



# SeedSense

## WELCOME

The lead up to harvest is an important time to monitor crops and identify diseases. This can assist planning to minimise their impact next season. In this edition we reflect on pests and diseases reported in crops throughout Australia this season.

With this in mind we recommend a seed treatment trio of Rancona® Dimension, Guardian® and Zincflo® Plus to get your 2017 wheat or barley crop off to a flying start. Using these in combination not only protects against root diseases, but promotes plant vigour and gives early protection against insect pests.

We also take a look at the role of zinc in plant health, the outbreak of Russian Wheat Aphid in Australia, and minimising insect pests in stored grain.

Make sure to take up the opportunity in the enclosed flyer and enter seed and/or grain in the Royal Adelaide Show - growers receive free grain testing results from entries and will be in the running for some great prizes at the 2017 Show.

Enjoy the read.

*Brett Heath*  
Commercial Manager

## FLEXIBLE PROTECTION AGAINST DISEASE

Since its' introduction in mid 2014 Rancona® Dimension has cemented itself as a market leader in managing the damaging root diseases of crown rot, rhizoctonia and pythium in wheat and barley.

These three root diseases currently result in \$185 million in losses to wheat and barley crops across Australia; and have the potential to cause losses of up to \$778 million if not managed effectively.

Rancona Dimension is registered for crown rot and rhizoctonia suppression in wheat and barley, and control of pythium, smuts and bunt.

It's unique Micro-Emulsion formulation provides extremely low dust off at application and easy clean down of machinery.

Trial results (in WA, SA, VIC and NSW) since 2012 show Rancona Dimension to be:

- Superior to the untreated control, with yield benefits of up to 30%.
- Comparable to, or better than, the industry competitor seed treatment products in terms of efficacy and yield benefits.
- Comparable to in-furrow rhizoctonia fungicides in many cases.

Rancona Dimension gives you the flexibility to protect against yield robbing diseases – just dial



the application rate up or down according to your crop protection needs.

Crown rot has been widely reported at low levels in many WA wheat crops this season. Identifying disease pre-harvest assists with critical paddock management decisions for next year's cropping program. If crown rot was evident this year, consider using Rancona Dimension next season or resting the paddock from cereals.

Consider adding Zincflo® Plus to improve the ability of the plant to resist attack by both crown rot and rhizoctonia, helping to reduce yield loss.

Lynton Barrett, Lameroo SA, has been using Rancona Dimension and Zincflo Plus on his seed for the last couple of years, as one component of a disease management strategy.

"Rancona Dimension is an excellent product and it has altered the way I can crop my sandy loam country; this is because we are on a two year rotation which means rhizoctonia has always been a consideration, as it causes yield losses."

"I also use Zincflo Plus on my seed because zinc is a given in the Mallee soil - low in zinc and with rhizoctonia issues - in order to produce a good crop that yields well." he said.

For the best results Hannaford suggest taking an integrated approach to managing the root diseases of crown rot, rhizoctonia and pythium.

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The Seed Protection Specialists



# Seasonal Update

## DISEASE & PEST ROUNDUP

### SMUTS & BUNT IN CEREAL CROPS

**Smuts and bunt** have been detected again in many cereal crops this season, mainly loose smut and flag smut. Smuts will generally only be found where no seed treatments have been used; the incorrect seed treatment is used; or farmer's cut treatment rates. For example, loose smut has been found in barley crops where only fluquiconazole based seed treatments were used.

*If using fluquiconazole on barley you should combine this with another seed treatment to control the smuts and bunt.*

If using in-furrow fungicides, a base seed treatment such as **Rancona® C** or **Vitaflo® C** should be used to protect the crop against smuts and bunt - in-furrow fungicide products DO NOT control smuts and bunt. Smuts and bunt can mean the grain is subject to rejection at the silo if they are discovered in the sample.

### ROOT DISEASES IN CEREAL CROPS

Both **rhizoctonia** and **crown rot** have been detected in many crops this season, resulting in significant yield losses in some crops.

**Root lesion nematode (RLN)** numbers are increasing in most cropping areas, which can increase the damage caused by rhizoctonia and crown rot. If RLN is not managed correctly it may impact on the effective management of rhizoctonia or crown rot.

### OTHER DISEASES EVIDENT BY CROP

The diseases seen in this year's canola, lupin, field pea, lentil and chickpea crops are a result of the wetter winter and spring, and the reduced amount of seed treatments used on these crops this season.



### INSECT PESTS

#### Aphids

Aphids were found in significant numbers early in the 2016 cropping season. Aphids reported included: corn, oat, wheat, green peach, blue-green, turnip and grey cabbage. Early infections resulted in feeding damage to crops as well as the transmission of the following viral diseases:

- Cereals: Barely yellow dwarf virus (BYDV) and Cereal yellow dwarf virus (CYDV)
- Canola: Turnip yellows virus (TuVY), Cauliflower mosaic virus (CaMV) and Beet western yellows virus (BWYV)
- Pulses: Bean yellow mosaic virus (BYMV), Cucumber mosaic virus (CMV), Beet western yellows virus (BWYV), Alfalfa Mosaic virus (AMV), Bean leafroll virus (BLRV) and Subterranean clover stunt virus (SCSV)

Reports of the Green peach aphid developing tolerance/resistance to some insecticide groups highlights the importance of using a multi-pronged attack.

Refer to the GRDC fact sheet "Resistance Management Strategy for the Green Peach Aphid in Australia Grains".

The Russian wheat aphid (RWA) was detected in Australia this season. The RWA was detected early, resulting in damage to crops through injection of a toxin and transmission of BYDV. Yield losses occurred through death of the plant or tillers and development of sterile heads in spring as a result of the injected toxins.

#### Mites

Mites were found in significant numbers early in many crops, resulting in feeding damage. The presence of the wheat curl mite also resulted in some crops being infected by the Wheat streak mosaic virus (WSMV), with some yield loss occurring as a result.

#### Stored grain pests

Stored grain insect pests are an increasing problem in most grain growing regions. There has been increasing levels of documented resistance occurring in stored insects to the currently available insecticides.

**References:** PestFax reports from Department of Ag's in SA, Vic, NSW and WA; Seasonal Crops Summaries from Department of Ag's in SA, Vic, NSW and WA; Crop Watch reports from DK Communications and Department of Ag's in SA, Vic, NSW and WA; Crop observations by Arysta and Hannaford field staff.

## A HELPING HAND

We all know that living in the country has its advantages, but it also has its fair share of challenges, including access to services and facilities that city-folk take for granted. That's where one of our partner organisations, The Foundation for Rural and Regional Renewal (FRRR), comes in. A not-for-profit organisation, FRRR helps local community groups address local needs with local solutions.

### HANNAFORD AND FRRR MAKING A DIFFERENCE TOGETHER

Hannaford has contributed to FRRR's Small Grants for Rural Communities (SGRC) grant program for the last two years. The grant program helps address issues that make a difference to the sustainability of rural, regional and remote communities - from repairs to public halls and preschools, to equipment for emergency services organisations, community events, volunteer training and tourism activities.



### SOME OF THE PROJECTS HANNAFORD HAS SUPPORTED INCLUDE:

SA: Cummins & District Enterprise Committee - "Water for the Future"

WA: Narrogin Independent Playgroup - "Play It Safe"

VIC: CFA - Lawloit Fire Brigade, VIC - "Fill 'er Up"

WA: The Cannery Arts Centre Inc, Esperance - "Growing Food, Growing Community"

Visit FRRR's grant calendar - [www.frrr.org.au/grant\\_calendar](http://www.frrr.org.au/grant_calendar) to see what grants might be available to support your community.

## ZINC FOR PLANT HEALTH

Zinc is one of the essential micronutrients required for optimum crop growth.

Zinc has several important functions in plants, including major roles in enzyme reactions, photosynthesis, DNA transcription and auxin activity. Additionally, adequate zinc levels in the plant have shown to reduce the impact of both crown rot and rhizoctonia.

Plants derive zinc that is

- 1) dissolved in the soil solution,
- 2) adsorbed to the surface of clay particles and
- 3) adsorbed by and chelated or complexed with organic molecules in soil organic matter.

### FACTORS AFFECTING ZINC AVAILABILITY

**Soil pH:** Zinc is most soluble and therefore available to the plant at a pH of 5 to 7.

**Zn:P Balance:** High levels of soil P are commonly responsible for Zn deficiencies.

**Zn:Cu Balance:** Plant roots absorb Zn and Cu by the same mechanism, causing interference in the uptake of one when the other is in excess in the root zone.

**Root disease:** Crown rot and rhizoctonia reduce plant root area and can affect the uptake of zinc.

## INTRODUCING PETER & KAREN AGARS IN WA

Hannaford welcomes Peter and Karen Agars as the new seed treatment specialist in the **Ravensthorpe, Lake King and Newdegate areas.**

Peter and Karen have had a long association with farming. Operating a family farm for 25 years has given them a great understanding of managing their own business, and the hard work and organisation required.

Peter grew up on the family farm near Wirrulla in South Australia. He married Karen, a local girl

### BENEFITS OF USING ZINC FLO® PLUS OVER OTHER FORMS OF ZINC SEED TREATMENTS

- Formulated as a seed treatment
- Lower rate of 300ml/100 kg than other sulphate and chelate products
- Supplements inadequate seed nutrient reserves
- Improves plant vigour
- Enhances disease resistance
- Less dust-off than other forms of zinc seed treatments
- 14.5% zinc chelated concentrate that helps to increase yield and protein value
- Also contains 5.6% Nitrogen as urea and 3.5% Sulphur as sulphide
- Improves grain yield and reduces the detrimental effects of drought and disease (when applied professionally)
- Compatible with other Hannaford seed treatments and is easily applied

### CHOOSING A SOURCE OF ZINC

There are various forms of zinc micronutrients, most commonly oxides and chelates. The main difference between the two forms is that oxides are generally less soluble than chelates, meaning

from Nunjirkompita, and they progressed into managing the farm - cropping wheat, barley, oats and running sheep.

Peter and Karen have three children: Kimberly, Haiden and Brooke.

In 2010 the family farm was sold and they began contract harvesting around the Esperance/Ravensthorpe regions. Since 2014 they've also been cropping and running sheep on a lease property at Darkan. Their son Haiden has joined them this year after completing Ag school.

Peter, Karen and Haiden are passionate about the agricultural industry and were keen to extend their contracting business. The Hannaford Franchise was the perfect venture for them.

Peter and Karen intend to handle most of the infield operations with the Hannaford seed

that chelates are in the most readily available form for uptake into the plant.

These sources can be grouped as:

**Organic chelates** *i.e. Zincflo® Plus chelated zinc.*

**Soluble inorganic products** *i.e. zinc sulfate*

**Partially soluble inorganic products** *i.e. Zinc Oxysulphate.*

**Insoluble inorganic products** *i.e. zinc oxide.*

Research has shown that chelated forms of zinc (such as Zincflo Plus) are more plant available than inorganic forms. Not all sources of zinc are as effective as each other, and the effectiveness depends on:

- Water solubility
- Method of application
- Concentration of zinc in the product
- How finely the zinc is ground

Zinc oxide and oxysulphates are slow release forms for build-up purposes. For in-row applications or for immediate uptake, zinc sulphate or chelated and/or complexed zinc should be used. For seed treatments chelated zincs are the most effective.

When chelated zinc is applied as a seed treatment, the chelate enables the zinc to remain available to the plant longer than an oxide form. Chelates have the ability to bind to insoluble forms of zinc in the soil, which in turn increases the nutrient availability for plants. Zincflo Plus can assist in correcting zinc deficiency by sequestering the zinc from the soil, making it available to the plant.

grading machinery. Haiden will provide support when required and Karen will handle the office and administration side of the business.

"We're excited about continuing the long standing reputation Hannafords has with farmers throughout Australia," said Peter.

**E: [hannaford.ravensthorpe@gmail.com](mailto:hannaford.ravensthorpe@gmail.com)**  
**P: 0427 268 136**





# Australia's Specialist Range of Seed Treatments

Seed Treatment	Active(s)	Covered Smut/ Bunt	Flag Smut	Loose Smut	Stripe Rust	Leaf Rust	Leaf Scald	Septoria Leaf Blotch	Powdery Mildew	Take-all	Anthracnose	Ascochyta	Botrytis	Brown Leaf Spot	Pythium Root Rot	Rhizoctonia Root Rot	Fusarium Crown Rot	Blackleg	Stored Grain Insect Pests	Blue Oat Mite	Red-Legged Earth Mite	Aphids	Trace Element
Rancona Dimension	Ipconazole Metalaxyl	Wheat, Barley, Oats	Wheat <sup>1,2</sup>	Wheat, Barley, Oats											Wheat, Barley	Wheat*, Barley*	Wheat*, Barley*						
Rancona C	Ipconazole Cypermethrin	Wheat, Barley, Oats	Wheat <sup>1,2</sup>	Wheat, Barley, Oats															Wheat, Barley, Oats				
Vitaflo C	Carboxin Cypermethrin	Wheat, Barley, Oats	Wheat <sup>1,2</sup> , Triticale <sup>2</sup>	Wheat, Barley, Oats, Triticale															Wheat, Barley, Oats, Triticale				
Foliarflo C	Triadimenol Cypermethrin	Wheat, Barley, Oats	Wheat <sup>1,2</sup>	Wheat, Barley, Oats	Wheat*		Barley*	Wheat*	Barley*										Wheat, Barley, Oats				
Quantum Pro	Fluquinconazole	Wheat, Barley <sup>3</sup>	Wheat <sup>1,2</sup>	Wheat, Barley <sup>3</sup>	Wheat**	Wheat***	Barley* <sup>3</sup>	Wheat*	Barley*	Wheat*								Canola*					
Zincflo Plus	Zinc (Chelated) Sulphur & Nitrogen																						Cereals
Xlflo	Iprodione													Lupins			Lupins*						
Thiraflor	Thiram										Lupins <sup>2</sup>	Chickpeas <sup>2</sup>	Chickpeas <sup>2</sup>										
Evershield	Thiram Thiabendazole											Chickpeas, Lentils Field peas	Chickpeas		Chickpeas, Lentils Field peas		Chickpeas, Lentils Field peas						
Guardian	Imidacloprid																		Cereals	Canola, Lupins	Canola, Lupins	Cereals, Canola	

\* Suppression  
 \*\*Stripe rust is controlled for up to 6 weeks after sowing, with good suppression thereafter  
 \*\*\*Leaf rust is controlled for up to 4 weeks after sowing, with good suppression thereafter  
<sup>1</sup> Soil borne  
<sup>2</sup> Seed borne  
<sup>3</sup> Refer to label for additional registrations  
 ®Rancona, Vitaflo, Foliarflo, Quantum, Zincflo, Xlflo, Thiraflor, Evershield & Guardian are all registered trademarks of: Arysta LifeScience Australia Pty Ltd and MacDermid Agricultural Solutions Australia Pty Ltd.  
 ALWAYS REFER TO REGISTERED LABEL FOR FULL INSTRUCTION

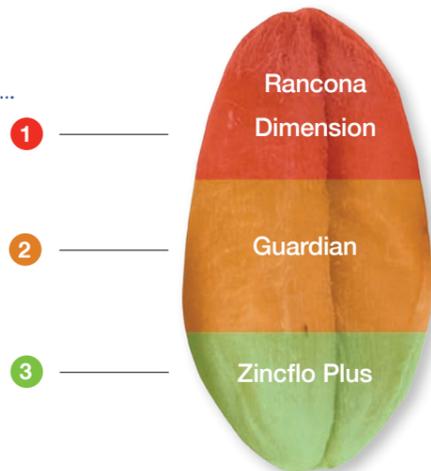
## THE HANNAFORD TRIO PACKAGE

GIVE YOUR 2017 WHEAT OR BARLEY CROP A FLYING START

Protect against crown rot, rhizoctonia, pythium, smuts and bunt.

Control pest aphids (Russian Wheat), mites (RLEM & Blue Oat), barely yellow dwarf virus, and stored grain pests.

Improve plant vigour and disease resistance, and supplement zinc deficiency.



### BENEFITS:

- Starts working the moment the seed is planted - protecting the seedling during the vulnerable establishment stage.
- Faster emergence, excellent seedling establishment, healthier and more vigorous plants – for maximum yield potential.
- Protect against yield-robbing diseases.
- Control pests - no need to apply soil or foliar applied insecticides as a separate operation at, or just after, sowing.
- Easy to apply low dust formulations.
- Improves plant vigour and enhances disease resistance.





# Seasonal Update

## STORED GRAIN PESTS AN INCREASING PROBLEM

In most grain growing regions stored grain insect pests are becoming a major problem, and in many areas resistance to insecticides used by the industry is occurring.

Farmers are urged to practice adequate grain hygiene (see check list) and use IPM programs, including the appropriate use of insecticides. Refer to the GRDC stored grain web site (<http://www.storedgrain.com.au/>).

Remember that the three main groups of insecticides (pyrethroid, organothiophosphate, and insect growth regulators) used for controlling stored insect pests all have some level of resistance to them, and should be used in combination to give the most effective control.

Hannaford's **Guardian**® is registered to control stored grain pests. At this stage there is no known resistance in stored grain insect pests to this insecticide.

## HANNAFORD NATIONAL AWARD WINNERS ★★☆☆☆



L-R: Brett Heath, David & Karen Harris, and Rico Christensen

### MINIMISING INSECT INFESTATION - GRAIN STORAGE CHECK LIST

A combination of meticulous grain hygiene plus well-managed aeration cooling generally overcomes 85 percent of storage pest problems. Some guidelines include:

- Apply more than one insecticide group for effective stored insect pest control.
- Remove all spilt grain around silos and field bins, and dispose of away from the storage area.
- Clean grain handling equipment once the current grain handling job is complete.
- Treat the inner and outer surfaces of silos and field bins with a registered insecticide.
- Control weeds under and around the grain storage area (weeds can harbour grain pests).
- Grade grain as soon as possible to remove cracked grain, dust and weed seeds (these attract grain pests), and treat with an appropriate seed treatment containing an insecticide.
- If not grading grain straight after harvest, apply a registered grain insecticide.
- Retreat grain if storing for long periods (most seed treatments protect for three months).
- Inspect your stored grain monthly for insect infestations and treat if necessary. Monitor: insect pests; grain temperature; grain moisture content; grain quality and germination
- Store grain at low moisture contents, < 12% for cereals and < 9% for oilseeds.
- Use of sealed and pressure-tested silos can help exclude insects from the silo and allows for effective fumigation if required.
  - Consider carbon dioxide treatment with sealed silos to reduce insect activity.
  - Only use fumigants, like phosphine, in a pressure-tested, sealed silo.
- Freshly harvested grain usually has a temperature around 30°C - an ideal breeding temperature for storage pests. Aim for storage temperatures of < 23°C in summer and < 15°C in winter. Effective aeration is critical to both lower temperature and moisture content of the grain.
- White painted silos lower internal temperatures by up to 5°C.
- Turning grain in storage can even out grain temperature and moisture contents.

**Simon and Kristy Roper** of Esperance WA were recently awarded Hannaford's National Business Excellence Award for 2015-16 as 'Best Franchise in Australia'.

This makes it consecutive National award wins for Simon and Kristy following their 2013-14 win. The back-to-back win further acknowledges the hard work they have put into growing the Esperance franchise, and their ongoing commitment to achieving consistently high standards in business operations.

"We're honored to receive this award," said Simon. "We strive to do the best by our customers, which we hope is reflected in our business and in the service we provide."

The awards were presented in August during the Hannaford National Franchise Conference in Hahndorf, South Australia;



L-R: Brett Heath, Simon & Kristy Roper, and Rico Christensen

an event held every two years and a key networking and training forum for Hannaford franchisees.

Guest speakers at the two-day event were Jason Gehrke of Franchise Advisory Centre, James Finlay of Neil Clark and Associates,

## RUSSIAN WHEAT APHID FOUND IN AUSTRALIA

The Russian wheat aphid (RWA) *Diuraphis noxia* was found in Australia during the 2016 season.

Initial outbreaks occurred in South Australia in May, and by mid July it had been detected in Victoria and areas of southern New South Wales. As yet there have been no reports of RWA from Western Australia.

### WHAT IS THE RUSSIAN WHEAT APHID?

- Approximately 2mm long, pale yellowish green with a fine waxy coating and an elongated body compared to other cereal aphid species.
- A soft bodied insect feeding mainly on wheat and barley, but can attack most cereal crops, and as such poses a major threat.
- Remains on small grains or grasses all year long and unlike other aphids, never moves to a woody host.
- Spread easily by the wind, or by 'hitchhiking' on machinery, clothes or plant material.
- Can act as a vector for viruses, including

Barley yellow dwarf virus (BYDV) and Cereal yellow dwarf virus (CYDV), although it does not seem to be a good transmitter of viruses.

- As the RWA feeds it injects a toxin into the plant tissue resulting in damage and yield loss.

In cool weather it is only found on lower leaves and in their leaf sheaths, but are more broadly distributed over plants during fine weather.

If not controlled RWA can cause up to 75% yield loss in wheat and barley.



### DAMAGE SYMPTOMS INCLUDE:

- White, purple or yellowish leaf streaks
- Longitudinal rolling of leaves, forming a hollow tube inside of which aphids shelter
- Stunted crop growth, and plants may appear flattened (tillers almost parallel to the ground)
- Bleached heads with small grains
- Possible BYDV infection

### GRDC 4-POINT STRATEGY:

- 1. FIND** – look for characteristic leaf streaking or rolling symptoms on cereal crops and grasses.
- 2. IDENTIFY** – positively identify RWA in consultation with an industry specialist.
- 3. THRESHOLD APPROACH** – consider international thresholds for control, factoring in crop growth stage, crop yield potential and potential yield losses - the USA currently recommends a threshold guideline of 20% seedlings infested up to the start of tillering, and 10% of plants infested thereafter.
- 4. ENACT** an appropriate management strategy that, where possible, encourages beneficial insects.

Protect the three major yield-contributing leaves – flag, leaf two and leaf three – and major yield loss can also occur from growth stage 30 onwards.



### RECOMMENDATIONS AND MANAGEMENT:

Treat your seed with a seed treatment containing imidacloprid prior to sowing, such as Hannaford's **Guardian**® at 120ml/100 kg.

Seed treatments containing 600 g/L imidacloprid are now listed for control of Russian wheat aphid under Emergency Use Permit APVMA 82304.

Generally, seed applied insecticides are safer and have less impact on predatory insects than do foliar applications of insecticides.

The best strategy is to use an integrated pest management program.

Chlorpyrifos and pirimicarb are chemicals that are now listed for control of Russian wheat aphid under Emergency Use Permit APVMA 82792.

*RWA is a DECLARED pest, contact Plant Health Australia if detected - 1800 084 881*

Franchise in Eastern region and **Jon and Margaret Schutz** of Point Pass SA, as Best Franchise in Southern region.

**David and Karen Harris** were also recognised for the best results achieved in our customer satisfaction survey, and **Terry and Kelly Jackson** of Strathalbyn SA for the excellent results achieved in their first year of operation.

David said, "The ultimate goal is customer satisfaction, so we're thrilled to receive recognition within the business based on feedback from our customers."

"We congratulate this year's award winners," said Brett Heath, Commercial Manager Hannaford, "and we thank all of our franchisees for their hard work and dedication in providing farmers with a professional and reliable service."



L-R: Brett Heath, Jon Schutz, and Rico Christensen

Michael Wilkinson of Wilkinson Insurance Brokers, and Rico Christensen, President North America and Australia for Arysta LifeScience.

Awards were also presented to **David and Karen Harris** of Naracoorte SA, for Best

# Hannaford

Where the locals go



## SOUTHERN NSW & VICTORIA

**Berrigan, Finley, Deniliquin, Jerilderie, Corowa & Tocumwal**  
Peter & Jan Hill  
0428 852 323

**Wagga Wagga, Junee, Coolamon, Lockhart, Holbrook & Tarcutta**  
Barry & Joanne Kohlhausen  
0459 202 079

**Warracknabeal, Minyip, Birchip, Hopetoun, Sea Lake & Swan Hill**  
Brian & Charmaine Wilson  
0427 681 034

**Charlton, Donald, St Arnaud, Quambatook, Boort & Echuca**  
Bernie & Wendy Laffin  
0417 567 602

**Nhill, Rainbow, Jeparit & NW Dimboola**  
Rob Lynch  
0428 911 387

**Horsham, Kaniva & SE Dimboola**  
Wayne and Lindy George  
0427 902 381

**Ballarat, Ararat, Lismore & Clunes**  
Andrew & Janelle Cheesman  
0437 688 776

**Goroke, Frances, Edenhope & Casterton**  
David & Karen Harris  
0428 857 725

## SOUTH AUSTRALIA

**Streaky Bay, Ceduna, Port Kenny & Poochera**  
Dion & Ursula Gilmore  
0428 261 448

**Lock, Tooligie, Wudinna & Kimba**  
Head Office  
0427 013 661

**Cummins, Kapinnie, Karkoo & Ungarra**  
Head Office  
0427 013 661

**Port Lincoln, Tumby Bay, Cleve & Cowell**  
Head Office  
0427 013 661

**Gladstone, Crystal Brook, Jamestown & Melrose**  
David & Tracey Smith  
0428 847 949

**Kadina, Alford, Bute & Arthurton Nth**  
Gary Hamdorf – Hannaford Agronomist  
0427 022 355

**Maitland, Ardrossan, Warooka & Arthurton Sth**  
Graham & Carole Derrington  
0419 821 654

**Snowtown, Blyth, Nantawarra & Avon**  
Mick & Denise Coleman  
0427 642 142

**Auburn, Clare, Manoora & Burra**  
Garry & Tania Gaerth  
0409 280 318

**Barossa, Riverland, Eudunda & Tarlee**  
John & Margaret Schutz  
0417 812 760

**Strathalbyn, Fleurieu Peninsula & Kangaroo Island**  
Terry & Kelly Jackson  
0403 298 076

**Naracoorte, Bordertown, Keith & Tintinara**  
David & Karen Harris  
0428 857 725

## WESTERN AUSTRALIA

**Geraldton, Binu, Mullewa & Mingenew**  
Gary Hamdorf – Hannaford Agronomist  
0427 022 355

**Moora, Dandaragan, Coorow & New Norcia**  
Darren Rutley  
0400 510 154

**Dowerin, Trayning, Bencubbin & Dalwallinu**  
Brent & Gloria Melville  
0428 811 585

**Cunderdin, Northam, York, Tammin & Toodyay**  
Ross & Ellen Parrick  
0429 064 119

**Brookton, Pingelly, Beverley, & Quairading**  
Phillip & Katrina Crute  
0427 250 877

**Cuballing, Wandering, Williams & Boddington**  
Trevor & Kirstie Clark  
0418 563 926

**Narrogin, Wickiepin, Wagin & Kukerin**  
Charles & Lorette Naudé  
0487 404 757

**Boyup Brook, Darkan & Kojonup**  
Trevor & Kirstie Clark  
0418 563 926

**Katanning, Woodanilling, East Kojonup & Broomehill**  
Derek Batchelor  
0428 241 306

**Cranbrook, Tambellup & South Stirlings**  
Neville & Anne Parsons  
0429 904 653

**Jerramungup, Gairdner, Borden & Pingrup**  
Mark Weedon  
0428 351 176

**Ravensthorpe, Lake King & Newdegate**  
Peter & Karen Agars  
0427 268 136

**Munglinup, Hopetoun & Cascades**  
Kingsley & Brodie Walker  
0487 194 243

**Salmon Gums & Grass Patch**  
Kym & Sadie Walker  
0427 477 493

**Esperance & Condingup**  
Simon & Kristy Roper  
0412 882 613

**Southern Cross, Hyden, Kellerberrin & Mukinbudin**  
Michael & Sonya Dunbar  
0428 401 025

FREE\* Seed Germination Test

\*For Hannaford customers only.



The information and recommendations set out in this Newsletter are based on data believed to be reliable at the time of publication. Results may vary, as the use and application of the products is beyond our control and may be subject to climatic, geographical or biological variables, and/or developed resistance. Any product referred to in this newsletter must be used strictly as directed, and in accordance with all instructions appearing on the label for that product and in other applicable reference material. So far as it is lawfully able to do so, Arysta LifeScience Pty Ltd accepts no liability or responsibility for loss or damage arising from failure to follow such directions and instructions. © Registered Trademarks