# **Salinity and other regional product issues consolidated resource list**

The following list has been developed by AUSVEG SA with support from Hort Innovation and the VegNET SA program to support SA growers to access resources available to assist in their businesses.

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# **Soil Health Resources**

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| **Title** | **Description** | **Expert contact** | **Link** |
| **Managing salinity in vegetable crops** | Salinity issues can appear in all major vegetable production areas; they can come and go depending on weather and changes in water quality. It can occur naturally or as a result of management practices.  | Julie Finnigan jfinnigan@serve-ag.com.au 0408 270 068 | <https://www.soilwealth.com.au/resources/webinar-recordings/managing-salinity-in-vegetable-crops/> |
| **Soil mapping in vegetables using EM38** | This fact sheet looks at soil mapping in vegetables using EM38. EM38 refers to electromagnetic soil mapping. EM38 data is used to generate a spatial layer that provides information about soil variability within a field. This resource was developed as part of the Hort Innovation Vegetable Fund project Adoption of precision systems technology in vegetable production (VG16009). | Julie O’HalloranT 07 5346 9528 Senior Development Horticulturist of The Queensland Department of Agriculture and Fisheries | <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/fact-sheet-soil-mapping-in-vegetables-using-EM38/> |
| **The basics of cover cropping with Dr Kelvin Montagu** | Get inspired by this podcast with Dr Kelvin Montagu who gives a good overview on cover cropping, the key benefits for using it on your farm – for your wallet and for your soil health – as well as some handy tips and methods for doing it successfully. | Dr Kelvin Montagu0421 138 019(02) 4754 3856 | <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/the-basics-of-cover-cropping-with-dr-kelvin-montagu2/> |
| **Improving processing vegetable yields through improved production practices (VG16011)** | The following information is intended to highlight the key principles for maximising crop uniformity | University of Tasmania and Applied Horticulture ResearchLinda Drake +61 2 8627 1040 | <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/irrigation-management-in-sweet-corn/> |
| **Nitrous oxide emissions from vegetable soils** | Nitrogen is a key input into vegetable production. This fact sheet details how applying high levels of nitrogen, either as fertiliser, compost or amendments is necessary to achieve high yields. | Gordon Rogers (02) 9527 0826 or gordon@ahr.com.au | <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/fact-sheet-nitrous-oxide-emissions-from-vegetable-soils/> |
| **Integrating sustainable soil health practices into a commercial vegetable farming operation (VG12115)** | Conventional cultivation methods including pre-plant ripping and rotary hoeing can be expensive and damaging to soils. Over time they result in a decline in organic matter levels, poorer physical structure and reduced microbial activity that can allow a build-up of soil-borne diseases, ultimately reducing yields. | Gordon Rogers (02) 9527 0826 or gordon@ahr.com.au | <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/vg12115/> |
| **Soil wealth and integrated crop protection – phase 2 (VG16078)** | This investment continues to provide vegetable producers with the latest information in soil and pest related areas, in formats that are readily accessible and easy to use, through www.soilwealth.com.au, workshops, webinars and other resources. | Gordon Rogers (02) 9527 0826 or gordon@ahr.com.au | <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/vg16078/> |
| **Soil health and sustainable land management** | We have led development of state level soils strategies, as well as regional and local strategies. We have worked closely with communities and farmers to create local action plans for protecting and improving soil health. | Dr Doris Blaesing dorisb@rmcg.com.au 0438 546 487 | <https://www.rmcg.com.au/service/soil-health-and-sustainable-agricultural-practices/> |

# **Irrigation Management**

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| **Title** | **Description** | **Expert contact** | **Link** |
| **Understanding Irrigation Decisions: from enterprise planning to the paddock** | Understanding Irrigation Decisions has been written to put in content and provide guidance on irrigation decisions ranging from enterprise planning to the paddock. To understand the breadth of irrigation decisions requires consideration of the social, financial, agronomic and engineering aspects – a challenging task. Understanding Irrigation Decisions has combined this breadth into one document. | Dr Kelvin Montagu0421 138 019(02) 4754 3855 | <https://www.soilwealth.com.au/resources/articles-and-publications/understanding-irrigation-decisions-from-enterprise-planning-to-the-paddock/> |
| **Irrigation monitoring in potatoes Part 1: Practical use of IrriSAT and soil moisture sensors** | The 1,000 ha farm is located at Billimari near Cowra, NSW, on loam and sandy loam soils. It has been producing processing potatoes (var. Snowden) for the past nine years and the grower was interested in trying some new tools to manage his irrigation. | Gordon Rogers (02) 9527 0826 or gordon@ahr.com.auPieter Van Nieuwenhuyse0433 889 244  | <https://www.soilwealth.com.au/resources/case-studies/irrigation-monitoring-in-potatoes-part-1-practical-use-of-irrisat-and-soil-moisture-sensors/> |
| **Irrigation monitoring in potatoes Part 2: Practical use of satellite information** | his case study looked at what extra information could be obtained from paddock satellite images used to monitor crop water use, and what value this can have for growers and advisers.The 1,000 ha farm located at Billimari near Cowra, NSW, on sandy loam and loam soils, has been producing processing potatoes for nine years. The grower was interested in using IrriSAT to help schedule his irrigation. A side benefit of IrriSAT is that you also get good quality satellite images of your farm every seven days. | Gordon Rogers (02) 9527 0826 or gordon@ahr.com.auPieter Van Nieuwenhuyse0433 889 245 | <https://www.soilwealth.com.au/resources/case-studies/irrigation-monitoring-in-potatoes-part-2-practical-use-of-satellite-information/> |
| **Data analytics and application technology to guide on farm irrigation (VG15054)** | This project aimed to provide vegetable growers with crop-specific information on evapotranspiration levels (the amount of water lost through plants and soil) to help guide irrigation decisions on-farm. It ran from 2016 to 2017 and completed field trials for four crops (brassicas, carrots, lettuce and spinach) to calculate their evapotranspiration rates based on their plant growth stage. | Brett Pringlesupport@theyield.com. | <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/vg15054/> |
| **Review of current irrigation technologies (VG14048)** | This project, which ran from 2015 to 2016, was designed to give Australian vegetable growers an understanding of available and emerging irrigation practices and technologies, and to support the uptake of more efficient water practices. | Mathew PlunkettP: 0434 147 988E:Matthew.plunkett@protectedcropping.net.au | <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/vg14048/> |
| **Check your irrigation system is ready for the coming season** | A check of your irrigation system will ensure you are ready to start irrigating on time and are set-up well for the season ahead. | Marguerite White, Project Manager, ICD Project ServicesE: mwhite@icdprojectservices.com.au P: 0447 500 415 | <https://www.soilwealth.com.au/resources/articles-and-publications/check-your-irrigation-system-is-ready-for-the-coming-season/> |
| **Recycled water management** | We are industry experts in recycled water management, working with government agencies, water corporations and industry to produce sustainable, viable and practical outcomes. | Matt Shanahan matthews@rmcg.com.au 0408 476 140 | <https://www.rmcg.com.au/service/recycled-water-and-organics/> |
| **Improving irrigation efficiency for potatoes** | The Soil Wealth/ICP team have set up a new demonstration site at Cowra to demonstrate the benefits of new tools to improve water use efficiency in potatoes.  | Marc Hinderager on 0409 082 012 or marc@ahr.com.au | <https://www.soilwealth.com.au/resources/articles-and-publications/improving-irrigation-efficiency-for-potatoes/> |
| **Reducing food safety risks from pre-harvest water (for vegetable producers)** | This fact sheet provides information on ways to reduce contamination of water used for crops. This resource was produced as part of the Hort Innovation Vegetable Fund project Pathogen persistence from paddock to plate (VG16042). | [Reception phone line(02) 9351 2000Can be contacted by submitting a form on website](https://www.google.com/search?hl=en-AU&gl=au&q=F22+Life,+Earth+and+Environmental+Sciences+(LEES)+Building,+City+Rd+%26,+Eastern+Ave,+Camperdown+NSW+2006&ludocid=5315355471716864335&lsig=AB86z5VN30kIpWX67gnBOOgDvzSk&hl=en&gl=AU) | <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/reducing-food-safety-risks-from-pre-harvest-water-for-vegetable-producers/> |
| **Water and irrigation services** | AK Consultants has a range of specialist skills associated with water and irrigation, which can be applied at a farm or regional scale. | Astrid Ketelaar astridk@rmcg.com.au 0407 872 743Sally Scrivens sallys@rmcg.com.au 0409 616 173Michael Tempest michaelt@rmcg.com.au 0467 452 155 | <https://www.rmcg.com.au/service/irrigation-services/> |

# **Pest and Disease Management**

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| **Title** | **Description** | **Expert contact** | **Link** |
| **Plant health** | Plant health services reduce the risk of pests and diseases that can affect South Australian crops and threaten our economy. | Plant Health enquiries33 Flemington Street, Glenside, SA 5065Email: pirsa.planthealth@sa.gov.auPhone: (08) 8207 7820 | <https://www.pir.sa.gov.au/biosecurity/plant_health> |
| **A multi-faceted approach to soilborne disease management (VG15010)** | This project, which ran from 2015 to 2018, looked at potential management strategies for soilborne diseases, including chemical, cultural and biological options, to find better options for growers.  | Gordon Rogers (02) 9527 0826 or gordon@ahr.com.au | <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/vg15010/> |
| **Improving soilborne disease diagnostic capacity for the Australian vegetable industry (VG15009)** | This investment, which ran from 2015 to 2019, used world-leading DNA technology to provide vegetable growers with tests to assess the risk of soilborne diseases caused by select pathogens prior to planting. This knowledge, when applied with sound disease and soil health management strategies, will contribute to a reduction in the losses from soil-borne diseases. These tests are available through SARDI’s PREDICTA research service, which you can learn more about in this guide produced by the research team. | Michael Rettke 0401 122 124 michael.rettke@sa.gov.au | <https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/vg15009/> |
| **Biosecurity resources for Australian potato growers and industry members** | The Australian potato industry is committed to building its capacity to respond to potential biosecurity threats. In addition to dedicated farm biosecurity officers and advisers, a range of farm biosecurity planning resources are available for growers, advisers and industry members to access. These resources are regularly reviewed and updated to reflect industry needs.  | <https://www.planthealthaustralia.com.au/industries/potatoes/> | <https://www.soilwealth.com.au/resources/fact-sheets/pest-and-disease-management/biosecurity-resources-for-australian-potato-growers-and-industry-members/> |
| **National vegetable and potato biosecurity program and handy translated resources** | Biosecurity planning provides a mechanism for the vegetable industry, government and other relevant stakeholders to actively determine pests of high priority, analyse the risks they pose and implement procedures to reduce the chance of pests becoming established. AUSVEG is involved in a number of extension projects with a core biosecurity focus. Find out more here.  | Madeleine Quirk 03 9882 0277madeleine.quirk@ausveg.com.au | <https://www.soilwealth.com.au/resources/articles-and-publications/national-vegetable-and-potato-biosecurity-program-and-handy-translated-resources/> |
| **Farm biosecurity** | Farm biosecurity is an integral part of crop protection and plant health. Essentially, farm biosecurity is a set of measures designed to protect a property from the entry and spread of pests and diseases. It is your responsibility, and that of every person visiting or working on your property.Visit the website below to access the biosecurity essentials, including the Farm Biosecurity Toolkit. You can also view a range of biosecurity fact sheets from Plant Health Australia below. | Exotic Plant Pest Hotline1800 084 881 | <https://www.soilwealth.com.au/resources/weblinks/farm-biosecurity/> |