exchange program. We heard special lecture of Ph. D Am-On who is associate professor in KU. She talked about socio-economic analysis on farming system towards sustainable development. We have to develop farming technology for sustaining farming system. But she said our researcher shouldn't bring new technology. We should make appropriate technology after analyzing the area information such as soil profile, water resources, temperatures, animal and plant variety, benefit living and peat. She explained we should develop appropriate technology of each area.



Picture.2 Greeting to farmer



Picture.3 The farmer cultivating hot basil

We were divided into three groups and gave each subject. The subject of our group was vegetables production aspect towards soil fertility improvement. The next day, we visited Thai local farmer living near campus for asking our questions about method improving soil fertility. Thai students helped us to translate English into Thai. I had an impression that Thai farmers don't have not only money but also knowledge despite they have much more cultivated field than Japanese farmers have.

We discussed this result and made a presentation. Thai students always supported us.



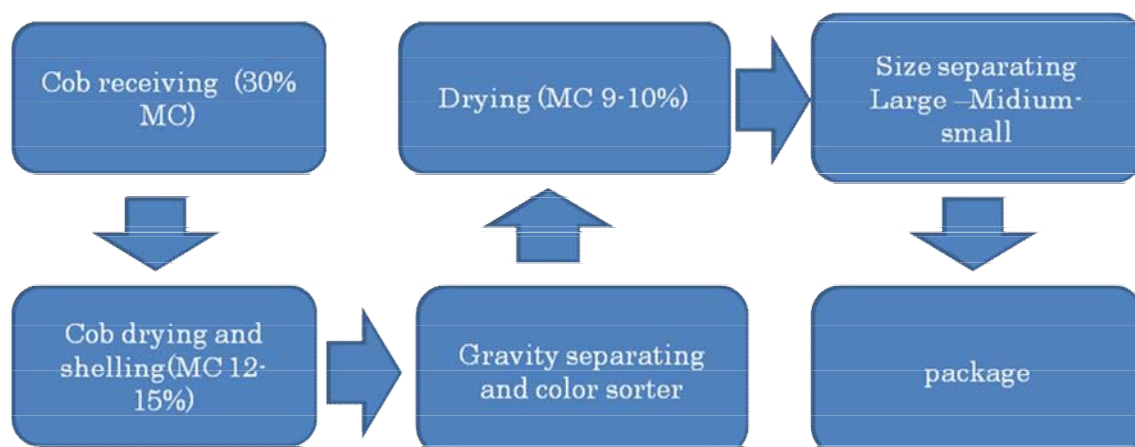
Picture.4 Japanese students and Thai student who participated in this lecture



Picture.5 Basil field

Field work in Pacific seeds

I visited Pacific seeds Thai for studying how to process seed. This company's head office is in Australia and one of the international seed and plant supplier. This company engaged in research, production and marketing of hybrid seeds for corn, sorghum and sunflower mainly. I went on a factory tour and looked on processing seeds. The graph.1 indicates the processing system of seeds production.



Graph.1 The processing system of seed production



Picture.6 Waxy corn which shipped from north Thailand

poor quality seeds in accordance weight and color. After separating, seed is dried again. The moisture content decrease 9 or 10% again. Then separating by size is conducted



Picture.8 The gravity machine for separating by weight of seeds

The factory I studied tour produce corn seeds. The corn seeds were produced in north of Thailand and are shipped to this factory. In this time, the moisture content is about 30%. The next step is drying and shelling. The moisture content decrease 12 or 15%. Then gravity separating and color sorter take off



Picture.7 Cores of corn shelled

and divides seeds into 3 sizes. Finally, seeds are packaged. Pacific seeds conducts tests on samples of the productions for maintaining quality of seeds. This test is called cold test. The seeds are checked germination rate under 5 °C for 24 hour. It

is passed more than 85% germination rate.



Picture.9 Packaging work



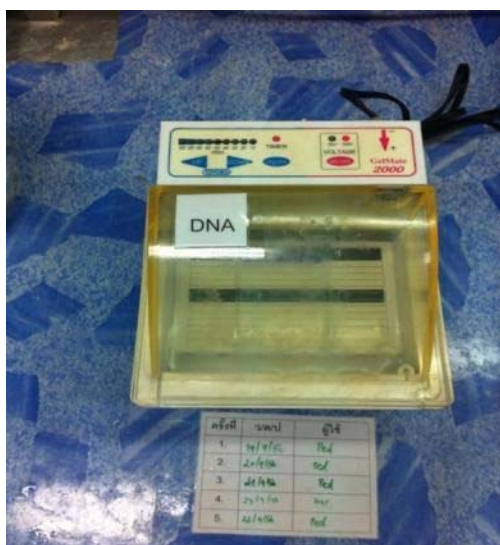
Picture.10 The cold test for checking germination rate

Lab work

In Thai's lab, I was able to do experiment I'm conducting right now. My research is to classify genus *Metroxylon* by DNA base sequence. There are many experiment devices and I was impressed there are a lot of different experimental equipments in this lab. Everyone in the lab are upper grade than me and helped me doing my experiment politely. First, I



Picture.11 Experimental equipments

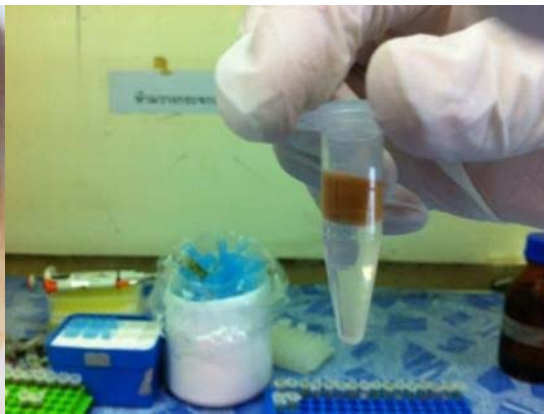


Picture.12 The electrophoresis device

conducted DNA extraction from dry leaflets I brought from Japan and fresh leaflets taken sampling in South Thailand. The fresh leaflets was collected by my adviser. Then I conducted PCR, electrophoresis and DNA extraction from gel in order. Final, I additionally wanted to do sequence. But I have not enough time. So I couldn't do. I will continue this experiment in Japan.



Picture.13 Grind leaflet. The one of process for extracting DNA.



Picture.14 The one of process for extracting DNA



Picture.14 Welcome party with members of laboratory

Picture.14 is members of laboratory. They are so kind for me and possess many knowledge of research. If I have something I don't know about my experiment, I can ask and get their advices.

Work in the SCG paper company

SCG paper company established in 1968. This company is the largest producer of various paper products in Thailand. I worked with this company's branch office to research on one floor in the building inside the Kamphaeng Saen campus. This laboratory researches about improving eucalyptus genetically by technique such as GM and molecular breeding for using as paper raw materials. GM stands for genetically modified. It's the technology altered genetic materials on organism. One of employee said GM is the necessary technology in the future. We cannot increase cultivating area anymore. However, the population in the world more and more increase in the future and many people suffer from starving now. So we just need more food even though it may be that GM cause serious harm to human being. I imaged it's the dangerous

technology and I still feel similarly. But I changed my mind a little. They seek eucalyptus which more quickly grow and have disease resistance.

Firstly, I was explained experimental equipments they usually use. Picture.15 is nucleic acid capillary electrophoresis equipment. This equipment can measure by the difference in the number of DNA base. I was recommended this one because this one is higher sensitivity than I usually use for my experiment.

Picture.16 is eucalyptuses cultivated in agricultural field. It grows for four or five years. It's height of more than 30 m. I was surprised that it grows rapidly.



Picture.15 Experimental instrument in the company

Picture.16 The Eucalyptuses which be grown in the agricultural field

Thai culture and Sightseeing trip

For one month I could eat every Thai food and tropical fruit. Few meals was too spicy for me to eat. But most those something to eat was delicious and reasonable. We can buy a meal 20 to 30 baht in the cafeteria or market on the campus. I usually bought lunch in the cafeteria and dinner in the market. That's why I didn't spend money too much except when I went to trip. My advisor, seniors of lab and company employee often took me to lunch, dinner and sightseeing. They often asked me something I want to eat. But I don't know the flavor and ingredient of meals. So they explained meals to me one by one. That's why I can remember many Thai foods.

There are many temples in Thai and Thai people often go to pray there. I went to temples on sightseeing trips or on the way back from field work or seminar. So I had many opportunities to pray. I had copied Thais the right way at first but I could pray alone eventually.

I went to famous places relatively near the campus. I would like to introduce three places which I went.

Khaosan road

The employee of the company which I worked took me Khaosan road. I could see many foreigners and different stores which were sold T-shirt, souvenirs, CD and DVD, and insects we eat. I was told it's not sometimes safety here. Most shops are opened by migrating worker from Myanmar or Cambodia. It created a little dangerous atmosphere. I went to buy souvenirs here. But I didn't think of buying because prices are high.



Picture.17 The Group photo in Ayutthaya

Ayutthaya

I went to Ayutthaya region with seniors of laboratory and two Japanese, one is businessman who comes to investigate lawn grass in Thai and other is exchange student. There is Ayutthaya in low land. Every place was flooded due to it was rainy season then. Picture.18 is Pasak river flowing right by archaeological. Water height is higher than ground level. The floodwall prevents water from flowing in the land. The rainy season would continue still. So it was said that water height will rise higher in the future.



Picture.18 The Pasak river flowing right by archeological

Kanchanaburi

There are places such as water fall and hot spring, and constructions related to world war II. We firstly visited Hellfire Pass. It's enshrined people who died being forced to work for Thailand-Burma railroad. During world war II, Japan had



Picture.19 The group photo in Kanchanaburi

forced captive soldier work. I didn't know this thing. Japanese were portrayed as the villain in museum. I felt like running away. I thought again we must never make war again and have to prevent war from occurring. Here is region richly endowed with nature. We swam in the water fall and hot spring.

Conclusion

I think I can have many wonderful experiences through this program. I cannot accomplish it without support of everyone. I felt anxious whether I can communicate with Thai people before going to Thailand. Because I have been to abroad countries several times, but I haven't been alone. Furthermore, I have to not only study but also work. So the foreign student in Mie University had me taught English before going. But I didn't know whether I could improve my English ability. While I have stayed in Thai, Every Thai people who I communicated dispelled my anxious. When I can't understand what they say, they talked me slowly until I can understand. They supported me at everything. I think characters of Thai people are not different with Japanese too much exclude when they are in the party. I was surprised they was singing and dancing very cheerfully without alcohol for a quite long time in the party. They like karaoke. In almost every case, they enjoy a karaoke in the party. Professor which is the highest rank at the site probably sing firstly then students start singing. Also, they like coke. When we have meals, they often asked me which water or coke you want to drink. And they drink something to drink with a cup full of ice. They know stuff about Japan. Some people talked me about Japan culture such as cartoon, food and Ama-san. I could learn not only English ability but also cultures of Thai.

I will never forget this experience.

At last, let me express my thanks to my advisors who have supported me and everyone in the laboratory who have helped me do my experiment.