



SoilWealth | ICP
nurturing crops · protecting crops

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Summary of resources for the melon industry

Handy hints on where to find useful information



**Hort
Innovation**

RMCG



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Scan the QR code to access this resource online



This guide summarises and provides easy access to melon-relevant resources developed by the Soil Wealth and Integrated Crop Protection project.

These resources are relevant to the major melon growing regions in Australia and include fact sheets, case studies, videos, webinar recordings and podcasts, as well as demonstration site information.

All the resources in this guide can be found on the project website at soilwealth.com.au.



Cover crops and biofumigation

Title	Summary
Biofumigation <i>Fact sheet, July 2024</i>	Adding biofumigants to a vegetable or melon crop rotation can improve overall soil health and reduce input costs.
An update from our Sydney Basin demo site <i>Articles and other publications, May 2022</i>	At our Sydney Basin demonstration site in Wedderburn, grower Kim Ngov has transitioned from a successful inter-row ryegrass program to now growing high seeding rates of ryegrass as ground cover, in replacement of plastic mulch.
Biofumigation cover crops part 1: What variety and when? <i>Webinar recording, December 2019</i>	Part 1 of this webinar recording looks at the growth of 17 biofumigant cover crops across the year in southern Queensland.
Biofumigation cover crops part 2: Pest and diseases and impact on soil-borne diseases <i>Webinar recording, December 2019</i>	Part 2 of this webinar looks at potential pest and disease issues while growing cover crops and the potential impact on soil-borne diseases following incorporation.
Cover crops for cucurbit growers in Katherine, NT: Results of 2020 demo site <i>Case study, November 2020</i>	This article outlines information about a demonstration site trial on cover crops for cucurbit growers at Katherine Research Station.
Cover crop herbicide guide <i>Posters, February 2022</i>	See this poster for suggestions for cover crops to suppress weeds through quick establishment and/or dense canopies.
Cover crop spotlight on buckwheat <i>Video, March 2018</i>	This video provides guidance on sowing, management and how to best terminate buckwheat as a cover crop.
Cover crops – The advantages of Sunn hemp <i>Video, July 2020</i>	This video focuses on the advantages of Sunn hemp as a cover crop and provides guidance on sowing, management and termination.
Cover crops for Australian vegetable growers <i>Posters, February 2022</i>	This poster provides a strong starting point to help vegetable growers choose a cover crop to suit their farming operation, climate and cover crop objectives.
Cover crops for weed control and single use plastic elimination <i>Case study, March 2021</i>	Grower Kim Ngov has sown another cover crop trial on his intense vegetable farm on the outskirts of Sydney. Kim is focused on using cover crops to build soil health, control weeds and eliminate single-use plastic mulch.



Cover crops and biofumigation

Title	Summary
Cover crops with Harvest Moon <i>Podcast, May 2019</i>	The Soil Wealth ICP team look at how Harvest Moon in Tasmania is using cover crops to protect and improve their precious red soil.
East Gippsland Vegetable Innovation Days: Cover crops and strip-tillage live webinar panel session <i>Webinar recording, May 2020</i>	This live webinar panel session at the 2020 East Gippsland Vegetable Innovation Days focused on cover crops, strip-tillage and slug and snail management.
Growing Matters #1: Basics of cover cropping with Dr Kelvin Montagu (9 min listen) <i>Podcast, July 2019</i>	Get inspired by this podcast with Dr Kelvin Montagu which provides a good overview on cover cropping, the key benefits for using it on your farm as well as some handy tips and methods for doing it successfully.
Growing Matters #2: Link between soil wealth and cover cropping with Dr Kelvin Montagu (12 min listen) <i>Podcast, September 2019</i>	Dr Kelvin Montagu explains how cover crops integrate with vegetable production systems and how keeping your soil healthy plays a big role on the wellbeing of your crops.
Nitrogen fertiliser price and supply: A good reason to look at legume cover crops <i>Articles and other publications, January 2022</i>	Given the price rises and uncertainty of nitrogen fertiliser supply, it's a good time to look at legume cover crops.
Nitrogen fertiliser price and supply: management options in difficult conditions <i>Webinar recording, March 2022</i>	Watch this webinar recording to hear from industry experts about best practice nitrogen management options in vegetable production.
Selecting a sorghum cover crop for integrated crop protection <i>Articles and other publications, December 2021</i>	Sorghum species are an excellent summer cover crop and break crop for most vegetable growers. They are useful as part of an Integrated Crop Protection (ICP) approach.
Should you be making hay from your cover crop? <i>Articles and other publications, October 2019</i>	With hay prices increasing, it is worth thinking about how taking a hay crop may affect your next vegetable crop. This article outlines the key elements to consider.
Summer cover crops <i>Fact sheet, September 2016</i>	This brief guide matches the main aims of soil management in farming systems with specific summer crops.



Cover crops and biofumigation

Title	Summary
Using cover crops to manage mycorrhizal fungi in vegetable crops <i>Webinar recording, July 2020</i>	Dr Kelvin Montagu summarises the potential role of cover crops in managing mycorrhizal fungi in vegetable production.
Winter cover crops <i>Fact sheet, July 2016</i>	This brief guide matches the main aims of soil management in farming systems with specific winter crops.

Soil amendments

Title	Summary
Soil organic matter rules of thumb <i>Poster, April 2024</i>	This rules of thumb guide provides a general outline of the functions and management of soil organic matter (SOM).
Biochar - what is its potential for vegetable production? <i>Fact sheet, November 2021</i>	Interest is growing around biochar as both a soil amendment and to increase carbon sequestration to soil.
Organic soil amendments – update <i>Global scan and review, December 2020</i>	This updated global scan and review covers what organic soil amendments are, why and how to use them, the effects on soils and crops, as well as other specific considerations.
Safe compost for fruit and vegetables: a guide for the supply of recycled organics to fresh produce <i>Fact sheet, October 2016</i>	This guide describes how the producers of recycled organic products can meet the requirements of food safety programs.
Using compost safely: a guide for the use of recycled organics in horticulture <i>Fact sheet, October 2016</i>	A guide that outlines the materials and methods behind using compost in a safe manner.



Soil biology

Title	Summary
Cover crops and soil biology in vegetable soils <i>Webinar recording, June 2020</i>	This webinar recording discusses the impacts of cover crops on soil biology and how they might influence soil microbial communities.
Feed your soils to feed the world: Supporting soil health in vegetable production <i>Articles and other publications, June 2021</i>	Peter Wadewitz of Peats Soil & Garden Supplies provides compost, mulches and recycled organic resources in South Australia and interstate. For Peter, it all starts with talking to growers about healthy soils, building organic matter and strengthening soil structure to produce a better crop.
How do you know your soil is healthy? Top tips for vegetable growers <i>Fact sheet, December 2020</i>	This fact sheet discusses how a soil health status, soil condition, soil organic matter and soil organic carbon can provide insights into a soil's capacity to fulfil all of its functions.
Soil biology and biological products: An introduction podcast (30 min listen) <i>Podcast, July 2020</i>	Soil biology is a complex, dynamic and broad field. This podcast will introduce you to the concept of why biology is important to soil fertility and maximising crop production.
Soil Biology Masterclass (Day 1 recording) <i>Webinar recording, August 2021</i>	Watch this masterclass recording to indulge in the complex world of soil biology and how it relates to profitable vegetable production.
Soil Biology Masterclass 2021: Biological products <i>Webinar recording, August 2021</i>	Soil Wealth ICP team member Pieter van Nieuwenhuyse delves into the use of biological products in Australian vegetable production.
Soil Biology Masterclass 2021: Breakdown of organic matter and agrochemicals in vegetable soil <i>Webinar recording, August 2021</i>	Soil Wealth ICP team members Kelvin Montagu and Marc Hinderager look into breakdown of organic matter, agrochemicals and impact on soil biology.
Soil Biology Masterclass 2021: Disease suppression <i>Webinar recording, August 2021</i>	Plant pathologist Dr Len Tesoriero presents on soil-borne disease suppression in vegetable crops.
Soil Biology Masterclass 2021: Nitrogen availability <i>Webinar recording, August 2021</i>	Soil Wealth ICP team members Kelvin Montagu and Marc Hinderager look into nitrogen availability in vegetable crops and its impact on soil biology.



Soil biology

Title	Summary
Soil Biology Masterclass 2021: Panel discussion on soil biology testing (Day 2) <i>Webinar recording, August 2021</i>	Day 2 of the Soil Biology Masterclass featured a panel discussion on soil biology with Kelvin Montagu.
Soil Biology Masterclass 2021: Soil biology in vegetable production - basic principles <i>Webinar recording, August 2021</i>	Soil Wealth ICP team member Kelvin Montagu looks at the links between key soil functions and soil biology, and the interactions between plant roots and soil biology.
Soil Biology Masterclass 2021: Soil fumigation - chemical and biological <i>Webinar recording, August 2021</i>	Dr Shane Powell from the Tasmanian Institute of Agriculture joins the Soil Wealth ICP team to share her expertise on soil fumigation and its effects on soil biological communities.
Soil Biology Masterclass 2021: Soil structure <i>Webinar recording, August 2021</i>	Soil Wealth ICP team member Doris Blaesing discusses soil biology and its links to soil structure in vegetable crops.
Soil organic matter, biology and mineralisation - The challenges & complexity of estimating mineralisation rates <i>Webinar recording, May 2021</i>	This webinar recording shares information on soil organic matter, soil biology and the challenges and complexity of estimating mineralisation rates in soils.





Nutrition

Title	Summary
Growing more with less <i>Podcast, January 2025</i>	Tune in to this podcast where Soil Wealth ICP team member Carl Larsen chats to industry experts Ivor Gaylard (Swan Systems), Medi Zaboli (Sentek) and Doris Blaseing (RMCG/Soil Wealth ICP) for some practical tips
Organic nitrogen rules of thumb <i>Poster, November 2024</i>	This rules of thumb poster has been developed to provide a general understanding of nitrogen (N) in soil and in the different organic inputs such as legume cover crops, compost, and manure. All numbers provided are approximate.
Getting soil pH right – Lime quality and application rates <i>Fact sheet, January 2019</i>	This fact sheet describes the causes and effects of soil acidification and explains how liming increases soil pH differently depending on your soil type, as well as ways to manage paddock variability.
Harnessing science to nurture plants and optimise yield <i>Articles and other publications, August 2021</i>	Growers and advisers armed with a deep knowledge of nutrition and its practical application in a crop are better placed to ensure that crop achieves peak production.
Managing cover crop residues in vegetable production <i>Fact sheet, May 2017</i>	This comprehensive guide provides a wide range of information on soil testing including: the reasons to test, choosing the right testing service, and Interpreting tests.
Managing salinity in vegetable crops <i>Fact sheet, August 2019</i>	Read this fact sheet to find out more about good salinity management practices on farm, salinity thresholds for vegetables and how salinity can be identified and measured.
Managing salinity in vegetable crops <i>Webinar recording, November 2019</i>	Industry experts share their knowledge on good salinity management practices on-farm in this interactive webinar.
Managing sodicity in vegetable crops <i>Fact sheet, May 2020</i>	This fact sheet explains what sodicity is, how to identify sodicity in soils, its impact on soil and crops, as well as management options.
Nitrate field test <i>Fact sheet, January 2020</i>	This simple and easy to use guide outlines how a quick nitrate test can be conducted in the field.
Nitrous oxide emissions from vegetable soils: What's all the fuss about? <i>Fact sheet, November 2016</i>	This fact sheet shows the harmful effects nitrous oxide has on the environment and how to reduce and manage emissions.
Nutrient element functions in vegetable crops <i>Fact sheet, July 2016</i>	This fact sheet shows the harmful effects nitrous oxide has on the environment and how to reduce and manage emissions.



Nutrition

Title	Summary
Nutrition management support <i>Fact sheet, June 2020</i>	In this fact sheet, the Soil Wealth ICP team shares a range of informative resources for nutrition management.
Plant analysis for vegetable crops: A practical guide to sampling, analysis and interpretation <i>Articles and other publications, February 2020</i>	This guide covers laboratory based plant nutrient analyses, specifically dry matter analysis and sap analysis.
Quick guide to farm nitrogen <i>Fact sheet, April 2015</i>	This guide contains information regarding the 4R principle of applying nitrogen fertilisers: right source, right amount, right place and right time.
Silicon for crop health <i>Fact sheet, June 2016</i>	This fact sheet outlines the benefit of silicon application on crop health and pest and disease resistance.
Soil health and water use efficiency <i>Fact sheet, October 2018</i>	This practical fact sheet provides guidance on readily available water and soil texture, as well as healthy soil conditions.
Soil phosphorus – The basics <i>Fact sheet, September 2019</i>	Read about the common characteristics of soil phosphorus, its availability for uptake by plants and practical management tips and tools in line with the 4R principles.
Taking soil samples <i>Fact sheet, January 2020</i>	This fact sheet provides guidance on how to take soil samples correctly.
Taking soil samples? We'll show you how it's done at Koo Wee Rup <i>Video, November 2021</i>	While taking soil samples at Koo Wee Rup in Victoria, Soil Wealth ICP team member Carl Larsen explained how to collect a quality soil sample for testing.



Reduced tillage

Title	Summary
Cover crops and strip tillage in organic production - Koo Wee Rup <i>Webinar recording, October 2020</i>	Tune in to a discussion on the use of strip tillage and cover crops in organic production with the Koo Wee Rup Grower Group and Dr Kelvin Montagu.
Ed Fagan explains why his initial reservations about strip-till and cover crops were dispelled <i>Video, May 2019</i>	New South Wales vegetable grower Ed Fagan explains how strip-tillage and cover cropping complement each other.
Lyndon Orpwood discusses the benefits of strip-tillage to Simplot Australia <i>Video, May 2019</i>	Simplot Australia's Lyndon Orpwood explains how strip-tillage has improved moisture retention and field productivity at Bathurst, New South Wales.
Make 2019 the year you have a serious look at strip-till <i>Articles and other publications, December 2018</i>	Looking to reduce establishment costs, improve your soil and save time? This article shares the benefits and challenges of strip-till.
Strip-tillage in the field – Jeff McSpedden, NSW case study <i>Video, March 2019</i>	Bathurst grower Jeff McSpedden identifies the benefits of strip-till, including stubble retention, improved moisture retention, greater efficiency and reduced diesel usage.





Pest management

Title	Summary
Adopting IPM - principals and practice <i>Webinar recording, September 2024</i>	Discover the essentials of Integrated Pest Management (IPM) with Andy Ryland (Integrated Pest Management Consulting) in this adopting IPM webinar.
Cucurbit Ute Guide <i>Ute guide, May 2024</i>	Pests, diseases, and disorders of cucurbits: A field identification guide.
At the cutting edge: Advancements in integrated crop protection for profitable vegetable production <i>Webinar recording, August 2021</i>	There are a number of important advancements and lessons from Europe implementing a mandatory ICP approach in vegetable production systems. The need to use ICP there has driven RD&E that can be applied in the Australian context. Watch this interactive webinar to hear more from leading international researchers and practitioners from Europe and Australia.
Adjuvants: a guide to oils, surfactants and other additives <i>Fact sheet, December 2016</i>	Information regarding how adjuvants work, what types are available, and recommendations regarding which ones to use.
Alternatives to metham sodium <i>Fact sheet, June 2015</i>	A fact sheet that explores the alternatives to the industry standard soil fumigant, metham sodium (MS). It explains the need for an alternative and the potential environmental and human health impacts MS can have.
Insect pests of cucurbit vegetables <i>Articles and other publications, June 2015</i>	This article by NSW Department Of Primary Industries (DPI) covers some insect pests specific to cucurbits, but most are pests of other crops as well. None of the pests included need routine control measures, but they do need to be regularly monitored and treated when the pest becomes a problem.
IPM in practice: A new approach to release beneficials <i>Articles and other publications, July 2022</i>	Biological Services is trialling the slow release of predatory mites using sachet technology to improve commercial integrated pest management (IPM) practices.
Managing pesticide resistance <i>Fact sheet, July 2015</i>	This fact sheet provides information on what pesticide resistance is, how to monitor it, and the steps to take to avoid it.
Maximising IPM practices in protected cropping <i>Articles and other publications, September 2022</i>	A group of vegetable growers and industry members visited Family Fresh Farms in New South Wales for a Soil Wealth ICP event focusing on how growers can incorporate integrated pest management (IPM) in protected cropping systems.



Pest management

Title	Summary
Mega pests: managing sucking pests <i>Fact sheet, October 2023, updated April 2024</i>	This fact sheet covers a range of issues regarding the control of sucking pests, including the use of predators and parasitoids.
Mega pests: the basics of protecting your crops <i>Fact sheet, May 2015, updated April 2024</i>	This fact sheet contains information regarding adoption of an ICP program, the key components of an ICP program as well as information on other crop management options available.
Spray application basics <i>Fact sheet, May 2015</i>	This fact sheet outlines the appropriate methods involved in chemical application to help maximise the amount of chemical reaching the plant and help minimise the amount lost in the process.
What changes to expect - integrated crop protection <i>Global scan and review, September 2021</i>	In this global scan we look at some of the changes affecting the integrated crop protection tools available to vegetable growers by examining what is happening elsewhere, globally and in other sectors.
Whitefly-transmitted viruses in vegetable crops: Integrated virus disease management <i>Articles and other publications, May 2015</i>	This technical reference note has been produced by Denis Persley and Cherie Gambley (DEEDI) as part of Horticulture Australia Limited project VGO 7128-Integrated management of virus diseases in vegetables.

Disease management

Title	Summary
Fusarium wilt of melons <i>Fact sheet, December 2024</i>	Wilting is the generalised loss of turgidity and drooping of leaves or shoots. Wilting can appear due to many different reasons, sometimes abiotic, such as insufficient water, and sometimes biotic, being the symptom of a pathogen attacking the plants and disrupting their vascular system.
Fusarium wilt of melons <i>Webinar recording, September 2024</i>	Dr Len Tesoriero (Crop Doc Consulting) explores Fusarium wilts in melons and their management options.



Disease management

Title	Summary
A guide to preventing leaf and stem diseases <i>Global scan and review, June 2021</i>	This guide gives a brief overview of plant disease, general methods of transmission and the conditions that foster key diseases of aboveground vegetable plant parts.
At the cutting edge: Area wide management of insect vectored viral and bacterial diseases <i>Webinar recording, July 2022</i>	Watch this webinar recording to hear from industry-leading researchers about the key findings and area wide management (AWM) strategies of insect-vectored viral and bacterial diseases of vegetable crops.
AWM webinar mini-series #1: In control - managing cucurbit viruses for profitable vegetable production <i>Webinar recording, August 2022</i>	This webinar mini-series focused on area wide management (AWM) strategies to control viruses in cucurbits including cucumber green mottle mosaic virus (CGMMV) and zucchini yellow mosaic virus (ZYMV).
Better managing soil-borne diseases with pathogen DNA testing <i>Fact sheet, December 2020</i>	This fact sheet provides guidance on the importance of monitoring soil-borne diseases, including tips for understanding and managing soil-borne disease risks.
Fusarium wilt management in vegetables with Dr Len Tesoriero <i>Webinar recording, December 2017</i>	This webinar recording shares the latest techniques in managing the soil-borne disease Fusarium wilt in vegetable crops including solanaceous crops, legumes, cucurbits and sweet potatoes.
How to manage sclerotinia in vegetable crops with Dr Len Tesoriero <i>Podcast, February 2019</i>	This podcast of a webinar recording discusses sclerotinia management in vegetable crops.
Managing fusarium diseases in vegetable crops <i>Fact sheet, August 2018</i>	This fact sheet provides practical information on the factors that favour fusarium diseases, and management strategies.
Mega pests: managing foliar diseases <i>Fact sheet, May 2015</i>	This fact sheet covers a range of issues relating to the management of foliar diseases including: the use of resistant varieties, irrigation scheduling and farm sanitation.



Disease management

Title	Summary
Mega pests: managing soil-borne diseases <i>Fact sheet, May 2015, updated April 2024</i>	This fact sheet provides information on managing clubroot, Pythium, fusarium, rhizoctonia and sclerotinia.
Rhizoctonia Solani anastomosis groups and their hosts <i>Fact sheet, October 2022</i>	Rhizoctonia Solani is a fungal pathogen comprised of many species and strains that can cause diseases in vegetable crops such as damping off, root and stem rots, and sometimes leaf blighting or leaf spots.
Soil-borne diseases in vegetable crops: A practical guide to identification and control <i>Articles and other publications, June 2019</i>	This practical guide is divided into chapters based on vegetable crop families. Each chapter contains information on the identification and control of the major soil-borne diseases for each crop.
Soil-borne disease series: black rot <i>Video, September 2018</i>	A short video presented by Dr Len Tesoriero on the identification, causes and management of black rot.
Virus diseases of cucurbits in Australia <i>Articles and other publications, February 2020</i>	In this booklet the symptoms, spread and control measures for viruses affecting cucurbits are outlined.
The role of soil DNA testing in managing the risk of soil-borne diseases – How is it being used and what can it do? <i>Webinar recording, August 2018</i>	This webinar recording covers better management of soil-borne diseases in vegetables through the use of DNA testing.



Weed management

Title	Summary
Integrated weed management, using cover crops and strip-till (6 minutes) <i>Podcast, June 2020</i>	This podcast discusses how inter-row ground cover and an integrated approach using cover crops and strip-till may suppress weeds.
Integrated weed management (Webinar 1 of 3): A practical approach for vegetable growers <i>Webinar recording, November 2020</i>	This webinar will cover the key tactics and principles of integrated weed management “IWM” by giving examples of successful IWM.
Integrated weed management (webinar 2 of 3): How cover cropping can improve its use for vegetable growers <i>Webinar recording, December 2020</i>	This webinar looks at the capacity of both summer and winter cover crops to out-compete weeds during non-cash cropping periods, reduce the weed seedbank and improve soil health.
Looking beyond plastic mulch film <i>Fact sheet, August 2024</i>	Replacing Plastic Mulch Film (PMF) poses a significant challenge due to its low cost and immediate benefits. However, as input and production costs rise, concerns about climate change escalate, and policies regarding plastic use and waste evolve, finding alternatives to PMF is becoming increasingly important.
Integrated weed management (webinar 3 of 3): The future of intergrated weed management in vegetable farming <i>Webinar recording, February 2021</i>	This webinar will look into the future of integrated weed management (IWM) and how innovations can benefit the vegetable industry.
Integrated weed management manual <i>Articles and other publications, March 2022</i>	The University of New England has published the Australian vegetable industry’s first comprehensive integrated weed management (IWM) manual. It provides information on the impacts of weeds, the principles of IWM, and the various methods that may be included in an IWM strategy depending on crops grown and farm circumstances.
Integrated weed management - Oxalis (<i>Oxalis</i> spp.) <i>Fact sheet, February 2021</i>	There are about 30 oxalis species in Australia, including soursob and creeping oxalis. Preventing the spread of underground bulbs and seeds is critical for control of soursob and creeping oxalis respectively.



Weed management

Title	Summary
Integrated weed management - Nutgrass (<i>Cyperus rotundus</i>) <i>Fact sheet, December 2020</i>	This fact sheet explains how an integrated weed management (IWM) strategy, including cultivation measures and chemical control, is the best approach for reducing nutgrass populations to a manageable level.
Technology for controlling weeds <i>Global scan and review, January 2019</i>	This global scan and review provides guidance on non-selective fallow paddock weed control, as well as selective in-crop weed control, and delivery technology.
Technology for controlling weeds in vegetable production <i>Webinar recording, August 2019</i>	This webinar recording shares insights from leading industry experts on some of the most practical advances in weed management.
Virtual shed walk: microwave technology for control of weeds, diseases and pests <i>Webinar recording, September 2021</i>	Liam Hescock and the team from Growave, alongside grower Ed Fagan and Soil Wealth ICP's Marc Hinderager, showcase the next-generation microwave technology and answer questions from the audience.
Weed management in vegetables <i>Fact sheet, December 2015</i>	A fact sheet that provides information on the economic impact of weeds, effectiveness and affordability of various control methods, and information regarding the implementation of an Integrated Weed Management (IWM) program.



Biological crop protection products

Title	Summary
At the cutting edge: Advancements in biopesticides for profitable vegetable production <i>Webinar recording, September 2020</i>	Hear from leading international researchers discuss biopesticides, a diverse group of pest control products based on naturally occurring biochemicals, minerals and microbes.
Biopesticides in Australia <i>Fact sheet, November 2017</i>	Overview of specific biocontrol products and biopesticides, including developments, current status, challenges, advantages and disadvantages.
Biological products database <i>Global scan and review, December 2019 (updated July 2020, October 2020, August 2021 and May 2022, October 2024)</i>	This Biological Products Database is a tool to help growers navigate the array of 'biological' products currently available to their farming business.
Importance of beneficial biological organisms in soil for vegetable crops <i>Articles and other publications, May 2020</i>	This article explains how enhancing natural populations of beneficial soil organisms can aid in the growth and establishment of crops, as well as improve soil health.
Using mycorrhizae to boost vegetable crop quality and yield <i>Articles and other publications, July 2020</i>	As the use of biological crop products increases in the Australian vegetable industry, it is essential that growers have a clear understanding of soil biology and how these products can work effectively. This includes the role of mycorrhizae and how it can impact the quality and yield of a crop.



Irrigation

Title	Summary
A guide to estimating wind speed for spraying agricultural chemicals <i>Fact sheet, February 2019</i>	Choosing when to spray based on the prevailing wind speed is important for effectively applying crop protection products and managing risk. This poster can be displayed in the chemical storage area and spray rig shed on your farm as an important reminder for you and your employees.
Get prepared: Irrigation scheduling tips for summer <i>Articles and other publications, September 2020</i>	SWAN Systems shares some key considerations to get the best results from irrigation scheduling software over summer.

Equipment and machinery

Title	Summary
Erosion control machinery – Harvest Moon, TAS case study demonstration site <i>Fact sheet, March 2019</i>	This fact sheet showcases one of the practices employed at Harvest Moon to manage the risk of soil erosion, including information on the ripper mulcher.
Finger weeder demonstration <i>Video, October 2022</i>	When was the last time you checked your spray rig? This poster can be displayed in the chemical storage area and spray rig shed on your farm as an important reminder.
The ripper mulcher in Tasmania <i>Podcast, February 2019</i>	This podcast explains more about the ripper mulcher and its use by Harvest Moon in north-west Tasmania to control erosion on sloping ground under cultivation.
Time to rejig your rig? Five simple steps in spray rig calibration <i>Poster, May 2019</i>	This fact sheet showcases one of the practices employed at Harvest Moon to manage the risk of soil erosion, including information on the ripper mulcher.



Emerging technology and precision agriculture

Title	Summary
Exploring the application of precision agriculture: Koo Wee Rup demonstration site <i>Case study, April 2019</i>	Schreurs & Sons and the Soil Wealth ICP team partnered to explore the application of precision agriculture in celery, leek and baby leaf production systems at Koo Wee Rup in Victoria. This case study captures the results from initiatives to improve nutrition, irrigation and drainage management, and insect pest and beneficial monitoring.
Ag-tech trial turns up the heat on weeds <i>Case study, February 2021</i>	Problem weeds such as oxalis and nutgrass could be a thing of the past following a trial of microwave weed control technology.
Crop management: Advancement of drone applications in Bundaberg, Qld <i>Articles and other publications, December 2020</i>	A vegetable grower based in Bundaberg, Queensland is continuing to grow his business and find new uses for drone applications in horticulture.
Labile carbon <i>Fact sheet, September 2018</i>	This fact sheet outlines why labile carbon is used as a leading indicator of soil health and how you can undertake your own field test.
Remote sensing <i>Global scan and review, July 2019</i>	In this global scan, we address the types of remote sensing available, and its applications to vegetable production systems.
The drone is no longer just a toy: Rules, regulations, risks and responsibilities to be considered by drone growers <i>Podcast, February 2021</i>	This podcast provides information on the rules, regulations and responsibilities for growers using drones in horticulture.
Use of remote sensing technology in vegetable weed control and yield prediction <i>Articles and other publications, August 2020</i>	Start-up company Hummingbird Technologies describes how the technologies in the Artificial Intelligence and remote sensing space can help vegetable growers to make the right decisions for weed control and harvest prediction.
Using drones to generate farm insights: Drone basics and operations including weed mapping <i>Webinar recording, July 2021</i>	Watch this webinar for information on the legal requirements for drone operators and how drones can help you manage daily challenges including weed control.
Variable rate technology: Is it right for your farm? <i>Posters, September 2020</i>	This poster provides a snapshot of variable rate application, the options available, why and how to do it, key questions to keep in mind and more information on the practical tips and tools available.



Emerging technology and precision agriculture

Title	Summary
Veg and tech: Science fiction or the future of farming? <i>Global scan and review, June 2019</i>	Soil Wealth ICP scanned the watchlist of 24 emerging technologies detected by Agrifutures in 2018 to determine how tech change will influence vegetable growing businesses. This global scan and review covers global innovations in technology, how they are being applied, and what we should be looking for.
Weathering the storm with precision ag. <i>Articles and other publications, January 2021</i>	Metos explains the unlimited opportunities for the Australian vegetable industry to adopt precision agriculture technologies.

Carbon and climate

Title	Summary
Regenerative Agriculture – Foundations and First Steps. <i>Webinar recording, September 2024</i>	In this introductory webinar on regenerative agriculture, Clinton Muller, RMCG explored what regenerative agriculture means, how it contrasts with sustainability, the principles and practices and provides a practical overview on implementing practices on your farm.
Estimating emissions: Why measuring emissions is important and how to do it. <i>Fact sheets, January 2024</i>	Farm productivity and greenhouse gas emissions are closely linked; higher emissions are generally associated with lower productivity. The factsheets provide a summary of the latest tools available to measure and monitor emissions.
Flood preparedness miniseries <i>Video recordings, September 2024</i>	How do you prepare your soil so it can maintain its structure during high rainfall events? In this series of videos, Dr Kelvin Montagu discusses management practices that can be implemented to help the soil stay together under adverse conditions.
Building resilience to climate extremes Overview: Getting ready for changing conditions <i>Fact sheets, May 2024</i>	This five-part series from the Soil Wealth ICP project presents a risk-based approach to assessing resilience to climate extremes and impacts for vegetable and melon businesses.