

CROPLANDS



Celebrating 50 years at the forefront of spray technology.

For the last 50 years, Croplands has been proudly helping Australian growers to protect their valuable crops. With an unwavering commitment to produce spraying equipment that is efficient, reliable and engineered to endure, Croplands is always seeking to save you time, reduce your costs and maximise your productivity.

The first Croplands 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 growers' needs.

TIMELINE

- Croplands starts manufacturing and selling orchard sprayers.
- Croplands is purchased by Nufarm Ltd and the head office is established in South Australia.
- Australian manufacturing of vineyard sprayers begins.
- Quantum hydraulic drive axial fan is released.
- Croplands grows its range with the refinement and completion of the QM-500 and QM-380 Quantum fans.
- Croplands launches Quantum Smart Spray and new range of QM-420 vineyard sprayers.





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PERFORMANCE THAT'S PROVEN

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 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 the best on the market.

The QM-500 fan was released in the early 2000s and has been the cornerstone of the QM model range.

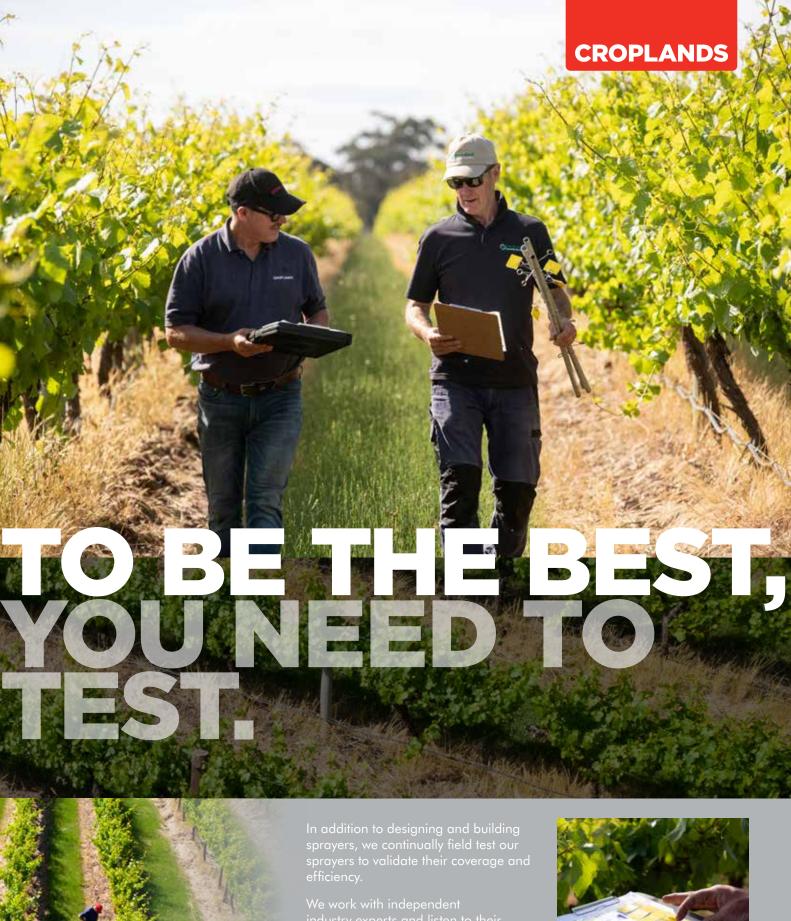
The new QM-420 was released in 2019 after extensive research and field testing. This industry leading hydraulic-driven fan produces highly turbulent air for superior penetration and crop protection. It's also extremely quiet and energy efficient.

Fitted with dual spray rings, the QM-420 can spray a wider band of application rates, while 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.











QM-420

The 420mm-diameter fan, with a new cowl design, is highly efficient, delivering greater RPM with a lower power requirement.

It produces turbulent and high-volume air for optimum vine canopy penetration and spray coverage. It is used in 2 or 3 x fan (per row) configurations.

Dual spray rings are fitted with a total of 10×100 nozzles per fan. 5×100 nozzles are fitted to the inner or lower volume spray ring with an additional 5×100 nozzles fitted to the outer or higher volume spray ring.

This allows for 3 x tier spraying (low/medium/high) rate application without the need to change nozzles.

QM-500

Designed in collaboration with SARDI, the QM-500 fan has set the benchmark in horticulture spray coverage since its release.

This iconic 500mm-diameter fan is fitted to the Classic model and tree crop sprayer range.

A roto-moulded, fully integrated cowl is lightweight and impact resistant.

It produces a wider band of air and is used as 2 x fans per row for vineyard spraying.

A single spray ring is fitted with 8 x nozzles per fan.

COVERAGE IS KEY

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 (MULTI- ROW)	QM-500 CLASSIC (MULTI- ROW)	QM-420 (MULTI- ROW)	QM-420 SINGLE ROW	QM LINKAGE	QM 1000 TRAILED	CROPAIR 1000 TRAILED	CROPAIR LINKAGE
CORPORATE, CONTRACTOR OR LARGE	•	•	•					
MEDIUM		•	•					
SMALL			•	•	•	•	•	
HOBBY/ BOUTIQUE				•	•	•	•	•

QUANTUM SMART SPRAY



Quantum 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 3-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

Newly designed 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 standard for 8 to 12 fan models.

AR-250 LFP standard for 18 fan and recapture kit models.

Nozzles

 $10 \times \text{nozzles}$ per QM-420 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.

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 Smart Spray models.

Equipped with a safety cut off switch, the MPP shuts down if the oil level drops.

Optional biodegradable oil.



The iconic Quantum Classic 500 multi-row sprayers have been spraying vineyards across Australia for over twenty years.

Using the QM-500 fan, the Classic range offers a multi-row model solution for growers wanting legendary QM coverage on a more basic model platform.

Fans

Individual QM-500 fans for maximum canopy coverage, hydraulically driven from the tractor hydraulics or via optional Micro Power Pack.

 $2 \times QM-500$ fans per boom arm. 2-row model = $8 \times fans$, 3-row model = $12 \times fans$.

Boom

Quantum Classic hydraulic fold boom.

Individual left and right terracing kit optional for sloping or undulating conditions.

Optional outer hydraulic row-width adjustment.

Fan Drive

Tractor-driven hydraulic oil supply standard on all models.

Optional Micro Power Pack available if hydraulic oil supply is limited.



Pumps

AR-185 LFP standard on 8 and 12 x fan models.

AR-250 LFP optional for higher volume requirements.

Controls

Standard Electric controls. Two-section (left and right) with pressure adjustment from the tractor seat.

Optional rate control selections on page 18.

Nozzles

8 x nozzles per QM-500 fan, available in 80, 60 and 40-degree options.

Non-drip, individual nozzle shut-offs optional.

Tanks

High-impact, UV-stabilised polyethylene tanks fitted with flushing and freshwater 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.

Micro Power Pack

Compact, self-contained hydraulic oil supply system designed to drive QM-500 fans independent to the tractor hydraulic system.

Improves tractor efficiency and allows smaller-model tractors to power Quantum model sprayers.

Equipped with a safety cut-off switch – the MPP shuts down if the oil level drops.

Optional biodegradable oil.



Croplands Quantum multi-row sprayers have been providing grape growers with industry-leading coverage for over twenty years.

Incorporating the new QM-420 fan with dual spray ring and fan frame design, the Quantum 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 3-tier spray rate solution (low, medium and high), manually adjusted.

Fan frame

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

Boom

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



Fan Drive

Tractor-driven hydraulic oil supply standard on all models up to 12 fans.

Optional Micro Power Pack.

Pumps

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

AR-250 LFP standard for 18 fan models.

Controls

Electric controls. Two-section (left and right) with pressure adjustment from the tractor seat.

Optional rate control selections on page 18.

Nozzles

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

Tanks

High-impact, UV-stabilised polyethylene tanks fitted with flushing and freshwater 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.

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 models.

Equipped with a safety cut off switch, the MPP shuts down if the oil level drops.

Optional biodegradable oil.



vineyards, the Croplands Quantum 420 single row sprayers take coverage to the next level. Available in cool climate (4-fan) and warm climate (6-fan) model configurations.

Fans

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

Dual spray ring allows for 3-tier spray rate solution (low, medium and high), manually adjusted.

Tower/Frame

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.

Fan Drive

Tractor-driven hydraulic oil supply is standard.

Pumps

AR-140 LFP positive displacement pump is standard.

Optional AR-185 LFP pump for higher volume applications.

Controls

Electric controls. Two-section (left and right) with pressure adjustment from the tractor seat.

Optional electric and rate control selections on page 18.

Nozzles

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

Tanks

High-impact, UV-stabilised polyethylene tanks fitted with flushing and freshwater 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 standard on all models.

Optional flotation tyres can be fitted for low compaction.



Croplands Quantum 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.

Fans

Individual QM-420 fans, hydraulically driven 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.

Fan Drive

Tractor-driven hydraulic oil supply is standard.

Pumps

AR-80 LFP positive displacement pump is standard.

Optional AR-140 LFP pump for higher volume applications.

Controls

Remote mount, 5 x outlet, UCM controller with manual pressure adjustment and gauge.

Optional electric and rate control selections on page 18.

Nozzles

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

Tanks

High-impact, UV-stabilised polyethylene tanks fitted with separate flushing and freshwater tanks.

Available in 600L, 800L and 1000L models.

Frame

Heavy-duty, hot-dipped galvanised frame.



Fans

Individual QM-420 fans, hydraulically driven from the tractor hydraulics.

Tower

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

Fan Drive

Tractor-driven hydraulic oil supply is standard.

Pump

AR-80 LFP positive-displacement pump standard.

Controls

Remote mount 4-outlet manual controller with manual pressure adjustment and gauge.

Optional electric and rate controller options on page 18.

Nozzle

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

Tanks

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

Chassis/Axle

Hot-dipped galvanised chassis. Self-steering draw bar supplied as standard.

Adjustable-width axle fitted with 10.0/80 x 12-inch implement tyres.



Fan

FIENI 815mm, 2-speed fan with neutral position.

Adjustable pitch blades.

Air output = 32,000m³/hr at low range and 39,000m³/hr at high range.

Fan and Pump Drive

PTO shaft supplied.

Pump

AR-1064 105 L/min, 50-bar rated, four diaphragm pump.

Controls

Remount mounted 2-outlet manual controller with manual pressure regulating valve and gauge.

Optional electric and rate controller options on page 18.

Nozzles

7 x brass rollover nozzle bodies per side.

Tank

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

Chassis/Axle

Hot-dipped galvanised chassis with standard fixed draw bar fitted. Adjustable-width axle fitted with 10.0/80 x 12-inch implement tyres.

Power required

Recommended tractor engine HP requirement = 50-60 HP.



CROPAIR 300L

Fan

FIENI 615mm single speed fan with adjustable pitch blades for variable air outputs.

Air output = 26,000m³/hr.

Fan and Pump Drive

PTO shaft supplied.

Pumps

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

Controls

Remote mounted 2-outlet manual controller with manual pressure regulating valve and gauge. Optional electric control upgrade.

Nozzles

5 x brass rollover nozzle bodies per side.

Tank

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

Power required

Recommended tractor engine HP requirement = 25-30 HP.

CROPAIR 600L

Fan

FIENI 815mm, 2-speed fan with adjustable pitch blades for variable air outputs.

Air output = 32,000m³/hr at low range and 39,000m³/hr at high range.

Fan and Pump Drive

PTO shaft supplied.

Pumps

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

Controls

Remote mounted 2-outlet manual controller with manual pressure regulating valve and gauge.

Nozzles

7 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.



HV2400

For growers looking for a basic spray rate controller. 2-section solenoid control. L/ha and L/100m capability.



BRAVO 180

For the professional operator requiring GPS integration and data transfer via USB. Up to 4-section control of motor valves or solenoids. Pre-set row width and application rates for simple, on-the-go adjustments. L/ha or L/100m capability. Fully integrated to NuPoint data management system. Optional fan speed control and tank level indicator.



FUSION CONTROLLER

(pictured above)

Premium controller optional for QM Smart Spray multi-row model sprayers, combining spray and hydraulic control.

Includes integrated joystick control and full-colour touch screen.

CANBUS design with in-built diagnostics and software upgradeable functionality.

Up to 8 x boom sections.

L/ha or L/100m capability.

Individual L/R fan speed control (Wind Comp.), programmable boom width control.

Optional tank level sensor.

HV4000

For the professional operator, providing up to 4-section control of motor valves or solenoids.

Pre-set row width and application rates for simple, on-the-go adjustments.

L/ha or L/100m capability.

Fully integrated to NuPoint data management system and optional fan speed control.



IBX-100

Premium controller optional for QM-420 multi-row model sprayers, combining spray and hydraulic control.

ISOBUS compatible to in-cab screen (if fitted) or optional full-colour touch screen as virtual terminal.

Up to 7 x boom sections and 9 x hydraulic functions. Programmable boom width control.



L/ha or L/100m capability.

Additional options – joystick control, individual L/R fan speed control (Wind Comp.) tank level sensor, mapping and auto boom shut-off (GPS receiver required).



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 5-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.

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



Install

Unpack device and read installation instructions.

Install the Nu750 modem and data storage box in a suitable location in the tractor cab.

Hook up the supplied cable to either the Croplands HV4000 serial port or Bravo180 spray controller serial port.

Hook up the power cable to a suitable supply – suggest to the ignition source so the unit will power down when not in

Download

Download the NuPoint app to your phone or tablet.

Download the software to the laptop or desktop computer selected in the office for managing jobs and applications.

Once installed, connect your phone or tablet wirelessly to the Nu750 to begin tracking and using the data supplied to the app by the device.

Use the instruction guide to begin allocating and managing spray application jobs.



Operate

Use the system to trace and track vehicles in the vineyard or orchard.

Plan and schedule your spraying job - simply drag and drop jobs to the driver's schedule.

Add markers or maps as needed.

See other operators working (for multiple units) to ensure jobs are carried out in the right blocks.

Live tracking of spray application – see if there are any issues with spray rates, speed or area being sprayed.



Optimise

Use the collected data and software to manage future jobs – schedule in advance.

Create spray diary records of completed jobs and use charts to analyse and improve spraying job efficiency.

Use data to discuss improvements with operators and fix any bad habits (overspeed, underapplication etc).



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	NFS AG	02 6742 7771
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
Muswellbrook	Kentan Machinery	02 5575 4000
Orange	On-Trac Ag	02 6362 5566
Taree	Kentan Machinery	02 6552 5833
Wagga Wagga	Intersales	02 6921 5515

NORTHERN TERRITORY

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

QUEENSLAND

Atherton	Tableland Pumps, Pipes & Rural	07 4091 227
Ayr	A & B Rural	07 4783 448
Bowen	EE Muir & Sons	07 4785 232
Bundaberg	Sunfam Pty Ltd	07 4152 4166
Gatton	Lockyer Farm Machinery	07 5462 188
Innisfail	GF Rural Supplies	07 4061 1066
Murgon	South Burnett Machinery	07 4168 1411
Nambour	Tractor Machinery Implements	07 5476 488
Toowoomba	Toowoomba Spray Shop	07 4634 400
Rockhampton	Milne Bros. Equipment	07 4930 033
Stanthorpe	Vedelago Mechanical Repairs	07 4685 220
Tully	GF Rural Supplies	07 4068 100

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
Nuriootpa	Vater Machinery	08 8563 2008
Saddleworth	Vater Machinery	08 8847 5000
Strathalbyn	Bates Farm Machinery	0417 363 555
Summertown	Kubpower	08 8390 3017
Waikerie	McKay's Auto & Ag.	08 8541 2288

TASMANIA

VICTORIA

Ballarat	Central Machinery Services	03 5332 0566
Bendigo	Precision Control	03 5448 8484
Cobram	Cobram Rural	03 5871 3333
Colac	Claas Harvest Centre	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
St Arnaud	Sprayer Centre	03 5495 3222
Swan Hill	Swan Hill Kubota	03 5032 9290
Wangaratta	McGregor Machinery	03 5722 9933
Wodonga	Intersales	02 6061 4390

WESTERN AUSTRALIA

Albany	AFGRI	08 9842 8529
Boyup Brook	AFGRI	08 9765 1305
Busselton	AFGRI	08 9757 6215
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	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

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