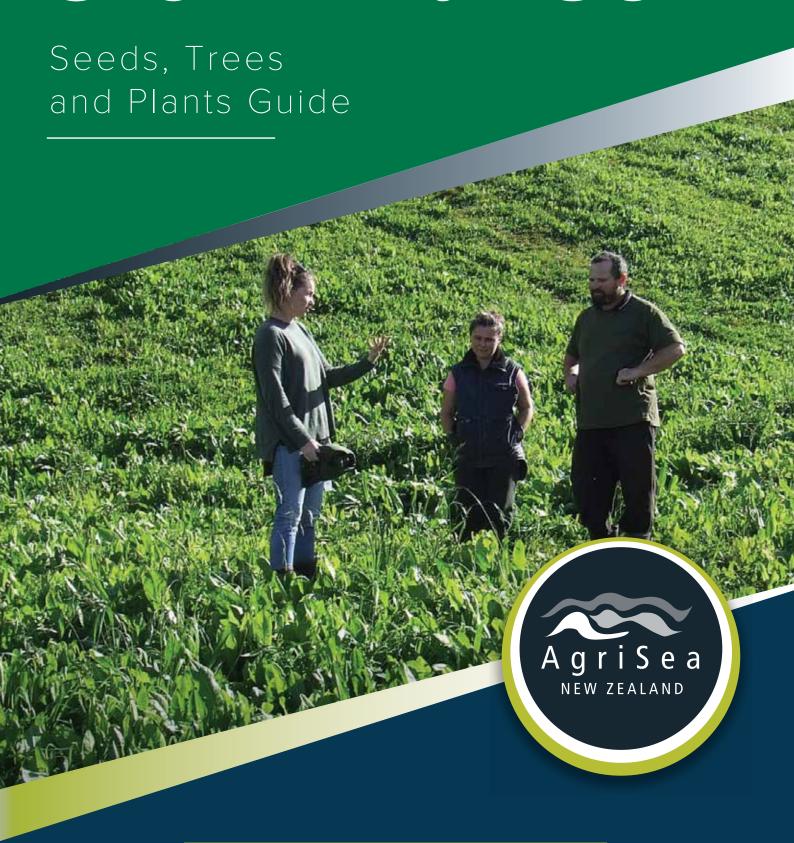
# Grow With Us



Providing your farm nutrient rich diversity from paddocks to trees

#### **Diverse Pastures**

Together, Agrisea and Wesco Seeds Ltd have worked to formulate a range of pasture seed mixes to provide an improved nutrition solution for your grazing animals.

This diverse pasture option is better suited for your animals, your farming system and the environment because of its ability to increase your soil and stock health.

#### The basics and benefits

Diverse Pastures (or diverse swards) are sown pastures made up of a mix of grasses, herbs and legumes. Together they deliver soil fertility, biology and structure, boost livestock health, encourage biodiversity and are productive with low rainfall.



# When choosing species, think about:

 Your soil, climate and the management you intend to carry out (e.g. grazing, harvest).

- What functions you want from your mix (drought resilience, soil improvement, maximum forage production, biodiversity provision, or all of the above).
- How the balance of plants in the sward will change over time be prepared to adapt your management.
- How many different plant families are part of your mix.

## Why should you include diverse species into your pasture systems?



Better ground coverage collects more energy that feeds sugars to the roots and microbes to greater depths. Top soil growth is developed deeper.



Deeper diverse roots attract more beneficial biology that improves soil aeration and water retention improving plant resilience.



Different plants use different nutrients and attract different types of biology to promote better nutrient cycling.



A wider range of nutrients (proteins, carbohydrates, fats, fiber, vitamins, and minerals) are presented to the grazing animals that help with their general wellbeing.

## Diversity is key

Each species has different functions, which makes the mixture work better overall. They improve the soil in different ways, producing greater yields, and also have different nutritional functions.

Choosing the right mix of seeds is key, and depends on your soil type, geography and desired outcomes. A mixture can include anything from 6 to 30 species, although a minimum of 4 plant families is key to getting a good range of functions.

#### The financials

Pros • Saving on fertiliser (nitrogen fixing plants can fix up to 250 kg N/ha).

- Saving costs of mineral feed plus supplementary feeding in drought.
- Increased yields different plants, when grown together, can yield 50% more than an average rye grass sward.
- Save on inputs over time including fert, seed, chemicals, machinery costs and labour.

- Cons 'Trial and error' period of establishment.
  - Seed cost can be higher initially
  - Different management can be required to optimise return and results

#### **Plant Families**

It is recommended to sow mixed pastures containing species from a minimum of four different plant families. More than four families would be better. A diversity of plants grown in close proximity to each other increases soil microbial diversity: the greater the diversity of microbes, the healthier the soil. Increasing diversity improves plant resilience through better root depth, aeration, nutrient availability and water holding

Listed below are some of the plant families and species commonly used in diverse pastures family name in **bold**, listed in alphabetical order.

#### **Perennials**

Aceae

Asteraceae - Daisy family

Chicory Yarrow Dandelion

Brassicaceae - Brassica family

Alyssum (a short-lived perennial)

**Fabaceae** – Legume, pea and bean family

Clovers (e.g. white, red, strawberry) Lucerne

Plantaginaceae - Plantain family

Plantain

Poaceae - Grass family

Grasses (e.g. Ryegrass, Cocksfoot,

Fescues, Timothy)

Brome **Phalaris** 

Prairie Grass (a short-lived perennial)

Polygonaceae - Knotweed family

Dock

Roseaceae - Rose family

Sheeps Burnet

#### **Annuals**

Aceae

Asteraceae - Daisy family Sunflower

Brassicaceae - Brassica family

**Turnips** Rape Radish Rocket Mustard Kale

Boraginaceae - Borage family

Phacelia

Fabaceae - Legume, pea and bean family

Clovers (e.g. Arrow leaf, BAP, Balansa,

Berseem, Crimson, Gland)

Faba beans (Broad beans)

Lupins Medics Vetch

**Linaceae** – Flax family

Linseed

Poaceae - Grass family

Sorghum Barley

Oats Millet

Maize

Wheat Triticale

Polygonaceae - Knotweed family

Buckwheat



## AgriSea Plant Growth Trials

An independent study on maize seed germination evaluated the impact of AgriSea seaweed biostimulants, rich in macro and micronutrients. Results under ideal conditions showed significant differences in plant growth parameters among treatments, with AgriSea (T6) outperforming other commercial products in seedling root and shoot length. This highlights the efficacy of AgriSea biostimulants in promoting natural growth hormones and enhancing maize seed germination. The study underscores the substantial benefits of using AgriSea for improving seedling development and overall plant growth.



Note: T1 is raw seed and the remainder of treatments is seed coating with the different seaweed biostimulants.





## Agrisea Mix

This mix is great for a wide range of farming types such as sheep farming, beef farming or dairy farming,

THIS MIX CONTAINS			
Saxon Diploid Perennial	20%	Tri-Blend White Clover	9%
Matua Prairie Grass	12%	Tri-Blend Red Clover	9%
Matrix Diploid Perennial	10%	Persian Clover	6%
Hillary Fescue	8%	Sargent Chicory	4%
Crown Royal Cocksfoot	8%	Drover Plantain	4%
Rocket Italian Ryegrass	4%	Medics	3%
Timothy	3%		

Sowing Rate: 25-30kg per hectare.

Sowing Rate: Existing Pasture 15-20kg per hectare. Planting Depth: Ideal - 10mm, Max - 15mm.

	500KG +	100-500KG	0- 100KG
AGRISEA TREATED	\$14.40KG	\$15.40KG	\$16.40KG



## Agrisea Dryland Dairy Mix

This mix is designed for dryland dairy farmers. The tolerance to summer dry comes from the added deep rooted species.

THIS MIX CONTAINS			
Saxon Diploid Perennial	15%	Timothy	3%
Matrix Diploid Perennial	13%	Tri-Blend White Clover	10%
Hillary Fescue	10%	Tri-Blend Red Clover	10%
Crown Royal Cocksfoot	10%	Persian Clover	6%
Matua Prairie Grass	5%	Sargent Chicory	4%
Rocket Italian Ryegrass	4%	Drover Plantain	4%
Phalaris	1%	Medics	3%

Sowing Rate: 25-30kg per hectare.

Sowing Rate: Existing Pasture 15-20kg per hectare Planting Depth: Ideal - 10mm, Max - 15mm.

sture 15-20kg per hectare.		500KG +	100-500KG	0- 100KG
- 10mm, Max - 15mm.	AGRISEA TREATED	\$14.75KG	\$15.75KG	\$16.75KG



## Agrisea Irrigated Dairy Mix

This mix is formulated to suit irrigated dairy farms.

THIS MIX CONTAINS			
Saxon Diploid Perennial	13%	Timothy	3%
Matrix Diploid Perennial	13%	Tri-Blend White Clover	9%
Avatar Tetraploid Perennial	8%	Tri-Blend Red Clover	9%
Hillary Fescue	8%	Persian Clover	4%
Crown Royal Cocksfoot	8%	Sargent Chicory	4%
Rocket Italian Ryegrass	8%	Drover Plantain	4%
Matua Prairie Grass	5%	Medics	4%

Sowing Rate: 25-30kg per hectare.

Sowing Rate: Existing Pasture 15-20kg per hectare.

Planting Depth: Ideal - 10mm, Max - 15mm.

	500KG+	100-500KG	0- 100KG
AGRISEA TREATED	\$14.75KG	\$15.75KG	\$16.75KG



## Agrisea Dryland Sheep & Beef Free Draining Mix

This mix will enhance dryland sheep and beef farming options. The tolerance to summer dry comes from the added deep rooted species.

THIS MIX CONTAINS			
Grazing Brome	13%	Phalaris	3%
Hillary Fescue	13%	Hardy White Clover	10%
Crown Royal Cocksfoot	7%	Tri-Blend Red Clover	10%
Matrix Diploid Perennial	7%	Capricorn Lucerne	10%
Medow Fescue	7%	Sargent Chicory	2%
Timothy	7%	Sheeps Burnett	2%
Matua Prairie Grass	7%	Drover Plantain	2%

Sowing Rate: 25-30kg per hectare.

Sowing Rate: Existing Pasture 15-20kg per hectare.

Planting Depth: Ideal - 10mm, Max - 15mm.

	500KG +	100-500KG	0- 100KG
AGRISEA TREATED	\$16.75KG	\$17.75KG	\$18.75KG

## Agrisea Summer Annual Mix

This mix is curated to provide top-notch summer feed as well as building soil health. This is a great option to plant before a perennial seed mix in the Autumn.

#### THIS MIX CONTAINS

Oats	12%	Matua Prairie Grass	6%	Radish	1%
Rye Corn	10%	Japanese Millet	6%	Phacelia	1%
Faba Beans	8%	Linseed	6%	Sargent Chicory	2%
Vetch	6%	Buckwheat	4%	Drover Plantain	2%
Fury Annual Ryegrass	6%	Blue Lupins	4%	Kingsford Rape	1%
Sunflower	6%	Persian Clover	4%	Green Globe Turnips	1%
Poas	606	Balansa Clover	4%	· ·	

Sowing Rate: 35-40kg per hectare.
Planting Depth:
Ideal - 15mm, Max - 20mm.

	500KG+	100-500KG	0-100KG
UNTREATED	\$6.95KG	\$7.25KG	\$7.95KG
AGRISEA TREATED	\$7.75KG	\$8.05KG	\$8.75KG



## Agrisea Winter Annual Mix

This mix is full of winter active species which helps create a diverse range of feed during the winter.

#### THIS MIX CONTAINS

Oats	18%	Blue Lupins	3%
Rye Corn	18%	Kingsford Rape	3%
Fury Annual Ryegrass	13%	Radish	1%
Faba Beans	10%	Balansa Clover	3%
Vetch	7%	Persian Clover	3%
Linseed	7%	Phacelia	1%
Matua Prairie Grass	7%	Green Globe Turnips	2%

Sowing Rate: 35-40kg per hectare.
Planting Depth:
Ideal - 15mm, Max - 20mm.

	500KG+	100-500KG	0-100KG
UNTREATED	\$5.45KG	\$5.75KG	\$6.45KG
AGRISEA TREATED	\$6.25KG	\$6.55KG	\$7.25KG.



#### Annual/Soil Enhancer Orchard Seed Mix

#### THIS MIX CONTAINS

THIS WITH CONTINUES			
Fescue – meadow and fora	ige 7kg	Buckwheat	2kg
Cocksfoot	2kg	Linseed	1kg
Diploid perennial	10kg	Faba Beans	2kg
White and Red Clover	3kg	Vetch	1kg
Strawberry Clover	1kg	Radish	2kg
Crimson Clover	1kg	Blue lupins	5kg
Plantain	1kg	Mustard	0.5kg
Chicory	1kg	Phacelia	0.5kg
Oats	5kg		





## Perennial Orchard Seed Mix

THIS MIX CONTAINS	THIS	MIX	CON	ITAI	NS
-------------------	------	-----	-----	------	----

Crimson Clover

	TIIS WIN CONTAINS			
F	escue – Meadow and Forage	8kg	Plantain	1kg
(	Cocksfoot	2kg	Chicory	1kg
[	Diploid Perennial x 2	10kg		
١	White and Red Clover	3kg		
	Strawberry Clover	1kg		





## Annual/Soil Enhancer Kiwi Fruit Seed Mix

THIS MIX	CONTAINS
_	B 4 I

Plantain Chicory Oats

Fescue – Meadow & Creeping Red	7kg	Buckwheat	5kg
Cocksfoot	2kg	Linseed	1kg
Diploid Perennial	10kg	Faba Beans	2kg
White and Red Clover	3kg	Vetch	1kg
Strawberry Clover	1kg	Radish	0.5kg
Crimson Clover	1kg		

1kg 1kg

5kg

Sowing Rate: 45kg per hectare.

## Perennial Kiwi Fruit Seed Mix

#### THIS MIX CONTAINS

Fescue – Meadow & Creeping Red	8kg
Cocksfoot	2kg
Diploid perennial x 2	10kg
White and Red Clover	3kg
Strawberry Clover	1kg
Crimson Clover	1kg
Plantain	1kg
Chicory	1kg

Sowing Rate: 27kg per hectare.



## Annual/Soil Enhancer Grape Seed Mix

#### THIS MIX CONTAINS

THIS WIP CONTINUES			
Fescue – Meadow & Creeping Red	7kg	Buckwheat	2kg
Cocksfoot	2kg	Linseed	1kg
Diploid Perennial	10kg	Faba Beans	2kg
White and Red Clover	3kg	Vetch	1kg
Strawberry Clover	1kg	Radish	0.5kg
Crimson Clover	1kg	Blue lupins	5kg
Plantain	1kg	Mustard	0.5kg
Chicory	1kg	Phacelia	0.5kg
Oatc	5kσ		

Sowing Rate: 45kg per hectare.



## Perennial Grape Seed Mix

#### THIS MIX CONTAINS

Fescue – Meadow & Creeping Red	8kg	Plantain	1kg
Cocksfoot	2kg	Chicory	1kg
Diploid perennial x 2	10kg		
White and Red Clover	3kg		
Strawberry Clover	1kg		
Crimson Clover	1kg		

Sowing Rate: 27kg per hectare.



## Helpful tips to know when Sowing Wesco Seed

#### 1. Know your soil pH and nutrient status:

6 months before sowing.

#### 2. Planting depth is critical to germination and plant survival:

No more than 15mm deep.

Small seeds (clover, plantain etc.) max 10mm deep.

#### 3. Check soil condition:

Dry soil, plant seeds slightly deeper; closer to soil moisture.

Damp soil plant seeds closer to the surface.

Ensure the seed bed is firm to retain moisture.

Or autumn sowing March/April - warm soil is needed for germination (10-12°c), along with good levels of soil moisture – so sow in Sept/Oct or later in April/May. Be careful not to over graze too early (6-8 weeks post establishment).

#### 4. Application method:

Is suited to the seed mix and field environment.

#### 5. Use a crop diary to record:

Paddocks & crops used. Planting dates & rates.

Soil moisture, temperature. Weather.

Application type & settings. Harvesting/grazing dates.

Disclaimer: Wesco Seed Ltd. provides expert advice to our clients about the use and development of our products. Wesco Seeds Ltd. cannot be held responsible for product failure due to environmental inconsistencies, inappropriate application, mismanagement or natural disasters.

\*note: planting times will vary across NZ.

Check with our field reps for advice on sowing dates as timing is critical.







March-May & Sept-Nov depending on location and type of crop mix being sown

## Trees and the multiple benefits they provide:

The benefits of functional trees to farms are huge. In reality we cannot achieve functional, resilient, productive and profitable ecosystems without trees regardless of the crop we are growing.

Mixed pasture for our livestock is purely another crop and just like kiwifruit or avocados, it needs protection from the elements now more than ever.

#### Benefits include:

- · Shade, Shelter
- Fodder
- Leaf drop
- Free fertiliser
- Diversity of forage and microbiome
- Medicinal benefits
- Habitat for essential and beneficial insects and pollinators
- Improved nutrient acquisition
- Seeding of rain
- Extra dew formation and retention
- Drought tolerance in summer, warmth in winter
- Decreased flight path for birds so extra nutrient cycling
- Carbon sequestration
- Potential nutrient transfer from riparian areas
- Reduction in nutrient and sediment runoff
- Improved aesthetic and land value
- Improved animal and human welfare and well being
- Greater retention and attraction of staff
- Erosion control
- Produce for humans/animals
- Habitat and cover for other classes of livestock eg chickens /deer
- Firewood
- ETS credits
- Protection from wind blown biocides and weed seeds
- Improved air and water quality
- Reduction in the need for synthetic inputs
- Increased financial, social, environmental and cultural benefits





**Proudly Supporting** 

## Lower bank zones

Plant name	Туре	Tolerates	Benefits	Size (height x width)
	Spac	Lower bank zone e 1-1.5m between pla	nts	
Cabbage tree (tī kōuka) Cordyline australis	Tree	ઁુ મુ∷∴ ∰ છે	<b>►</b>	10 x 3 m
<b>Pukio</b> Carex secta	Sedge	૽ૄ૱ઃઃૹ૾૾ૢ૾૾		0.75 x 1 m
Spring-flowering toetoe (toetoe) Austroderia fulvida	Grass	ઁું ૄું ઃઃ ∰ ≬	<b>▶</b> ₹	1.5 x 1.5 m
Cutty grass (rautahi) Carex geminata	Sedge	<b>૱</b> ♦♦		0.75 x 1 m
Giant umbrella sedge (upokotangata) Cyperus ustulatus	Sedge	<b>광</b> …※	₹ 🗪	1x1m
Carex secta (pūrei) Cordyline australis	Sedge		<b>▶</b> ₹∞	0.75 x 1 m
Edgar's rush Juncus edgariae	Rush	ઁ્મ∴⊹⊹≬	<b>▶</b> ₹≪	2 x 1 m
Glen Murray tussock Carex flagellifera	Sedge	⊕ ÷   † ♦ ♦   † ♦ ♦   † ♦ ♦   † ♦ ♦   † ♦ ♦   † ♦ ♦   † ♦ ♦   † ♦ ♦   † ♦ ♦   † • ♦ • • ♦ • • ♦ • • • ♦ • • ♦ • • ♦ • • • ♦ • • ♦ •	<b>►</b> ₹≪	1×1m

## Upper bank zone

Plant name	Туре	Tolerates	Benefits	Size (height x width)
	Spa	Upper bank zone ce 1.5-2m between pla	nts	
Black matipo (kōhūhū) Pittosporum tenuifolium	Small tree/tree	<b>૽</b> ÷∻	5 K P	8 x 3 m
Mānuka Leptospermum scoparium	Small tree	⑥ቍ፞፞፠ቇ፟፟ዾ	<b>♦ ► •</b>	4 x 1.5 m
Akeake Dodonaea viscosa	Small tree	⑥チ┄╬ℤ	<b>▶</b> ♠	6 x 3 m
Broadleaf (kapuka) Griselinia littoralis	Tree	૭ુૄુઃ∷∰≬⊠	<b>*</b> •	10 x 3 m
Kahikatea * Dacrycarpus dacrydiodes	Tree	ાં ફેર્ફ્સ ♦	**	40-60 x 4 m
Kānuka Kunzea ericoides	Tree	♦ ÷	<b>♦</b> ▶ •	8 x 3 m
Karamū Kunzea ericoides	Shrub/small tree	<b>◎ ++ *</b>		4 x 1.5 m
Koromiko Hebe stricta	Shrub	<b>૽</b> ૾ૺૺૺ૾ૠ૽ૼૹ	\$ \$ \ \$	1.8 x 1 m
Lemonwood (tarata) Pittosporum eugenoides	Tree		* V - 1	9 x 4 m
Mahoe * Melicytus ramiflorus	Tree	ાં જે મે∴ હે છ	<b>* *</b>	10 x 3 m
Mingimingi Coprosma propinqua	Shrub	⑥チ┄╬≬烴	<b>*</b> •	4 x 1.5 m
Swamp flax (harakeke) Phormium tenax	Other	૭ુ ૄુઃ∴ ∰ ≬	<b>*</b>	2 x 2 m
Tōtara * Podocarpus totara	Tree		<b>*</b>	20 x 4 m
Wineberry (makomako) Aristotelia serrata	Shrub/tree	٥	*	8 x 3 m
Cabbage tree (tī kōuka) Cordyline australis	Tree	⑥ቍ⋯፠ۡ♦	<b>₽</b> Ф <b>▶</b> ₹	10 x 3 m
Five Finger* Pseudoparax arboreus	Small Tree	<b>૽</b> ∜%⊠	<b>₽\$\\\</b>	8 x 3 m
Kowhai Sophora tetraptera	Tree	<b>૽</b> ∻%⊠	¥÷∳►₹	10 x 5 m
Pigeonwood (Porokaiwhiri)* Hedycarya arborea	Small Tree	<b>◎ ÷</b> ※	<b>\$</b>	12 x 3 m
Karo Pittosporum crassifolium	Small Tree	<b>૽ૢ૱</b> ⊠	<b>*</b>	10 x 4 m
Lowland ribbonwood (manatu) Plagianthus regius	Tree	<b>⊕</b> &	<b>L</b> •	10 x 3 m
Golden akeake Olearia paniculata	Shrub	*** ♦ 🗷	<b>•</b>	3 x 3 m
Narrow leaved lacebark Hoheria angustifolia	Tree	<b>왕፠≬</b> ⊠	<b>**\</b>	6 x 3 m
Toetoe Austroderia richardii	Grass	步…※ል⊠	<b>*</b>	1.5 x 1.5 m

<sup>\*</sup>Plant these species into existing vegetation or 2-3 years after initial plantings so they have shelter to grow.

## Table of Riparian Plants

Tolerates key: Full sun 🔑 Wind 👯 Salt wind 🎇 Frost hardy 🌔 Poorly drained soil (boggy) 🔀 Dry soil conditions

Benefits key: Attracts birds 🗘 Attracts bees 📗 Slope stabilisation 🔻 Filters runoff 📍 Shade 🕥 Fish habitat

## Hedging and Raceway Planting

Feijoa Rosemary Flax Poplar Natives Italian Alder





### Get to know your soil:

Visual Soil Assessment (VSA) – A quick, simple and effective method to assess soil quality and plant performance.

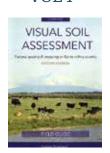
VSA is a quick and simple method to relate the performance of the plant to the condition of the soil and farm management practices. The visual messages provide an immediate and effective assessment of the condition of the soil and the performance of the pasture or crop. The VSA is a repackaging of the complexity of soil science and plant agronomy into a format that is readily available. The VSA can be used by anyone, anywhere. Today, the VSA is widely used as the method of choice to semi-quantitatively assess soil quality and plant performance.

The Agrisea team has had multiple training sessions on farm with Graham Shepherd and we recommend this resource to help build on farm health.

Download your copy by scanning the QR below each volume:

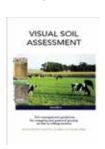


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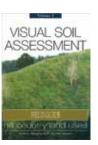


VOL 2



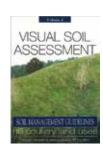


VOL 3





VOL 4





If you would like to send us across a few photos of your soil we can take a look and make some suggestions or come out for a visit email: info@agrisea.co.nz or call 0800 SEAWEED to talk to your local Area field consultant.





**GOOD CONDITION VS = 2**Dark coloured topsoil that is not too dissimilar to that under the fence line



MODERATE CONDITION VS = 1 The colour of the topsoil is somewhat paler than under the fence line, but not markedly so



POOR CONDITION VS = 0
Soil colour has become
significantly paler compared
with under the fence line



# **Top Customer Service**

Ours is a partnership – we're committed to assisting you to reduce production costs while maintaining high production, high yields and high profits.

# **DISCUSS YOUR SEED** REQUIREMENTS TODAY



**CONTACT WESCO SEEDS** 0800 643 643 sales@wesco.co.nz







Contact your local Area Field Consultant today info@agrisea.co.nz



**0800 SEAWEED (732 9333)** 

www.agrisea.co.nz