

## **CQ-RAC meeting Biloela – Thursday 28<sup>th</sup> 2013.**

**Attendees:** Graham Spackman, Dr Sandrine Makiela, Colin Dunne, Gordon Staal, Lex Webb, Richard Sequeria, David Gordon, Rex Webb, John Sheppard, Michael Burgis.

**Apologies:** Nigel Gregg, Anthony Lee, Michael MacTaggart.

**Chair for the meeting:** Graham Spackman. Graham was renominated as chair.

**Moved:** Colin Dunne **seconded,** Richard Sequeria.

**CQ Minutes from August 2012** minutes accepted.

**Moved:** Colin Dunne **seconded:** Gordon Staal.

### **GRFL- RAC Report, Michael Burgis.**

#### ***RAC's charter, GRDC review of RAC's, Bazley review.***

GRFL grower owned business. The Foundation is involved in the following;

- a) QLD RD&E review, they have engaged a consultant to provide a report on the formation of a new Research Institute model for Qld.
- b) Approached the Qld Ag Minister to run the Eagle Farm quarantine centre that is being axed by DAFFQ, it plays an important part of providing new germ- technology for the industry.
- c) The Foundation made an application to commercialise a new barley variety line from the Hermitage barley program.
- d) Reappoint and re-in vigour the RAC's. The foundation intends to engage members via short questionnaires and website forums during the year.

#### ***Bazley RAC overview:***

There is a need for younger people involvement, lots of great work from the RAC network that was not being promoted. Ensure that the feedback from the long term research priorities is fed back to the farming communities. The RAC's are the conduits for extending the messages from the research effort, therefore the **committee members** need to promote the messages. The industry consensus clearly felt there was a need for the RAC function in regards to RD&E matters in Qld.

#### **Meeting:**

**Recommendation: Members are welcome to bring someone younger or an interested party to participate in any future meeting.**

Allan Umbers (consultant) has been employed by GRDC to review the Mechanism to identify Research issues across the Eastern States, this includes the RAC function across the Eastern States.

There is a new GRDC booklet to be published on what projects are being funded and researched.

RAC chairs meeting Brisbane: – review of RAC research priorities. *Chairs were asked that they delve deeper into the research issues.*

#### **Member reports:**

Last season winter crops were good, dry spring led to little summer crop planted, what was planted has been drenched. This winter everyone is looking at chickpea, there are concerns about disease issues. Colin Dunne is part of the national Climate Champion Program; recently attended a meeting in Perth where a new program Med- I was demonstrated, allows growers to click on their own property and it will provide a 7 day forecast for the region, replacing Cli-Mate. Serious flooding in many parts of the region, good winter crops although protein levels were low, growers are concerned about spending money up front in regards to Nitrogen application. Early sorghum has been downgraded due to wet weather. The FTR grass has gone ballistic

following the wet summer and will be a major concern for the winter season. Currently the region has good profiles of soil moisture. Puffy Pod is a concern in Mung-Beans. CQ desperately needs a legume that fix's more nitrogen into the farming system. An issue of concern is that some growers are considering planting back to back chickpea. **Ascochyta** is already being found on chickpea plants that have come through the summer fallow period. In CQ, ascochyta resistant and tolerant varieties trials show significant yield losses in the local environment. Sweet Summer grass is starting to gain significant across the region. Lots of frost damage in wheat across CQ last season, also low proteins. Local chickpea crops were exceptional in CQ last year, *a challenge was is issue to southern growers to match the CQ yields in the future!!* Lower planting of sorghum this summer, sorghum seed quality is being questioned particularly Pacific Seeds lines of Buster, there were many poor Buster establishment stands across CQ. There are more tillage and residual herbicides now being used in the farming system due to weeds and soil erosion. A question was asked on what is the long term effect of this change on the farming system. Sweet Summer Grass and FTR grass appear to require different management, lots of similarities in the practises, but it needs tweaking. Growers are seeking a complete grass weed strategy.

**Grower Solutions report: Richard Daniel**

## **2012-13 Summer Trial Snapshots**

### **1. Residual Herbicides in the Summer Fallow**

Six trials conducted targeting the control of awnless barnyard grass, four trials targeting feathertop Rhodes grass (FTR) and one targeting windmill grass (WG). The main aim is to look at the longevity of residual activity on both broadleaf and grass weed control.

### **2. Chloris Herbicide Compatibility**

Four trials conducted (three on FTR, one on WG) to evaluate the impact on grass control from a range of broadleaf herbicide options when mixed with a Group A herbicide. Treatments compared with or without a double-knock treatment of paraquat.

### **3. Chloris Double-knock Timing**

Four trials (three on FTR, one on WG) comparing glyphosate and Group A products for knockdown control. Main aims are to confirm appropriate timing intervals for paraquat double-knock application and to evaluate alternative Group A herbicides that may have shorter plantback restrictions.

### **4. Non-Phenoxy Products for Fleabane Control**

Evaluation of herbicide options for controlling large fleabane in the summer fallow. The emphasis in these two trials will be on products that can be safely used near cotton and other phenoxy sensitive crops and provide acceptable efficacy as part of a double-knock strategy.

### **5. Phenoxy Mixtures for Fleabane Management**

Two trials conducted to determine the most reliable herbicide options for controlling large fleabane in situations when phenoxy use is acceptable. All treatments have a double-knock application of paraquat.

### **6. Mungbean Herbicide Screen**

Three trials established to evaluate the crop safety of a range of herbicides in mungbeans. This is a continuation of a project commenced in 2011/12 screening for potential registration candidates.

### **7. Mungbean Powdery Mildew Management**

An evaluation of fungicide efficacy for powdery mildew control in mungbeans. Three trials currently established to evaluate product choice, application timing as well as crop safety.

### **8. Sorghum Fungicides**

Four trials established to evaluate the economics of late fungicide application in sorghum for Fusarium head blight and sorghum rust management.

## **2013 Winter Trial Plans**

### **1. Nitrogen management for protein in wheat**

Nine small plot and two large scale trials are planned, comparing nitrogen application timings and methods. Five of the trials will also compare the equivalent level of additional nitrogen applied at planting or split between planting and early stem elongation. Four of the trials will focus on 'formulation' comparison eg liquid urea, UAN and LAN

### **2. Root-Lesion Nematodes**

Two trials planned to screen potential nematicides, although likelihood of success is considered low. Two large scale sites for low v high populations will also be established.

### **3. Canola Nutrition**

Two trials planned to investigate the impact of N, P and S levels on crop yield and oil content on similar lines to 2012 but with more emphasis on P. Similar trials being conducted by NSW DPI.

### **4. Chickpea Nutrition**

Three trials planned to investigate the impact of N, P, K, Zn and S levels on crop yield.

### **5. Feathertop Rhodes Grass (FTR) and Windmill grass (WG)**

Five trials (4x FTR, 1 x WG) planned to evaluate residual winter cereal herbicides for useful activity against spring germinating FTR. Herbicides are being applied as per in-crop. Three trials (2 x FTR, 1 x WG) planned in chickpeas and three trials (2x FTR, 1 x WG) in canola.

### **6. Aphids in canola**

Two large scale trials planned evaluating aphid impact and thresholds. WA threshold is to spray when >20% of plants have colonies. Current NSW threshold is to allow a higher number of colonies more conservative than the WA equivalent.

### **7. Annual ryegrass**

Two trials planned to look at both crop safety and efficacy of ARG management tools in wheat on Liverpool Plains. Will include IBS, PSPE and early post-em treatments.

### **8. Yellow Leaf Spot (YS)**

Four small plot trials will be conducted (one expected under controlled conditions) to test fungicide timing against YS in EGA Gregory or Spitfire. One field site planned to be under pivot to improve disease pressure.

## **Sleeper issues – to be initiated if seasonal conditions conducive**

### **9. Botrytis Grey Mould (BGM) in Chickpeas**

BGM is a sporadic issue in chickpeas but can cause major yield and economic impacts as seen in 2010. Fungicide screening work is planned to enable three small plot trials to be rapidly established if seasonal conditions are conducive to disease development in 2013.

### **10. Fababean Diseases**

Disease data on chocolate spot and leaf rust was not able to be generated in 2011 or 2012. Two trials are planned to test a range of fungicides for the management of these issues if seasonal conditions are conducive to disease development in 2013.

### **11. Botryosphaeria – White Grain Disorder**

One small plot screening trial will be conducted to assess for fungicide efficacy against this disease. The trial will use approaches that have been moderately effective against Fusarium head blight in wheat.

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### **Dr David Jordon- Sorghum Program.**

- 1) Summer Grains Conference - early bird registration is coming to a close **17<sup>th</sup> -19<sup>th</sup> June** – The program is nearly complete, **seeking Grower Registrations**
- 2) New technician appointed for the sorghum program- Lisa Bradburn based in Emerald.
- 3) Bill & Linda Gates Foundation - \$ 4million grant for the sorghum program with the focus of developing suitable food sorghums for African , but there is an Australian investment into developing drought tolerant species.
- 4) Negotiating for a new program with GRDC, the emphasis is on the management surrounding sorghum production.

## **Nominee Reports.**

### **Dr Rex Williams- DAFF-Q .**

Gary Fullilove, appointed as the new GM for Crop and Food Science

DAFFQ supporting QAAFI with its endeavours on the Bill Gates sorghum program grant.

Qld Pulses: There is an extra \$4.8 million of new investment last year via QUT, novel ideas for chickpea-mungbeans. New project with GRDC in Pulses , sign –off nearly completed .

Barley – moving into the pre-breeding model, supplying germplasm to the breeding companies.

Maize breeder at Hermitage; trials in south, one at Emerald. The program is looking to develop varieties that are well adapted to our environment.

Wheat: new platform with QAAFI, new scientist – Dr Lee Hickey.

Genetic Resource collection, infrastructure being built at Horsham, national approach, Australian Gene Bank, led by Dr Sally Norton from Qld.

Mal Ryley- won the SEED of LIGHT AWARD – 30 years of service to the industry. DAFF has appointed a shadow senior plant pathologist.

New plant diagnostic service in Toowoomba, a free service except for the soil nematode testing. Several new projects in Bio-Security area have commenced.

PO5 scientist weed position appointed, Dr Michael Widderick, based in Toowoomba.

A DAFFQ flood respond team has been mobilised.

Northern Grower Solution research group started on the coast.

There will a CQ agronomist for the Pulse and Soils program?

### **Dr Sandrine Makiela CQU.**

Research CQU,, dryland rice research started, trying to develop new varieties.

Bio-char research, Sandrine is seeking CQ growers support to commence trials.

Sandrine trials, wheat – looking at soil microbe community changes, asking for farmer volunteers with different systems, tillage, no tillage etc. Researching nutrient use efficiency and soil health changes.

### **John Sheppard - GRDC northern panel representative.**

Chairs meeting in Brissy gave excellent feed-back. Alan Umbers has been appointed to review the Research Issue Identification Mechanisms, the RAC's are part of the review. CQ issues got up at the Canberra GRDC meeting last week; they are now with the GRDC program managers and should be part of the funding program for 2014. Barley Leaf Rust is one of the critical issues that will be urgently reviewed and researched.

GRDC is looking to change its business MODEL. The MLA model maybe part of the template, (independent business), the decision change is partly being driven by the information exchange rules.

IDA (travel) awards (APRIL-OCTOBER calls) close next week – opportunity to visit other overseas countries to look at their farming systems or perhaps an interstate visit to view research activities.

### **Dr Rex Williams- DAFF-Q . Queensland RDE capability:**

Received a reduction in budget last year, not much in AgriScience, mostly corporate area.

AgriScience has industry outcomes and external funding, so safer.

Reduction in cereal genetics funding.

No loss of positions in CQ.

Locating researchers where they are more likely to generate outputs.

CQ – change in weeds area, now lead out of QAAFI but still local.

Need to know gaps – work on filling those gaps.

Research priorities a useful guide.

Graham Spackman questioned the perennial problem of locating scientists in one location – they are hardly seen in regional areas. No substitute for having them local & in touch with growers.

If too far away, there are unique issues, need local people – basis for developing capacity.

Research agronomist based at Emerald (new).

Researchers on their own are limited as well – need interaction with others.

Need development support in the regions.

Losing capability at Biloela at present.

DAFF can't justify supporting two stations at Biloela and Emerald.

Plan to build capability at Emerald.

No shed or infrastructure at Emerald yet.

New planter, header, machinery shed, seed store on the way.

Rumoured 20% cut from budget.

RW has a spread-sheet concerning FTEs (20 in CQ at moment), currently working up the list and will supply a copy of the list to CQ-RAC members.

**Next Meeting – August, Emerald.**