



FASTSTART™ ESTABLISHMENT AWARDS

SNAPSHOT

Grower name: John 'Cowboy' Cameron
Farm and location: 'Kendale', Bongeene (Darling Downs, QLD)
Farm size: 1,200 ha
Enterprise: Cotton, wheat, sorghum, millet
Cotton production system: Dryland
Cotton variety/s: 75% Sicot 746B3F, 25% Sicot 748B3F
Soil type/s: Self mulching and cracking black clay
Summer crop area: 600 ha
Cotton crop area: 500 ha
Average summer rainfall: 350 mm
Planting equipment: John Deere MaxEmerge
Planting rate: 12.3 seeds/m
Average planter speed: 9.5 km/hour
Average planting depth: 2 cm

2018 Dryland Cotton Winner - John 'Cowboy' Cameron, Bongeene QLD



John 'Cowboy' Cameron, winner of the 2018 FastStart Establishment Award for dryland cotton.

CROP SUMMARY

Planting date: 2 November, 2018
Establishment method: Rain
Previous crop: Long fallow millet
Plant stand: 11.3 plants/m
In-crop irrigations: Nil
Rainfall: 157 mm
Soil applied insecticide: Talstar - 200 ml/ha
Nitrogen: Nil - 174.8 kg N is soil test
Phosphorus: 50 kg/ha
Potassium: 20 kg/ha
Zinc: 15 kg/ha

PREPARATION

Describe your field preparation prior to planting

Attention to detail in the field is most important, starting with the destruction of the previous crop. We set up fields to be even and equal, and this all starts with planting a cover crop (wheat, barley or millet). We make sure the guidance of the tractor and planter is right so the crop will be planted into the right plant line. We also leave a soft area for the establishment of next year's cotton crop.

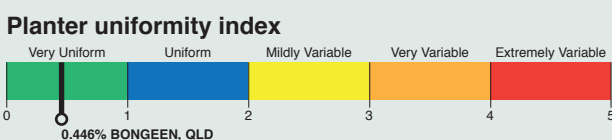
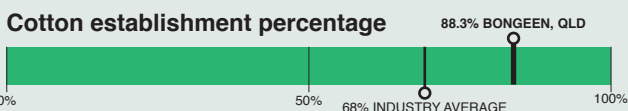
Following our rotational cropping plan, this particular field was planted to millet on a 50cm row spacing, which was then mulched and in the following summer, the cotton was planted between the rows of stubble.

What weed control tactics do you employ prior to or post planting?

Weed control at Bongeene is a glyphosate based program but with a mixture of chemicals and tactics that vary year to year, depending on which weeds are becoming a concern. We have a 'zero survivor' policy for weeds which is enforced to reduce resistance.

The general tactic is to control difficult weeds with short term residual herbicides; for example, the use of Atrazine in the millet to control the fleabane for when the cotton is planted. Dual Gold, Stomp and Diuron herbicides have been used in the past and work back into the weed management as needed. This year, the farm was sprayed for weeds for weeds pre-plant, post plant/pre-emergence, and post emergence (though not all in the same field). It is also important to control weeds along the fence

ESTABLISHMENT MEASUREMENTS



line and road side to keep the seed bank down and we have found that by doing so leads to reduced weeds on the field.

What is your fertiliser application strategy? Do you soil test?

Yes, there is a soil test and this is the basis for the fertiliser regime. If needed, nitrogen is added to the field at pupae bust for the cotton crop, and additional fertilisers are added to the field in the early stages of the fallow crop. The fertilisers are water injected into the soil off-centre from the plant line (approximately 50-100ml). The reason for the timing and placement is to ensure the rain drives the nutrients deeper into the soil and to reduce the chance of seed burn from the chemicals.

How do you prepare your planter/machinery?

It's all about the attention to detail. The machinery is modified to suit the needs on the farm, with every row unit inspected before use, and any bearing is replaced as necessary to ensure everything is running the same. The planting unit has been modified to inject liquid starter before the seed, then place the seed 2cm in depth before a seed firmer is dragged over the plant line to ensure the seed sits in the moisture. If we didn't use seed firmers, the soil will collapse and we won't achieve good establishment. There are no modifications to the planting plates, and instead the vacuum pressure is set at the lower end of the recommended pressure to ensure better singulation. This usually achieves 90% singulation.

When planting, it's important to keep all wheel tracks in the right place (using guidance technology) as you don't want to plant cotton on the side of a wheel track. We also ensure we have fertiliser placement right, at 3-4 inches off the cotton line.

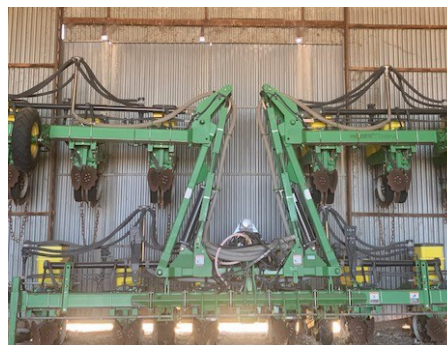
DECISION MAKING

Why did you select your chosen varieties for your farming system?

We choose the varieties (75% Sicut 746B3F, 25% Sicut 748B3F) based on the yield and fibre quality from the results of a cotton trial that had been conducted on the farm previously.



John Deere MaxEmerge planter, set out at 1m spacing, used for planting single skip dryland cotton.



Disc openers, showing the black seed tube which has an orange seed firmer at the back of the tube for seed placement. At the front is a tube which applies the insecticide and the starter fertiliser as a liquid.

What seed treatments did you use, and why did you select these?

We used the standard D2C (Dynasty Complete + Cruiser) treatments that were used in the trials and carried it over, and we also used Talstar via a water injection to help eliminate insects.

Do you use a lubricant to assist with seed flow?

Yes.

TIMING

When did you plant, and how did you make this decision?

We aim to plant at the end of October into early November. This is the preferable time for us to start planting, but the main factor was that there was a significant rain event at this time that allowed for adequate planting moisture for our dryland crops.

Did you water up or pre-irrigate or establish on rainfall?

Rainfall.

IN SUMMARY

- Good establishment starts with the destruction of the previous crop.
- Attention to detail is key when setting up planting equipment - modify machinery to suit your needs.
- Planting depth is the most important factor in ensuring good establishment. CSD trials in the region have found that planting at a more shallow depth has better results.
- Planting just into moisture gets the better emergence, so try to time this as best you can.
- Attention to the emergence and depth has to be done properly - it's important to get off the tractor seat and check this regularly.

Entries for the 2019 awards open on 1 August, 2019 and can be submitted via: www.faststartcotton.com.au/faststart-awards