

Pastures for prosperity — Seeds forum.

2. The changing face of tropical pasture seed marketing in northern Australia

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Historical

Tropical pasture seed production and marketing is relatively new — i.e. a life-span of 40 years. The mid-1950s and the 1960s saw a lot of feverish activity by seed companies, Government departments and institutions and seed producers.

In the 1970s, 2 major factors greatly influenced the direction of marketing and promotion i.e. the 'beef crash' and the rapid rise in the cost of carrying seed stocks. Seed companies which, before this period, bought the total production and then did the marketing, changed direction and bought seed only as required. This left producers to carry stock. The side-effect of this was producer or farm-gate selling.

Seed company promotion became **passive**. This continued through the 1980s and still exists today. The role of promotion of tropicals was left to the Government institutions, which did a remarkable job, considering it was not quite their role.

Present

The start of the 1990s ushered in PVR (Plant Variety Rights) or PBR (Plant Breeder's Rights) as it is now known. PBR, which is a form of patent rights, has been operating in most developed countries in the world for some time.

Unfortunately, it has been perceived here in Australia, and I suppose in other countries, as a ready-made revenue generating process both by governments with user pays intentions by way of royalty payments, and seed companies by market

control and guaranteed margins. I believe these situations are having a dampening effect on the tropical seed market.

The reasons can be categorised as follows:

- New cultivars are not sufficiently superior to existing material.
- The total annual value of the tropical market is minuscule in comparison with the temperate market, so the expected revenue is just not there.
- The price of the majority of PBR cultivars is too high when royalties and higher margins are built into the end user price. **Expectations have been too great.**

Let us take these reasons individually and analyse them.

Why are the PBR cultivars not out-performing existing material?

We already have a range of well adapted and productive public cultivars. Vast areas in northern Australia have no pasture improvement at all so that, unless a new cultivar has great superiority over existing plants, be it in production or adaptation, it has little chance of replacing existing ones. **Quite frankly, the market does not warrant something that is only marginally better.**

Why is the annual tropical market relatively small?

Most tropical cultivars are long-term perennials so that, once established, with adequate management and maintenance, these pastures can remain productive for many years, provided an insect or pathogen does not wipe them out. **The last thing these pastures require is more seed.**

The vast tropical savanna areas suited to introduced tropical cultivars will be planted only gradually. It is a fatal boardroom exercise to attempt to quantify this market by multiplying

hectares by planting rates and placing a value on the total seed required, then starting to think this will happen soon.

Why is the price of PBR cultivars too high?

Cost recovery, greater margins and high expectations are contributing factors.

Governments using 'user pays' principles coupled with savage departmental budget cuts have compelled plant breeding institutions to look elsewhere for funding, so up-front payments and seed royalties are now the norm. These costs are being built into the end user price.

Seed companies, which have bid for and obtained exclusive marketing rights to new cultivars, have had to outlay up-front payments. There has been a tendency to recover these outlays quickly and to increase profitability, without considering whether the increased prices are consumer affordable. To be realistic, the purchase of pasture seed is not very high on the pastoralist's shopping list. A certain amount is usually spent on seed. **If the price is high, a smaller quantity is bought.**

The price of pasture seed has a profound effect on pasture development in northern Australia. Generally, northern Australian soils have low fertility and low unit output, so consequently they require low-cost inputs. This situation improves further south in the subtropical and temperate regions.

Northern Australia is cattle breeding not finishing country. In essence, high priced seed will have no chance of having an impact on pasture improvement in northern Australia. A comparison is readily available. Large tonnages of low-priced, open cultivars were produced and sold last season, with current stocks now low. Higher-priced PBR cultivars, on the other hand, are generally in a carry-over stock situation.

Future

I am of the opinion, and have been for some time, that we no longer have to sell the concept of improved pasture to the pastoralists of northern Australia. Certain recent factors have brought about a change in attitude and thinking, that has altered the direction of selling pasture seed. Market demand for better quality, younger cattle, a requirement for younger, quicker-maturing

animals for the live export trade to South-east Asia, and a general change in herd and financial management have been the most significant factors.

The most important marketing trend for the Tropical Pasture Seed Industry to address is to sell and demonstrate the know-how of establishing and managing improved pastures.

High prices, and sitting in an office waiting for someone to walk through the door, will sell nothing. Glossy brochures and slick advertising does not work either, in the market we are targeting.

The success of my company, Southedge Seeds, in the promotion and marketing of tropicals in northern Australia has some important aspects. We are producers. We also have a cattle herd, so we think like primary producers. This means we can talk to our pastoralist clients on the same level. We understand their problems and sensitivities. We spend a lot of time in the field advising and providing after-sales service. We have gained the confidence and respect of our clients by supplying good quality seed and good quality know-how.

I travel to the Northern Territory and the Kimberleys in Western Australia in the company aircraft. This involves promotional and after-sales work. This is the type of activity which has enormous marketing impact.

Practical hands-on, on-the-ground promotion and selling will be the only way significant areas of pasture improvement will be achieved in northern Australia. Gone are the days of waiting for markets to happen, waiting for droughts to break, and waiting for the next excuse to come along.

We have been actively involved in trial plot programs in north Queensland for many years and more recently in river frontage plots on the Einasleigh and Gilbert River at Abingdon Downs and Strathmore. These are showing great promise.

Environmental concerns

A lot has been said and a lot more will be said, about the effect the pastoral industry is having on the natural habitat in Australia. Unless there is a change of attitude by a large proportion of the grazing industry, these concerns will continue, and eventually governments will have no option

but to enact and enforce unpalatable legislation. I firmly believe the pastoral industry can get its act together and demonstrate that what it is doing is environmentally as well as financially sustainable, if it starts now.

The mining industry, which had the worst possible vandalism record, has taken giant steps in demonstrating that it is environmentally responsible. The pastoral industry needs to take note of what it is doing. **The mining industry is still digging holes in the ground and, as well, it is demonstrating environmental responsibility.**

In spite of the extreme environmental view that anything that is introduced to where it previously did not exist is unacceptable, let us demonstrate that we can introduce plants into the existing environment without dramatically altering the ecosystems, and at the same time, maintain and improve production of modern meat products.

Market direction and opportunities

I would like to explain an innovative method of pasture establishment which is ideally suited to the tropical savanna. We know that seed, which has high hard seed characteristics, can pass through the digestive tracts of animals, both ruminant and non-ruminant. Fortunately, the stylos fall into this category. Nearly all of the grasses and the large soft-coated legumes do not.

The pilot plot method

This entails establishing small strategic areas within larger areas, e.g. weaner or holding paddocks, or a corner of a large paddock. Ten percent of the total area is ideal. The strategic areas are planted to stylos such as Seca, Siran, Verano and Amiga plus a suitable grass. The area needs to be fenced for stock control.

The areas are planted with stylos and a suitable grass at a higher planting rate to ensure a good fast establishment. An appropriate planting method is used, e.g. crocodile seeder, broadcasting or aerial sowing. Tree clearing is not necessary. The area is locked up during the wet season and, when the stylos are fully seeded at the end of the wet, the gate or fence is opened to allow cattle access to the pilot area. Although 60–70% of the stylo seed is digested, 30–40% passes

through the animals and is distributed over the large area. This process is ongoing every year.

Advantages

- Low initial cost; 4–5 kg seed/ha can produce 100–150 kg every year for distribution.
- Some increased animal production obtained from the high protein from the seed and legume forage.
- The plot is ongoing.
- Much more environmentally friendly as no tree clearing is required and a gradual introduction of worthwhile legumes into the existing native grasses will better utilise these native pastures.
- More rewarding as the plots establish and develop much more quickly.

Disadvantages

- A longer time-scale for the legumes to get over the whole area — 6–8 years, although this can be accelerated by planting more pilot plot areas.
- Grasses do not spread as readily, as the cattle digest almost all of the seed. Grasses do, however, spread by other means, e.g. water flow, wind, animal coats, birds.

It could be argued that, from a selling point of view, this suggestion is self defeating. If every property in northern Australia, which is suitable for the introduction of stylos, did some of these pilot plots every year for the next 10 years, the seed industry would be unable to keep up the supply of seed. Higher seed prices could be justified with such a program.

This method of pasture establishment could achieve the aim of assisting the northern Australian pastoral industry into higher production at affordable costs and higher prices for the seed industry, while allaying some of the environmental concerns.

This method is working on our property, “Springs Valley”, at Mareeba and John Bethel’s family property, “Huonfels”, at Georgetown.

Let me ask the question: **“Where are the thinkers in our industry?”** PBR has handed cultivar control back to the seed companies. The onus is on them to undertake constructive promotion, instead of blaming the drought and any other thing that happens along.

Ponded pastures

Ponded pasture has come under a lot of criticism in recent times. Most of this has been based on misinformation. There are examples of advantages to native wildlife in north Queensland and the Northern Territory. Swamps supporting introduced *Hymenachne* are sought after by birds, e.g. magpie geese. We need to demonstrate, in a constructive way, that this is an advantage. In the Northern Territory, the native *Hymenachne* is just as prolific as the introduced strain.

Establishment difficulties using seed to establish *Hymenachne* and para grass have been experienced. I am convinced that some of the poor results have resulted from low seed quality, as I have seen evidence of this in my travels across northern Australia. So let's address this problem.

Coated seed

Fertiliser-coated seed has very little application with tropics. **There are no proven or demonstrated agronomic advantages.** Perhaps it has some ballistic properties with chaffy grass seed to assist sowing. The claim, that lower seed planting rates can be used because of better establishment, is unsubstantiated and misleading.

The addition of inoculant, insecticide, and fungicide in seed coatings will have limited application with cultivars sown into undisturbed country. High ground temperatures, which are required to break seed dormancy, will destroy inoculant and short-life chemicals.

Fertiliser coating of tropics is a lost cause. Coating for reasons other than those already described could well be investigated and pursued as a marketing tool.

Seed treatment

There is some advantage with dehulling and scarifying of seed that has high dormancy. Some grasses, e.g. *Urochloa*, can be successfully dehulled to improve purity and germinability as well as handling and transport advantages. Dehulling and scarifying of stylos and jointvetches does have advantages, but with caution. The abnormally light erratic seasonal conditions, which have occurred in Queensland over the past few years, have made the use of scarified seed risky.

Mining rehabilitation

As I mentioned before, the mining industry in the past has had the attitude of: dig a hole, dig the place up, then leave. That is no longer the situation. Environmental pressure and government action now require mining operations to rehabilitate the areas as they go or before they leave. Restoration of abandoned areas is taking place.

Mining companies are required to lodge substantial bonds to ensure rehabilitation is carried out. They are employing qualified officers to do this work as they go along.

Opportunities exist for the seed industry to supply seed for these operations. There is a line of thought emanating from government departments that this rehabilitation should be done with native species.

Difficulties of establishment and problems of seed production are being encountered with native species. The use of short-term, quick-coverage introduced species, with the natives recolonising naturally later on is a concept which is gaining support.

Native species

Interest in the production and supply of seed from native species has gained some prominence of late. I personally think it is largely a non-event. I do not envisage the requirement being any greater than needed for mining rehabilitation and I see the importance there diminishing. Some Mitchell and Flinders grass production will be required to revegetate some badly overstocked and degraded areas.

It has been suggested that large quantities of native grass seed would be required to replant grazing land acquired for national parks and aboriginal lands. I do not believe this will happen for a number of reasons. Our native species have had a very long period of varietal adaptation, so seed of spear or kangaroo grass would have to be harvested in the area to be replanted. This would create logistical problems.

Research into seed production techniques would need to be carried out for large-scale production. I believe the removal of cloven and full hoofed, as well as other feral animals, and management such as controlled burning would see rapid colonisation of the locally adapted

native species, perhaps before seed production can be geared up.

Conclusion

Tropical pasture seed marketing has many facets with very little in common with temperate marketing. Beware the southern expert who thinks it will conform. I find tropical marketing exciting, with challenges at every corner. It requires a lot of hard dedicated effort.

A disturbing aspect, which is emerging with PBR cultivar marketing, is the practice of some

companies still using research information as promotional material even after years of commercial release. For honest marketing, it would pay those companies to update their information.

In any promotion, there is a starting point, a processing area, a rear end, an end product and a by-product. If the by-product gets involved in any of the processes, it spells trouble.

A message to cultivar researchers. **“Do not interfere with the ‘wild species’ nature of our tropicals”**. These ‘wild species’ can cause some seed production problems. This is outweighed by their remarkable adaptability in the pasture area.