

# TREE CROP & KIWIFRUIT SPRAY RANGE

BUYERS' GUIDE • 2022

[CROPLANDS.CO.NZ](http://CROPLANDS.CO.NZ)





# CROPLANDS

# 50 YEARS

BRINGING YOU THE BEST

## Celebrating 50 years at the forefront of spray technology.

Our very first machine made its way into an orchard fifty years ago. Since then we've grown a lot, expanding our range to cover all sorts of tree crops, from apples and kiwifruit to nuts.

Our growth is reflected in the success of our customers. When they're able to protect their crop with a sprayer that's efficient and reliable, they prosper. This understanding of growers has seen Croplands sprayers a common sight in orchards around New Zealand.

Croplands machines are built with New Zealand's varying terrain in mind. 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 tree crops farmed throughout the country, there's a machine to suit every grower's needs.

### TIMELINE

- '70** Croplands starts manufacturing and selling orchard sprayers. A new tank mould is developed and the distribution of Fieni airblast fans begins. Croplands starts exporting to Australia and the USA.
- '80** Trifan and self-propelled "Spraymaster" sprayers are released. Croplands is purchased by Nufarm Ltd and establishes an Australian base in Adelaide.
- '90** The Slimline 2000L and 2000L/3000L XL tanks are developed and released along with the innovative Straightening Vane (SV) fans.
- '00** The new 4000L tank range is developed and released with the versatile Quantum fan, along with the unique HV4000 controller.
- '10** The refinement and completion of the QM500 and 380 Quantum fans, along with next-generation 920 DSV, 1060 DSV and 820FE fans. The introduction of low-profile tanks enables 'crop-specific' sprayers: Smart Spray, Kiwiliner, Avoliner and a new self-propelled sprayer.
- '20** Quantum 420 Orchard Tower and Rover Self-Propelled sprayer are launched.



4 **Performance that's proven**

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6 **Quantum Orchard Tower**

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# PERFORMANCE THAT'S PROVEN

**The Croplands premium fan range delivers unparalleled coverage, performance and reliability. This is backed by New Zealand's leading fruit growers as they continue to use our sprayers to protect their high-value crops.**

All our Airblast fans are engineered by Fieni, a global leader in agricultural fan design, manufacturing and innovation.

Croplands and Fieni have been collaborating since 1972, and together we set the standard for fan sprayer performance, efficiency, penetration and coverage. And with Fieni fans available from 600mm in diameter to 1060mm, there's a model to meet your orchard's needs.

Croplands Tower sprayers are fitted with Quantum hydraulic-driven fans. Quantum fans are smaller in diameter – 420mm or 500mm, allowing for multiple-head configurations to target crops more directly.

The Quantum fan design is very popular in large-scale tree crop orchards, delivering excellent spray coverage at high travel speeds, so growers can enjoy exceptional efficiency while reducing costs.

To see how Croplands' market-leading fans perform in your orchard's unique conditions, contact your dealer for an on-property demonstration.



# TO BE THE BEST, YOU NEED TO TEST.

In addition to designing and building sprayers, we continually field test our sprayers to validate their coverage and efficiency.

We work with independent industry experts and listen to their recommendations.

These learnings improve sprayer set up and performance for our customers.



SUITS

ORCHARDS

HIGH VALUE SPECIALTY BUSH &amp; TRELLIS CROPS

# QUANTUM 420 ORCHARD TOWER



Equipped with the new QM-420 fan with dual spray ring, the Quantum 420 Orchard Tower is our latest sprayer. Available in 8 x head configuration, it provides superior spray coverage in tree crops up to five metres in height.

## Tower

New fixed tower specifically designed for orchard crops. Robust design with manual width adjustments and simple set up for precise fan positioning to provide excellent spray coverage in medium-sized tree crops up to 5 metres in height.





### Fans

8 individual QM-420 fans, hydraulically driven from tractor hydraulics or self-contained oil supply (optional Micro Power Pack). Delivering turbulent, high-volume air for optimum canopy penetration and coverage.

New optional upwind/downwind compensation. Controls individual left/right fan speeds from the cab to improve coverage in exposed conditions and minimise off-target spray.

Dual spray rings are fitted with a total of 10 x nozzles (inner x 5, outer x 5) for a 3-tier spray rate solution (low, medium and high), this reduces the need to change nozzle sizes and minimises off-target spray drift.

Fans are mounted in a new fan frame system, offering added protection and allowing for precise, simple fan position settings.

### Drive

Standard - Tractor supplied oil supply for fans.  
Optional fully enclosed Micro Power Pack.

### Pump

AR-185 LFP positive-displacement pump standard.  
Higher volume, brass-pump option.

### Controls

HV-4000 Auto rate controller as standard.

Additional rate controller options on page 22.

### Nozzles

Ceramic hollow cone nozzles from ALBUZ are precision polished to ensure perfect sealing, giving precise flow rate and excellent resistance to chemicals and wear. 10 nozzles per QM-420mm fan, available in 80, 60 and 40-degree options.

### Tank

High-impact, UV-stabilised polyethylene tanks fitted with separate flushing and freshwater tanks. Available in 3000 XL, 2200 XL and 2000 Slimline. Slimline model only 1400mm overall width.

### Chassis/axle

Hot-dipped full-length chassis with single step. Self-steer draw bar standard. Single axles. Fixed on XL models. Width adjustable on Slimline model. Optional tandem axles available for compatible tank models.



SUITS

NARROW ROWS OF TREES UP TO 3.6M

# CROPLINER

## LINEAR TOWER



**Developed by Croplands and Fieni with input from local New Zealand growers, the 920 Linear Tower delivers more accurate and uniform air output, targeted to narrow 2D-style tree plantings.**

Allowing more even coverage and greatly reducing off-target spray drift when compared to conventional style fans, the Linear Tower also allows more accurate targeting of various zones of the tree.

### Fan

The highly efficient 920 Linear Tower fan is designed for precise placement of air and droplets. Specially designed deflector vanes in the stainless steel volute distribute the air uniformly - ensuring even coverage in the narrowest plantings. 3 fan pitch settings, 2 speed gearbox for spraying varying tree sizes and/or crop development. Centrifugal fan clutch for smooth fan engagement.

### Pump

Positive-displacement Annovi Reverberi (AR) BHS-170 high-pressure pump. Brass head/bronze manifold for maximum corrosion resistance.

### Controls

Remote mounted ARBMH50 2-outlet manual controller standard. Optional rate controller selections on page 22.

### Nozzles

5 single swing-over nozzle bodies in the lower tier and 4 double swing-over nozzle bodies in the top tier makes it easy to get the volumes into the zones where you need it most. 1 set (26) of stainless steel disc and brass cores and 1 set (26) of ALBUZ ceramic hollow cone nozzles to allow a wide range of application rates.





### Tank

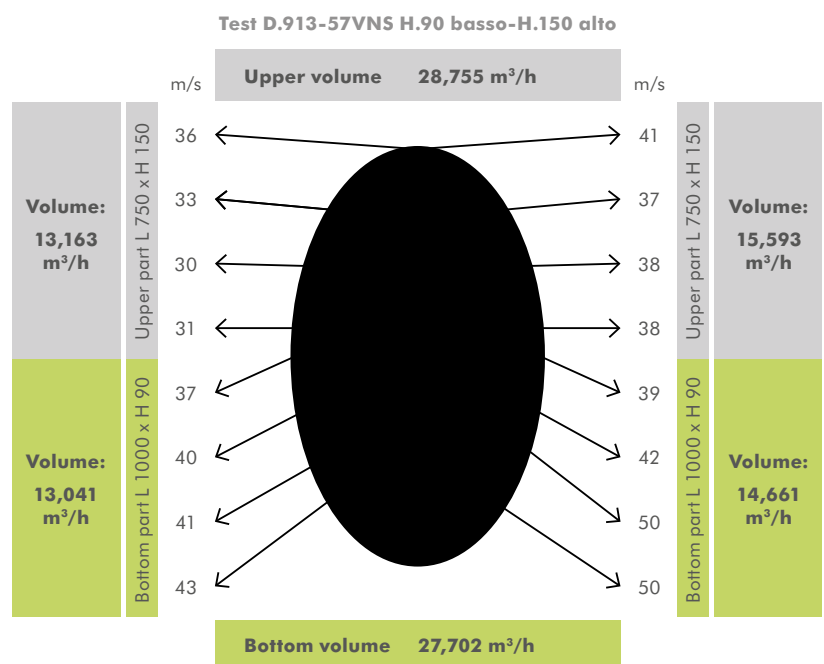
2000L gel-coated fibreglass construction tank for high strength and smooth finish. Separate 30L freshwater tank.

### Chassis/axle

Hot-dipped galvanised, full-length C-channel for strength and corrosion resistance. Heavy-duty adjustable length draw bar. Rear bumper for fan protection, tank sump protection.

### Power required

Approximate engine HP requirements.  
920 DSV fan = approx. 70 HP.





SUITS

LARGE TREE CROPS

MEDIUM TREE CROPS

CITRUS

# CROPLINER SLIMLINE





**The iconic sprayer of our orchard model line-up, the Cropliner Slimline model has been shaped for minimum crop interference.**

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**Fan**

Highly efficient FIENI 920 mm DSV fan designed to generate more air with lower HP. 3-fan pitch settings. 2-speed gearbox for spraying varying tree sizes, and/or crop development. Centrifugal fan clutch for smooth fan engagement.

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**Pump**

Positive-displacement Annovi Reverberi (AR) BHS-170 high-pressure pump. Brass head/bronze manifold for maximum corrosion resistance.

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**Controls**

Remote mounted ARBMH50 2-outlet manual controller standard. Optional rate controller selections on page 22.

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**Nozzles**

Stainless steel spray rings fitted with brass roll-over nozzle bodies. 1 set (28) stainless steel disc and brass cores and 1 set (28) ALBUZ ceramic hollow cone nozzles to allow a wide choice of application rates.

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**Tank**

2000L gel-coated fibreglass construction tank for high strength and smooth finish. Separate 30L freshwater tank.

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**Chassis/axle**

Hot-dipped galvanised, full-length C-channel for strength and corrosion resistance. Heavy-duty adjustable length draw bar. Rear bumper for fan protection, tank sump protection.

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**Power required**

Approximate engine HP requirements.  
920 DSV fan = approx. 70 HP.



SUITS

BUSH CROPS

TRELLIS CROPS

MEDIUM SIZE TREE CROPS

# CROPLINER XL

**The perfect solution for operations of all sizes. Multiple tank and fan size combinations can be perfectly matched to your tractor HP and budget requirements.**

## Fans

Highly efficient FIENI DSV fans in 920mm and 1060mm sizes.

## Pumps

Quality AR high-pressure pumps. AR BHA-140 (alloy) fitted on 1500L models. AR BHS-170 (brass) fitted on 2200, 3000 and 4000L models.

## Controls

Remote mounted ARBMH50 2-outlet manual controller standard. Electric and rate control options on page 22.

## Nozzles

Brass roll-over nozzle bodies fitted with 1 set stainless steel disc and brass cores and 1 set ALBUZ ceramic hollow cone nozzles to allow a greater choice of application rates.

## Tank

High-impact, UV-stabilised polyethylene tanks. Available in 1500, 2200, 3000 and 4000L tank sizes. Fitted with flushing and fresh water tanks.

## Chassis/axle

Hot-dipped galvanised, full-length chassis with adjustable draw bar and single step. Rear bumper and leaf guard. Single fixed axle standard.

## Drive

Constant velocity PTO shaft supplied as standard.

## Power required

Approximate engine HP requirements.

920 DSV fan = 70 HP, 1060 DSV fan = 105 HP.



# HYBRID SPRAYER

**Covering a wide range of conventionally planted tree crops, the Hybrid Sprayer is perfect for targeting specific tree zones.**

## Fans

920 DSV variable-pitch polycarbonate blades with 2-speed gearbox and centrifugal clutch complemented with 2 Croplands Quantum QM-500 fans for extra punch and targetability "up top".

## Tower frame

Hot-dipped galvanised steel pole with support. Features adjustable brackets for a range of set ups across different crops.

## Nozzles

14 x swing-over double-nozzle bodies per side with high-quality ALBUZ 80-degree ceramic cone jet nozzles. Each Quantum fan has an additional 8 x ALBUZ 80-degree nozzles per side.

## Drive system

Pump and 920 DSV fan are driven from the tractor PTO. The Quantum fans are driven separately from the tractor hydraulics.

## Pump

High-quality 4-diaphragm AR BHS-170 brass-headed pump with 163 L/min flow and 50-bar pressure.

## Tank

2000L fibreglass construction with 30L hand-wash tank.

## Chassis/axle

Hot-dipped galvanised, heavy-duty chassis with adjustable height axle, wheel scrapers, sump guard and adjustable drawbar.



SUITS

LARGE SIZE TREE CROPS

# AVOLINER 920



**Designed specifically for spraying avocados,  
with a bigger fan and pump combination.**

## Fan

Highly efficient FIENI 920 DSV (downstream straightening vanes) fan. Designed to generate more air with lower HP.

## Pump

Positive-displacement Annovi Reverberi AR BHS-200 high-pressure pump standard. Brass head/bronze manifold for maximum corrosion resistance.

## Controls

Remote mounted ARBMH50 2-outlet manual controller standard. Optional rate controller selections on page 22.

## Nozzles

Stainless steel spray rings fitted with brass roll-over nozzle bodies. 1 set (28) stainless steel disc and brass cores and 1 set (28) ALBUZ ceramic hollow cone nozzles to allow a wide choice of application rates. Optional Top Gun assembly for taller trees.

## Tank

Low profile 2000L high-impact, UV-stabilised polyethylene tank. Fitted with 120L flush tank and 4L hand-wash tank standard.

## Chassis/axle

Hot-dipped galvanised, full-length chassis with adjustable draw bar and single step. Rear and side bumpers.

## Drive

Constant velocity PTO shaft supplied as standard.

## Power required

Approximate engine HP requirements.  
Avoliner with 920 DSV fan = approx. 70 HP.



# KIWILINER 820



**Designed specifically for spraying kiwifruit,  
where a shorter and lower profile is required.**

## Fan

Highly efficient FIENI 820 DSV front-entry fan for kiwifruit. Downstream straightening vanes. Designed to generate more air with lower HP.

## Pump

Positive-displacement Annovi Reverberi AR BHS-170 high-pressure pump standard. Brass head/bronze manifold for maximum corrosion resistance. Optional AR BHS-200 pump for higher volumes.

## Controls

Remote mounted Brass Block manual controller standard. Optional rate controller selections on page 22.

## Nozzles

Stainless steel spray rings fitted with brass roll-over nozzle bodies. 1 set (28) stainless steel disc and brass cores and 1 set (28) ALBUZ ceramic hollow cone nozzles to allow a wide choice of application rates.

## Tank

Low profile 2000L high-impact, UV-stabilised polyethylene tank. Fitted with 120L flush tank and 4L hand-wash tank standard.

## Chassis/axle

Hot-dipped galvanised, full-length chassis with adjustable draw bar and single step. Rear and side bumpers.

## Drive

Constant velocity PTO shaft supplied as standard.

## Power required

Approximate engine HP requirements.  
Kiwiler with 820 DSV fan = approx. 60 HP.



SUITS

ORCHARDS

HIGH VALUE SPECIALTY BUSH & TRELLIS CROPS

# CROPLINER ROVER







**The lowest profile and most manoeuvrable self-propelled sprayer on the market. It can spray where a tractor and sprayer combination simply can't.**

#### **Fan**

Highly efficient FIENI 820 DSV front-entry fan for kiwifruit. Downstream straightening vanes. Designed to generate more air with lower HP. See fan details on page 20.

#### **Pumps**

Quality AR BHS-170 brass pump fitted standard.

#### **Controls**

Fitted standard with HV-2400 auto-rate controller. See page 22 for details.

#### **Nozzles**

14 x brass roll over nozzle bodies per side, fitted stainless steel disc and brass cores.

#### **Tank**

2000L low profile tank. Key sprayer dimensions: length = 5580mm, width = 1870mm, height = 1370mm, dry weight = 2630kg.

#### **Operator station**

Fully sealed and air-conditioned cab with carbon filters. Easy navigation with reversing camera and LCD display.

#### **Engine**

4-cylinder turbo charged diesel engine.

#### **Transmission**

Mechanical drive.

5 x speed manual with high and low range.

Single speed reverse.

Speed ranges from 1-24 km/hr.

Selectable 2 or 4-wheel mechanical drive.

Selectable 2 or 4-wheel steer (with auto alignment and non-alignment indicator).

Hydraulically operated 4-wheel disc brakes.

Supplied on 400/60 x 15.5 flotation tyres.



SUITS

SMALLER ORCHARDS

BOUTIQUE OPERATIONS

# CROPAIR TRAILED & LINKAGE



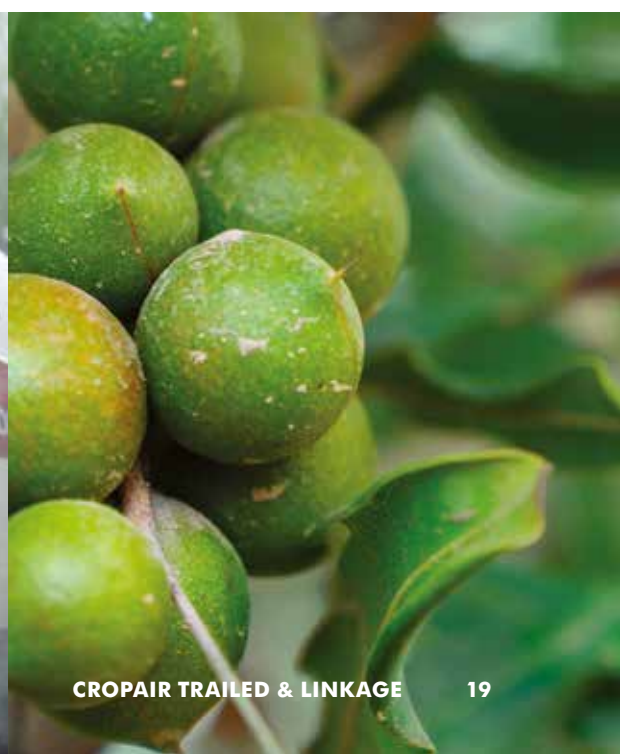



**CROPAIR 300L**

**CROPAIR 600L**

**CROPAIR 1000L**

<b>Fan</b>	FIENI 615mm single-speed fan with adjustable pitch blades.	FIENI 815mm, 2-speed fan with adjustable pitch blades.	FIENI 815mm, 2-speed fan with neutral position. Adjustable pitch blades.
<b>Pumps</b>	AR 54 L/min high-pressure (40 bar) triple diaphragm pump.	AR 54 L/min high-pressure (40 bar) triple diaphragm pump.	AR 105 L/min high-pressure (50 bar), four diaphragm pump.
<b>Controls</b>	Remote mounted 2-outlet manual controller with manual pressure regulating valve and gauge.	Remote mounted 2-outlet manual controller with manual pressure regulating valve and gauge.	Remote mounted 2-outlet manual controller with manual pressure regulating valve and gauge.
<b>Nozzles</b>	5 x brass rollover nozzle bodies per side.	7 x brass rollover nozzle bodies per side.	7 x brass rollover nozzle bodies per side.
<b>Power required</b>	Approximately 25-30 HP required.	Approximately 50 HP required.	Approximately 50-60 HP required.





# AIRBLAST FANS

**Croplands premium air-blast fans are engineered and built to the highest standard.**

**FEATURES INCLUDE:**

- Stainless steel volutes
- Variable pitch, high-strength, glass-reinforced nylon blades shaped for maximum air delivery with the lowest possible power input
- 2-speed heavy-duty gearbox and centrifugal clutch
- Stainless steel spray ring with brass roll-over nozzle bodies on each side
- Fully guarded for safety





820MM FRONT-ENTRY FAN



920MM DSV FAN



1060MM DSV FAN



920 LINEAR TOWER FAN

	820MM FRONT-ENTRY FAN	920MM DSV FAN	1060MM DSV FAN	920MM LINEAR TOWER FAN
<b>Nozzle bodies per side</b>	14	14	15	14
<b>Max. air output</b>	53,860m <sup>3</sup> /hour	83,798m <sup>3</sup> /hour	108,618m <sup>3</sup> /hour	56,458m <sup>3</sup> /hour
<b>Eliminates trash build up on intake grill</b>	✓	x	x	x



# SPRAY CONTROLLERS



## 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.



## HV2400

For growers looking for a basic spray rate controller. 2-section solenoid control with up to 10 pre-set application rates. Programmable alarm settings with L/ha and L/100m capability.



## 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. 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.



## 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. 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.



# COVERAGE IS KEY

## Selecting the right sprayer

### Selection guide (by crop)

#### BUSH & TRELLIS



#### STONE & PIP



#### CITRUS



#### KIWIFRUIT



#### LARGE TREES



	BUSH & TRELLIS	STONE & PIP	CITRUS	KIWIFRUIT	LARGE TREES
<b>CROPLINER SLIMLINE</b>	•	•			
<b>AVOLINER 920</b>					•
<b>KIWILINER 820</b>				•	
<b>CROPLINER ROVER</b>	•			•	
<b>CROPLINER XL</b>		•	•	•	•
<b>CROPAIR 1000</b>	•	•			
<b>CROPAIR 600</b>	•				
<b>CROPAIR 300</b>	•				
<b>QM 420 ORCHARD TOWER</b>		•	•		•
<b>QM TOWER</b>		•	•		•
<b>CROPLINER LINEAR TOWER</b>		•	•		
<b>HYBRID SPRAYER</b>		•	•		•



# NATIONWIDE DEALERS

## NATIONAL DISTRIBUTORS



PGG Wrightson Stores  
Nationwide, contact your local store



Fruitfed Supplies Stores  
Nationwide, contact your local store

REGION	PHONE
Alexandra	03 448 6999
Blenheim	03 578 3019
Cambridge	07 827 7129
Christchurch	03 349 9948
Cromwell	03 445 3730
Feilding	06 323 0050
Gisborne	06 863 1660
Hastings	06 873 0950
Katikati	07 549 1316
Kerikeri	09 407 9621
Kumeu	09 412 2711
Levin	06 368 0892
Martinborough	06 306 9699
Motueka	03 528 8680
Ohakune	06 385 8500
Pukekohe	09 238 0713
Richmond	03 544 6115
Te Puke	07 573 7907
Whangarei	09 470 2520

## CROPLANDS ACCREDITED SERVICE AGENTS

SERVICE AGENT	REGION	CONTACT	PHONE
Splash Direct	Bay of Plenty	Craig Bell	07 573 6138
Noble-Adams Machinery	Canterbury	Aaron Witbrock	03 349 7862
Jordan Mechanical	Central Otago	Neil Jordan	027 290 5008
Norwood	Gisborne	Shane Preston	06 867 9865
Calnan's Spray Quip Services	Hastings	Greg Deck	06 879 5720
Keri Diesel Services	Kerikeri	Shane Mitchell	09 407 5300
O-Tec - Onsite Mechanical Services	Kerikeri	Olaf Gustafson	021 053 4852
ME & AL Mannington	Kumeu	Mike Mannington	09 412 8927
Agrivit Ltd	Marlborough	Jeremy Watts	03 572 8787
Spraying Equipment Specialist	Masterton	Vlodek Kwiatowski	04 478 2258
Norwood	Pukekohe	Kevin Hamilton	09 238 7189
Brian Miller Truck and Tractor	Richmond/Waimea Plains	Brian Miller	03 544 5723
NS Rogers	Tasman Region	Nathan Johns	03 528 9212
Norwood	Timaru	Tony Scott-Walton	03 688 1133
Machinery Maintenance Pump House	Wanganui	Ian Mackay	0800 667 867
Norwood	Whangarei	Greg Francis	09 438 3719

## NATIONAL SALES & SUPPORT

### CROPLANDS NEW ZEALAND

Freecall 0800 106 898  
Freefax 0800 117 711

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[www.twitter.com/Croplands](https://www.twitter.com/Croplands)

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Technical Service +61 8 8359 9333

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Rob Marshall 027 248 6822

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**Lower North Island and Gisborne**  
Vic Barlow 027 475 2322

**Upper South Island and West Coast**  
Leon Powell 027 700 0066

**Lower South Island and Canterbury**  
Rob Marshall 027 248 6822