

South African Exchange

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Summary

In Australia, a first world nation with generally a gold standard in production Horticulture, we're used to the luxuries of potting machines, tray fillers, seed machines, sticking robots, remote climate control, quality potting mix, fertiliser, pest control and more simply quality and reliable water, gas and electricity supply, whereas South Africa is not. Load shedding (periods of time where power cuts off), similar issues with water, a weak currency, poor potting mix (making out of anything you can find),

little nursery automation and the list goes on. Growing plants still isn't easy even with all our modern machines and sterile potting mixes and quality water, imagine how hard growing plants is without all of that! This paper will be going a little bit more in depth into the issues that South African growers experience every day. I was able to experience South African growers' passion and enthusiasm that enables them to overcome these issues daily, truly one of the most inspiring things I've been able to witness.

INTRODUCTION

My name is Joshua Taylor, and I am from Rosebud on the Mornington Peninsula 60 km south of Melbourne. I am currently employed at a propagation nursery, Peninsula Growers as Head Grower. I started my horticultural journey at a young age of 15. I took advantage of the ‘work experience’ opportunity that my school offered and did a week’s work experience at Southern Advanced Plants. After I had completed this week’s work experience, I knew that this was the career that I wanted to pursue. I began an apprenticeship at Peninsula Growers shortly after year 10 in 2018. I now have 6 years of industry experience and love my job more and more every day.

Load Shedding

Load shedding occurs when the demand out meets the supply causing power to trip in certain areas for unprecedented periods of time, from my experience this load shedding can last 30 mins to many hours if not days. On the days where temperatures can exceed 45 degrees Celsius you can understand how this could become problematic, disabling (shade screens, extraction fans, air conditioners, etc.).

Many nurseries had coal generators as a reliable source of a backup power supply (**Fig. 1**), diesel generators are too expensive to purchase and too expensive to run for prolonged periods of time



Figure 1. Coal Generator.

Climate Control

Also in Gauteng Johannesburg was a nursery called ‘Random Harvest’. This was a retail nursery that specialised in growing native and indigenous plants. In **Fig. 2** you will see concreted propagation benches with assorted trays of freshly propagated

plants in a community tray format. These propagation beds were woodfire heated (**Fig. 3**). Gas is a resource that is rather expensive compared to the relatively inexpensive woodfire heater.



Figure 2. Concrete propagation benches.



Figure 3. Woodfired boiler.

Potting Mix

Another common issue in South Africa that growers experience is the lack of quality potting mixes. We are very spoiled in Australia, I can order a fresh load of potting mix and have it delivered less than 24 hours later, sterilised, free of weed seed and any other contaminants or pathogens. This is a rare luxury for most South African growers. This grower was in Gauteng (Johannesburg), they couldn't get good quality potting mix in to their site without the cost being disproportionate. Instead, they source different materials from neighbouring farms including (mulch, grass clippings, soil products, coir, e.g.). After materials have been collected, they are moved into windrows where they are left to decompose and slowly turn into a usable potting mix (Fig.4).

Labour

One of the major differences between South African and Australian nurseries is the size of the labour force. In Australia, nurseries face several challenges, including high minimum wages, difficulties in finding institutions to provide effective staff training, and notably high staff turnover rates. These issues often lead Australian nurseries to invest heavily in automation to mitigate labour-related problems and control wage costs whereas in South Africa, labour costs are low and is available to hire anytime of the year (Fig. 5).



Figure 4. Decomposing windrows.



Figure 5. Labour for nurseries is available in abundance in South Africa.

CONCLUSION

There are vast differences between South African and Australian Horticultural industries. Despite the many challenges that the South African horticultural industry experiences they have never failed to adapt to the continuously changing conditions and grow exceptional quality plants that are on par with the Australian industry and the rest of the world. During my South African experience, I met many extraordinary people. This experience has enabled me to network and forge relationships with like-minded people that are passionate about this industry.

Acknowledgements

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