



ONIONS AUSTRALIA | 2016

Latest research & development news



New hybrids tackle disease



INSIDE:
Your onion disease identification poster

AUSTRALIAN onions

Introducing the 'Secret Serve'

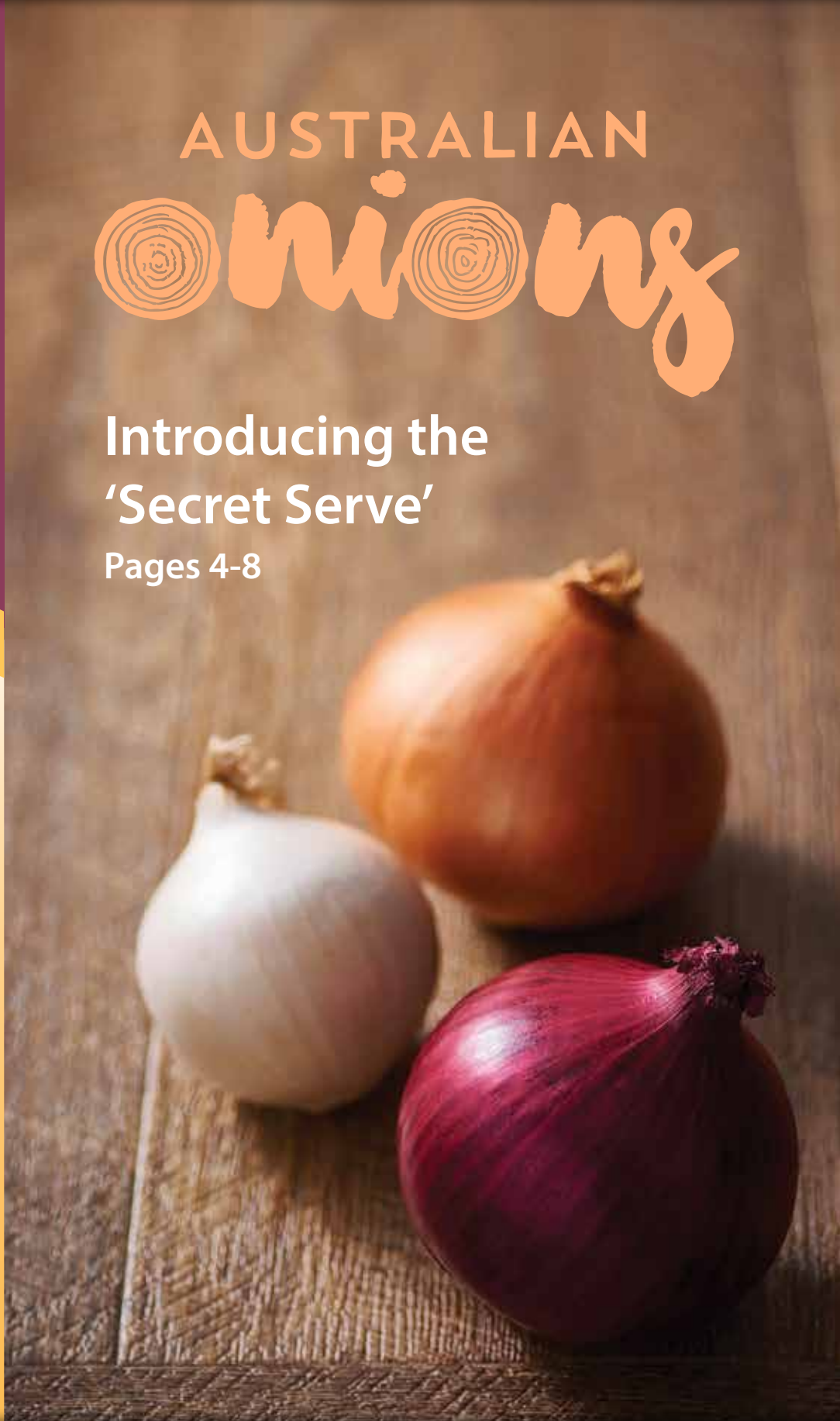
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Bejo Onions

Hybrids for the premium market

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For sowing September - early October

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For sowing September - early October

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For sowing July - early August

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Welcome

Welcome to Onions Australia's 33rd edition of our annual magazine.

It's been a momentous year for the industry with the launch of the 'Secret Serve' marketing campaign. We're finally seeing the marketing levy that has taken so long to come to fruition in action and it looks great. Make sure you check out the new logos and branding and all the campaign entails. We need your support to keep this campaign in the public eye, with our focus on increasing the consumption of Australian onions.

Further highlights in this edition include the great work being done by Foodbank and the contributions made by the Mitolo Group, updates on the many R&D projects underway that are utilising your levy money, a profile piece on industry stalwart Steve Rathjen and the state round-ups.

For the first time, a poster on onion disease has been developed and included in the magazine – make sure you keep it handy- put it up in your office or shed, it's a great guide to disease and treatment options.

Finally, make sure you contact the Onions Australia office any time to share your ideas, whether related to the magazine or other industry happenings, it's important to get feedback so we're responding to your needs. Enjoy the read!



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Onions Australia Executive Committee

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Andrew Moon
Greg Bragg
Daniel Mead
Dean Metcalf
Andrew Doran
Garry East
Lewis Lydon
Mark Dobson
Alan Thierry
Michael Williams
James Ryan
OA CEO Lechelle Earl (Ex-Officio)

Chief Executive Officer

Lechelle Earl

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From the Chair

Without a doubt one of the highlights of the past 12 months has been the collaboration between Onions Australia and AUSVEG, to co-host the 2016 National Horticulture Convention that was held on the Gold Coast in late June.



As one of seven industry bodies to co-host the Convention, Onions Australia was in good company alongside partners Apple and Pear Australia, the Central Markets Association of Australia, Fresh Markets Australia, Growcom, Persimmons Australia Inc and Australian Organic.

This was a fabulous opportunity to engage more with our fellow industry members and build a better relationship with AUSVEG.

Onions account for more than nine per cent of Australia's total vegetable production and is the country's fourth largest vegetable crop, so it's imperative that we strive to have a bigger voice not only within the collective domestic industries but also on the international stage and make ourselves better heard.

Despite these statistics however, we are of course as a whole still a small industry so we should be proud of this new involvement with AUSVEG and plan to ensure efforts are made to see that the relationship continues to benefit our onion industry.

Opportunities such as these also offer our industry better representation in the overseas market, which is a market we should, and can, look to capitalise on in a more structured way.

As an industry we need to get out there a little more and I think if AUSVEG displayed anything to me clearly, it's that in this fiscal environment we need to explore the advantages of working closer with peak industry bodies.

Joint collaborations will ensure we continue to grow. While there is, and always will be, a determined group of growers involved in pushing our industry forward, there's always room for more support to strengthen our cause.

Regretfully some people don't see the worth of OA as a collective, but it's imperative we stay connected and involved. As Henry Ford once said, "Coming together is a beginning; keeping together is progress; working together is success."

As some of you may know, this is my final 'From the Chair'. In October I will officially resign as Chairman and hand over to the incredibly competent, Peter Shadbolt.

I'm very proud of my two years in the role and it brings me an immense amount of personal and professional pride to have seen the marketing levy finally put to use under my chairmanship.

I have no doubt that the 'Secret Serve' initiative will be of great benefit to our industry not just now but in to the future. I look forward to official feedback on whether or not it has led to increased domestic consumption of onions, with the objective a 3 - 5% year on year (YoY) growth.

There's no doubt that the transformation and changes surrounding Horticulture Innovation caused many disruptions, concerns and questions about how our industry would function with these changes.

However, I feel that the streamlined processes used by the governing body as it stands today are now accepted and the incoming Chairman should have no issues hitting the ground running – but rest assured that I am always happy to assist if and where required.

I would like to thank my predecessor Andrew Moon who was a great support settling me in to my role as your Chairman and who continued to be of great support throughout my time as your Chairman.

A special thank you goes to our OA CEO Lechelle Earl who pulled OA through the uncertain and difficult times in which Hort Innovation transitioned into a grower-owned research and development corporation.

Thank you also to our OA executives who are taking out time of their busy work schedules to attend OA meetings.

Finally, thank you to all Australian onion growers for your involvement in this industry which I hope will go from strength to strength ... because of you.

I look forward to seeing you all at our next Onions Australia Conference in Brisbane at the end of September.

Kees Versteeg
Chair OA

From the Office

Sometimes I feel a bit like a broken record writing this annual column for the Onions Australia magazine.



It seems a case of another year, another battle, and continued tough times for Aussie horticulture – with onions no exception to that.

Just when you thought belts could not be pulled any tighter – the challenge went out again, with Onions Australia unsuccessful in retaining the industry's Communications Project.

The project is now being coordinated by Cox Inall Communications, working side by side with OA. The office has managed to secure an alternative support project, ensuring the OA office is the first point of contact for ALL industry information, and continuing to work hand in glove with Cox Inall to ensure the latest R&D information is distributed to levy payers. While it has been a challenging time, the working partnership between Cox Inall Communications, OA and Hort Innovation is proving successful and OA is hopeful that levy payers will see improvements in information delivery.

There were several highlights for the year – with the obvious being the launch of the Secret Serve marketing campaign. After

years of consulting with growers, then negotiating the obligatory red tape, with a legislative challenge thrown in for good measure, the Australian Onion Industry's long-awaited marketing campaign was successfully launched earlier this year.

It was a moment of great pride for Onions Australia to see the fruition of the years of hard work – and now attention turns to ensuring the campaign delivers in its objective of encouraging Australians to eat more onions.

Another highlight of the year was Onions Australia co-hosting the National Horticulture Convention on the Gold Coast. OA joined with convention founders AUSVEG and other co-hosts Growcom, Persimmons Australia, the Central Markets Association of Australia in partnership with Fresh Markets Australia and Apple and Pear Australia Limited to stage the event.

The convention attracted more than 1500 growers and industry representatives and was hailed a resounding success, with OA already turning its attention to next year's event.

With this in mind, our focus remains on ensuring we stage high quality conferences, filled with information, education and networking opportunities in order to bring out the best in our industry.

These conferences rely on the generosity of our key strategic partners and sponsors and OA is proud to be associated with such reputable businesses who have demonstrated genuine interest and investment in the national – and international – onion industry.

Without support such as this, OA would find it difficult to continue to advocate for our growers – the fundamental reason we exist.

So with that in mind, may your yields be bountiful and prices high, and bring on 2017.

Lechelle Earl
CEO OA

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Introducing the 'Secret Serve'

Project code VN15500. Contact is Craig Perring | Marketing Manager | Horticulture Innovation Australia Limited | Level 8, 1 Chifley Square, Sydney NSW 2000
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Parents across the country are being encouraged to embrace a 'Secret Serve' of onions as they prepare family meals in a bid to give their kids an extra serve of vegetable, without them knowing.

The Australian Onions 'Secret Serve' marketing campaign, a first for the onion industry and years in the making, was officially launched by Horticulture Innovation Australia (Hort Innovation) at the end of May with an in-store ribbon cutting at Get Fresh in Findon, South Australia.

The campaign is backed by research that suggests an alarming 94.6 per cent of Australian children aged 2-18 years are not getting the recommended daily serves of vegetables*, and, that is where the humble onion can give parents an easy win in the kitchen as they count towards your daily intake.

The national initiative focuses on the creative use of onions in everyday meals and includes family friendly recipes, tips and tricks for storing and preparing onions, as well as recipe cards, in-store cooking demonstrations and recipes

developed specifically for the industry by members of the 'Secret Serve Society'.

Hort Innovation Marketing Lead Graeme Yardy said the campaign hopes to make it easier for parents to ensure their children are getting the recommended five serves of vegetables by showing them how easy it is to add onions into family favourite recipes.

"Australian children aren't consuming nearly enough vegetables. Onions can help: they are a versatile, delicious and nutritious vegetable you can add to any meal without the kids even knowing," he said.

"The Secret Serve Campaign is designed to show that onions can become a reliable, and hassle-free serve of veg for your children, ensuring they are well nourished without the nightly argument - which we see as a big win!"

Onions contain many health benefits. They are an anti-oxidant, anti-viral, anti-inflammatory vegetable, onions contain high levels of biotin (vitamin H), manganese, vitamin B6, vitamin C and fibre. Other attributes include boosting the immune system and helping to maintain good gut and heart health.

Onions Australia Chairman Kees Versteeg says the campaign signals an important step in promoting the industry and encouraging an increase in onion consumption.

"As an industry it took time, but we worked hard to get up a marketing component to the levy.

"It's encouraging to see a full complement of initiatives coming out of the Secret Serve campaign, with a hope primarily increasing consumption, and, ultimately sales of onions.

"I would encourage all growers to get behind the campaign and use the new Australian Onions branding in their own businesses, especially where there is an opportunity for our brand being seen by consumers" Mr Versteeg said.

* The Australian Bureau of Statistics National Health Survey 2014-15.



AUSTRALIAN onions

THE CAMPAIGN

As part of the 'Secret Serve' campaign, new branding has been developed for Australian Onions. The branding is designed to work on any background, as there are plenty of colour schemes represented and it is available for all varieties of onions.

Hort Innovation managed the branding process and considered at different styles, including Corporate, Simple, Organic and Iconic. The criteria for logo development included it being versatile, organic and earthy while also being quite modern and creative. A real consumer feel, while being timeless and edgy was considered to be of high value. Importantly, the onions featured needed to be easily identified as onions (and each variety featured) and it needed to include the words 'Australian' or 'Aussie'. The Australian Onions Style Guide is available to all growers through Hort Innovation and Onions Australia, and will soon be available online.



Above: Australian Onions Style Guide

Right: Secret Serve Society Recipe Book



Throughout June and July as part of the campaign roll out, the onion industry partnered with the mushroom industry to bring in-store cooking demonstrations to 470 Woolworths, Coles, and independent supermarket and greengrocers across Australia.



THE SECRET SERVE

WWW.SECRETSERVE.COM.AU

Introducing the 'Secret Serve'

Samples of spaghetti bolognese with a 'Secret Serve' of onions-(and blended mushrooms), were on offer to shoppers to inspire new ways to serve the vegetable and accustom kids to their taste. Shoppers were also asked about their onion consumption and to provide feedback on the campaign as well as providing them a recipe booklet they could take home.

The in-store demonstrations were just the start of the three-year campaign, which includes:

- the launch of the 'Secret Serve' website (www.secretserve.com.au)
- a recipe booklet that includes a seven-day meal planner containing some family favourites, (including under cover beef stroganoff and hidden home-made beef burgers) but also tips on how to dice, store and cook onion as well as how to stop the tears when cutting them

- Initially recruiting celebrity members to the Secret Serve Society, including Chef Darren Robertson, Foodie and TV presenter Magdalena Roze and Chef icon Lyndey Milan, to share recipes, followed by Aussie mums and meal preparers
- engagement of bloggers and key influencers in the media by sending them a pack with a recipe and all the ingredients to cook up a meal with a 'Secret Serve' of onion, then encourage them to write about it using #secretserve
- the launch of an Instagram account and Facebook page where consumers can share their favourite onion recipes, tips and tricks



The 'Secret Serve' campaign was also a feature at the 2016 National Horticulture Convention in Brisbane, which was co-hosted by Onions Australia. Hort Innovation Marketing Manager Craig Perring presented the campaign to the delegates.



Some of the comments from in-store demonstrations include:

"Great idea to get kids to eat veggies, especially onions and mushrooms, because they are blended small"



"I had no idea that onions were so good for you"



"I love the recipe book, so many easy and yummy recipes"



"The onions and mushrooms really make this dish tasty"

An extension of the recipe booklet developed with the launch of the campaign, the 'Secret Serve' campaign will also feature recipes created by well-known food personalities across Australia, known as the 'Secret Serve Society', showcasing the versatility of this unique and nutritious vegetable.

Why not try this recipe for potato rosti, by meteorologist, Foodie and TV presenter Magdalena Roze.

RESULTS OF THE IN-STORE CAMPAIGN SO FAR

Across Australia, more than 36,000 samples were tasted during 470 in-store demonstrations. In addition, there were more than 57,000 interactions- where shoppers spoke with the in-store demonstrator but didn't necessarily take a sample. Of those samples that were taken, there was a great conversion rate, of 44%, so nearly half of all shoppers who sampled the bolognaise proceeded to buy loose or bagged onions during their shopping visit.

About the Onion Levy

The statutory onion levy is money gathered from growers across Australia to fund research and development (R&D) projects with the objective to improve efficiency, product quality, sustainability. Following changes, the levy now contributes to marketing campaigns.

The levy is payable on all commercially grown onions and collected from the grower at the first point of sale by the Levies Revenue Service (LRS). This is usually at a wholesale market or processing company.

Originally set in 2002, the levy was reviewed because it was inequitable, R&D priorities particularly were not being met by current funding levels and new industry obligations were in place.

Onions Australia consulted widely with growers around Australia for more than two years, spent a further 6 months gathering testimonials and a further 12 months being reviewed by Government. It became clear that the Government would only invest in an industry that was prepared to invest in itself.

Eventually a vote on changes to the statutory levy took place in May 2011 and following that, new legislation came into effect from July 1, 2014, which saw changes implemented and the allocation of levy funds to marketing. The new levy (total \$4.00) has an R&D component of \$2.90, with \$0.10 for a Plant Health Australia levy, and \$1.00 for marketing. There is also an Emergency Pest Plant Response levy set at \$0.00.

Hort Innovation is responsible for managing industry funds and the Australian Government matches the R&D component of the levy dollar-for-dollar. At present approximately \$200,000 has been allocated towards marketing each year, for the next three years.



MAGDALENA ROZE'S POTATO ROSTIS

(WITH A SECRET SERVE OF ONIONS)

1

"You can't go wrong with potato rosti, especially for family breakfast on a Sunday morning, and I fell in love with it again after a holiday in the UK. We stayed at a B&B in Kent and the host made the most amazing potato rosti for breakfast which reminded me how delicious it is, with poached eggs or just on their own."

PREP TIME: 5 MINS

COOKING TIME: 10 MINS

SERVES: 4

INGREDIENTS

2 LARGE DESIREE POTATOES (SCRUBBED)

1 ZUCCHINI

1 RED ONION

1 HANDFUL ROUGHLY CHOPPED PARSLEY

2 TBSP VEGETABLE OIL

SALT

PEPPER

3 TBS KETCHUP TO SERVE

METHOD

1 Grate the potato and zucchini into a bowl (leave the skins of the potatoes on for extra flavour and nutrients).

2 Peel and thinly slice the onion, and add this to the bowl along with the parsley, salt and pepper. Give the ingredients a good mix and squeeze out any excess liquid into a separate bowl.

3 Heat two non-stick frying pans with a little oil and place half the mixture into each pan. Push down the sides and cook on high heat for 2 minutes. Then turn down to a medium heat and cook for 4 minutes each side.

4 Carefully give the potato cakes a couple of flips every couple of minutes to check the colour and, more importantly, to impress any onlookers! When cooked, cut into triangles and serve with ketchup.

Introducing the 'Secret Serve'

The 'Secret Serve' recipe card includes a seven-day meal planner of recipes containing a secret serve of onion, including

- Spaghetti bolognese
- Vanishing vegetarian fried rice
- Hidden home-made beef burgers
- Under cover beef stroganoff
- Masked minted lamb rissoles
- Camouflaged chicken san choy bau
- Incognito sizzling steak fajitas

GET INVOLVED!

Growers have access to all the new designs for Australian Onions as part of the 'Secret Serve' campaign and are encouraged to use the logos on all products to reinforce the campaign, and more importantly create brand awareness.

Contact Hort Innovation Marketing Manager, Craig Perring on (02) 8295 2342 or email craig.perring@horticulture.com.au or Lechelle Earl at the Onions Australia office on 08 8725 8862 / lechelle@onionsaustralia.org.au who can provide all the recipes cards, logos and anything you need to help you get involved.



1

- SECRET - SPAGHETTI BOLOGNESE

INGREDIENTS

2 TBSP OLIVE OIL
1 BROWN ONION, FINELY CHOPPED
2 GARLIC CLOVES, CRUSHED
2 TBSP TOMATO PASTE
400G BUTTON MUSHROOMS
400G BEEF MINCE
800G CAN DICED TOMATOES
1/2 CUP BASIL LEAVES, SHREDDED
500G SPAGHETTI
FINELY GRATED PARMESAN & BASIL LEAVES, TO SERVE

METHOD

- 1 Finely chop mushrooms by hand, or alternatively pulse in a food processor until finely chopped.
- 2 Heat oil in a large saucepan over medium heat. Add onion and garlic, sauté for 3 minutes or until softened. Add mushrooms, increase heat to high and cook for 5 minutes or until moisture has almost evaporated. Add tomato paste, cook, stirring for 1 minute.
- 3 Add mince, cook, breaking up mince with wooden spoon, until mince changes colour. Add tomatoes and bring to the boil. Reduce heat to low. Simmer uncovered for 20 minutes or until thickened. Stir in basil and season.
- 4 Meanwhile, cook pasta in a saucepan of boiling salted water following packet instructions. Drain and return to pan. Stir through mushroom sauce, parmesan and extra basil. Serve.



2016 Reg Miller Award: Andrew Moon

The 2016 Reg Miller Award winner may have only been in the onion game just on 10 years but he's successfully made a lifetime of difference to the industry in that short period of time.

Queensland grower Andrew Moon was named as the recipient of the coveted award at the annual Onions Australia conference in September held in Brisbane.

A fifth generation farmer, Andrew is a familiar face to many in the industry having served three years in the role as Onions Australia Chairman from 2012-2014 and a member of the former Industry Advisory Committee before that.

During Andrew's time in the top job he led the battle to get the onion industry levy finalised after a drawn-out five-year process, as well as played a significant role throughout the Horticulture Australia Limited Review.

It's more than his English ancestors who first selected country near Brisbane in the early 1900s could have envisaged for their future family members.

Andrew's parents moved to St George in western Queensland in 1979 to grow cotton, but water shortages throughout the drought years of the late 1990s and 2000s forced Andrew and his business partner and brother David Moon, to diversify.

In 2004 they started growing melons, and from there have further successfully expanded in to broccoli, pumpkins, and of course, garlic and onions.

Today onions are their biggest crop – brown, red and more recently, sweet onions – and supermarket giant Coles is their biggest customer.

As well as day to day operations, Andrew is responsible for all marketing of produce under the 'Moon Rocks' brand, where the focus on quality, sustainable, environmentally friendly produced onions is key.

Despite stepping down from the big gig nearly two years ago, Andrew remains a loyal supporter of the industry body and is a vocal encourager of getting involved in networking opportunities as a member of the Onions Australia Executive Committee.

Andrew and his wife (Kerri) have two teenage children, a son and a daughter, both of whom are yet to commit to the family business but those close to them suspect it's only a matter of 'when, not if'.

In his spare time Andrew is a keen fisherman who loves to escape to Cape York to camp and search for the 'one that got away'.

Those who know him best say he's a genuine bloke, personally and professionally, who is well-known to 'call a spade a shovel' and never leave anyone guessing what he's saying.

Overall he is regarded as a well-respected farmer and leader in the onions industry who will be remembered for tackling some of the sector's greatest challenges with professionalism and skill.

The Reg Miller Award is the Onion Industry's highest honour.

Open to anyone passionate about the industry, the award recognises people who have made outstanding contributions to the Australian Onion Industry.

The award is named for Reg Miller, a South Australian who helped found Onions Australia. He worked on the family farm for some 20 years, served with the Australian Infantry in Darwin during WWII and throughout his life did committee work with grower associations, including Onions Australia.



Reg Miller Award winner, Andrew Moon



Onions Australia Chair Kees Versteeg with Andrew Moon

Frank fights hunger with Foodbank

It's 1am on a cold Adelaide morning. The temperature dipped in to single digits a few hours back and most of the city is asleep, trying to keep warm. But at the South Australian Produce Market in the suburb of Pooraka things are heating up with ease.

Deliveries, unloading, packing, sorting. Every year, more than 250,000 tonnes of fresh produce is traded between 45 wholesalers, 60 growers and hundreds of retail operators. And every Thursday morning at 1am a truck with 'Collins' plastered up the side of it pulls up outside cool room #27 with two tonnes of onions on board for delivery.

While it's an insignificant figure on paper, it's a delivery that offers infinite community support and a backstory filled with old-fashioned generosity. Cool room #27 is more than just another store at the Pooraka market; it's the central hub for fruit and vegetable collection for emergency food relief outreach across the state,

15 years ago the South Australian branch of national non-profit group Foodbank was a fledgling operation that had only opened its doors in the state a little over six months prior.

General Manager and Founder of Foodbank SA Leigh Royans had taken to the airwaves to get the word out about the new initiative.

"On the radio segment I explained the role that we envisaged Foodbank playing in the South Australia community," Mr Royans remembered.

"At the end of the interview I made a plea for help from the local food industry to come on board and help provide essential food for disadvantaged families."

It would be the first of many public requests for help, but on that particular occasion, Mr Royans' call to arms was acknowledged immediately by local onion producers, The Mitolo Group.

"I took a call from Frank Mitolo the very next day, I remember it as clearly as just yesterday as it was our first break-through direct to growers in the fruit & vegetable sector."

"Frank had spoken with his father Bruno after hearing the radio interview and they agreed they wanted to help."

"We arranged a day and time to meet out at their pack-shed at Virginia and as they say, the rest is history!"

"The donations of onions, and also potatoes, started flowing within a week and since that day they've never stopped."

"It's a generous philanthropic gesture that empowers the work of our charity and shines a light on the leadership qualities of Frank Mitolo."

But ask the man himself, Managing Director of The Mitolo Group, Frank Mitolo, about the donation relationship that has lasted the distance, and his take on things is a little more modest.

"It's one of those things that we do as second nature now and to be honest, it's just appropriate to help out where we can," he said.

"There's a lot of product that would be thrown out based on cosmetic reasons which is simply a waste."

"Donating this produce doesn't have a significant financial impact on us as a business but the positive impact on those who receive it is big."

Big is an understatement.

More than 500 different emergency food response agencies and community outreach programs across South Australia now benefit from donations to Foodbank.

"In real terms that equals to about 84,000 marginalised people who receive food from us each month and more than a third of that number are children," Leigh Royans said.

It doesn't take much to figure out that the two tonnes of onions and three tonnes of potatoes that The Mitolo Group donate to Foodbank SA each week only just touches the sides of what is needed on the ground.

"We have a fabulous group of different potato donors but if it wasn't for The Mitolo Group we wouldn't have any onions at all," Foodbank SA General Manager Leigh Royans said.

Mr Royans said the organisation is openly desperate about its need to secure more regular produce donors, whether it be on a weekly or fortnightly basis.

"Onions are such a valued staple and they form a very important part of any

Foodbank SA director and Chair of F&V Committee Ray Tanner, with Leigh Royans, GM and Founder of Foodbank SA



emergency food assistance package," he said.

"We've been incredibly fortunate that Frank and his family have been open to continually help us battle this need."

"In the time The Mitolo Group have been donating they've actually tripled the amount they provide to help us keep up with growing demands and we just couldn't do it without them."

"This may all sound quite simple from the outside, but it's not," Mr Royans said.

"This is truly amazing support that has been unwavering for more than 15 years, donating value-added premium produce to help tens of thousands of disadvantaged families and kids in our state."

Onions Australia CEO Lechelle Earl shared Foodbank SA's glowing endorsement of the Mitolo Group's ongoing efforts.

"Onion growers are a hardworking, humble bunch and the Mitolo Group is an exceptional example of this," she said.

"Our growers tend to go about their work without fuss or fanfare, and I am so proud to see such strong support for charity,



Packing onions at Foodbank SA

nor am I surprised to see Frank Mitolo go above and beyond to support the cause."

The Mitolo Group is incredibly successful in its own right as the leading potato and onion packing company in the Southern Hemisphere, a primary supplier of potatoes and onions to Coles stores nationally, and a packing facility that can process 100 tonnes of onions and 500 tonnes of potatoes in one day.

But at its core, the company is a family business.

"My father Bruno started the business in 1972, initially as a packing shed for onion growers," Frank Mitolo said.

It wasn't long before Bruno started growing onions and potatoes, as well as growing his own family.



Where it all happens; Foodbank SA

Frank fights hunger with Foodbank

As Managing Director of the company, Frank is also joined by brothers Darren and John, who are in charge of packing shed operations and farming respectively.

"We've worked hard and we're now reaping the benefits of that effort," Mr Mitolo said.

"I guess that's why we committed to Foodbank SA from the beginning and will continue to do so."

"It's an important thing for all companies to consider because the fact is that not everyone in our local community leads a privileged or fortunate life."

Mr Mitolo said a lot of people within the onion industry still aren't aware about Foodbank.

"I'd encourage as many growers and packers as possible to consider to donate produce to this cause," he said.

"It's really not hard to do and we're at a point now where our weekly donation is automatic, it's not even a conscious thought anymore."

CEO of Onions Australia Lechelle Earl said she was a strong supporter of the Foodbank initiatives, having seen the importance of its work across the community generally with emergency food-relief and in local schools with the breakfast programs.

"Sadly many children go to school without breakfast - the most important meal of the day," she said.

"It is so heartening to see such strong community support that ensures these children are fed and ready to learn for the day."

"I would encourage any business or individual to support Foodbank, and in turn support their local community."

During that first fateful phone call between Leigh Royans and Frank Mitolo, neither of them could have predicted the longevity of their partnership or that Foodbank South Australia would one day own the title of the 'largest hunger relief organisation' in the state.



In 2015 it helped provide enough food for more than 4-million meals – and it's a safe bet that a significant number of dishes served up to nourish and warm included an onion from The Mitolo Group.





Better with every generation.

Every day for 150 years, Seminis has worked to empower growers by improving the vegetables they grow and providing solutions to their toughest challenges.

For onion growers, we're delivering new varieties bred for Australian conditions with the qualities required for profitable crops. With in-built disease resistance and uniform bulbs which can be transported or stored, our new generation of hybrid onions are a smart addition to cropping programs across Australia.

At Seminis, we're constantly thinking of the next generation. Not just the next generation of seeds, but the next generation of growers and families all over the world.

Call us on 1800 364 846 or visit www.seminis.com.au to find out more.

Bee pest surveillance ramps up

Onion project MT12011- National bee pest surveillance program

Research Provider: Plant Health Australia; Project Leader: Alison Saunders; Report Author: Melanie Bottrill and Jenny Shanks

It's not an exaggeration to say that honey bee pollination is critical to Australian horticulture and agriculture.

An estimated 65 per cent of agricultural production involves pollination from honey bees, including the onion industry, where onion seed is 100 per cent dependent on pollination.

Honey bee populations around the world, including in Australia, are increasingly compromised by pests, diseases, insecticides and exclusion from vital floral resource areas.

While Australia is currently free from many of the exotic pests that affect honey bees overseas, the detection of the exotic bee parasite *Varroa jacobsoni* in a feral Asian honey bee hive earlier this year at the port of Townsville has highlighted the importance of a national surveillance system to detect key pest threats to honey bees.

The earlier a new pest can be detected, the greater the chance that it will be restricted to a limited area, making eradication feasible.

Through the National Bee Pest Surveillance Program (NBSP), surveillance is undertaken in Australia for bee pests and pest bees, benefitting both the honey bee industry and plant industries dependent on honey bees for pollination.

The NBSP includes surveillance for honey bee pests through a national program of sentinel hives, remote surveillance hives, catchboxes, sweep netting, and hobby beekeeper involvement at high risk ports of entry throughout Australia.

Since taking over the administration of the NBSP in early 2012, Plant Health Australia (PHA) has continued to increase the number of samples processed as part of the NBSP, with 939 samples examined for pests of bees and bee pests in 2015.

In 2015-16, PHA implemented a more frequent testing regime of sentinel

hives, with testing undertaken every two months.

Increasing the number of sentinel hives to at least six hives within 3km at nominated high risk ports was implemented from 2014 and has since been maintained as a minimum standard in jurisdictions. As a result, sentinel hive numbers across Australia increased to over 160 in 2015.

A major focus of 2015-2016 has been towards the PHA-led project *Statistical review and redesign of the NBSP*, funded by Horticulture Innovation Australia (HIA).

The project has identified improvements for the NBSP and will act as a catalyst for PHA, the honey bee industry, pollination-reliant plant industries, research and development agencies, and governments to implement a long-term funding agreement from 2016/17 to 2021.

Among its recommendations is that all high and medium risk ports have at least six sentinel hives and at least four hives at low risk ports. Further, it recommends these sentinel hives be placed at a 2km spacing and inspected every six weeks instead of eight weeks.

It also supports improvements to current surveillance activities (other than sentinel hives), as well as the incorporation of Asian honey bee surveillance, bee virus diagnostic testing and Asian Hornet surveillance.

PHA has also managed the national trial of 20 remote catchboxes (RCB) in Brisbane, Gladstone, Weipa, Cairns and Darwin, with the trial finalised in early 2016.

PHA, along with AUSVET Animal Health Services and University of Southern Queensland's Dr Cheryl McCarthy successfully completed the incorporation of the remote surveillance box technology into the NBSP and its database.

Due to the useability and the ability to cover more remote areas, there has been progression to further improve these RCB and deploy a further 20 across Australia, starting in June this year.

The NBSPS is now recognised as a world-leading bee pest surveillance program, significantly boosting the ability to detect exotic bee pests such as Varroa mite as soon they arrive in Australia.

The NBSP is a cost shared initiative between the honey bee industry, represented by the Australian Honey Bee Industry Council (AHBIC), pollinator-reliant plant industries, represented by Horticulture Innovation.

This project has been funded by Horticulture Innovation Australia Limited using multiple industry levies and funds from the Australian Government.

The number of sentinel hives across Australia has increased.



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*Supporting Australian
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Biosecurity an ongoing priority for Steve Rathjen

On the day Onions Australia magazine catches up with South Australian onion growers and industry stalwart – Steve Rathjen – over the phone, it’s blowing 110 kilometres an hour outside his farm office.

“They reckon we’ll be flat out reaching eight degrees today and the rain has set in for a day or two,” he laughed.

“So you could say it’s a bit cold here at the moment, but I’d take this sort of weather over drought any day of the week.”

Knowing both of the family properties – 200 kilometres apart in the upper south east of South Australia and on the River Murray – are wet and cold is very warm comfort indeed for the fourth-generation farmer who spent much the 2000s battling drought.

“When the drought hit, then the water restrictions on a river that already had very low water availability were imposed, we opted to lease country further south where underground water was available,” Mr Rathjen said.

“It was a rather harrowing time, but we learnt a lot from it and we’re now in a situation where water restrictions are in place again. But having the second property, which we ended up purchasing six years ago, means the property on the river is effectively drought proofed.”

Trading as ‘Delta Produce’, Steve Rathjen remains the general manager of both farms along with his two sons, Darren and Brendan, as well as being one of the Directors of the onion packing business ‘Rivapak’ based at Mannum.

“My two sons are now keen to progress the business into the future as part of the succession plan,” he said.

“Like me, they both have the belief that there’s no better feeling to grow and market a good quality product, so I know their vision for where the operation goes in to the future very much aligns with mine.”

It’s no surprise that what the Rathjen

family envisages for the future doesn’t just focus on their own backyard.

A founding member of the Onions Australia Industry Advisory Committee, Steve Rathjen has become a driving force for biosecurity awareness in the onion industry.

This December marks 15 years since a small corner of his Murraylands property was detected with onion smut, which requires a 15 year quarantine period from all allium crops.

The noxious disease can devastate crops and lie dormant in the soil for fifteen years.

“To go through something like that is huge,” Mr Rathjen said.

“It absolutely changed everything for us and I would hate to go through it today with the size of our current operation.”

By his own admission, Mr Rathjen said he was faced with the choice of ‘sticking his head in the sand’ or accepting the biosecurity breach and push forward with prevention and awareness.

He was a significant contributor to the creation of the first biosecurity plan for onion growers in Australia.

“For our industry, the last quarantine site will finally be cleared early next year and that will give us one of the very few onion production countries in the world to have area freedom from onion smut, but on an industry front there’s plenty to be vigilant for,” he said.

“There are 12 pests and diseases considered high risk that we don’t have in the onion industry here in Australia yet but we can’t afford to rest easy and hope it stays that way.”

“A lot of other pests come in on other

crops and there are anywhere from 50 plus incursions a year into the country so that’s a considerable number.

“While the measures in place today are incredibly stringent, we need to keep awareness high so everyone through the supply chain knows what to look out for.”

“Onion smut first came in to Australia in the early 1940s and now in 2016 we’re at a point where we’ve nearly eradicated it – there’s a lot of to be proud of.”



L-R- Steve Rathjen (centre) with son Brendan (left), grandson Leroy and son Darren (right)

While the 2010 Reg Miller Award winner doesn't hold as many positions in boardrooms these days, Steve Rathjen is far from retiring his commitment to biosecurity and pushing the boundaries.

"I would love to see the industry go down the integrated pest management path and I'm confident that we have enough forward thinking growers to see that happen sooner rather than later," he said.

"On our own property we've trialed the introduction of beneficial mites to keep pests under control until harvest and have seen some encouraging results for the future."

"It's one measure the industry can utilise while ensuring we've got enough chemicals to allow a proper rotation so growers don't get caught out."

"Overall though we've got a great record as being clean, green producers and that's on show for all to see with the results from the national residue programme. There have been no detections of chemicals above recommended maximum residue levels in onions on a random testing basis, i.e. 100% compliance.

"Our industry should be proud and I can guarantee that some of the overseas countries would be very envious of that track record."

As the wind picks up outside and the rain becomes audible down the phone line, Steve Rathjen gets ready to pick up where he left off before the interview began – there's things to be done in the inclement weather outside.



"It's important that every farmer across every industry learns how important it is to wear two hats," he said in closing.

"One for your own farm, and one for the industry – we've got to be in this together."



Varroa mite control options tested

Onion Project MT12049; A model for industry planning and preparedness for an incursion of Varroa mite. Research Provider: Plant Health Australia; Project Leader: Brad Siebert; Report Author: Stephen Dibley.

Bringing managed honey bee hive movements to a standstill or restricting their movements have been identified as effective tools for limiting the spread of one of the deadliest pests of honey bees, if or when an incursion is detected in Australia.

That's according to a simulation exercise carried out to investigate how prepared Australia is for an incursion of the exotic Varroa mite, particularly *Varroa destructor*, which has devastated honey bee populations elsewhere around the world.

Australia is the only major beekeeping country to remain free from Varroa mite, and Workshop Acari explored the impact of a Varroa mite incursion in Australia on pollination-dependent industries, with the almond industry being used as the example.

The workshop simulated a detection of Varroa mite in sentinel hives at the Port of Melbourne, picked up by the National Bee Pest Surveillance Program.

It examined the resulting response activities and found that while hive movement restrictions would help limit the spread of Varroa mite, this approach could threaten production in a range of crops through the inability to access adequate hives to achieve full pollination.

To manage this risk, the exercise found rapid and transparent decision making regarding the implementation and review of movement restrictions, together with clear communications to affected stakeholders, would be vital.

The exercise also found that Australia's Varroa mite early detection surveillance program is a critical preparedness activity, benefiting the honey bee and pollination dependent industries.

Other key recommendations included broadening surveillance to formally engage growers and bee keepers to significantly increase detection sensitivity without significant increases in required resources.

It also found changes in pollination practices could limit the impact of Varroa mite on honey bees and the ability to achieve satisfactory pollination.

Workshop Acari also recommended that collaborative approaches are implemented across the honey bee, agricultural and horticultural sectors.

Over 65 per cent of the horticultural and agricultural crops produced in Australia are pollination-dependent, relying on commercial European honey bee (*Apis mellifera*) pollination services or the large wild honey bee populations.

This reliance poses a threat to crop production should a serious exotic pest such as Varroa mite, particularly *Varroa destructor*, become established in Australia.

Varroa mites are external parasites that feed on the haemolymph of drone, worker, larvae, pupae and adult bees.

This feeding weakens the bees, shortens their lives, and makes them more susceptible to viruses that otherwise would cause little harm.

Without external management, infested colonies will slowly decline until all honey bees are dead.

Plant Health Australia (PHA) ran Workshop Acari as part of the Honey Bee and Pollination Program, a jointly funded partnership with the Rural Industries Research and Development Corporation (RIRDC), Horticulture Innovation Australia Limited and the Australian Government.

This project has been funded by Horticulture Innovation Australia Limited using multiple industry levies and funds from the Australian Government.



Many horticultural and agricultural crops are reliant on the European honey bee for pollination.

Photo courtesy of Jenny Shanks, PHA

Minor use permits for the Onion Industry

CURRENT PERMITS

Permit No.	Permit Description	Comments	Submit to APVMA	Status
PER13119	Diazinon / Onions / Onion thrips	06-Mar-12	31-Mar-17	AOIA
PER14602 Version 2	Boscalid (Filan), Iprodione (Rovoral Aquaflo & Chlorothalonil (Bravo) / Onion seed & Onions / Neck Rot (<i>Botrytis alli</i>)	24-Jul-14	30-Sep-18	AOIA
PER13698	Phosphorous acid / Lettuce (leaf and hydroponic), Fennel and Bulb (Alliums) Vegetables / Downy Mildew	01-Oct-12	30-Sep-17	Growcom
PER14773 Version 2	Bentazone-sodium (Basagran) /Onions / Broadleaf weeds	16-Apr-14	30-Jun-18	AOIA
PER80282	Alpha-Cypermethrin / Onions / Onion thrips	16-Dec-14	30-Nov-17	AOIA
PER80060	Dimethenamid-P (Frontier-P Herbicide) / Bulb onions / Nut Grass Jurisdiction: For use in WA only	31-Aug-15	31-Jul-18	VGA, WA

DATA GENERATION PROJECTS CURRENTLY UNDERWAY

Permit No.	Permit Description	Contractor	Trial Details	Status
PER14773	Bentazone-sodium (Basagran) /Onions / Broadleaf weeds	Peracto ST15026	Hort Innovation Project contracted May 2016 - ST15026 (AgVet Grant Funded project)	Due for completion 31-Aug-17

All efforts have been made to provide the most current, complete and accurate information on these permits, however we recommend that you confirm the details of these permits at the following APVMA website: <https://portal.apvma.gov.au/permits>

If you require any 'non-performance' information to be provided to the APVMA, please complete their Adverse Experience Report Form. This can be found at: <http://apvma.gov.au/sites/default/files/kp83-f02d.pdf>

** A 'non-performance' is an unintended or unexpected effect on plants, plant products, animals, human beings or the environment, including injury, sensitivity reactions or lack of efficacy associated with the use of an agricultural chemical product(s) when used according to label (or permit) directions.*

Users are advised that while the pesticide can be applied legally under the APVMA minor use permit, there can be a significant delay until the MRL gazetted by the APVMA is adopted in the Australia New Zealand Food Standards Code.

Until this occurs the MRL may not be recognised and a zero tolerance may be imposed for residues of the pesticide resulting from its use according to the APVMA permit.

Please be aware that in the absence of an MRL in the Food Standards Code, the use of the pesticide according to the permit may result in the suspension of the produce in the marketplace. Please check the FSANZ website or the Australian Government ComLaw website: <http://www.comlaw.gov.au/Details/F2014C01358/Download> to confirm if there are MRL established by the Australia New Zealand Food Standards Code.





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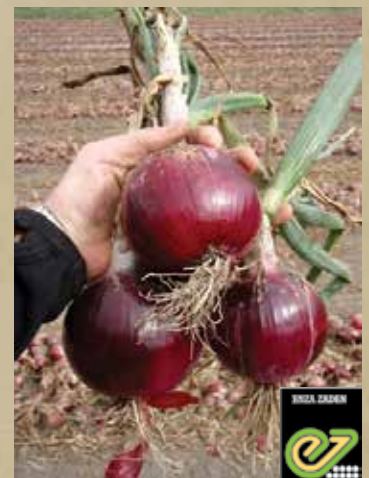
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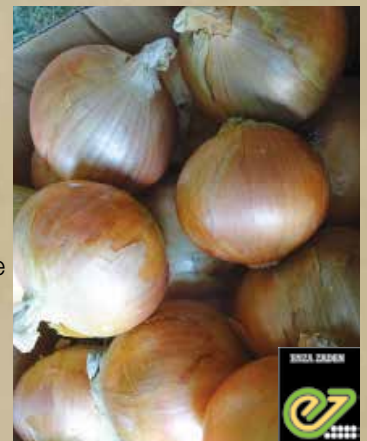
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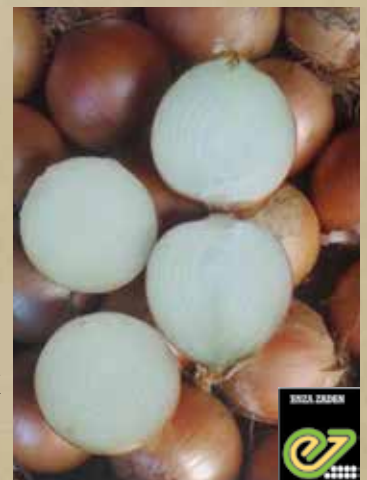
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Soilborne diseases research report

Onion Project VN13003, Michael Rettke, Barbara Hall, South Australian Research and Development Institute, Plant Health and Biosecurity, Waite Building, GPO Box 397, Adelaide SA 5001.

Good crops of onions need healthy roots. Root health can be compromised by a range of pathogens and or growing conditions.

Above ground symptoms of root disease can vary from obvious patches of severely stunted onions (e.g. onion stunt) to widespread less noticeable symptoms that nonetheless reduce size and yield of bulbs (e.g. root lesion nematodes, pink root). This project is focussed on the management of onion stunt, recognised as a major problem within the Australian onion industry.

PREDICTING THE RISK OF ONION STUNT

Rhizoctonia solani AG8 has been identified as the primary cause of onion stunt (see Photo 1). Soil pathogen DNA testing quantifies the level of pathogen inoculum such as *R. solani* AG8 in a soil sample. This level can be used to assess the risk of disease prior to planting, but the value

varies with the pathogen, the crop and the environment.

Evaluation of the test over the past two seasons at 43 paddocks located in the Murray Mallee region of South Australia has demonstrated that the sampling strategy and testing methods developed to measure pre-plant DNA levels in the soil of *R. solani* AG8 provide a useful indication of the risk of onion stunt (shown in Figure 1). In a small number of paddocks the presence of a related species (*R. solani* AG4) contributed to incidence of onion stunt. The estimate of disease risk was better when paddocks were sampled prior to or early in ground preparation and was improved by taking into account the pre-plant population of the root lesion

nematode *Pratylenchus neglectus*. Along with contributing to the risk of onion stunt, this nematode was associated with larger areas of reduced plant growth and yield of brown onions in infested paddocks (shown in Figure 2). This nematode should be included in pre-plant testing for onions. Yield of red onions was more influenced by the disease pink root. A pathogen DNA test has also been developed for *Setophoma terrestris*, cause of pink root. Testing to date has indicated that most paddocks have medium to high levels of inoculum.

Photo 1: Characteristic onion stunt patch caused by *Rhizoctonia solani* AG8



MANAGING THE RISK OF ONION STUNT

Breaking up the *R. solani* AG8 fungal hyphal network in the soil by intensive cultivation and deep ripping is central to managing the risk of onion stunt. Effectiveness of this strategy has been highlighted by monitoring the change in inoculum level prior to planting and during growth of the nurse crop in paddocks where stunting occurred or did not occur. On average, the paddocks included in this testing had a similar *R. solani* AG8 level prior to ground preparation for planting, but stunting did not occur in those where levels were successfully reduced (shown in Figure 3).

Under favourable conditions *R. solani* AG8 can build up rapidly on a nurse crop. Where onion stunt is considered a risk, careful nurse crop management is important, even in paddocks where initial *R. solani* AG8 levels are low or have been reduced. Risk is highest for early sown crops, but onion stunt can still impact later plantings. Other important management strategies include planting onion seed with high viability and good vigour, avoiding deep sowing, and promoting early onion growth by ensuring adequate nutrition and optimising irrigation.

More details are available in the best practice guidelines which are accessible to growers on the Onions Australia website.

This project has been funded by Horticulture Innovation Australia Limited using multiple industry levies and funds from the Australian Government.

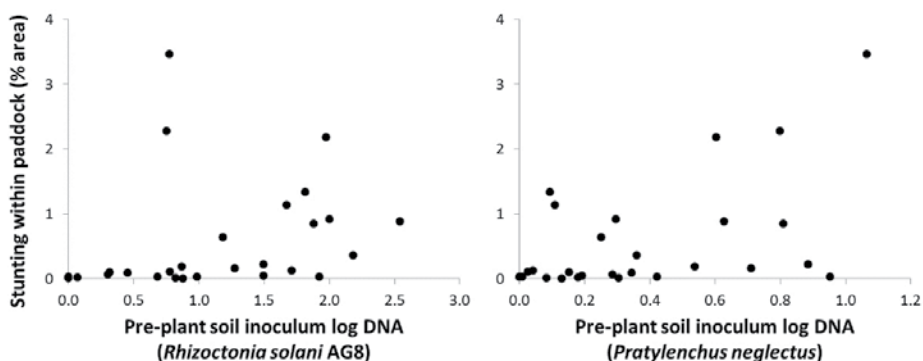


Figure 1: Relationship of pre-plant soil inoculum levels of *Rhizoctonia solani* AG8 and *Pratylenchus neglectus* with the area of stunting that occurred in onion paddocks. Paddocks sampled when fallow or slightly cultivated.

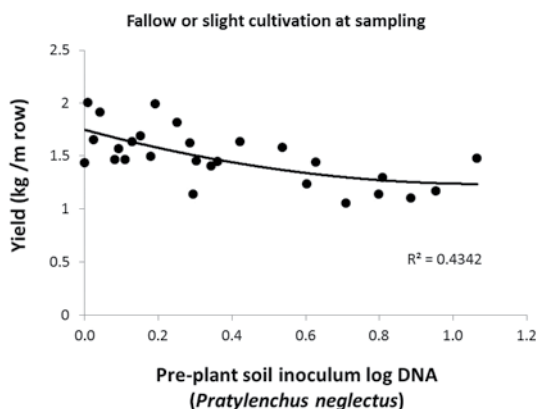


Figure 2: Relationship of pre-plant soil inoculum levels of *Pratylenchus neglectus* sampled when fallow or slightly cultivated with yield of brown onions in 27 paddocks.

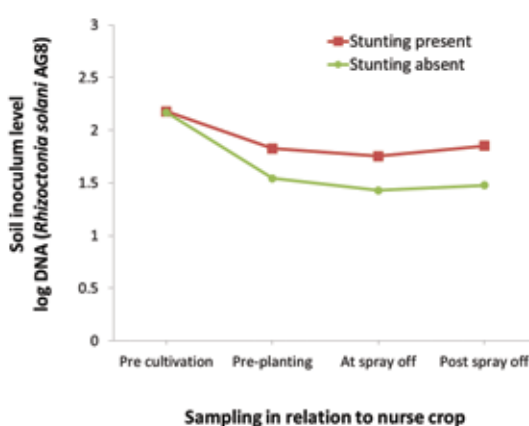


Figure 3: Temporal variation of *Rhizoctonia solani* AG8 levels present in the soil of onion pivots comparing locations where stunting occurred and where stunting was not detected.

Identifying species on onion rust

Onion Project VN13001 Andrew Geering, Terri Weese, Alistair McTaggart, Chanintorn Doungsa-ard and Roger Shivas, The University of Queensland and the Queensland Department of Primary Industry and Fisheries, Ecosciences Precinct, 41 Boggo Road, Dutton Park QLD 4102.

Onion rust was identified by Plant Health Australia as the main biosecurity risk to the A\$180 million Australian onion industry. Epidemics of this disease in Europe and the United States have caused severe losses to *Allium* species including onion.

The rusts on Alliaceae form a species complex with at least nine species reported in the literature as the cause of onion rust. These fungi are listed as extreme risk pathogens for onion in the current Industry Biosecurity Plan. However, it is highly ambiguous which of these rusts are present in Australia and which are pathogenic to onion. This project set out to determine which onion rust species were present in Australia and overseas and provide molecular and morphological tools for their identification.

To achieve the project objectives, a very large collection of onion rusts had to be assembled for study, and it was fortunate that many disease specimens had been preserved in herbaria around Australia, some dating back to the 1970s. To supplement these local specimens, rust specimens from the Netherlands, England, Italy, the Czech Republic, Austria, Germany, Greece, Albania, Montenegro, China, The Philippines, Thailand, Vietnam and the USA were obtained, most often with the assistance of international collaborators (sadly, only a few were personally collected!). This collection of specimens provided a very rich resource for study, and we were confident that much of the world's diversity of onion rusts was represented.

As a consequence of the diversity study, five different genetic lineages of onion rust were identified worldwide, each likely to represent a distinct species. Of those rusts found in Australia, one was restricted to chives and has only been recorded a single time from Australia, in a northern suburb of Sydney in 1971. This rust, called *Puccinia mixta*, may have failed to establish in Australia. The second onion rust lineage in Australia has been present for 50 years, and was represented by isolates from

bunching onion (*A. fistulosum*), shallot (*A. cepa* var. *aggregatum*) and garlic (*A. sativum*), along the entire eastern seaboard. The third onion rust lineage was discovered for the first time on garlic in Adelaide in 2013 but has now spread to Tasmania and Queensland. Interestingly, the only other place in the world where this rust species is known to occur is China. Two onion rust species were found to be exotic to Australia, a leek-infecting type from Europe and a garlic-infecting type from California.

Differentiating the onion rust species using traditional morphological methods is extremely difficult, and there are only likely a few in Australia who could accomplish this task. To overcome this skills deficit, we

have developed a rapid molecular test to distinguish the endemic Australian species from the exotic ones. This test could be done by any of the major plant pathology laboratories, and does not require specific training in mycology. Using this diagnostic assay, we were able to affirm all our previous identifications from Australia, as well as provide a diagnosis of *Puccinia porrii* in California for our collaborators.

The objectives of this project have been accomplished, and the Onion Industry Biosecurity Plan can now be implemented with much greater certainty to safeguard the industry from exotic pathogen threats.

This project has been funded by Horticulture Innovation Australia Limited using multiple industry levies and funds from the Australian Government.



Onion rust on a garlic plant, Adelaide SA



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Review and redesign of the National Bee Pest Surveillance Program

Onion project: MT14057 Dr. Sharyn Taylor - Plant Health Australia

Authors: Peter Caley, Mark Stanaway, Kerrie Mengersen, Mark Goodwin, Simon Barry, Sharyn Taylor, Melanie Bottrill, Jenny Shanks, Alison Saunders

The European honey bee (*Apis mellifera*) plays an important role in pollination of horticultural and agricultural crops, with \$4-6 billion per annum in agricultural production estimated to be responsive to honey bee pollination (Department of Agriculture, 2011 and Keogh *et al.* 2010).

Australia's honey bee industry and pollination reliant industries maintain a production advantage over many other countries, as Australia is currently free of many bee pests and pest bees that cause significant issues overseas. As a result, exotic bee pests and pest bees pose a serious biosecurity risk, and the Honey Bee Industry Biosecurity Plan (2013) (Plant Health Australia Ltd., 2013) has identified 14 pests and diseases that have been ranked as the highest priority biosecurity threats. Of these 14 pests, Varroa mites (*Varroa destructor* and *Varroa jacobsoni*) are considered the most significant, (particularly *Varroa destructor*) and it is predicted an incursion could cost as much as \$1.3 billion to manage over a period of 30 years (ABARES 2012; Hafi *et al.* 2012; Cook *et al.* 2007).

A key component of biosecurity preparedness for the honey bee and pollinator-reliant industries is surveillance that contributes to early detection of high priority pest threats, as rapid detection of an incursion of a new pest will increase the likelihood that eradication or containment will be successful. The honey bee and pollinator-reliant industries and the regional economies they support will therefore benefit significantly from continuing their investment in a National Bee Pest Surveillance Program (NBPSP), that enables early detection of high priority pests.

The current NBPSP has been a leading example of a successful industry/government partnership that has benefited from a nationwide approach to surveillance. Prior to a new investment in this activity, it has been timely to review the program and to ensure resources are being utilised effectively and efficiently

to maximise outcomes for early detection of pests and maintain bee health and pollination services in Australia. Based on the review undertaken in this project and consideration of what an optimal design would look like, a redesign of the NBPSP has been proposed and costed. The work undertaken in this project also provided an opportunity to enhance our statistical understanding of surveillance methods to determine if further improvements could be made in the design and operation of the NBPSP.

Within this project, there was strong emphasis on reviewing the sentinel hive component of the NBPSP, due to its significant central role for the detection of high priority mites that also vector viruses of serious concern. The sentinel hive component can be used in conjunction with other surveillance activities such as sugar shake, alcohol washing and drone uncapping, which are highly sensitive for detecting mites such as Varroa. As the sentinel hive component is a core component of surveillance and is also one of the most costly components of the NBPSP, it was vital to establish whether the current hive arrangements were adequate for the intended detection capabilities, and were operating at the most efficient and effective arrangement.

To achieve this, a Varroa Spread Model was developed to evaluate the optimal surveillance design associated with the sentinel hive component operating at Australian ports. The model estimated broadly that the optimal arrangement of sentinel hives for detection of Varroa mites at high risk ports, is an array of six hives at 2km spacings, inspected and checked every six weeks. This is largely consistent with the current resourcing of the NBPSP.

Further refinement of the Varroa Spread Model was used to identify surveillance components that would be required to achieve the highest likelihood of detection within infested areas of 100km², 150km² and 200km². Results indicated that an inclusion of four sentinel hives at 2km spacings, inspected every six weeks, deployed at lower risk rated ports (along with the optimal six hives at high and medium risk ports) would confer an overall increase in the confidence of detection from the sentinel hive program to 72 per cent.

In addition to the sentinel hive component, this project also assessed other key surveillance components that make up the NBPSP. These other surveillance activities are critical and sensitive to the high priority pest (including pest bees and viruses) that can be detected. It was observed that despite a lack of analytical information to statistically place a figure on the additional surveillance activities, it is known that these along with an optimal sentinel hive arrangement creates a strong and sustained program that cover surveillance for the 14 high priority pests and diseases of bees.

Through review of the NBPSP, it was noted that a significant increase in resources is required simply to maintain the existing program (Table 1). As the existing program has expanded past that originally contracted, the costings currently do not reflect the activities undertaken, thus an analysis of the input and costs was needed. This analysis was used as the basis for understanding the differences in cost vs. activities across contracted, as well as current activities and further proposed options.

To redesign and scope the NBPSP, the sentinel hive analysis indicated by the Varroa Spread Model described a minimum of four hives for lower risk sites and an optimum of six hives for higher risk sites. This arrangement was used to appropriately cost three proposed programs, along with additional surveillance activities, to develop a strong and nationally appropriate revised NBPSP for the future. The source of difference between the three proposed options are in the number of ports and numbers of sentinel hives. The additional surveillance activities are either maintained, increased or enhanced (such as inclusion of surveillance for the high priority biosecurity threats Asian honey bees, Asian hornets and exotic

viruses). These data suggest an array of sentinel hives across high, medium, low and unknown (unanalysed) ports will be supported appropriately annually, and additional surveillance will be included as key components for detection of many exotic pests. The proposed programs summarised in Table 1 also provide estimated costing related to initial one-off costs for investigations into new surveillance enhancements, as these are vital for the success of the proposed NBPSP and the early detection of exotic pests.

The costs of the proposed program are then further extrapolated to 30 years to express the investment in the NBPSP in terms of the cost of managing for a pest (such as Varroa) for the same time period (Table 2).

Given the complex nature of activities, funding streams and the need for coordinated data collection and capture and efficiencies to be gained in undertaking some functions at a national level, ongoing facilitation and maintenance of the program must be incorporated into the future program. The NBPSP has been a leading example of an industry government partnership and through this review and redesign project, it is considered that the program could be significantly enhanced by implementing the recommendations of this report.

This project has been funded by Horticulture Innovation Australia Limited using multiple industry levies and funds from the Australian Government.

Permit No.	'Actual' cost of current contracted program	Currently contracted + non-contracted program	Proposal #1 All ports with 6 hives/ port	Proposal #2 All medium and high risk ports with 6 hives/ port	Proposal #3 All high and medium ports 6 with 6 hives/ port and 4 hives/port at low and unknown risk port
Sentinel hive arrangement	\$284,000	\$377,500	\$525,000	\$300,000	\$450,000
Additional surveillance activities	\$254,500	\$254,500	\$254,500	\$254,500	\$254,500
Surveillance enhancements	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000
Annual cost	\$566,500	\$660,000	\$807,500	\$582,500	\$732,500
Total costs over a five-year period (incl. one off enhancements at \$185,000)	\$3,017,500	\$3,485,000	\$4,222,500	\$3,097,500	\$3,847,500

Table 1. Summary of annual costings comparing the 'actual' cost of the current contracted program, the activities currently contracted and non-contracted, and three proposed options. The table is split into costs annually for sentinel hives, additional surveillance activities, and the surveillance enhancements for the future. Total annual costs for these separate programs is provided, as well as the total annual costs for the term of a 5-year program including a one off cost for investigations in establishment of new surveillance enhancements (\$185,000).

Permit No.	'Actual' cost of current contracted program	Currently contracted + non-contracted program	Proposal #1 All ports with 6 hives/ port	Proposal #2 All medium and high risk ports with 6 hives/ port	Proposal #3 All high and medium ports 6 with 6 hives/ port and 4 hives/port at low and unknown risk port
Total costs for the NBPSP over a 30-year period (incl. one off enhancements at \$185,000)	\$17,013,500	\$19,985,000	\$24,410,000	\$17,660,000	\$22,160,000
Cost of Investment in an NBPSP for 30 years expressed as a % of the cost of managing for a pest for the same period (\$1.3 billion)	1.3%	1.5%	1.9%	1.4%	1.7%

Table 2. Investment in the NBPSP for 30 years expressed in terms of the cost of managing for a pest (such as Varroa) for the same period.

Just Onions

After a lifetime on the front line of the fruit and vegetable industry, Alan Thierry today spends more time working on his business, rather than in it.

It's the hallmark of a successful businessman enjoying semi-retirement, but it only takes a minute in Alan's presence to know that this onion industry packing star is a long way from stepping back from the game altogether.

Elected to the Onions Australia Executive Committee in October last year, Alan Thierry is an enthusiastic advocate to the industry.

"You could say that the fruit and vegetable game is absolutely in my blood," he said.

"My Dad came to Australia in 1955 and went in to door to door retailing of fruit and veg, and then wholesaling and packing."

"I strayed from the family business for a small amount of time but in 1985 I went in to packing for myself."

What would become a major Australian packing business started off as a friendly question from a neighbouring retail buyer in the Melbourne Wholesale Market.

"I'd gone in to packing and had a gentleman ask if I could do some onion packing for him," Alan said.

"I started off packing one kilogram sacks of onions and I was doing about a tonne a week, supplying direct to retailers, all from my garage."

Within a few short months an enterprising Alan was serving the trade on the floor of the fruit and vegetable markets in Melbourne.

And after just five years in the game, he was packing 20 tonnes of onions a week and had well and truly outgrown his garage.

"In 1990 I decided it was time to rent some space so I moved my business, 'Just Onions', in to the family business space

at Geelong Citrus Packers but we quickly outgrew that space too," he said.

In 1997 "Just Onions" moved to a purpose built packing facility in Geelong.

"We've expanded twice since then and another expansion is being planned."

Alan puts the success of Just Onions down to great relationships with growers, clients and staff.

"Without great relationships you don't have a business," he said.

With 300 tonnes of onions being packed and branded each week out of the "Just Onions" facility, as well as their warehouse in the new Epping Market, the company is well-placed to make the most of industry's new marketing campaign, 'The Secret Serve'.

"Just Onions has always been committed to creating customer focused packaging and 'The Secret Serve' logo is due to be added to our consumer packaging in the coming months," Alan said.

"Presentation and brand recognition can't end at the super market shelf, we want to make sure our branding and message gets all the way home and in to the kitchen," he said.

"Utilising 'The Secret Serve' artwork is the first step, and we're also considering adding menus to the package."

"On a two kilo bag of onions there's a lot of useable packaging so we're keen to explore what options we might have."

Alan said the idea of value adding is incredibly important in order to continue to grow onion consumption in Australia.

"It's a fact that everyone buys onions but the younger generation, little kids, turn their noses up at the idea of onions," he said.



"With this campaign we can encourage families to include the 'secret serve' of onions in their cooking and also educate them on the health benefits as well."

Alan said the time to embrace new marketing strategies had come, in an effort to ensure that Australian produce is at the front and centre of local consumer's minds.

"Australia's onion industry has a great clean and green reputation and we must continue to spread that message to encourage consumers to buy local, over imported onions that have the potential to destroy our disease and pest advantage," he said.

"It's not uncommon to see products from overseas alongside Australian produce, particularly if the imported produce is cheaper than our locally produced product."

"We have to get creative and stay one step ahead to maintain our local industry."

Alan said it was encouraging to see Coles and Woolworths make commitments to only stocking Australian grown onions on their shelves.

"As an industry we applaud and encourage this type of commitment," he said.

"The Australian onion industry is nothing if not ingenious, so I have no doubt that we'll incorporate new technology and marketing methods to value-add to our product and maintain our viability."

"Change isn't everyone's cup of tea, but just like modern technology, you've got to keep up with it to continue to give your business an edge."

Horticulture Innovation Update

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Earlier this year the onion Strategic Investment Advisory Panel (SIAP) was announced.

In general terms, the role of a SIAP is:

- To provide strategic investment advice to Hort Innovation in its investment of industry levies and Australian Government funds in research, development and extension (and marketing).
- To oversee the industry's strategic investment plan and be guided by the strategic investment priorities identified within the plan.
- To work with Hort Innovation to identify and prioritise R&D and marketing opportunities and issues affecting the industry.

Members were appointed based on a range of skills, experience and industry knowledge. Members appointed were:

- Peter Shadbolt
- Dr Richard Jones
- Julian Shaw



Bradley Mills

- Tony Higgs
- Yvonne Smith
- Kees Versteeg
- Steve Rathjen

The SIAP met for the first time in April 2016 to review the existing Strategic Investment Plan and to begin to develop the industry's research and marketing investment priorities for the next five years.

The panel discussed other key agenda items, including:

1. Minor use permits priorities - Some minor use data generation work was to be contracted for Bentazone-sodium minor use permits. Also, the top 5 priorities for pest & disease management were discussed where there is a current / likely future gap in chemicals available for control. These priorities were to be utilized in an Agvet Forum looking at ways to overcome chemical resistance in agriculture.
2. A presentation giving an overview of insights, recommendations and next steps required to develop the 2016-17 onion Marketing Program was provided to the advisory panel.
3. Onion industry biosecurity plan update, including the development of a biosecurity manual and a biosecurity awareness program.

This work will be continued when the panel meets again in late 2016.

A process to review the Onion Industry Strategic Investment Plan is to occur during August – October 2016. Growers and other industry participants will be given the opportunity to have their say through a range of workshops, online surveys and face to face meetings to be conducted around the country. An

experienced strategic planning consultant, McKinna et al Pty Ltd will be involved to facilitate this process.

McKinna et al is a specialist strategic planning consultancy with over 30 years of advisory experience in the global agrifood arena. The consultancy has delivered projects across virtually every agrifood sector from commodities to Australia's leading brands, spanning 'paddock to plate'. The company principals Catherine Wall and David McKinna both have 'hands on' experience in commercial agrifood businesses as well as advising government, industry and most of the major food companies in Australia in areas such as market analysis, supply chain analysis, export market development, industry development, marketing strategy and strategic planning.

Company Principal David McKinna says their experience stands them in good stead to deliver a comprehensive plan for the onion industry.

"Our strategic planning method has been honed over many years - it is simple but highly effective. It's a top down approach, where we engage with industry to identify the most critical burning issues impacting their businesses, then collaborate to build a strategic response around that," said Dr McKinna.

You can contact McKinna to discuss the strategic investment plan contact via the email address strategicinsights@mckinna.com.au



New hybrids tackle disease

Australian onion growers face many similar challenges to their fellow growers throughout the world, but by far their costliest shared problems are crop diseases.

Unlike many other vegetable crops, onions are susceptible to many of the same diseases, regardless of their location across the globe.

To help Australian growers identify the most prevalent diseases, Onions Australia in collaboration with Seminis, have developed a handy packing shed poster enclosed with this edition of the magazine.

World-renowned onion expert and Seminis Onion Breeding Lead, Dr Rick Jones, spearheads a team developing hybrids to help growers tackle some of their most significant disease threats including Pink root.

“We have several new hybrids we are introducing into Australia that we have commercialised this past year and some that will be commercialised in 2017 as well,” Dr Jones said

“Our intention is to only release new hybrids that have Pink root resistance going forward.

“We’ve been working for over two decades to build resistance into parental lines and we’re very excited about these new hybrids which will provide real advantages to growers.”

The new hybrids that will be released in Australia that are all resistant to Pink root include:

- Akamaru - Short Day Brown, autumn planting in Queensland
- Ayoba - First early Mid Day Brown, late autumn planting in South Australia
- Ranguru - Mid Day Brown, winter planting in Victoria, South Australia and Western Australia
- Shrike - Mid Day Brown, winter planting in South Australia and Western Australia

- SV7030NS - Short Day Red, autumn/winter planting in Queensland and South Australia

Dr Jones said with root diseases such as Pink root and Fusarium Basal Rot more difficult to control than foliar diseases, genetics played an important role in helping to combat them.

Besides planting resistant varieties, Dr Jones said the primary control method for the two diseases is good crop rotation.

“We recommend two onion crops every five years on the same ground, no more frequently than that,” Dr Jones said.

“These diseases gradually build up in the soil over many years and they reduce yield.”

Dr Rick Jones



Dr Jones said for most of the diseases featured on the enclosed reference poster, good on-farm sanitation including destroying onion cull and debris piles was an important component in prevention.

"As growers grow and pack onions, you inevitably end up with cull onions that can't be sold. We recommend good practices, such as taking them away from the production area or burying them to eliminate them as a source of contamination for crops," Dr Jones said.

"Most of the foliar diseases such as blights, Purple Blotch, and Downy Mildew, there are some pretty effective new chemistries available now that will control most of those diseases. We recommend good growing practices, good on-farm sanitation, crop rotations, and using new generation fungicides to control them."

At the other end of the spectrum, Dr Jones said White Rot was a significant disease that could be devastating some years and non-existent in others.

"There are some very costly control measures you can use to manage White Rot but once you have it in your soil it's impossible to eliminate," Dr Jones said.

"The normal way it spreads around the globe is through planting garlic - we often see it in areas that have grown garlic.

"Really, the best control measure is quarantine and to not grow onions or garlic in fields where it's present."

If growers face issues with Damping-Off, Dr Jones recommended planting high germinating seed.

"The Damping-Off fungi are seed and seedling diseases, so if growers use high vigour seed they can get plants up and growing well beyond the window of susceptibility," Dr Jones said.

"Using fungicide-treated seed and good on-farm sanitation practices will also help.

"The other diseases growers should be alert for are the postharvest bulb rots: Botrytis Neck Rot, Black Mould and Bacterial Soft Rot.

"Botrytis Neck Rot is caused by improper curing of bulbs at harvest time. Crop rotation is important, but really, proper harvest practices work the best. Harvest when the top fall is 90 to 100 per cent and ensure good storage conditions for bulbs, comprising cool temperatures and moderate humidity.

"Black Mould is also a storage disorder, but with good crop rotation, good on-farm sanitation and good curing it's not really a problem.

"Crop rotation will help control Bacterial Soft Rot, which is typically caused by plants growing in wet weather just before the end of the crop cycle. However, Bacterial Soft Rot is not a generally a major problem for growers who use good practices."

For more information contact Seminis:
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Development of an onion white rot forecast model for Tasmania

Project VN14001 Development of an onion white rot forecast model for Tasmania, Associate Professor Calum Wilson and Dr Suzie Jones, Tasmanian Institute of Agriculture

Onion white rot (OWR), caused by *Sclerotium cepivorum*, is a widespread and destructive fungal disease of commercial onion crops and was identified as a high priority disease in the onion industry Strategic Agrichemical Review Process (SARP)

Fungicides provide the foundation for currently available integrated strategies for management of OWR in Tasmania. Hence optimisation of control with fungicides is a valuable short term strategy for the Tasmanian industry. The mode of action of currently available fungicides is to temporarily inhibit mycelial growth in the soil. This effect is likely to slow down the rate of initial infection from sclerotia and/or slow down root to root spread, but only while the concentration of

fungicide is high enough. Obtaining and maintaining a threshold concentration of fungicide in the relevant soil profile may be a key component of effective disease management. Identification of target depths of soil where the disease is active at different times of the season, and for different planting times, needs to be determined to guide the timing of fungicide applications. Additionally, knowledge of relationships between crop growth stage and environmental

conditions that promote disease onset are required to guide disease management strategies.

This project aims to develop an OWR forecast model based on growing conditions in Tasmania and to improve the level and consistency of fungicide control through identification of conditions that precede high risk infection periods. The project will run for three years and is funded by Horticulture Innovation Australia Limited using the onion industry levy and funds from the Australian Government. Development of the model will take into account key parameters that influence OWR development: time of planting, soil temperature, soil moisture, root biomass at various soil depths (linked to crop growth stage and relevant to potential root-to-root spread of infection) and depth of infection. To account for potential differences in disease development at different planting times data will be collected for three representative planting windows - May, July and September. Separate forecast models will be developed for each of the three planting periods. The OWR forecast models will be delivered as a standalone fact sheet detailing the combinations of soil temperature, soil moisture and crop growth stage, for each planting window, that signal the start of infection periods.

Pilot studies were done in the 2015/16 season to test and develop the research methodologies. The disease forecast model will be based on data collected from commercial field crops and in-situ planter bag trials conducted in the 2016/17 and 2017/18 seasons. Planter bag trials will be conducted at the TIA Vegetable Research Facility, Forth Tasmania to measure root growth, timing of infection and effect of inoculum soil. Root growth



will be assessed in commercial crops and the development stage of the crop will also be monitored for all trials.

Environmental data is also required for development of the forecast model and will be collected at all trial sites. Soil temperature and soil moisture will be monitored at various depths in the onion root zone and air temperature and relative humidity data will be collected. Agronomic inputs for the planter bag trials will mirror those used in the commercial field trials and the onion cultivars will be consistent across field and bag trials. Data from the fields will be used to calibrate planter bag data.

People with substantial experience in onion production and research in Tasmania are involved in this project. Dr Jason Dennis initiated the project and has over 20 years' experience in commercial onion production, research and development. The project leader, Dr Calum Wilson, supervised a PhD project (Dean Metcalf 1998) on biological control of onion white rot and has extensive experience in plant pathology research. Tim Groom (Managing Director of Wynyon Pty Ltd) and Julian



Shaw (Managing Director of Agronico Pty Ltd) are assisting with selection of, and access to, commercial field sites and agronomic input requirements for the planter bag trials.

The information gained in this project will assist growers and industry stakeholders to optimise the timing of fungicide applications. Improved knowledge of when to apply fungicides will be useful

for future research into new potential fungicides and chemical application options. The information will also provide a basis to further develop integrated management strategies.

This project has been funded by Horticulture Innovation Australia Limited using multiple industry levies and funds from the Australian Government.

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Fontelis® Fungicide program vital for quality onions

A program that includes the DuPont™ Fontelis® fungicide has been an important factor in producing high quality onions on the Rathjen properties at Caloote, near Murray Bridge and between Keith and Bordertown in South Australia.

Steve Rathjen said Australian markets were very focussed on premium quality, good looking bulbs and they aimed their spray program at achieving those results.

“Quality is our top focus,” he said. “It doesn’t always happen with weather but we aim to grow quality on every acre we plant.”

In recent years Fontelis® fungicide has been used on the farm and has helped achieve their quality goals and is also another chemistry that can be rotated through the program.

“Fontelis® is a valuable part of our program,” Mr Rathjen said. “We are great believers in rotating chemicals and preventing resistance. I think if you keep using the same chemical it might work well but you’ll find after a couple of years you’re

not getting the results. So we strongly believe in rotating chemicals and chemical groups. Fontelis® is an integral part of our management, last year and this year. We are more than happy with the results from Fontelis® at this stage.”

He said diseases such as mildews, botrytis and slippery skins could occur in onions and they also had issues with bulb diseases that often weren’t picked up until harvest.

“You need to have a pretty good program in place to cover that,” he said. “We operate on the prevention rather than cure.”

Mr Rathjen said the use of Fontelis® had helped them produce quality onions that could be sold straight away or stored for months if necessary.

“If you don’t put quality in the bin when you are harvesting, you are not going to pack it for a long period.”

He said they were packing onions that had been harvested nine months prior and the quality was still very good.

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Brendan (L) and Steve Rathjen (R) use Fontelis® fungicide to achieve high quality onions on their South Australian properties.

State Round Ups - 2015/16 Season

South Australia

Greg Bragg

It seems like every time I write about the South Australia roundup for our magazine I always seem to be talking about "What a difficult year" either depressed prices or a difficult growing year or both!

Well this year it was only one of the two and thankfully not the low return to growers that has been experienced the last two years. However, what was challenging was the extreme heat we experienced in South Australia through the growing season, particularly throughout December, in fact we recorded the hottest heat wave on record for December with 7 days 40 degrees or higher, and on top of that we had 6 days in excess of 35 degrees.

By January everyone was over the heat, but there was no respite with the high temps with the 1st week of January recording 2 days above 40 with the hottest reaching 44 and 2 days in the high 30s before we had a welcoming cool change. Keep in mind too these weather statistics are Adelaide temperatures, and out in the growing regions it was far hotter.

Obviously these extremes in temperature took their toll on the early to mid-season crops with a lot of reported pink root issues which reduced yield and quality, and then with the constant watering some soft rot showed up in the paddock and in bins which this was unavoidable- it seemed you were damned if you did, and damned if you didn't.

Prices are starting to firm a little as most growers have moved through their ambient stored onions, and some sheds have just started on cool room stored onions.

Early sowings have been underway since mid-May, what plantings I have seen to date looked to have germinated well, however emergence has been very slow due to the very cold winter we have been experiencing.

In most growing areas we have had very good rain, but very little sunshine and it seems like almost every week at the moment we are experiencing extreme weather events. July has been the windiest for 30 years, however I don't think there has been too much damage to the early onions, as there has been rain with the wind. All we need now is some sun and warmth, and hopefully spring brings us both!

New South Wales

Lucy Gurciullo

There was an average start to the 2015/2016 season with good rains. Most onions were planted in May/June with later sowing up to the end of August.

Early crops grew well with a mild to hot spring. There was no report of problems in crops this year with good size in most of the crops and growers saying their onions were storing well.

Prices once again were a letdown expressly in the Reds, they were very hard to move due to the imported Reds. The area sown for 2016/2017 will be about 750 hectares which is up from last year, signalling that a few growers are getting back into growing onions. It has been a good start to the season with good rains and fairly mild weather. Hopefully this season will bring better prices than last year.

Tasmania

Andrew Doran

Plantings for the 2015/16 onion season were 10% down on the previous season.

Demand for Australian-Tasmanian buying local onions continues to be strong, with onion quality good for most of the earlier crops grown. The hot and dry summer (for Tasmanian conditions) has definitely affected the yield and quality of some of the later onion crops.

Early onions drilled in late April and in May were planted in good conditions, with regular rainfalls to get good, even germination for the growing season.

Sowings in June/July which can be two of our wettest months, were also favourable, with most of the season's plantings all in by mid to late September.

In terms of growing conditions for the season, quality and yield of the early onions was good while later regular crops suffered more because of the dryer weather.

Tasmanian conditions were incredibly dry, with record dry months for November and December.

January would have been a record dry month if not for the 7 inches of rain later in the month which ended up being a record wettest month in some parts of the north west coast of Tasmania! This meant that some September crops didn't have any rain on them until the end of January dump.

Lifting of early crops started between Christmas and the new year with harvesting starting in the middle of January. Harvesting at the end of January was stalled due to the rain and lifting was also stalled, ending up being 7-10 days later than expected.

In terms of disease and insect pressure, there was a minimal amount of white root rot in crops this season, and mildew conditions were low due to the dry warm summer. Insect pressure was minimal this season.

Continued...

State Round Ups- 2015/16 Season

Queensland

Michael Sippel

The 2015 season has wrapped up and the new season's crop is well and truly in the ground.

The bulk of the plantings began in late April and continued through the month of May without any interruption. The month of June has been more difficult to complete with late sowings interrupted by rainfall events. Some suggestions are that the local crop is slightly down in area on previous years' plantings. This is due to an extremely dry summer period forcing growers to rethink best use of available water and less speculation on the open market.

With a very good start to our brassica and leafy vegetable season, many growers' decisions to put available water back into these crops has paid dividends. Last season saw very strong demand for our early red onions as brown onion sales were impacted by carry over from Southern production. The national campaign by Onions Australia to bring attention to our green grocers on sourcing locally produced onions contributed to the good start to our season.

High yields and good quality until Christmas was met by good demand by the supermarket chains. Adversely, onions sent to the central market system were met with poorer returns and has contributed to a dropout of some growers returning this season. Post-Christmas, patchy falls of rain and hail contributed to a downgrade in quality with some crops chosen not to be harvested.

A month ago there were some concerns that the persistent hot conditions would lead to premature bulbing of crops and possible bolting at season's end. Whilst the weather has now turned cold, it is uncertain what impact the early heat may do in the latter stages of the crops. At present, all crops now have a full profile of soil moisture and will require very little water until bulb initiation in September.

Victoria

Peter Shadbolt, Frank Powell

In northern Victoria, planting has been very similar to last year and the crops are going well.

In southern Victoria, it is estimated that around 2000 tonnes of brown onions are still being held in storage, but it hasn't been a good year for storage with some breakdown occurring and quality impacted by weeds.

There has been some success in exporting onions from southern Victoria into Asia this year and plantings are similar to last year.



Business directory

The below listed members are paying members and have opted on their membership form to be listed in our OA magazine. If any of the above member details have changed and/or are incorrect, please advise OA. If you are a paying member and would like to be included in above, please advise OA.

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Mobile 0417 104 747

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Urbrae SA 5064
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Mobile 0429 694 459

Grower/Packer

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bowhprod@bigpond.com
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Fax 08 8570 4188
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Ciampa Produce

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ciampaproduce@bigpond.com
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Favara Farming Pty Ltd

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Jerilderie NSW 2716
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Mobile 0427 137 684

Sumich

www.sumich.com
Phone 08 9440 7000

Harvest Moon

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www.harvestmoon.com.au
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Phone 03 6428 2505
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Just Onions Pty Ltd

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Mobile 0417 938 819

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Murphy Farms

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Paleso Enterprises Pty Ltd

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Phone 02 6968 5239
Fax 02 6968 5250
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Qualipac Produce Pty Ltd

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Phone 07 5466 5441
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Scotties Point Farms Pty Ltd

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Willow Produce

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Machinery

Dobmac Agricultural Machinery

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Fax 03 9687 1277
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- 12 and 16-bucket design
- Optional supply via belts instead of vibrating pipe troughs
- Simultaneous filling, weighing and unloading of different weigh bins

Symmetrical Set-up

- Symmetrical product supply to all weigh bins
- Product supply from every corner is possible
- Simultaneous product supply for fast weighing and unloading

Cleaning and Maintenance

- All technical parts (vibrating troughs and weigh bins) are easily accessible
- Weigh bins can be detached and switched quickly
- Hinges in the weigh bins have closed ball bearings

Integration

- Robust industrial control system
- Ethernet/Internet communication for operating, servicing, logging information and sharing information with other machines in the line
- Seamless integration of labelling and tagging



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BAXMATIC® - Fully automated packing



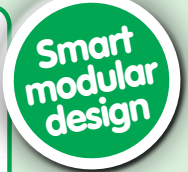
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- Large capacity
- Quick start-up and changes
- High reliability
- Great variety of high-quality bags
- Professional labels
- Straightforward operation
- Track & trace
- Link to order system
- Online support

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VERBRUGGEN palletizing solutions



Verbruggen
Palletizing Solutions

- Customised palletizing solutions
- Semi auto and automatic machines
- Crates, Cartons
- Paper, Jute, Net
- Integrated wrapping
- User friendly touch screen controls
- Online remote support
- Local knowledge and support

Jute or Net bags



Verbruggen palletizers are distinguished by their **solid and practical design**. From simple semi-automatic models to suit smaller operations, optionally expandable to fully automatic installation models to suit the medium and larger sized packaging companies where flexibility is desired. All groups of machines are **widely applicable due to their modular design**.

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