

**Pastures for Prosperity —
Proceedings of Seeds Forum:
The changing face of the seed
industry**

Pastures for prosperity — Seeds forum.

1. Proprietary lines and plant breeders' rights

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Question

“Should plant breeders and their endeavours be less well regarded by society than those of writers or composers of music, or designers of novel mechanical contrivances?”

Statement

“The exclusive protection of plant varieties changes the focus after development from emphasis on seed production to marketing with stability influence on down-stream essentials of defining market size, pricing and market penetration in all areas and the design of effective distribution mechanisms.”

The philosophical answer to the “question” is surely “yes”.

However, the response to the “statement” may be less positive. Opinion differences, I believe, will largely be the consequence of the need to recognise changing systems of release and production and recognising that effective marketing and optimum product use requires planned return on investment with harnessing of the best skills in marketing, inventory development and seed production.

In 1960, I joined Arthur Yates & Co. Pty Ltd, Sydney, and almost from the first day, became involved with Philip Yates, an imaginative man who then was discussing and planning for Plant Breeders Rights introduction in Australia for all crops. Twenty-seven years later in 1987, Australia enacted Plant Variety Rights (PVR) legislation, and in 1994, amended that legislation and

the name to The Plant Breeders Rights Act of 1994.

That anecdotal information has a parallel in time with the exciting developments in tropical grasses and legumes.

Dr J. Ebersson, DPI, and Dr J. Griffith Davies, CSIRO, were the imaginative group leaders, who stimulated the plant breeding teams responsible for the development of new cultivars that would substantially improve animal production in the wet and dry tropics of Queensland and northern Australia.

With enormous personal drive, a focus on the need for rapid utilisation of the new materials and a seed industry partially developed, these men and their organisations found creative farmers, and worked directly with them to have the varieties in commercial pasture use quickly.

These activities were the genesis of The Herbage Plant Liaison Committee (HPLC), Queensland being the first State to establish such an organisation. Thus, the marriage of seed companies and seed producers began, and from these early roots, the seed increase committees developed.

During the years to the 1990s, Government investments in agriculture, in general terms, had been substantially driven by the Australian social philosophy to enhance agricultural production through various incentives, including investment in Government research and extension activities. This investment in agriculture, at least through the early 1980s, was still seen to be of national benefit from an export earnings view point and asset betterment.

However, world trade with restrictive barriers and support programs, an increasing Australian population requiring greater financial support and higher demands on urban development, commenced a change in the social focus and the beginning of reductions in budgetary allocations to agriculture and its various segments.

An attitude toward having the user pay for specific resources was developing.

This change in attitude was not a factor in Plant Breeders Rights enactment, but demonstrates the changes developing in society, that, at times, are not quickly recognised.

Substantially, PBR was seen to have Australia benefit from world plant breeding, where PBR was enacted, and to essentially exploit Australian developments overseas. However, the major overlay was the equality philosophy for plant breeders, providing opportunity to use the creativity of people working in commercial industry, as well as those contributing through Government organisations, i.e. the harnessing of all intellectual skills for the development of better varieties.

As Government funding becomes more difficult, industry may soon face not only licensing fees for new PBR varieties and lump sum payments, but also other methods of funding present projects, and exploitation of the extensive tropical grass and legume plant collections.

PBR legislation exists in the following countries —

Argentina	Ireland	South Africa
Australia	Israel	Spain
Belgium	Japan	Sweden
Canada	Netherlands	UK
Czech Republic	New Zealand	Uruguay
Denmark	Norway	USA
Finland	Poland	
France	Slovakia	
Germany		

Both Mexico and Chile are soon to make application, while India and South Korea are preparing to make submissions.

Additionally, an Asian & Pacific Seed Association has recently developed with membership of Associations from the following countries —

Australia, Bangladesh, India, Indonesia, Japan, Korea, New Zealand, Nepal, Pakistan, Philippines, Sri Lanka, Taiwan.

This new organisation, with the development of multilateral conventions, is precipitating discussion and desire for the development of PBR.

As this Association develops, so will opportunity for Australia.

The changing face of the seed industry sees a marked shift from the necessities of the 1960s, the cooperative liaison with growers and companies, with price-sensitive attitudes substantially influenced by competitive attitudes of par-

ticipants, overhead costs of the various participants and the differing cash flow pressures of participants. This environment, with no inhibition regarding the number of participants or the relative skills of those involved, is now being changed by formal market planning and exclusive controls that have the multi-faceted effects of:

- adding stimulus of imagination and critical evaluation of potential new materials to the plant breeder in a competitive environment;
- having industry participants seek exclusivity through the understanding of long-term marketing planning and making formal bids, that in themselves are evaluated in similar ways to the breeder's evaluation of his/her variety;
- causing those bidding for exclusivity to make long-term financial evaluations of opportunities and offer breeders realistic annual payment for exclusive rights awarded; and
- developing stronger realistic bonds between the commercial participants —
 - professional marketers;
 - skilled seed producers; and
 - strategically located vigorous distributors.

These, in broad terms, outline some of the changes.

I hasten to say that the industry is now at the threshold of these evolutionary changes, and that the non-exclusive and exclusive release systems will continue for many years.

However, with the exponential growth of scientific understanding in genetics, with the opportunity of making rapid biological changes and the cost of such work, I hold a view that these pressures alone will drive industry to develop skills in marketing and seed production, in parallel with these developments.

Therefore, so long as we embrace democracy and capitalism, the roots of independent endeavours, we will face the continuing need for evaluating return on investment, the cornerstone of long-term planned growth.

My observations and comments thus far touch only a few of the changes in a philosophical way. The realities from the farming viewpoints are:

- The consumer —
 - Will government agencies continue tropical grass and legume development?
 - What will the continuing development cost be?

- Can the consumer be sure that newly released cultivars will be of significant benefit?
- Will there be a constant supply of high quality seed for consumer needs?
- The seed producer —
 - Will the seed producer be able to access new varieties and benefit from exclusive rights to varieties?
 - What technical skills will be available to assist seed producers in seed production?
 - Will the seed producer have profitable long-term relationships in seed production?
- The seed company —
 - How will the seed company obtain an exclusive licence for new varieties?
 - Will the company retain the exclusive licence?
 - Can the seed company be sure new varieties will be superior to the old?
 - Will large companies dominate in accessing new varieties?
 - Can the seed company be sure that adjudication by Government agencies will be non-political and non-biased, i.e. will all companies have equal opportunity?

CSIRO, Queensland, have negotiated with interested parties direct through their commercialisation division, thus keeping independence and flexibility.

Queensland DPI have introduced a policy that provides for similar independent action, but includes Austseed, an industry organisation, as an optional adviser or commercialisation vehicle.

What is Austseed?

Austseed is a non-profit organisation developed by the Seed Industry Association of Australia

(SIAA) in response to a request in 1983 by the then Federal Minister for Agriculture. At that time, the Australian Seed Producers Federation was also asked to respond to the request to propose methods for commercialisation of new cultivars developed from Government-funded plant breeding programs.

Only SIAA responded with the Austseed concept.

Following some modifications, Austseed became operational in January 1989.

The organisation comprises the following 7 people:

- the President of SIAA or his nominee;
- two representatives from SIAA (one agriculture, one horticulture);
- one independent with special skills in plant sciences;
- two representatives from the Grains Council of Australia; and
- one representative for the breeder with the right of veto.

Absolute confidentiality of the Austseed adjudications is and has been maintained.

The group has acted for the State Departments of Western Australia, South Australia, Victoria and Queensland, and has adjudicated and made recommendations in regard to 15 matters.

While Austseed is only one useful mechanism in the commercialisation process, it does present a politically neutral position, representative of the seed industry and the farmer lobby.

Austseed seeks, when acting for Government agencies, to canvass interest from all parties, and to encourage single and proposals of coalition among interested parties.

One matter, that can be overlooked by those submitting offers to Government agencies, is the cost of variety breeding, and the royalty or lump sum payments that may be appropriate.