

VINEYARD BUYERS GUIDE

2020



FEATURING | QUANTUM MIST 420 TRAILED & LINKAGE | QUANTUM MIST SMART SPRAY | CROPAIR LINKAGE

OUR STORY

The first Cropland sprayers made their way into Australian vineyards nearly thirty years ago. We've come a long way since then, evolving our range to give growers the ultimate in spray coverage.

Our growth is reflected in the success of our customers. When they're able to protect their crop with a sprayer that's efficient, thorough and reliable, they thrive. Because we understand this, Croplands sprayers are a common sight in vineyards around Australia, from the Barossa to the Hunter Valley.

Croplands machines are built with a respect for Australia's tough and varying terrain. Engineered to endure, this equipment gives growers the confidence to take on row after row, saving time, reducing costs and maximising productivity.

And because our range is as diverse as the grapes grown throughout the country, there's a machine to match every grower's needs.

TIMELINE

- 70 Croplands starts manufacturing and selling orchard sprayers.
- 80 Croplands is purchased by Nufarm Ltd and the head office is established in South Australia.
- 90 Australian manufacturing of vineyard sprayers begins.
- 00 Quantum Mist™ hydraulic drive axial fan is released.
- 10 Croplands grows its range with the refinement and completion of the QM-500 and 380 Quantum Mist fans.
- 20 Croplands launches Quantum Mist Smart Spray and new range of QM420 vineyard sprayers.

CONTENTS

4	COVERAGE IS KEY
5	SELECTING THE RIGHT SPRAYER
5	VINEYARD SPRAYER SELECTION GUIDE
6	QUANTUM MIST SMART SPRAY, 2 & 3-ROW
8	QUANTUM MIST 420, 2 & 3-ROW
10	QUANTUM MIST 420 SINGLE ROW
11	QUANTUM MIST 420 LINKAGE
12	QUANTUM MIST 1000 TRAILED, CROP-AIR 1000 TRAILED
13	CROPAIR LINKAGE
14	SPRAY CONTROLLERS
15	NUPOINT

COVERAGE IS THE KEY

When it comes to disease control in your vineyard, spray coverage and performance efficiency are key.

The high-volume, turbulent air delivered by our Quantum Mist™ sprayers opens up the foliage, allowing spray to penetrate into very dense canopies. This ensures more accurate coverage onto both sides of the leaves and into the tightest of bunches.

It is this technology that makes Croplands fans quite simply the best on the market.

More efficient and reliable than ever before, the 2020 range of Quantum Mist™ vineyard sprayers are fitted with new QM-420 axial fans.

Released in 2019 after extensive research and field testing, this industry-leading hydraulic driven fan produces highly turbulent air for superior penetration and crop protection. It's also extremely quiet and energy efficient.

Fitted with dual spray rings, the QM-420 can spray a wider band of application rates, whilst minimising off-target spray drift.

Want more proof as to why Croplands fans are the best on the market?

Croplands dealers and sales staff love nothing more than demonstrating our sprayers in the field – especially in conditions unique to you.

Contact your dealer now and let us show you that the proof is in the coverage.



SELECTING THE RIGHT SPRAYER

The decision to purchase a new sprayer is an important one for any grower.

With the extensive range of equipment that Croplands offers, there's a sprayer that'll suit your operation. To get the best fit for your business, consider the chart below when speaking to your Croplands dealer.

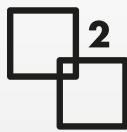


CROP REQUIREMENTS

CROP TYPE
(WINE GRAPES/
TABLE GRAPES)

APPLICATION RATES

DESIRED
SPRAYING SPEED



LAND DETAILS

VINEYARD AREA

VINEYARD TOPOGRAPHY
(FLAT, HILLY, UNDULATING,
TERRACED, CONTOURED)



VINEYARD PARAMETERS

ROW SPACINGS
(MIN AND MAX)

CANOPY HEIGHT
AND WIDTH

OVERHEAD IRRIGATION
SYSTEM (IF APPLICABLE)

HEADLAND TURNING
DIMENSIONS



TRACTOR REQUIREMENTS

ENGINE CAPACITY (HP)

HYDRAULIC FLOW
AND PRESSURE RATING
AT REAR REMOTES

NUMBER OF
HYDRAULIC REMOTES
AT REAR OF TRACTOR

VINEYARD SPRAYER SELECTION GUIDE

VINEYARD SIZE	QM SMART SPRAY 3-ROW	QM SMART SPRAY 2-ROW	QM-420 3-ROW	QM-420 2-ROW	QM-420 SINGLE ROW	QM LINKAGE	QM TRAILED 1000	CROPAIR 1000	CROPAIR 300/600
LARGE, CONTRACTOR OR COPORATE	●	●	●	●					
MEDIUM				●	●				
SMALL					●	●	●	●	
HOBBY / BOUTIQUE						●	●	●	●

This is a guide only - please consult your Croplands dealer or Croplands support staff if required.

QUANTUM MIST™ SMART SPRAY

RELEASED IN 2019, QUANTUM MIST SMART SPRAY IS THE PREMIUM MODEL SPRAYER IN THE VINEYARD MODEL LINE-UP. **AVAILABLE IN 2 AND 3-ROW CONFIGURATIONS** THE QM SMART SPRAY IS PACKED WITH NEW TECHNOLOGY AND INNOVATION.





FANS

- Individual QM-420 fans, hydraulically driven from the tractor hydraulics or via optional Micro Power Pack.
- Dual spray ring allows for three-tier spray rate solution (low, medium and high), adjustable from the cab via the Fusion controller as well as upwind/downwind fan speed compensation – an extremely effective system for improving spray coverage and minimising off-target spray.

FAN FRAME

- New design fan frame system offers added protection and allows for precise, simple fan position settings.

BOOM

- Premium heavy-duty boom with parallelogram folding design.
- Position sensors control boom width via in-cab Fusion controller.
- Unique mounting bracket design allows fitting for 3-row outer fan frame or optional 2-row drift reduction/recapture system.

PUMPS

- AR-185 LFP as standard for 8 to 12 fan models.
- AR-250 LFP as standard for 18 fan models and recapture model sprayers.

NOZZLES

- 10 x nozzles per QM-420mm fan, available in 80, 60 and 40-degree options.

TANKS

- High impact, UV stabilised polyethylene tanks. Available in 2000L, 3000L and 4000L models.

CHASSIS / AXLE

- Hot-dipped galvanised chassis with single step.
- Self-steer draw bar with tandem walking beam axles standard on all models.
- Optional flotation tyres for low compaction solution.



CONTROLS

- Control sprayer and hydraulic functions through a single platform with the Fusion controller featuring full colour touch screen and integrated joystick.
- CANBUS technology with onboard diagnostics minimises downtime and is easily upgraded via simple software updates.

DRIFT REDUCTION / RECAPTURE SYSTEM

- Optional system best suited to 2-row, cool climate vineyard operations.
- Improves vineyard spraying efficiency and minimises off-target spray drift, especially during dormancy and early season sprays.
- The dual screens reduce trash build up with recaptured spray being filtered prior to returning to the spray tank.

MICRO POWER PACK

- Compact, self-contained hydraulic oil supply system designed to drive QM-420 fans independent to the tractor hydraulic system.
- Improves tractor efficiency and allows smaller model tractors to power Quantum Mist Smart Spray models.
- Equipped with a safety cut off switch, the MPP shuts down if the oil level drops.
- Optional biodegradable oil.

QUANTUM MIST™ 420 2 AND 3 ROW

CROPLANDS QUANTUM MIST MULTI-ROW SPRAYERS HAVE BEEN PROVIDING GRAPE GROWERS WITH INDUSTRY LEADING COVERAGE FOR OVER 20 YEARS.

INCORPORATING THE NEW QM-420 FAN WITH DUAL SPRAY RING AND FAN FRAME DESIGN, THE QUANTUM MIST 420 MODELS TAKE THIS PROVEN FORMULA TO THE NEXT LEVEL.



FANS

- Individual QM-420 fans, hydraulically driven from the tractor hydraulics or via optional Micro Power Pack.
- Dual spray ring allows for three-tier spray rate solution (low, medium and high), manually adjustable from the ground.
- Optional upwind/downwind fan speed compensation – an extremely effective system for improving spray coverage and minimising off-target spray (must have HV-4000 rate controller fitted)

FAN FRAME

- New design fan frame system offers added protection and allows for precise, simple fan position settings.

BOOM

- Heavy-duty boom with excellent adjustability for varying row widths.

DRIVE

- Tractor-driven hydraulic oil supply is standard on all models up to 12 fans.
- Optional Micro Power pack.

PUMPS

- AR-185 LFP as standard for 8 and 12 fan models.
- AR-250 LFP as standard for 18 fan models.

CONTROLS

- Standard ECM manual control, left / right shut-offs and manual relief valve.
- Optional rate control selections on page 14.

NOZZLES

- 10 x nozzles per QM-420 mm fan, available in 80, 60 and 40-degree options.

TANKS

- High impact, UV-stabilised polyethylene tanks fitted with separate flushing and fresh water tanks.
- 2-row available in 2000L, 3000L and 4000L models.
- 3-row available in 3000L and 4000L models.

CHASSIS / AXLE

- Hot-dipped galvanised chassis with single step.
- Self-steer draw bar and tandem walking beam axles standard on all models.
- Optional flotation tyres for low compaction solution.

MICRO POWER PACK

- Compact, self-contained hydraulic oil supply system designed to drive QM-420 fans independent to the tractor hydraulic system.
- Improves tractor efficiency and allows smaller model tractors to power Quantum Mist Smart Spray models.
- Equipped with a safety cut off switch, the MPP shuts down if the oil level drops.
- Optional biodegradable oil.



QUANTUM MIST™ 420 SINGLE ROW

PERFECT FOR SMALLER SCALE AND ESTATE VINEYARDS, THE CROPLANDS QUANTUM MIST 420 **SINGLE ROW SPRAYERS TAKE COVERAGE TO THE NEXT LEVEL.**

AVAILABLE IN COOL CLIMATE (4-FAN) AND WARM CLIMATE (6-FAN) MODEL CONFIGURATIONS.

QM-420 SINGLE ROW

FEATURES

FANS

- Individual QM-420 axial type fan heads, hydraulically driven simultaneously from the tractor hydraulics. The QM-420 fan delivers turbulent, high volume air for optimum canopy penetration and coverage.
- Dual spray ring allows for three-tier spray rate solution (low, medium and high), manually adjustable from the ground.

TOWER

- Heavy-duty rear tower with adjustability for varying row widths.
- Fans mounted in a new fan frame system, offering added protection and allowing for precise, simple, fan position settings.

DRIVE

- Tractor-driven hydraulic oil supply is standard.

PUMPS

- AR-160 LFP positive displacement pump as standard. Optional AR-185 LFP pump for higher volume applications.

CONTROLS

- ECM 4-tap control with pressure adjustment and gauge.
- Optional rate control selections on page 14.

NOZZLES

- 10 x nozzles per QM-420 mm fan, available in 80, 60 and 40-degree options.

TANKS

- High impact, UV stabilised polyethylene tanks fitted with separate flushing and fresh water tanks.
- Available in 1500L, 2000L and 3000L models.

CHASSIS / AXLE

- Hot-dipped full length chassis with single step.
- Self-steer draw bar standard.
- Single fixed axle is standard on all models.
- Optional flotation tyres can be fitted for low compaction solution.



QUANTUM MIST™ 420 LINKAGE

CROPLANDS QUANTUM MIST 420 LINKAGE SPRAYERS ARE **IDEAL FOR NARROW ROW SPACINGS OR CHALLENGING TOPOGRAPHY.**

DELIVERING PREMIUM CROP PROTECTION THROUGH THE NEW QM-420 FAN WITH DUAL SPRAY RING AND FAN FRAME DESIGN.

QM-420
LINKAGE

FEATURES

FANS

- Individual QM-420 axial type fan heads, hydraulically driven simultaneously from the tractor hydraulics. The QM-420 fan delivers turbulent, high volume air for optimum canopy penetration and coverage.

TOWER

- Heavy-duty rear tower with adjustability for varying row widths. Fans mounted in a new fan frame system, offering added protection and allowing for precise, simple, fan position settings.

DRIVE

- Tractor driven hydraulic oil supply is standard.

PUMPS

- AR-80 LFP positive displacement pump as standard.
- Optional AR-135 LFP pump for higher volume applications.

CONTROLS

- Remote mount, 5 x outlet, UCM controller with manual pressure adjustment and gauge.
- Optional rate control selections on page 14.

NOZZLES

- 10 x nozzles per QM-420 mm fan, available in 80, 60 and 40-degree options.

TANKS

- High impact, UV-stabilised polyethylene tanks fitted with separate flushing and fresh water tanks.
- Available in 600L, 800L and 1000L models.

FRAME

- Heavy-duty, hot-dipped galvanised frame.





QUANTUM MIST™ 1000 TRAILED

FANS

- Individual QM-420 axial type fan heads, hydraulically driven simultaneously from the tractor hydraulics.

TOWER

- Single pole tower. Adjustable fan clamping brackets for precise fan positioning to the canopy.

DRIVE

- Tractor driven hydraulic oil supply is standard.

PUMP

- AR-140 LFP positive displacement pump as standard.

CONTROLS

- RM-40, 2 x tap remote mounted manual control. Manual pressure regulating valve and gauge.
- Optional electric control upgrade.

NOZZLE

- 10 x nozzles per QM-420 mm fan, available in 80, 60 and 40-degree options.

TANKS

- High impact, UV-stabilised polyethylene tank fitted with separate flushing and fresh water tanks.

CHASSIS / AXLE

- Hot-dipped galvanised chassis with standard draw bar fitted.
- Optional Self-steering drawbar.
- Adjustable width axle fitted with 10.0/80 x 12 implement tyres.

CROPAIR 1000 TRAILED

FAN

- 800mm single speed fan with neutral position.
- Adjustable pitch blades x 9.
- Poly fan cowl.
- Upper deflector kit supplied as standard.

DRIVE

- PTO shaft supplied.

PUMP

- FM-140, high pressure (40 Bar rated) triple diaphragm pump.
- Open flow output = 130L/min.

CONTROLS

- RM-40, 2 x tap remote mounted manual control.
- Manual pressure regulating valve and gauge.
- Optional electric control upgrade.

NOZZLES

- 6 x brass rollover nozzle bodies per side.

TANK

- High impact, UV-stabilised polyethylene tank fitted with separate flushing and fresh water tanks.

CHASSIS / AXLE

- Hot-dipped galvanised chassis with standard draw bar fitted.
- Optional Self-steering drawbar.
- Adjustable width axle fitted with 10.0/80 x 12 implement tyres.

POWER REQUIRED

- Recommended tractor engine HP requirement = 50-60 HP.



FAN

- 500mm single speed fan with adjustable pitch blades for variable air outputs.
- Air output = 24,000m³/hr.

DRIVE

- PTO shaft supplied.

PUMPS

- High pressure (40 bar) AR-503 triple diaphragm pump.
- 54L/min open flow.

CONTROLS

- Remote mounted manual tap control.
- Optional electric control upgrade.

NOZZLES

- 5 x brass rollover nozzle bodies per side.

TANK

- 300 litre spray tank with 30L flush and 15L hand wash tanks fitted.

POWER REQUIRED

- Recommended tractor engine HP requirement = 25-30 HP.

**CROPAIR
300****CROPAIR
600****FAN**

- 800mm, 2-speed fan with adjustable pitch blades for variable air outputs.
- Over run clutch fitted to protect fan from sudden engagement / disengagement.
- Air output = 33,000m³/hr at low range and 42,000m³/hr at high range.

DRIVE

- PTO shaft supplied.

PUMPS

- High pressure (50 bar) AR-813 triple diaphragm pump.
- 80L/min open flow.

CONTROLS

- Remote-mounted manual tap control.
- Optional electric control upgrade.

NOZZLES

- 6 x brass rollover nozzle bodies per side.

TANK

- 600L spray tank with 85L flush and 15L hand wash tanks fitted.

POWER REQUIRED

- Recommended tractor engine HP requirement = approx. 50 HP.

SPRAY CONTROLLERS

1 VISIO CONTROLLER

For growers who wish to monitor their spray application rate but prefer to control the application either manually or with basic electric controls. The Visio monitor offers a cost-effective solution. Coupled with a flowmeter and speed sensor, the Visio can display area applied, spray rate in L/ha, L/min and current speed.



2 HV2400

For growers looking for a basic spray rate controller. Two-section solenoid control with up to 10 pre-set application rates. Programmable alarm settings with L/ha and L/100m capability.



3 HV4000

For the professional operator, providing up to four-section control of motor valves or solenoids. Pre-set row width and application rates for simple, on-the-go adjustment. Multiple screen selections, programmable audio and visual alarms and up to 10 individual operating histories to keep the operator informed. L/ha or L/100m capability. Fully integrated to NuPoint data management system and optional fan speed control.



4 BRAVO 180

For the professional operator requiring GPS integration and data transfer via USB. Up to four-section control of motor valves or solenoids. Pre-set row width and application rates for simple, on-the-go adjustment. Multiple screen selections, programmable audio and visual alarms and up to 10 individual operating histories to keep the operator informed. L/ha or L/100m capability. Fully integrated to NuPoint data management system. Optional fan speed control and tank level indicator.



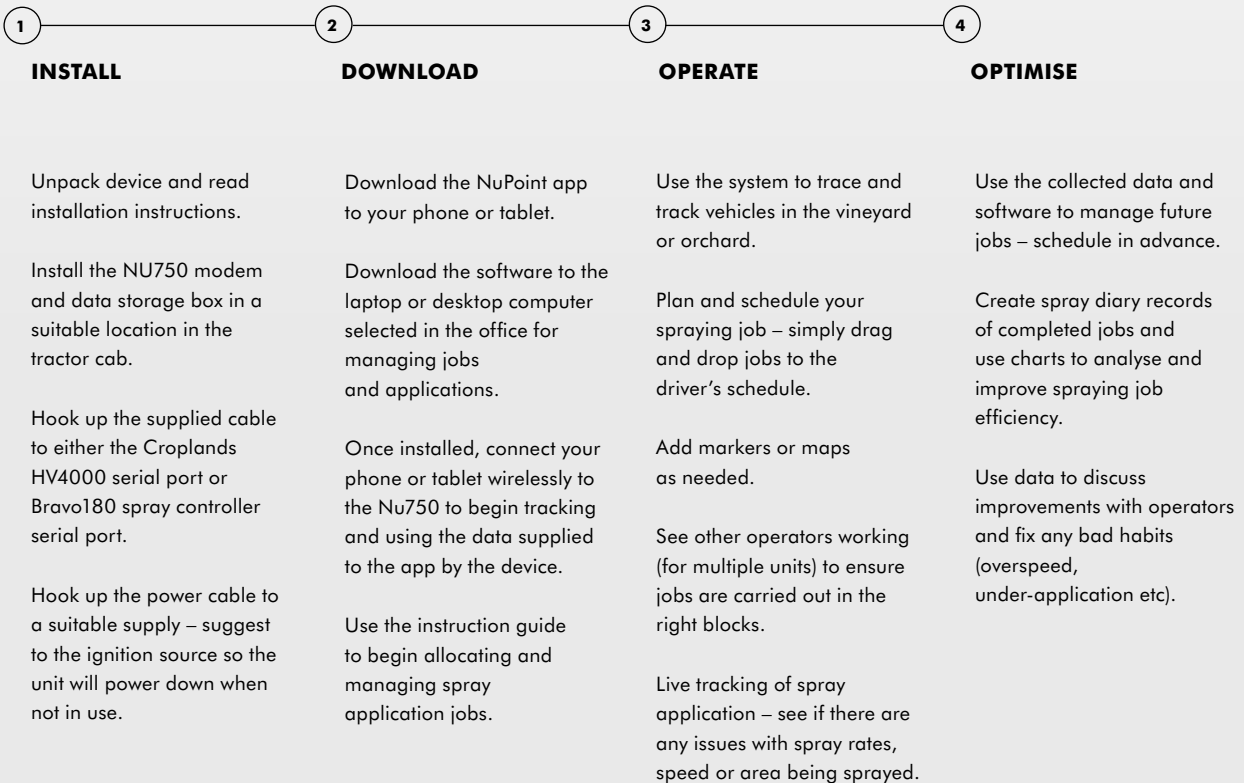
NUPOINT DATA MANAGEMENT SYSTEM

The Nu750 device suits any contractor, grower or operation wanting the option to track, schedule jobs (+maps) wirelessly to their drivers. The internal or optional external antenna allows easy and inexpensive installation. Up to five-section I/O interface captures the details that you are looking for and a 20,000-message buffer ensures nothing is lost, with a back-up battery that allows for short-term or last-gasp tracking when disconnected from the vehicle power supply. Distance, speed, area covered, time and application rates are all seen in real-time and are captured for reporting. This is the optimum unit for most applications.

NuPoint vehicle tracking and data system for streaming live data to a mobile phone or tablet device. It includes software for reporting, vehicle tracking, display of application map, spray job allocation, live sprayer performance.



FOUR SIMPLE STEPS



NATIONAL DEALER LISTING

NEW SOUTH WALES

Albury	Intersales	02 6977 1933
Bathurst	On-Trac Ag	02 6332 5655
Coffs Harbour	Coffs Harbour Farm Machinery	02 6654 0658
Cowra	Cowra Machinery Centre	02 6342 5555
Forbes	Forbes Machinery Centre	02 6852 3211
Gosford	Kentan Machinery	02 4302 6100
Griffith	Intersales	02 6962 6831
Gunnedah	Vantage NSW	1300 770 970
Hexham	Kentan Machinery	02 4964 8275
Kempsey	Macleay Valley Mower Centre	02 6562 8822
Lismore	Agrihaus	02 6622 0003
McGraths Hill	Ace Ohlsson	02 4571 6400
Mudgee	On-Trac Ag	02 6372 2662
Orange	On-Trac Ag	02 6362 5566
Pokolbin	Lawrence's Ag & Machinery Repairs	0414 234 841
Taree	Kentan Machinery	02 6552 5833
Wagga Wagga	Intersales	02 6921 5515

NORTHERN TERRITORY

Darwin	HD Pump	08 8947 1008
Humpty Doo	HD Pump	08 8988 1254

QUEENSLAND

Atherton	Tableland Pumps & Pipes	07 4091 2277
Ayr	A & B Rural	07 4783 4488
Bowen	Bartec Rural Services	07 4785 2322
Bundaberg	Sunfam Pty Ltd	07 4152 4166
Gatton	Lockyer Farm Machinery	07 5462 1888
Innisfail	GF Rural Supplies	07 4061 1066
Murgon	South Burnett Machinery	07 4168 1411
Nambour	Tractor Machinery Implements	07 5476 4888
Rockhampton	Milne Bros. Equipment	07 4930 0333
Stanthorpe	Vedelago Mechanical Repairs	07 4685 2200
Toowoomba	Toowoomba Spray Shop	07 4634 4000
Tully	GF Rural Supplies	07 4068 1002

SOUTH AUSTRALIA

Adelaide	Kubpower	08 8139 7200
Loxton	Ronco Motors	08 8584 5575
McLaren Vale	Pridham Viticulture	0414 600 342
Naracoorte	Kubpower	08 8762 0123
Saddledworth	Vater Machinery	08 8847 5000
Strathalbyn	Bates Farm Machinery	0417 363 555
Summertown	Kubpower	08 8390 3017
Tanunda	Vater Machinery	08 8563 2008

TASMANIA

Statewide	Spray Shop Tasmania	03 6343 1666
-----------	---------------------	--------------

VICTORIA

Ballarat	Central Machinery Services	03 5332 0566
Bendigo	Precision Control	03 5448 8484
Cobram	Cobram Rural	03 5871 3333
Colac	Swayn & McCabe	03 5231 5022
Echuca	Echuca Rural	03 5482 2788
Lilydale	Agpower	03 9739 5006
Mildura	Sunrise Ag	03 5023 0284
Shepparton	Shepparton Rural	03 5832 3500
Swan Hill	Swan Hill Kubota	03 5032 9290
Wangaratta	McGregor Machinery	03 5722 9933

WESTERN AUSTRALIA

Albany	AFGRI	08 9842 8529
Boyup Brook	AFGRI	08 9765 1305
Carnarvon	Carnarvon Tractors	08 9941 3622
Cowaramup	Cowaramup Tractor Sales	08 9755 5207
Donnybrook	Machinery West	08 9731 0700
Forrestdale	Growers Agrishop	08 9397 2800
Geraldton	AFGRI Equipment	08 9921 5044
Manjimup	Southern Forest Machinery	08 9777 2100
Moora	AFGRI	08 9651 1363
Muchea	CD Tractor Sales Service	08 9571 4117
Perth	AFGRI	08 9277 1140
Perth	Sprayline Spraying Equipment	08 9250 6100
Wangara	Boya Equipment	08 9409 2008
Witchcliffe	AFGRI Equipment	08 9757 6215

NATIONAL SALES AND SUPPORT

National Sales Manager

Jeremy Rennick 0409 065 994

NORTH

Coastal QLD/NT

Rob Graham 0409 597 462

Central NSW/TAS

Dave Farmer 0427 651 971

SOUTH

South NSW

David Hamilton 0427 975 072

VIC

Jeremy Deck 0430 006 672

SA

Andrew Germein 0417 848 590

WEST

Gavin Merritt

0448 022 172

Scot Craig

0448 337 280

CROPLANDS HEAD OFFICE

Freecall 1800 999 162

Freefax 1800 623 778

Email sales@croplands.com.au

50 Cavan Road Dry Creek SA 5094

YOUR CROPLANDS DEALER