

2019-20 FASTSTART™ COTTON ESTABLISHMENT AWARDS

IRRIGATED COTTON WINNER - ANGUS DOOLIN, NORTH STAR NSW



Pictured: Angus inspecting his crop at 'Myall Downs' in North Star.

SNAPSHOT

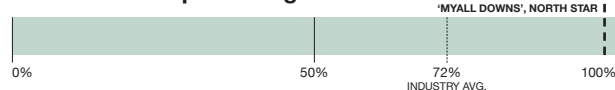
Grower name	Angus Doolin
Farm and location	'Myall Downs', North Star NSW
Farm size	Total farm area: 8,000 ha Total irrigated area: 800 ha
Enterprise (crops grown)	Cotton, barley, chickpeas, wheat, sorghum and corn
Cotton production	Irrigated
Cotton variety	Sicot 746B3F
Seed treatments	VIBRANCE® COMPLETE + CRUISER® 600FS (V2C)
Soil types	Brigalow Belah and red loam soils
Summer crop area	Water dependent - typically 400 ha
Cotton crop area	160 ha
Avg. growing season rainfall	413 mm
Planting equipment	John Deere MaxEmerge planter
Planting rate	15.5 seeds/m
Avg. planter speed	6.5 km/hour
Avg. planting depth	2.5 cm

CROP SUMMARY

Planting date	18 October, 2019
Establishment method	Pre-irrigated, watered up
Previous crop	Wheat (winter 2018)
Plant stand/m	15.2 plants/m
In-crop irrigations	Centre pivot irrigation ongoing
Rainfall	40 mm
Soil applied insecticide	Nil
Nitrogen	Nil pre plant, spread 300 kg/ha urea and rely on carryover from cereal for other nutrients
Phosphorus	Cotton Sustain® after last cotton crop (2 years ago) - 250 kg/ha + 2 T/ha gypsum (mulched root pupae bust working)
Potassium	30 kg/ha KRISTA K PLUS foliar through pivot
Zinc	2 kg/ha Zinc Heptahydrate through pivot

ESTABLISHMENT MEASUREMENTS

Establishment percentage



Planter uniformity index



PREPARATION

Describe your field preparation prior to planting

Full no-till, we do run the planter through prior to planting with trash whippers to clear trash out of the way. Although perhaps a little unorthodox to run the trash whippers prior to planting, this method has proven to be the best option for our farm as we have tried other options, like strip tilling, in the past with less productive results.

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

Post-plant, pre-emergent residual herbicides targeting grass and broadleaf weeds. As a full no-till system I am very conscious of over reliance upon glyphosate, consequently we often use a residual in the fallow following the wheat (12 months prior to planting) to reduce glyphosate use and therefore reduce resistance pressure prior to cotton. Post planting this season has seen 1 x over-the-top Roundup application with one more likely at this stage.

Do you soil test?

Yes, it is critical for determining our nutrition plan.

What is your fertiliser application strategy?

No pre-plant starter fertiliser is applied for current seasons cotton as we generally apply Cotton Sustain® at 250 kg/ha + 2 T/ha gypsum after the last cotton crop and prior to the following wheat crop. What isn't used by the wheat is generally mopped up by the following cotton crop. We do apply nitrogen to the current crop - application rates for all nutrients are determined using soil and tissue testing. This season's crop has received 300 kg/ha urea which was top dressed.

During early growth 2kg/ha Zinc Sulphate Heptahydrate is applied, through the pivot, followed by 30kg/ha KRISTA K PLUS leading into flowering.

How do you prepare your planter/machinery?

Basic check over to ensure all components of the planter are functional - we focus the success of establishment on our planting operation by ensuring a slow planting speed and use of the trash whippers, aiming for a stubble free plant line to prevent hair pinning of trash etc.

DECISION MAKING

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

Primarily by yield potential, although we are very mindful of Verticillium wilt.

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

VIBRANCE COMPLETE® and CRUISER® 600FS - we select these treatments to reduce risk.

Do you use a lubricant to assist with seed flow?

We always use talc/graphite.



Above: Angus uses a post-plant, pre-emergent herbicide program to control grass and broadleaf weeds.

TIMING

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

The planting decision was based on a number of factors, but primarily agronomic advice from our consultant. Our experience suggests this timing historically offers the best potential for yield, and conditions at the time were adequate, so the decision was made to plant.

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

Pre-irrigated and watered up.

IRRIGATION

When do you apply your first irrigation, and how do you make this decision?

We use centre pivots for irrigation and given the lead up to this season was so dry, irrigation started during pre-water to establish some moisture in the profile. Since watering up began the pivot has basically kept running, this season has been hot and dry so far so to be honest it has struggled to keep up to what would be ideal.



ANGUS' TOP 5 TIPS FOR ESTABLISHMENT SUCCESS

1. Utilise a full no-till system.
2. Run trash whippers to clear trash prior to planting.
3. Slow planting speed - avoid planting too quickly (this season we planted at 6.5 km/hour).
4. Ensure there is sufficient moisture below the seed and ensure watering up is sufficient.
5. Plant on a rising temperature plane.