

South African Region Student Exchange

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Summary

In May 2024, I was selected as an exchange student, which marked a watershed moment in my career. IPPS's generous support not only made this trip possible but also allowed me to learn more about the field of Horticulture from experienced individuals who are all about knowledge sharing. My trip to Australia lasted two weeks, it was my first time leaving South Africa, and I was extremely nervous, however.

When I arrived, I was greeted by friendly people who made this experience enjoyable and educational. My first trip was to Perth, where I spent time with Mr. David Hancock. The experience in Perth was a highlight of my career; I visited many

places with Mr. Hancock and learned much about different nurseries and plant diversity in Australia. We went to Grasstrees Australia, Plantrite, Natural Area Nursery, Caversham Wildlife Park, where I saw a kangaroo for the first time, and the Biodiversity Conservation Centre, which provided me with insights into my MSc project because they do similar work. I also had the opportunity to meet incredible people from Natural Area Nursery, who introduced me to different kinds of seafood. Perth was a beautiful place, rich with history and beautiful native plants of Australia.

After my trip to Perth, I traveled to the beautiful city of Brisbane, where I was

hosted and welcomed by Pam Berryman. During the three-day pre-conference tour, I had the opportunity to meet and interact with people who were both knowledgeable and welcoming. We visited several nurseries, and it was fascinating to see the differences and similarities between our nurseries in South Africa and Australia. I couldn't wait to bring back the knowledge I'd gained to South Africa. During my time in Australia, I was fascinated by the machinery in nurseries, as well as the diversity of plants and their similarities to those in South Africa. I also had the opportunity to identify some South African plant species that are invasive in Australia.

The conference began after the tour. This opportunity was eye-opening because I heard from highly skilled and knowledgeable professionals in my field. Being a member of the six packers introduced me to new friends and allowed me to interact and assist at the conference; I felt honored to be a part of the group. Following the conference, I spent time with the incredible Pam

and Linda. I had the opportunity to visit the Australia Zoo, and Movie World, and explore the Sunshine Coast.

I would like to thank the IPPS Australia and South African region for supporting me throughout my trip. The funding and support I received from IPPS was instrumental in making my trip to Australia a reality. It provided the financial backing needed for travel, accommodation, and daily expenses, while also opening doors to academic, cultural, and personal growth opportunities. The experience was transformative, broadening my horizons and leaving a lasting impact on my personal and professional life. I would also like to thank my hosts for welcoming me to their homes, introducing me to their families, and taking up time from their schedules to allow me to explore my time in Australia.

INTRODUCTION

In May 2024 I had the privilege of participating in a fully funded horticulture trip to Australia, sponsored by the International Plant Propagator Society (IPPS). This opportunity began by being in an inspiring competition with two other skilled individuals in Stellenbosch, South Africa (**Fig. 1 and 2**). We presented our experiences as young professionals in the Horticulture industry and why the opportunity to visit Australia would be beneficial in our careers. I

had the honor of being selected to visit Australia and in May 2024, I began my visit to this beautiful country. The purpose of the trip was to help me learn Horticultural practices outside of my country of residence focusing on various production and propagation techniques and engage with a variety of professionals in the field. My visit to Australia began in Perth and ended in Brisbane where I attended the 52nd IPPS (Australia) conference in Ballina.



Figure 1. IPPS delegates in Stellenbosch.



Figure 2. N. Ndlovu with student exchange nominees.

Day 1-3: Arrival and Introduction to Western Australia

My trip began with a connecting flight from South Africa to Dubai then finally landed in Western Australia. I was warmly welcomed by Mr David Hancock and his beautiful wife who was my host, upon my arrival, we had a special dinner engaging in beautiful conversations that made me get to know their family more (**Fig. 3**). In preparation

for the following day, Mr Hancock encouraged me to take as much rest as I only had one day in Perth and plenty to see and learn.



Figure 3. Mr. David Hancock with his lovely wife and family friend Bree welcome dinner.

Our first nursery visit was in Grass Trees Australia where we were given a tour by the lovely Fiona Reynolds. It was a pleasure visiting this leading supplier of grass trees and it was the first time seeing the species *Xanthorrhoea preissi* in person (**Fig. 4 - 6**). Fiona gave us a history of the

company and I learned that since 1995, Grasstrees Australia's skilled staff have provided quality grasstrees and zamia palms to the general public and government agencies showing me how conservation of these species is done as well as the extent done for restoration purposes of Australia's

precious grasstree. I further learned that the company has been involved in restoration, they have a license to rescue grass trees in the wild. Viable trees are selected on site, taken to the nursery, and treated for 12 months depending on how well roots have developed. Watering is done twice a week.

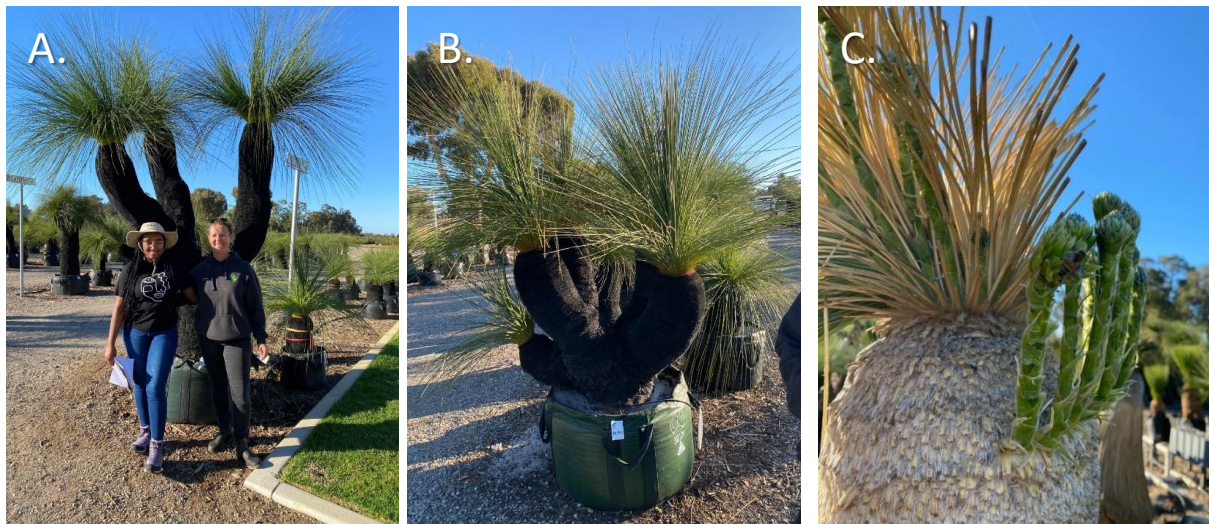


Figure 4. A) Nosipho & Fiona standing next to a 250-year-old grass tree. B) Grass tree plant. C) New shoot formation on a grass tree.

Our second nursery visit was to Plantrite Nursery. The drive was really interesting as we spotted several native species along the way. Upon seeing the nursery, I was amazed by how big and automated it is (**Fig. 5**). This is a wholesale native nursery that gave me an overview of native Australian flora and I was able to spot some similarities and differences to South African indigenous flora. I got to learn about the role and

importance of precision irrigation systems and efficient water use as Perth experiences issues with drought. The technologies I observed in this large-scale nursery showed me significant potential for application in South Africa's dry regions like the Karoo and Northern Cape. I also got to learn about the services they provide for multi-acre reforestation and environmental planting projects.



Figure 5. A) Large scale propagation unit at Plantrite nursery. B) Nursery machinery at Plantrite.

Having a host like Mr. David Hancock was an extreme honor for me, and our last nursery visit was a privilege as I got to see Natural Area Nursery. I was given a tour of the nursery and a history of it. Recently moved to a new area, Natural Area Nursery has a reputation for producing quality plants for restoration, revegetation, and landscape around Perth and Western Australia (Figs. 6 and 7).

I got to learn about all the fascinating restoration projects Mr. Hancock has been involved in and it was inspiring to see the relationship he has with the staff. I got to see a variety of native Australian plants and learned about water efficiency and some challenges presented during drought seasons.



Figure 6. Pellet trays at Natural Area Nursery.



Figure 7. A) Seed storage area at Natural Area Nursery. B) Seed smoking facility was similar to the smoker for Protea seeds in South Africa. C) Checking seedlings in the nursery.

Our next destination with Mr. Hancock was Caversham Wildlife Park, where I got to see and feed a kangaroo for the first time (Fig. 8).



Figure 8. Feeding kangaroos.

We then took a drive to Kings Park, which was one of the most beautiful places I have seen (Fig. 9).



Figure 9. King's Park memorial.

During our visits and chats with Mr. Hancock, I expressed an interest in biodiversity conservation and my current MSc projects. He then arranged for a brief meeting with

Jason at the Biodiversity Conservation Center in Kings Park. I got a tour and got to see their seed science program (**Fig. 10**), genetics, plant biotechnology (their tissue culture laboratories), storage science component which gave me ideas on storing recalcitrant seeds, and their work on restoration ecology.

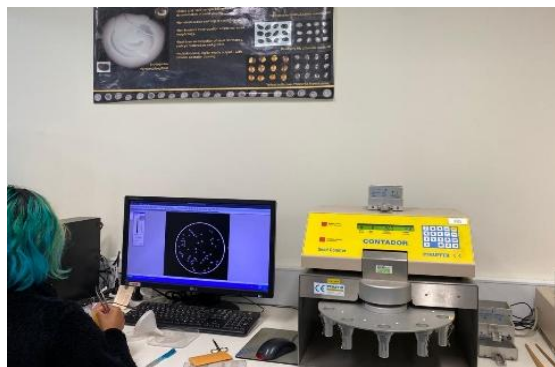


Figure 10. Automatic seed counter at the Biodiversity Conservation Centre.

Following our tour of the conservation center, I got to see the beauty of Kings Park and the history seeing the names of servicemen and women from Western Australia who served in the war was emotional and made me see how rich in history Western Australia is.

After a long day of fascinating visits and tours, we took a drive to the north beach where I went to my accommodation in preparation for a night out with some of the young people from Natural Area Nursery. Driving there we stopped at a few spots for pictures, and I got to see some of the restoration projects Mr. Hancock has done around the North Beach. The night in Perth ended beautifully with local seafood, music, drinks, and good company (**Fig. 11**).



Figure 11. Visiting North beach and having a seafood buffet with Natural Area Nursery staff. Exploring the beauty at the coast and tasting indigenous foods.

Day 4-6: Arrival in Brisbane and attend Pre-conference tour

I then flew from Perth to Brisbane where I was hosted by the lovely IPPS Secretary Pam Berryman. While in Brisbane, I saw a stark contrast with its humid, subtropical climate as compared to Perth. I also got to learn that Brisbane is known for its lush landscapes and thriving horticulture and offers an ideal setting to explore tropical and

subtropical crop production. On the first day of the pre-conference tour, I meet up with fellow delegates who share the same enthusiasm for Horticulture. On the first day of the pre-conference tour, we engaged in insightful conversations meeting with all delegates and I got to see Mount Tambourine and explore it with the lovely Pam and Linda (**Fig. 12**).



Figure 12. Exploring Mt Tambourine with Pam and Linda.

The second day of the conference tour began with our first nursery visit to Tambourine Mountain Nursery. We had a tour of the nursery and engaged in a talk with the owner Alicia Atkinson. Our second nursery visit was Mt Nathan Propagation which was a 20 km drive. We saw a wide range of native and exotic trees and shrubs. We then took a short drive to Crystal Waters Nursery

and had some refreshments while touring the beautiful nursery. Following that visit, we explored two more nurseries that grow plants for landscape trade and had a delightful lunch paired with wine tasting and a cheese board (**Fig. 13**). The day ended with a lovely Mexican dish and engaging in conversations with fellow delegates.



Figures 13. Day one of the pre-conference tour. Visiting nurseries and ending the day with wine tasting and cheeseboard.

Day three of the pre-conference tour was filled with interesting nursery visits, good conversations, and exploring native flora in Australia. Our day began with a one-hour drive to Limpenwood Botanic Gardens. Having a background in working at a botanical garden in South Africa, I was fascinated by the deep history and beauty of

Limpenwood Botanic Gardens. Being around since the mid-seventies, this stunning garden exposed me to a variety of rare and unusual tropical and sub-tropical plants all of which have potential applications for South Africa's tropical regions, like KwaZulu-Natal South Africa. We also got to

explore local food in Mt Warning Hotel engaging in mind-stimulating conversations. Following our lunch, we went to Gondwana Nursery, a beautiful horticultural space that is regarded as Australia's leading native propagation nursery (**Fig. 14**). I also observed that the nursery also employed envi-

ronmentally friendly practices, such as integrated pest management (IPM), which reduces chemical inputs while maintaining high yields. These methods could be replicated in South Africa's nurseries. Our day ended with a buffet of prawns, fresh oysters wine, and good conversations exposing me to the beauty of the coastal town.



Figure 14. A) Nursery visit. B) Using different colour pots in a production nursery. This could also be done in South Africa for ease in plant identification. C) *Grevillea* cuttings stuck in perlite.

52nd IPPS Conference – A breath of Fresh Air

Following the pre-conference tour, I was extremely excited to meet other delegates at the conference. It was an honor to be part of the six packers and assist Pam in preparing gift bags for fellow delegates. Meeting the six-packers was very insightful, it was very inspiring to share our knowledge and get to see fellow young people inspired by Horticulture as I am (**Fig. 15**). Dinner conversations before the conference proceeded got me to understand the role of the six-packers and what an amazing opportunity to be a part of the group. We were introduced to fellow delegates, and I was privileged to represent South Africa in that moment.

The first day of the conference began, and we were welcomed by enriching talks that provided valuable insights into the future of horticulture, a “breath of fresh air” indeed. Keynote speakers at the conference were experienced in multiple industries and lifelong interest in plants. I was fascinated and inspired by all the talks, and I could not wait to share the knowledge back home, particularly relating to micro-propagation, plant breeding, and propagation of rainforest plants. I got the opportunity to network with a variety of knowledgeable individuals who are skilled in running businesses, research, and innovation. The conference also included a variety of nursery visits in between. The knowledge I gained from this conference can be applied

to improve South Africa's horticultural sector, making it more sustainable, productive, and resilient in the face of our changing environment. The global connections made at

the event also offer opportunities for ongoing collaboration and exchange of best practices and I had the opportunity to present about my visit to Australia which was an amazing opportunity for me (**Fig. 30**).



Figure 15. A) Meeting fellow six-packers. B) Plant identification during a nursery visit. C) Presenting at the IPPS conference in Ballina, New South Wales.

The conference closed off with a beautiful gala dinner with exquisite food and an auction. It was an honor to assist in the auction with fellow six-packers and I received a certificate for presenting and being part of the six-packers. The following days were the last days of my visit to Australia.

My last few days of my visit was spent with Pam and Linda who allowed me to see the Gold Coast. We went to places such as Cape Byron State Conservation Area which reminded me so much of Cape Point in Western Cape, the ginger factory

and I got to taste a variety of ginger delicacies (**Fig. 16A**), and one more nursery visit where we were given an interesting tour by the inspiring Zoe (**Fig. 16B**). One of my highlights included visiting two iconic attractions: Australia Zoo and Warner Bros. Movie World (**Fig. 16C**). The visits provided a mix of wildlife conservation education and entertainment, offering unique experiences that highlighted both Australia's natural heritage and its thriving entertainment industry.



Figure 16. A) The Ginger Factory. B) Nursery visit. C) Australia Zoo and D) Warner Bros. Movie World.

Located in Beerwah on Queensland's Sunshine Coast, Australia Zoo is world-renowned for its conservation efforts and its association with the late Steve Irwin, the "Crocodile Hunter." I have always been a big fan watch him and his family on television back in South Africa and the zoo offered me a chance to interact with some of Australia's most iconic wildlife. I got to see and even hand-feed kangaroos, hold a koala and observe wombats, Tasmanian devils, and dingoes up close.

The experience deepened my understanding of the unique fauna of Australia. The zoo gave me an unforgettable wildlife experience with a strong emphasis on conservation. It was inspiring to see the work being done to protect endangered species and learn how human actions can make a positive impact on wildlife preservation.

CONCLUSION

IPPS Australian region provided me with valuable insights into the future of horticulture. The trip provided me with a wealth of knowledge and inspiration, much of which applies to South Africa's horticulture industry. The highlights I took from attending the conference and visiting nurseries include:

1. **Water management:** South Africa's water conservation issues may be resolved by adopting Australia's cutting-edge irrigation methods and regulations, such as drip irrigation and rainwater harvesting.
2. **Indigenous plant use and conservation:** Using South Africa's indigenous

The following day was an exciting visit to Movie World. Located on the Gold Coast, this popular theme park gave me "the magic of Hollywood" to life through its thrilling rides, live shows, and character meet-and-greets. I got the opportunity to ride a range of exciting rides, from adrenaline-pumping roller coasters, that were scary yet enjoyable experiences for me.

Throughout the day, I got to see and interact with characters from popular franchises such as Batman, Superman, Wonder Woman, and the Looney Tunes gang. The live-action performances provided a playful and immersive element to the experience. I truly enjoyed the experience and am grateful to Pam for taking me there, a beautiful way to close my 2-week trip to Australia (**Fig. 16 C**).

flora more and having nurseries dedicated to producing these plants for a variety of uses such as restoration.

3. **Technology integration:** The application of automation, sensors, and drones in Australian horticulture demonstrates how technology can increase output while reducing its negative effects on the environment.

Overall, I had an amazing opportunity that allowed me to learn and interact with a variety of skilled individuals in the Horticulture industry.