

My Horticultural Journey: Rare, Unusual or Reimagined

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Summary

I have been extremely fortunate in my professional career to have made so many connections to further my horticultural knowledge and interests and then be able to become a mentor myself. This fortune is not measured financially but rather on how I think I've achieved the goals I set out with and whether they stayed consistent, were modified slightly or completely changed. I can honestly say that it didn't come easily, and many things were just seemingly coincidence but looking back I think that making your own luck is a big part of it. What I have done is constantly strived to adapt and

improve everything that I do and the seven deadly words are always in my mind, "we have always done it that way" and the reason why many people and businesses don't keep up or change when needed which ultimately leads to major issues. Having a good general knowledge across several different fields also helps to foster adoption of new ideas, techniques or adaption of equipment to improve efficiency. Being able to weld, build and fix things may not seem like a horticultural skill but it certainly makes you think about a lot of different industries as you apply their tools of the trade.

INTRODUCTION

I was extremely fortunate to have always had a passion and vocation for all things plant and animal and my earliest memories are of collecting fig seedlings from rock ledges and burning *Banksia* infructescences to extract seeds. While in the 3rd grade at the age of nine seeing the bizarre *Calodendron capense* fruits at a primary school fete, buying two of them which ultimately produced

nine plants, several of which are still alive more than 40 years later (**Fig.1**). While these trees don't seem like much, I still get immense satisfaction seeing them on my and other farms that I planted or supplied 40 or more years ago, growing and supporting wildlife or just being beautiful flowering specimens.



Figure 1. The best of the *Calodendron capense* that I grew as a 3rd grader.

The Beginnings

My high school work experience in grade 10 was at the local Department of Agriculture, Alstonville Tropical Fruit Research Station, New South Wales where I did some interesting and cool stuff like plant 700 tea seeds which I think were the first planted in the region as a trial to assess whether tea was a viable crop in the region. The interest in tea cultivation in NSW is still there and

continuous improvements are happening (Krahe and Krahe, 2022). Another was to assess a range of new citrus varieties for taste and measure sugar content; one of these being Mineola Tangelo and every time I see one in the shops now, I think how cool is that I did some of the assessment on that variety way back as a high school student.

During my school years I was always interested in plants and nature and was fortunate to have an agriculture teacher at my high school Peter Giblin who managed to get a Certificate II in Nursery Production through as a part of the Higher School Certificate courses, as additional units both within and after school hours and was the pilot for what is TVET (Technical and Vocational Education Training) in high school today (TVET, 2000). Along with Peter's accomplishment of getting the course offered was the range of horticultural trainers at the local TAFE (Technical and Further Education) institute; one being Greg McPhee a local nurseryman, grafter and IPPS member. It was Greg who infected me with the grafting bug as while I was interested in it from an early age remembering trying to graft a tomato onto a weedy daisy. I clearly had absolutely no idea what I was doing as my background in dairy farming and beef cattle gave me no exposure to it. Greg showed our small group of six students how to propagate seeds and cuttings commercially and then how to bud and graft stone fruit that we germinated ourselves.

As a part of that course, we attended a seminar Prof Keith D. Cairncross of Macquarie University delivered at the local Wollongbar Department of Agriculture about his endeavours to graft Western Australian (WA) *Banksias* onto hardy east coast rootstocks for the 1988 Australian Bicentenary. Having never seen a WA *Banksia* before I was immediately hooked as they are quite showy and different to the east coast species I was familiar with. This began my absolute passion for Proteaceae which has diversified into other genera over time as well.

The University Days

So empowered by a small amount of knowledge and an excessive amount of enthusiasm, I embarked on getting myself a higher education, the first in my entire extended family. I had decided that while I hated school and all things study related, I realised that a degree would grant me a lot more options than a Certificate II or III in Nursery Production. I attended several agricultural campus open days to inspect their facilities and see if I could acquire any of their growing facilities for my *Banksia* obsession.

I decide that University of Queensland Gatton, formerly Queensland Agricultural College (QAC) had the best nursery and opportunity to borrow some facility space for my passion/obsession. It was a good decision as the nursery was a commercial operation supplying propagated plants for the cut flower industry, also focussing on difficult to propagate species and varieties. I spent every spare moment I could in the nursery learning about cutting and seed propagation and undertaking my own cultivation of *Banksia*, *Hakea*, *Grevillea* and *Dryandra*. Some of that work is shown in **Fig. 2**. These are a few of my earlier grafts conducted in 1989 and were done as cotyledon grafts using double sided razor blades.

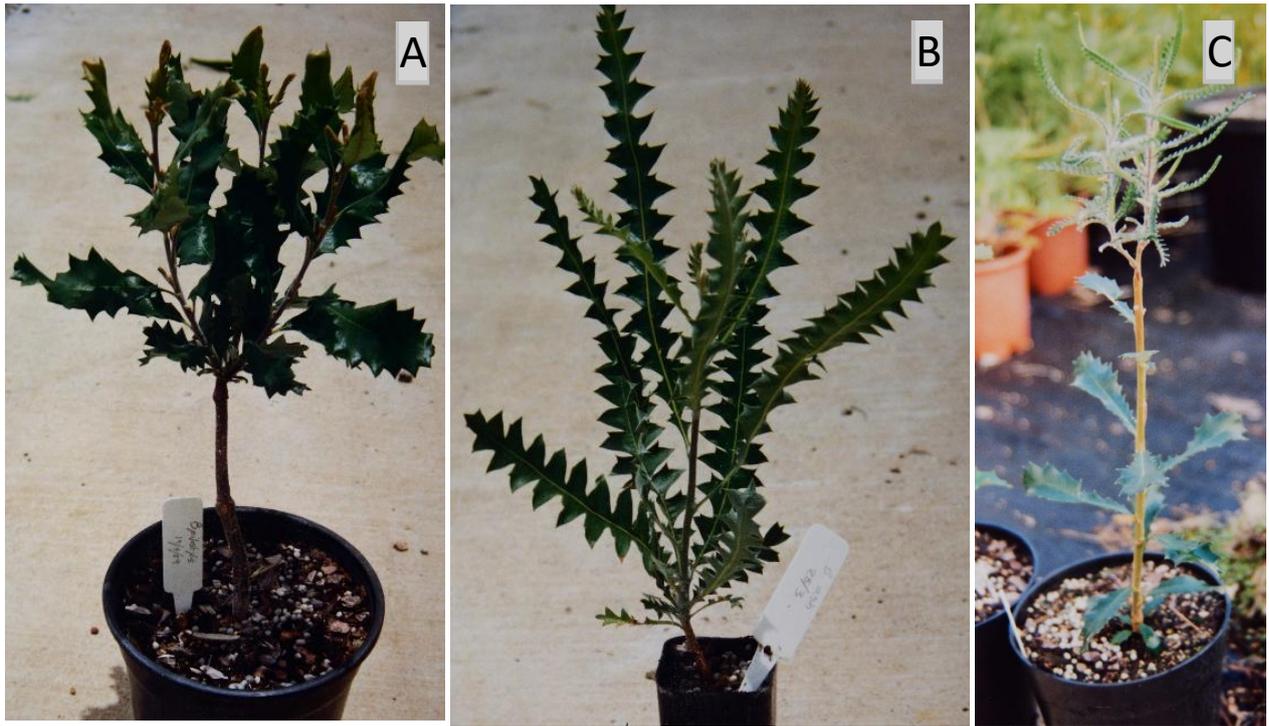


Figure 2. Some of my early work during my undergraduate study at the University of Queensland, Gatton. A) *Banksia pilotstylis* grafted 14 April 1989, B) *Banksia ashbyi* seedling tubestock and C) *Dryandra kippistiana* grafted onto *Banksia integrifolia*. Grafts were made using double-sided razor blades.

I met members of the local Society for Growing Australian Plants and this introduced me to legends like Norm McCarthy, a local collector and enthusiast and Merv Hodge, an amazing collector and grafter of *Grevillea* spp. and where I first learnt the mummy graft technique around 1989 or so. I then through Merv met Peter Olde and Neil Marriot who are both massive *Grevillea* aficionados and have written brilliant reference books on the genus (Olde and Marriot, 1994-1995), revised the taxonomy (see for example, Olde and Marriot, 1993; Olde and Marriot, 2009) and contributed greatly to their conservation (see for example Olde and Marriot, 2021) and broader awareness.

As I entered my 3rd year, (1990), I focussed on *Grevillea* and after a 6-month stint on a flower farm in Western Australia which I had arranged on a trip a year or so earlier, I was totally consumed by the immense diversity in the genus and the number of people cultivating them.

While living there I went to Zanthorrea Nursery and collected several *Grevillea* species one of which was simply called 'Black Magic' (**Fig.3**). The next year this plant was identified as the extremely rare *Grevillea calliantha* from Cataby area in south-west of WA (Makinson and Olde, 1991).



Figure 3. The *Grevillea calliantha* plant produced from the original material I collected from Zanthorrea Nursery.

I was also producing a broad range of grafted grevilleas that were sold thru the

QAC Plant Nursery as a part of their plant range (**Fig. 4**).



Figure 4. A) *Grevillea thyrsooides* in 200mm pots ready for sale around 1991, B) some of the range of grafted grevilleas in 200mm containers in the Queensland Agricultural College plant nursery ready for sale.

Along with commercial production, I was also involved in grafting recently collected material notably from Peter Olde and Neil Marriot on some of their trips into Western Australia while researching for their *Grevillea* books, which included some

amazing discoveries of extremely rare *Grevillea* such as *Grevillea batrachioides* (ANPSA, 2024) and *Grevillea flexuosa* (Environment, 2008) both of which I was successful in grafting and bringing into cultivation in Southeast Queensland (**Fig. 5**).



Figure 5. A) *Grevillea batrachioides*(left) compared with its close relative *Grevillea asparagoides*(right). B) The stunning leaves of *Grevillea flexuosa*

I insisted on doing my year paper on grafting *Grevillea* and while lecturers were reluctant, I still managed to push it through. I was paying for my course so I wanted to get as much out of it for me as I could. My nursery Lecturer at the time was Ian Gordon, a long time IPPS member and it was he who suggested I apply for the Rod Tallis Award which I did, and in 1991 I was awarded this in Canberra. I was a country lad so speaking at a conference was daunting and I was extremely nervous but managed to pull it off. This was before the days of Microsoft® PowerPoint presentations, so I didn't have any cool props - just me and a few slides.

I also was extremely interested in plant breeding. At this time Merv Hodge had developed *Grevillea* 'Superb' and it was a beauty, so I took crop improvement as a 4th year subject with Robert Fletcher, an experienced wheat breeder and within a year was already hybridising *Grevillea* spp. (Fig. 6) and then ultimately *Brachychiton* spp. which has become a 26-year odyssey

producing many stunning hybrids and more in the pipeline. I won't go into detail as that is the subject of another paper in this Issue and in several previous IPPS Proceedings.



Figure 6. The first hybrid that I produced that survived to maturity was this *Grevillea batrachioides* x *G. bipinnatifida* and while stunning it was as prickly as razor wire so not ideal for cultivation.

The Experienced Horticulturist

Throughout the times I was cultivating *Grevillea* spp. that culminated in over 136 species around 1992, I saw the potential for what plants could look like. This early experience has taught me to look at plants in different ways, particularly how to show them off in the best possible light whether that be a standard *Ixora*, *Gardenia*, *Callistemon* or *Melaleuca*. I have always used my

grafting skills to re-imagine what plants could be to make them more desirable or presentable for horticultural uses. Some of these ideas are depicted in **Fig. 7 to 9**. Plant breeding takes that to another level by blending the desirable traits of several or many species into interesting and novel new hybrids.



Figure 7. Standard *Callistemon* 'Little John' (A) and standard *Melaleuca quinquenervia* red (B)

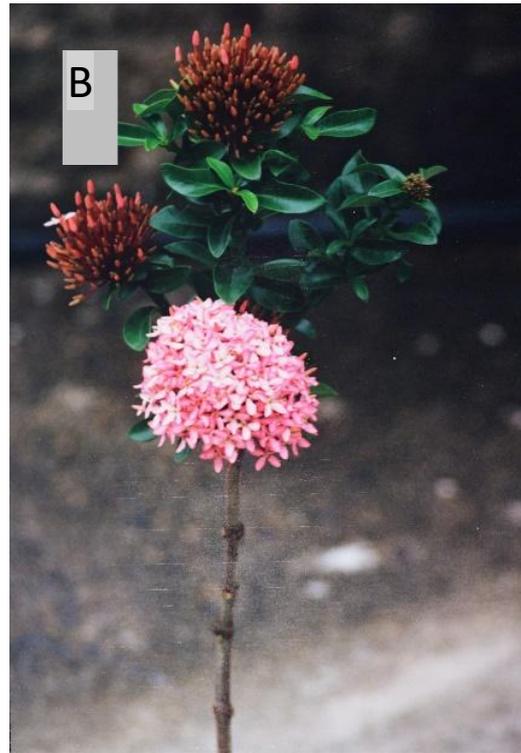


Figure 9. Standard *Gardenia* ‘Radicans’ onto *Gardenia magnifica* (A) and *Ixora* ‘Pygmy Pink’ onto *Ixora coccinea* (B) .



Figure 8. *Slumbergera* onto. *Hylocereus* (Not my idea - I saw this style of grafting at Bundaberg markets so did my own)

This is far from my entire horticultural journey, but it does spell out some of the earlier highlights and while it seems that luck has played a big part in my career and ‘success’ as I see it isn’t necessarily so. Luck did to some extent play out with the people I have met and learnt from, but it was also my determination to succeed in what I wanted to that drove me to get where I was. Whether it was my grade 7 maths teacher who said in my first maths class at high school “oh you’re a Boorman you’ll never go anywhere” obviously not knowing this Boorman, or lecturers at university saying oh you can’t pick your own 4th year study project theme, but I did and that got me a Rod Tallis Award which still hangs

proudly in my loungeroom. I'm not saying that this path I've taken didn't cause a lot of friction because it did, but I'm used to that, being who I am.

CONCLUSION

Find your passion and your vocation, academia is but a tiny part of the real world and the trick is to find your niche and love what you do. If you're good enough or passionate enough you will make an amazing career out of it and be extremely satisfied. Financial reward can be tricky in some fields but being truly satisfied with what you do is also extremely rewarding.

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