Attention to Detail Is a "Not Negotiable" for the Production of *Pseudopanax* Hybrids from Cuttings[©]

Jan Velvin

97 Albany Heights Road, RD2, Albany 0792, New Zealand

Email: getgrow@ihug.co.nz

BACKGROUND

Pseudopanax taxa are extremely popular woody native plants and commonly used in New Zealand amenity plantings. The main appeal of these taxa is their very varied, often unusual, leaf shapes (Figs. 1). Commonly they have varying shades of green leaves but some hybrids have purple/brown leaves (Fig. 2). One cultivar, Pseudopanax lessonii 'Gold Splash', has variegated green and yellow leaves giving a mottled effect.





Fig. 1. A. A juvenile *Pseudopanax ferox* plant on the left with the right plant showing adult leaves on the top. B. A closer view of the adult on the top of the plant.



Fig. 2. This dark coloured plant is probably a *Pseudopanax lessonii* \times *P*. (Adiantifolius Group) 'Adiantifolius' hybrid.

A range of *Pseudopanax* hybrids was introduced by Duncan & Davies, New Plymouth. Widely used and among this range are:

- P. (Adiantifolius Group) 'Adiantifolius' (P. lessonii × P. crassifolius)
 P. (Adiantifolius Group) 'Cyril Watson' (P. lessonii × P. crassifolius)
- P. lessonii (syn. discolor) 'Rangatira'
- P. 'Purpureus' (P. lessonii × P. discolor)
 P. lessonii 'Gold Splash'

Pseudopanax lessonii 'Gold Splash' (Fig. 3) originated from a cut back stump in the garden of Trevor Davies sometime around 1969. It was finally released for sale in 1978. It is interesting to note the time frame of 9 years in development here, as only with extremely careful management of stock plants and very selective cutting collection was this commercial release made possible.

Over the following years at times it has been noticeable that the true forms of these cultivars have been compromised by poor wood selection, with either weak quality cutting material or poor selection of form.



Fig. 3. Pseudopanax lessonii 'Gold Splash'.

"NOT NEGOTIABLE" PLANTS

Many native New Zealand cultivars fall into a group of plants I call "Not Negotiables."

These are plants that provide only a very small window of opportunity for cutting collection. Extra care with timing and wood selection is imperative for cutting success. All have only one or sometimes two growth patterns naturally per year. Recognising and reading these patterns is essential for successful cutting collection. Only strong, healthy, true-to-type cuttings should be selected.

Other native woody plants included in this "Not Negotiable" group with the same rigid requirements are *Sophora*, *Pittosporum*, *Metrosideros*, and *Podocarpus*.

CUTTING PRODUCTION

Requires the following skills:

- Observation
- Attention to detail
- Planning
- Knowing the "little things that add up"

Reference books tell us that to produce *Pseudopanax* from cuttings you require "soft to firm semi-hardwood cutting, March-April, hormone."

Let's peel back this information and apply the required attention to detail with:

- Stock plant management
- Timing of cuttings
- Wood selection
- Setting and aftercare

Stock Plant Management

What we finally require are tip cuttings which are:

- Terminated
- Semi-hardwood
- Strong and healthy
- True to type

Timing of Cuttings

Pseudopanax taxa have a natural growth pattern twice a year in the north of New Zealand.

- Spring giving cutting wood Oct./Nov.
- Dec/Jan giving cutting wood Apr./May

Being woody plants it is easier to maintain good strong stock plants if you can feed and trim working with these natural growth patterns.

- 1. Stock Plant Age. Maintaining strong young stock is also essential. Good rooting percentages can be maintained until the stock plant is approximately 5-6 years old when percentages fall away.
- **2. Trimming.** *Pseudopanax* have a ring of buds at the base of the last growth made. Trim leaving these buds in place. Trim just above the node or you may experience dieback in your plants (Fig. 4). The resultant growth from this will give you multiple breaks i.e. cuttings (Fig. 5). If you trim back to one stem bud you may get only one cutting (Fig. 6).



Fig. 4. A single break from cutting at a single bud.



Fig. 5. Cutting selected wood.

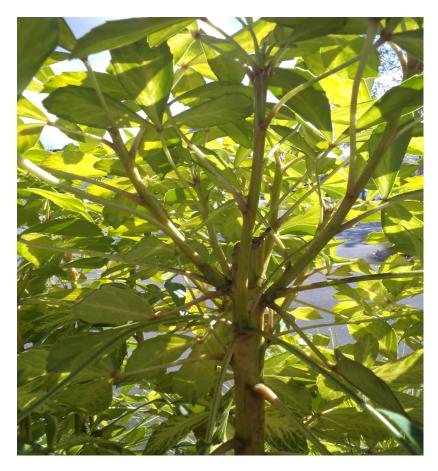


Fig. 6. Trimming to just above a ring of buds results in multiple breaks.

Wood Selection — the Cutting

We require:

- Semi-hardwood
- Terminated tip growth
- Nodal
- Light wounding

Setting and Aftercare

This is where the "little things add up."

- Well drained mix.
- Cuttings must be firm in the mix, not easy to firm if cells are being used as the cuttings are quite large in diameter.
- Space cuttings to give air movement.
- Hormone approximately 0.3% IBA.
- Water in well to settle the cuttings.
- Bottom heat 22°C.
- Mist don't saturate the mix.

POINTS TO REMEMBER

To achieve a quality *Pseudopanax* plant you must be able to select a strong, true-to-type, terminated, semi-hardwood, tip cutting. This cutting will give you the basis to produce a quality, bushy plant. Managing and often renewing your stock plants to produce quality material is imperative.

Remember, to grow roots on a cutting is one thing, to produce and sell a quality plant is quite another, and this can only be achieved with:

- Attention to detail in managing your stock plants.
- Selecting only healthy, true-to-type cutting material.