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My Taiwan Experienced as a TEEP Student

1. INTRODUCTION

Taiwan is home to many top-ranking universities and research institutions, offering a wide range of academic programs in various fields. Having the opportunity to be chosen as one of the scholars in TEEP is really a huge privilege to those who's like me, which parents are a middle - income earners. I was able to witness the world-class resources, facilities, and industry connections, enabling to conduct groundbreaking research and gain valuable knowledge. It is known for its high-tech industries, such as semiconductors, electronics, and biotechnology. As a scholar in Taiwan under TEEP Program, specifically in Nanhua University, I have the access to cutting-edge technologies and research facilities, which could help me advance my research and career, specifically inclined to agriculture. As a scholar in Taiwan, I felt comfortable and supported, with many opportunities to make friends and connect with local communities. In addition, this opportunity made me appreciate the beauty and abundance of their local culture and tradition. I had the opportunity to immerse myself in the local community through our tours and trips. Taiwanese culture is known for its rich heritage, diverse cuisine, and traditional festivals that we, the TEEP students got the chance to experience all of this during our 6 months stay in Taiwan. Furthermore, we the TEEP students also have the chance to learn Mandarin in the future which is a vital skill that can boost our career prospects and enrich our personal lives. By God's will, I am looking forward to more years and opportunities awaiting ahead.

2. COURSE SUBJECT

Aside from farm field experiences under the TEEP Program, we also attended lecture and discussion conducted by educated individuals and professors.

2.1 Organic Agriculture



This activity was under the guidance Professor Chen Yi-Sung, in our organic agriculture subject. We're observing the microgreen to see how long it takes for the soybean to sprout. We thoroughly combined the tree leaves humus, organic soil, and coconut fiber as the media. It took one week for the soybean to sprout. Aside from this practice, we also had a class related to organic beetroot cultivation and a lecture about the different types of bio-dynamic fertilizers and their procedures.

2.2 Dendrobium Orchid Management



This was my journal research under the supervision of Professor Simon Lai. I need to compare the growth and development of dendrobium orchids grown in three different media: coconut fiber, peat moss, and sphagnum moss. It was quite difficult for me to research orchid plants because orchid farming is not yet popular in the Philippines. Gladly, we were able to overcome this study thanks to Miss Cheska Aujero's assistance, we can seek her advice because she is competent and knowledgeable about cultivating orchids. She showed us how to water the orchids properly, how to fertilize them, and how to spot different diseases. Together with Professor Simon Lai, we may not be able to complete this one without their guidance.

2.3 Phalaenopsis Orchid Management



We are guided by Professor Lai's orchid cultivation expertise and learnings. Aside from class discussion, we also had on-hand practices inside the greenhouse. He instructed us how to properly care for the orchids. He demonstrated how to identify diseases and their treatments. We had a fantastic time learning about orchid growing.

2.4 AI (Artificial Intelligence) Class



This was under Professor Chen's class. We are having a class discussion about the various mechanized equipment utilized in agriculture, such as drones and harvesters. There were reports and discussions.

2.5 Apiculture



This was our class activity for Professor Chen Shih Shiung's Apiculture subject. I was able to experience what it feels like to be stung by a bee. The numbness and itching sensation are all over the area of skin where the bee stings, giving you the urge to hit someone (joking aside). In the first photo, we must manually remove the bee frames from the bee box. Then we must brush them off and clean the bee frame. Just a caution not to annoy the bees or they will attack you. Next, we must place or transfer the clean bee frame containing honey to the bee basket and proceed to the next process. The second photo shows the location of the bee frames. We need to make those bee frames spin around inside the manual machine and wait for the honey to drip. Following that, we must remove the empty bee frames or bee frames that do not contain honey and put them back on their designated bee box. Furthermore, we must filter the honey to avoid the inclusion of dirty tiny particles in the honey. The following step is to clean and sanitize the items we'll be using in the packaging procedure. Wear a hairnet or other protective gear while performing this process to prevent contaminants from mixing into the honey. Overall, it was a memorable and enjoyable experienced.

3. SEMINARS, WORKSHOPS, and CONFERENCES



Workshop towards carbon neutral agriculture, held at Nanhua University. It was attended by different Professors and environmentalists, including Professor Hong, Professor Yi Sung Chen and educators.



Seminar in IFOAM or the International Federation of Organic Agriculture Movement, with Jennifer Chang, Professor Chen Shi Shiung, the former president of Mingdao University, Changhua Taiwan and their administrators.



The 7th Sustainable Development @ Green Technology International Symposium program was held last April 15-16, 2023 in Fo Guangshan, Kaohsiung, Taiwan. Delegates from India, Hong Kong, Thailand, and the Philippines attended. The two-day conference was filled with so much bonding and connection to diverse countries. Leaders, presenters, moderators, advocators and students exchanged knowledge and experiences. Their goal is to have zero carbon emissions. They focus on the 17 SDGs, or Sustainable Development Goals, which primarily serve to protect the environment and the earth. We were all given specific areas and given the responsibility of assisting and directing guests all the way to the conference room. I was tasked with checking on them and providing them with some information. On the other side, we will be presenting our conference paper. My orchid research is entitled "Comparability in Growth and Development of Dendrobium "*Yellow Song Candy*" as Utilized with Different Media." I was so nervous to the point that my hands were literally shaking and I felt cold despite the fact that it was rather hot outside. Despite my nervousness, I did my best to deliver my paper on time, and happily, I

succeeded. I received some questions from the professors, and I believe I responded and answered them correctly. Furthermore, my first international conference symposium was made more memorable by the fact that some of the delegates were from the Philippines, which is my native country. As our representatives in the Philippines, we have Ms. Corazon Galon, Ms. Marriam Castel, Sir Arsenio Barcelona, Vice Mayor of Municipality of Murcia Mr. Johnny Reosura and team. Mr. Reosura also spoke about organic farming techniques in Murcia, and they also signed a MOU or Memorandum of Understanding between Nanhua University and Murcia to establish mutual connections and practices in the near future. We took a tour of Fo Guangshan and learned about Buddhism. I was greatly impressed by the people's faith and devotion to Buddha. Other than that, we also went to the butterfly garden in Maolin Kaohsiung Taiwan, but sadly the butterflies had migrated because it was summer and they needed to find food. According to the tour guide, the butterflies will return when the winter season begins.

Professor Hong- Yao Ming and all the staff in Green Technology for Sustainability Center, really did a great job to made this symposium and conference successful. Overall, the three-day conference was extremely exhausting but well worth the effort.



This is our trip to Hsinchu, Taiwan. We went on a tour of the various tourist attractions here. We had some culture appreciation and some art exercise, sketching with the extract juice from

the fruit persimmon. It was a fun activity. At the same time, we meet other students from various countries.



This activity happened last April 22, 2023. This is our exciting journey to Alishan, Chiayi, Taiwan. Together with the OICA, we went on an educational tour of the various tourist attractions in Alishan, such as those massive century trees. Taiwan does an excellent job at environmental preservation. Those breathtaking views and scenery stole my heart. With my other co-student, I formed some sort of relationship amongst people of different races and nationalities.



This happened during our visit to Professor Chen Yi - Sung's farm, which is also in Changhua. Professor Chen describes his unconventional farming method. He had a rice field, a turmeric garden, okra, and a variety of crops. What piqued my interest was Professor's approach to weed control. I discovered that he used green manuring. He had *sesbania*, *trifolium alexandrium*, and rapeseed as green manure crops. He acclaimed that these green manure crops not only prevent weeds from growing, but also aid in nitrogen fixation in the soil. I was especially impressed by Professor's corn planting technique; he stated that he has never watered his corn since it was planted, but the end result is quite good and consumable. He stated that when he planted the seed, he should cover it with soil with his feet and push thoroughly, explaining that this will keep the water and moisture content in the soil. I really learned a lot from Professor Chen during this tour.

4. INTERNSHIP

We are exposed to various activities at Nanhua University during our internship. This aided me in gaining confidence. This type of activity allowed me to broaden my comprehension and get additional knowledge.

4.1 Nanhua University Permaculture Farm



This photo taken during boy scout training of some students from the different schools of Taiwan

We had a small greenhouse at Nanhua University's permaculture farm. We raised some lettuce seedlings and have various orchid types for research purposes. Outside, we had some organic corn mulched with compostable plastic provided by Minima Company in order for us to observe. We had some organic beetroot, hand weeding, different mulching practice, and the use of bio-dynamic or BD 500, which was introduced by Professor Chen- Yi Sung. We had also a small bee farm.

4.2 City Bear Farm



I can still recall the moment I'm struggling to find a bee larva to breed a new queen bee. We went to Professor Chen Shih Shiung's magnificent farm in Changhua at this time. Professor Chen showed us his farm and how he was able to use his small space, yet the abundance of plants, farm animals, and varied agricultural techniques are incredible. He maintained a tiny bee farm and used farming techniques such as hügelkultur. He also bred black soldier flies, which he fed to his organic chicken. At the end of the day, we are able to finished our activity, and hoping to breed a new healthy queen bee.

4.3 Taida Horticultural Co.Ltd.



This exercise took place on April 18, 2023, at Professor Lai's Taida Company laboratory. I'm glad I got to see and learn about orchid tissue cultivation. To avoid harmful substances entering the laboratory, we must sanitize ourselves and wear protective equipment before entering. Professor Lai's assistant demonstrated how to correctly undertake tissue culture. She demonstrated how to properly cut the orchids and place them in the mother bottle, which contains agar. When it was my turn to do the process, my hands were literally shaking from my mixed emotions. Excitement and nervousness come together. Professor Lai called us one week later to share the good news. Our orchid tissue culture had survived, and he emphasized that no fungus was present. We also tried sorting the good orchids from the bad. Still, his assistant showed us how to do this one. Young orchids with only one and brown colored roots, as well as infected leaves, are deemed bad and should be discarded immediately. Young orchids with two or more roots and green color are regarded acceptable and ready for potting. After that, we must wash and clean the good one. Nonetheless, I felt extremely fortunate to have been able to participate in this type of practice, as I learned a great deal from it.



This exercise took place on April 25, 2023, at Professor Lai's Taida Company. Professor Lai exposed and allowed us to participate in this type of activity. Aside from our class, Professor made time to visit his orchid plantation, for which I am extremely grateful. Professor had a fairly large orchid area that amazed me. Professor Lai and his assistant demonstrated and instructed us on how to maintain the roots attached to the pot, often known as the "*rooting*" procedure. She meticulously reattached the overlapping roots to their medium. It's difficult since you need to be careful not to cut the roots. We began this procedure, and it has been a rewarding experience; I have completed 630 orchid pots.

4.4 Winter Camp at Nanhua University



This program happened last February 7-9, a three-day winter camp for elementary students from the different parts of Taiwan. For me, this was the most memorable experienced. I assumed we would simply watch these kids and keep them safe. However, the real job entered. We had some impromptu speeches, and we especially stood out as the teachers of these adorable little kids. It was quite exhausting and difficult to achieve this. But seeing these little kids who genuinely listened and followed me, made my heart flutters. It was a learning and educational camp experience not only for these children but also for us. Professors and educators addressed SDGs, or Sustainable Development Goals, and environmental preservation. The kids interacted with each other, and I can tell that these kids excel in class, even though I have a small child named Hans who is quite stubborn, but he still listens to me. I felt sad when they had to go home after the camp because we became close to each other already, but that is something I had to accept; things come and go.

5. OTHER SCHOOL ACTIVITIES and TOURS



Orchid of Mirror Show

This was also held in Changhua, and Professor Simon Lai brought us here. We can see the various orchid varieties inside. Different colors and sizes definitely feed your eyes. There are new orchid breeds. There are orchids that I have never seen before and it amuses me greatly. I was overwhelmed to have such an experienced.



I can still remember the day I joined my first ever singing competition. The International Students Singing Competition. I was hesitant to enter this tournament since I didn't want to disappoint anyone. In the other hand, I am extremely grateful to those people behind this. They boosted my self-esteem significantly. They prompted me to join this one. I came in fourth

place, which isn't bad for a first-timer like me. When I saw them in the crowd applauding for me, it made my heart melt. It made me very glad to know that there are people who believe in me. It made my heart flutter to understand that there are others who believe in my minor talent. If there's more opportunity, I shall make every effort to participate in this type of activity.

6. CONCLUSION

Being a scholar in Taiwan under TEEP Program has been a challenging yet rewarding experienced. I have had the opportunity to engage with a diverse range of perspectives and ideas within my field of study. Nanhua University offer world-class facilities, resources, and opportunities for research, which has allowed me to grow both intellectually and professionally. The support and encouragement I have received from my peers and mentors have been invaluable. Furthermore, Taiwan's commitment to internationalization and global engagement has allowed me to expand my knowledge, network, and cultural understanding. Through various international programs and events, I have been exposed to different cultures, ideas, and experiences that have broadened my views and enriched my academic work. Overall, being a scholar in Taiwan specifically under TEEP program had been a transformative experienced, and I am grateful for the opportunities and support that I have received. The knowledge, skills, and connections that I have gained here will undoubtedly have a significant impact on my career and personal growth in the future. I am extremely grateful for the people behind this TEEP Program, specially to Professor Hong and staff for the generosity and support.

7. OTHERS



This is our visit to the Xizhou Garden in Changhua, Taiwan. This is the Flower Festival. We wandered around and viewed those lovely set ups of many varieties of colorful and beautiful flowers with our good friend Anna here in Taiwan and Professor Yi Sung -Chen.