
Progressing Knowledge and technology

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Introduction

It is well recognised that Consultants and Agronomists have a key role to play in the dissemination of information generated through research and development. Helping to communicate it effectively to growers and participating in the ultimate implementation of technologies in the field. As our industry slowly recovers from a production down turn due to the drought we are reminded of what a critical resource people represent to our industry and even more so the value of people with knowledge. Thus we can see that in order to progress “Knowledge and Technology” it is essential to ensure that we have positive and effective communication between growers, consultants and industry as well as having a plan to sustain our people resource into the future.

The Success of the CCA

The Cotton Consultants Australia is as the name suggests a national body representing the interests of Consultants and Agronomists at an industry level and supporting their endeavours at a professional level. The national body was formed out of two state based organizations in 1997 and as a single entity was able to focus its efforts as well as being more accessible to the rest of the industry. The association as of the end of 2003 has 277 members and a mission statement to “ Promote and enhance cotton consultancy as a profession. To facilitate communication and act as a point of contact between members and other industry groups”. Member numbers are broken down into a number of categories as follows.

Full member	68
Provisional member	38
Associate member	149
Certified member	19
Honary member	2

Full and provisional members derive their livelihood by offering independent, objective and professional advice on a fee for service basis. Associate members generate their income through the sale of products and other services. Typically though not exclusively chemical companies or distribution employs them.

CCA Certification Program

Certified members are consultants and Agronomists who have qualified and agreed to participate in the association's Certification Program. The program involves an interview and audit process, which verifies eligibility as well as a commitment to professional up-skilling on an annual basis. Certified members are seen by the association as those people who are setting the benchmark for professional conduct, quality of service and are committed to progressing their knowledge. The aim of the CCA is to progress the majority of its consulting members through to this category over time.

A key component to the success of the CCA has been the employment of a full time executive officer. This has allowed the association to maintain momentum over a twelve-month period (not just over winter) as well as giving us the ability to broaden the scope of our activities. Our current E.O. Jon-Maree Baker has brought a level of professionalism and focus to the association previously unachievable with part time administration. The E.O. is supported by an elected board of members who are representative of the geographic and social demographic of the association. The results of this structure have been that CCA is able to provide effective and prepared representation at industry forums. We are able to supply our members with significant up-skilling and networking opportunities as well as being able to be reactive to their needs.

CCA via a strategic alliance with the Institute for Rural Futures provides industry with a significant service through its annual survey of members and their clients. Groups such as CRDC as well as various service industry companies use this information. Revenue generated from survey sales allows membership fees to be kept to a minimum whilst providing the association with income to provide a range of member services. An active and relevant group such as CCA can act as a focal point for extension for groups such as researchers hence providing a pathway for the progress of knowledge and technology. A key ingredient to the success of CCA is the effective communication it has with key industry groups such as ACGRA, CRC, CRDC and ACIC.

The Future Role of Consultants

The 2004/05 season heralds the beginning of a new era of cotton production. The introduction of Bollgard 2 and the proposal to be able to grow it and a refuge in uncapped quantities will result in significant changes to our industry. From a consultants point of view it should allow for a change of focus from Helicoverpa monitoring and control decisions to other aspects critical to the successful production of cotton. Another major factor affecting the future role of consultants will be water. Its availability and cost will be a key driver to changes in irrigated production systems. Consultants will have a key role to play in helping their clients evaluate and implement changes to their current irrigation practices or changes to their current cropping system that will help them maximise their dollar return per mega litre of water used. Some points to consider when examining the future role of consultants are.

- More than just “Bug checkers”.
- Agronomic skills in a range of crops.
- Have close relationships with core research community creating two-way information flow resulting in more targeted research projects and better implementation of established research in the field.
- Skilled in interpretation and application of precision farming technologies.
- Able to assist in the economic analysis of production alternatives.
- Ability to contribute to the management of Natural resources on the farm.
- Contribute to client’s endeavours to improve on farm Water Use efficiency (primarily thru evaluation of current practices bench marked against new practices). Possibly done in conjunction with other specialists.
- Provide the farmer with information on issues they have not had the chance too think through themselves.
- Consulting firms, which are made up of teams of specialists, e.g soils, nutrition, pests, economics, water. Or have the ability to network with and work with outside specialists in these areas.
- Drive on farm research and development, which provides relevant outcomes, which can be implemented in the farming production system (as opposed to general product registration or development work).
- Assist clients with the practice and implementation of BMP.

How Can The Consultant Improve The Profitability Of Cotton Farming?

If we look at the three drivers of profit being Gross Margin, Turnover and Overhead we can see that the most influence by a consultant may be brought to bear on Gross Margin. The consultant can have an impact on lifting yield or reducing the direct costs associated with making that yield. Increasingly growers have a requirement for sustainable profit as well. One profitable year followed by three unprofitable years is of little use. When challenged in the past by my clients to “improve their profitability” my immediate reaction was that if I was doing my job properly they should be on the way to achieving this goal. The key word however is “Improve”. Whilst we are currently profitable how do we become even more profitable? From a consultants point of view this will require some change to the service provided, the bringing of new ideas or concepts to the table or more clearly communicating and better implementing current strategies. Some points to consider follow.

- Consultants and their clients to communicate clearly about their short and long term goals.
- Consultants and clients should spend effective time in the crop together. The aim being to avoid assumed risk. A simple way to increase profitability is to eliminate excess inputs being

recommended in order to avoid risks the grower may have been willing to take if he was aware of them.

- Adoption and implementation of new technologies and strategies generated by research and development that have the ability to make the production system more profitable or efficient.
- Effective evaluation of the previously mentioned technologies and strategies in the farm environment.
- Help farmers learn and remember the lessons learnt from experiences on their own properties.
- Provide input into systems that reduce production variation and that are robust in a range of climatic and biological situations.
- Examination with a view to potential adoption and implementation of precision farming technologies that have the potential to more effectively target inputs.
- Where water is limiting or has the potential to be limiting develop a focus on dollar return per mega litre of water used for production practices. Be able to measure and quantify this.
- Cost effectively help farmers protect and improve their soil asset.
- Have the vision to learn lessons from other industries e.g. dryland, horticultural and organic farms.

What Opportunities for Innovations Exist?

Innovation with regard to the production system and how it relates to new technologies like bollgard will no doubt involve the revisiting of established principles. Everything from plant population, nutritional requirements, growth regulators, insect and water management to name a few will be re-examined by growers, consultants and researchers as they strive to get the very best out of the new technology. The room for innovation here lies in how the new experiences are disseminated. Given that a large proportion of the work will involve on farm type trials as opposed to hard-core ground breaking research there is an ideal opportunity for growers and consultants to network in their local communities. The widely established Area Wide Management type networks may provide an ideal forum for people to relate their individual experiences and exchange ideas. Hopefully this may fast track us to a sustainable and robust production system for Bollgard.

The other key area for innovation lies in the overall water use efficiency of farms. I think a number of growers, consultants and researchers are well down this path already. We need to examine current practise as well as evaluate new practices and the person who can come up with a way to cost effectively stop evaporation from on farm storages will get rich. Other points to consider are.

- Strategic alliances between research, consultant and grower to facilitate the progress of research knowledge.

- Possibility for consulting firms to participate in the carrying out of industry directed research in areas of appropriate expertise. This may have some positive effects on adoption as well.
- Industry Development officers to spend as much time with researchers as they do with growers so they have intimate knowledge of what they are extending.
- All sectors of the industry need to have a firm people management goal. Keeping people with knowledge in the industry is a crucial task for us all. Motivated, enthusiastic and happy employees are much more productive than those suffering from “Burn out”. Social and life style implications are just as important as financial. I do not believe that just “throwing money” at the problem is the solution.

Conclusion

Consultants through their relationship with growers have an important role to play in the progression of knowledge and technology. The Cotton Consultants Australia inc. is an effective body representing consultants and as such is an important focal point in the transfer of knowledge and information. The association also has a crucial role to play in maintaining and increasing the skills of its members as well as representing their interests at an industry level. The adoption and evaluation of new technology at the field level will need to be an area of continuing and increasing focus for consultants. This will help cotton growers meet the challenges posed by the Bollgard production system as well as an increasing requirement to efficiently use a valuable water resource.

