The first Cropland sprayers made their way into New Zealand 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 all vineyard growing regions across New Zealand.

Croplands machines are built with a respect for New Zealand’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**

- **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 Mist™ hydraulic drive axial fan is released.**
- **Croplands grows its range with the refinement and completion of the QM-500 and 380 Quantum Mist fans. Grapesprayer production commences in Marlborough for the NZ region.**
- **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 SPRAYWISE
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 very dense canopies. This ensures more accurate coverage on 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.

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

## SELECTING THE RIGHT SPRAYER

**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

<table>
<thead>
<tr>
<th>VINEYARD SIZE</th>
<th>QM SMART SPRAY 3-ROW</th>
<th>QM SMART SPRAY 2-ROW</th>
<th>QM-420 3-ROW</th>
<th>QM-420 2-ROW</th>
<th>QM-420 SINGLE ROW</th>
<th>QM LINKAGE</th>
<th>QM TRAILED 1000</th>
<th>CROPAIR 1000</th>
<th>CROPAIR 300/600</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARGE, CONTRACTOR OR CORPORATE</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEDIUM</td>
<td></td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMALL</td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOBBY / BOUTIQUE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

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.
FEATURES

QUANTUM MIST™ SMART SPRAY

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-160LFP standard for 2-row models.
- AR-185LFP standard for 3-row models.

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

TANKS

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.

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.
FEATURES

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-160LFP standard for 2-row models
• AR-185LFP standard for 3-row 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.
• Available in 2000L, 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.

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-140 LFP positive displacement pump as standard. Optional AR-160 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.

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

**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 & CROPAIR 1000 TRAILED

QUANTUM MIST™ 1000 TRAILED

FEATURES

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.

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

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.

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.
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.

300 & CROPAIR 600L

CROPAIR

300

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.
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. **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.

3. **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.

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.
EXPERTISE, FULLY COVERED

AS A DIVISION OF NUFARM, CROPLANDS IS COMMITTED TO BEST SPRAYING PRACTICES AND ENVIRONMENTAL SUSTAINABILITY.

Nufarm’s SprayWise horticulture application handbook

Widely used by specialist application consultants around the country, the SprayWise handbook has everything you need to know about dosage rates, chemical mixing, assessing coverage, nozzle selection, drift, calibration, adjuvants and more.

Get the advantage and order a copy by contacting Croplands on 0800 106 898
**CROPLANDS NEW ZEALAND**

Contact your local dealer or...

**Croplands New Zealand**

Freecall  0800 106 898
Freefax  0800 117 711
Email  sales@croplands.co.nz

**CROPLANDS HEAD OFFICE**

Phone  +61 8 8359 9300
Fax  +61 8 8349 6175

**www.facebook.com/Croplands**
**www.twitter.com/Croplands**

50 Cavan Road Dry Creek SA 5094
Technical Service  +61 8 8359 9333

**CROPLANDS ACCREDITED SERVICE AGENTS**

<table>
<thead>
<tr>
<th>Keri Diesel Services</th>
<th>Keri Keri</th>
<th>09 407 5300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norwood Farm Machinery</td>
<td>Whangarei</td>
<td>Greg Francis</td>
</tr>
<tr>
<td>ME &amp; AL Mannington</td>
<td>Kumeu</td>
<td>09 438 3719</td>
</tr>
<tr>
<td>Norwood Farm Machinery</td>
<td>Pukekohe</td>
<td>Mike Mannington</td>
</tr>
<tr>
<td>Splash Direct</td>
<td>Bay of Plenty</td>
<td>09 412 8927</td>
</tr>
<tr>
<td>The Equipment Centre</td>
<td>Tauranga</td>
<td>Kevin Hamilton</td>
</tr>
<tr>
<td>Norwood Farm Machinery</td>
<td>Gisborne</td>
<td>09 238 7189</td>
</tr>
<tr>
<td>Calnan’s Spray Quip Services</td>
<td>Hastings</td>
<td>Craig Bell</td>
</tr>
<tr>
<td>Spraying Equipment Specialist</td>
<td>Masterton</td>
<td>07 573 6138</td>
</tr>
<tr>
<td>Tasman Sprayer Solutions</td>
<td>Richmond/Waimau Plains</td>
<td>Ben Spooner</td>
</tr>
<tr>
<td>NS Rogers</td>
<td>Taumarunui</td>
<td>07 548 0194</td>
</tr>
<tr>
<td>Agrinut Ltd</td>
<td>Gisborne</td>
<td>Service Department</td>
</tr>
<tr>
<td>Noble-Adams Machinery</td>
<td>Hastings</td>
<td>06 867 9865</td>
</tr>
<tr>
<td>Johnson Gluyas Tractors</td>
<td>Masterton</td>
<td>Greg Deck</td>
</tr>
<tr>
<td>Jordan Mechanical</td>
<td>Richmond</td>
<td>06 879 5720</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vladek Kwiatowski</td>
</tr>
<tr>
<td></td>
<td></td>
<td>04 478 2258</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stu Flowers</td>
</tr>
<tr>
<td></td>
<td>Marborough</td>
<td>027 442 8661</td>
</tr>
<tr>
<td></td>
<td>Canterbury</td>
<td>Nathan Johns</td>
</tr>
<tr>
<td></td>
<td>South Canterbury</td>
<td>03 528 9212</td>
</tr>
<tr>
<td></td>
<td>Central Otago</td>
<td>Jeremy Watts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>03 572 8787</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aaron Wilbrack</td>
</tr>
<tr>
<td></td>
<td></td>
<td>03 349 7862</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tony Scott-Walton</td>
</tr>
<tr>
<td></td>
<td></td>
<td>03 688 1133</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Neil Jordan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>027 290 5008</td>
</tr>
</tbody>
</table>

**YOUR CROPLANDS DEALER**