

CONTENTS

| | |
|--|-----|
| New EU rules for vet meds | 2 |
| Pesticides and public perception in EU | 3 |
| Independence of APVMA confirmed | 4 |
| Regulator field trip | 5-6 |
| Maori training | 6 |
| Agrecovery update | 7 |
| Female food hero | 8 |
| VICH | 9 |
| Digitalisation and livestock | 10 |
| Triple drench resistance | 11 |
| CropLife Asia | 12 |
| Summer Conference | 13 |
| Register for Annual Conference | 16 |
| New members | 17 |

AGCARM

Level 7, Equinox House
111 The Terrace
PO Box 5069, Wellington 6140
New Zealand

P +64 4 499 4225

E enquiry@agcarm.co.nz

www.agcarm.co.nz

[INPUT]

May 2019

THE AGCARM NEWSLETTER

Biotech regulations review support increases

Political parties, scientific organisations and respected scientists are pushing for New Zealand to embrace the latest in gene technology.

By Mark Ross



Updating New Zealand's biotechnology regulations to embrace the latest science would allow life-saving medicines, environmental solutions and better food production techniques.

New Zealand has one of the strictest regimes in the world and is now being left behind in adopting the latest science and innovation. With the 2001 Royal Commission inquiry into biotech recommending that

we 'keep our options open and proceed carefully', it is time for the Government to step up and advance reviewing the laws.

In the global arena, biotech is contributing to reducing the release of greenhouse gas emissions from agriculture, improving human and animal health, decreasing pesticide spraying, and increasing world food production – and has been for more than two decades.

In the last 20 years, the risks of using gene technologies have been annulled through research and the implementation of precision techniques.

New techniques, such as gene editing, could provide tools to protect our native species against harmful pests and diseases such as Kauri dieback and possums. It can also help protect our waterways from nitrates and our atmosphere from greenhouse gas outputs.

Support for reducing the regulatory requirements for the registration of biotech products is gaining traction.

Various political parties, scientific organisations and respected scientists are advocating for changes to outdated biotechnology regulations.

A Government review aimed at reducing the regulatory requirements for the registration of biotech products is needed. The sooner this happens, the quicker we can improve our environmental, human health, and food-producing performance. ■



MARK ROSS, AGCARM CHIEF EXECUTIVE

EU proposes new rules for vet meds

Proposed new rules for veterinary medicines entering the EU could have big ramifications for exports to the bloc.

NEW EU RULES ON VETERINARY MEDICINAL PRODUCTS AND MEDICATED FEED

VETERINARY MEDICINAL PRODUCTS: WHAT'S NEW?

▶ FIGHTING ANTIMICROBIAL RESISTANCE



BAN on preventive use of antibiotics in **groups of animals**



REINFORCED BAN on the use of antimicrobials for **promoting growth and increasing yield**



RESTRICTIONS on metaphylactic use of antimicrobials (**control treatment** preventing a further spread of infection)



Possibility to **RESERVE** certain antimicrobials for humans only



OBLIGATION for Member States to collect data on the sale and use of antimicrobials



For **IMPORTED ANIMALS** and products from **OUTSIDE THE EU**: ban on antimicrobials for promoting growth and **restrictions on antimicrobials reserved for human use**

▶ PROMOTING AVAILABILITY OF VETERINARY MEDICINAL PRODUCTS BY STIMULATING INNOVATION AND COMPETITIVENESS

▶ ESTABLISHING A MODERN, INNOVATIVE, FIT-FOR-PURPOSE LEGAL FRAMEWORK

MEDICATED FEED: WHAT'S NEW?

▶ FIGHTING ANTIMICROBIAL RESISTANCE



BAN on preventive use of antimicrobials via medicated feed, on top of the use restrictions for veterinary medicines



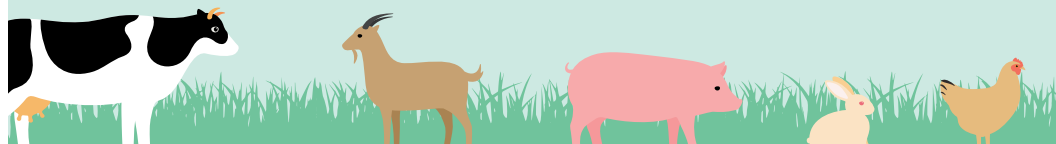
RESTRICTIONS on the prescription of antimicrobials in medicated feed

▶ EU-WIDE RULES FOR THE ECONOMICALLY VIABLE PRODUCTION OF SAFE MEDICATED FEED

A new law (EU Article 118) would have significant impacts outside of the EU for the use of veterinary antibiotics, which could affect New Zealand exports to the bloc.

If agreed, new legislation could be in force by early 2022. The rules apply to the marketing, manufacturing, importing, exporting, supplying, distributing, pharmacovigilance, control and use of these products.

As a HealthforAnimals member, Agcarm is working with global animal medicine associations to keep up-to-date on developments and to ensure that practicalities within any law changes are taken into consideration. ■



Pesticides and public perception in the EU

With the European Parliament elections taking place, now more than ever we are acutely aware of public perception and its impact on the regulation of pesticides.



PETER DAY

We might not agree with people who voice concerns about the safety of pesticides; we might strongly disagree in some cases, however, that does not make those concerns any less legitimate. These concerns should be listened to, whether we like what we hear or not.

The EU has one of the most stringent systems in the world when it comes to assessing pesticides before they are put on the market. This is a point acknowledged by a recent Special Committee set up by the European Parliament to evaluate the EU's authorisation system for pesticides. Unfortunately, however, regulatory compliance does not always equal public acceptance. This makes it difficult for businesses, which rely on stability and certainty, to operate, to plan, and to continue to bring innovative products to the market.

Last year our industry made a global commitment to transparency, where we committed to making all safety-related studies for active substances publicly available. One of the reasons behind this initiative was to show people that we have nothing to hide, and to help demonstrate the scientific rigour that lies behind the assessment process. We know this is no silver bullet. But we hope that

it will go some way to illustrating that our industry is listening to society's concerns.

In Europe, many roll their eyes when our industry talks about the need to feed a growing world population. This is perhaps understandable for a continent where we don't need to worry about there being enough food. However, the debate around how that food should be produced in Europe, for Europe, is one that has become dangerously polarised in recent years. This was epitomised by the debate around the reapproval of glyphosate. There is a perception that somehow tomorrow you could stop providing farmers with the solutions they need to put food on the table of Europe's 500 million consumers and that there would be no impact. Safety is a pre-requisite for food in Europe, it's something that can be taken for granted, but the things that European citizens worry about on a weekly basis, like the cost of their food, would be seriously impacted. Still missing is a true understanding of the way that food is produced and of the trade-offs that have to be weighed up when looking at the different models.

More than one million EU citizens signed a petition to ban the use of glyphosate and called for drastic changes to the way pesticides are

regulated in Europe. The substance was subsequently reapproved. However, in its wake, the European Commission has since come forward with proposals aimed at increasing public confidence in the EU's risk assessment process. The proposals will make wide sweeping changes not only for how pesticides are evaluated, but also in seven other food sectors as well, including GMOs, food additives and flavourings.

2019 will be a year of political change in Europe. It is an opportunity to start a fundamental debate about what the future of food production in Europe should look like and within this, how farmers should protect their crops. Our industry is ready to play its part.

Peter Day

is the Director of Regulatory Affairs for the European Crop Protection Association in Brussels. ■

Independence of Australian regulator confirmed

In October 2018 the Australian Senate established an inquiry into the independence of the national pesticides regulator.

glyphosate and all other pesticides, and the importance of crop protection products for farming. It also reaffirmed the comprehensive assessment and reassessments of glyphosate, and why Australians can be assured of its safety.

The Senate Committee's report released in mid-February recognised the APVMA as a world-leading regulator whose decisions are based strictly on science and evidence, free from industry influence.

Other evidence given told of the issues with the cost and timeframes for minor use approval of products which is leading to off-label usage. This process is not efficient and has the potential to create risks through product safety, efficacy and resistance management. As a result, the Committee recommended that the Australian Government commission an independent assessment on the impact of regulatory costs on the registration of minor use chemicals. This review should obtain evidence to inform policy and consider the availability of minor use chemicals in Australia.

The APVMA receives its funding through fees, charges and levies on the companies that register pesticides for sale in Australia. As part of the inquiry, the Senate Committee considered whether the current cost recovery arrangements for agricultural and veterinary chemical product regulation were impacting on the independent decisions made by the regulator.

By Matthew Cossey

The inquiry into the Australian Pesticides and Veterinary Medicines Authority (APVMA) was prompted by sensationalised and misleading media reporting about glyphosate driven by activist groups following a California law suit against the herbicide.

Despite there being no strong reason or foundation for the inquiry, the Australian plant science industry welcomed the inquiry as an opportunity to constructively engage in the discussion. The national peak industry body for the plant science industry in Australia, CropLife, used the process to better inform Parliamentarians and Australians about the rigorous independent regulation and importance of crop protection innovations.

Over two days of public hearings the Senate Committee heard from many groups representing the broader agriculture industry. Organisations, including CropLife, outlined comprehensively the evidence confirming the independence of the APVMA, the integrity of its regulatory processes as it related to



Similar regulatory bodies in other countries are primarily government funded. The European regulator for agricultural and veterinary chemical products is publicly funded by the European Union at a cost of approximately 79 million euros. The US EPA and Health Canada's Pest Management Regulatory Agency both operate on a partial cost-recovery basis, receiving CAD\$36.5 million and US\$128.3 million respectively in government funding.

While the Committee found the current APVMA funding arrangements clearly don't compromise the APVMA in any way, it is clear that the Australian farming sector would be a significant

beneficiary from the Australian Government providing appropriate funding from general revenue.

While there was doubt regarding the rationale and necessity for this inquiry, science and evidence have prevailed in the Committee's findings.

The APVMA is globally recognised as a world-leading regulator that makes decisions based strictly on science and evidence. Australians can rightly have confidence in its decisions that ensure the safety of users, consumers and the environment.

For more information on issues relating to glyphosate and the Australian experience visit croplife.org.au. ■

Agcarm hosted regulators from the Environmental Protection Authority, the Ministry for Primary Industries (MPI) and WorkSafe NZ on a two-day field trip around the Wairarapa and Wellington regions in November 2018.

The trip involved visits to New Zealand's largest biocontainment lab, farms, a vineyard, vet practice and a distributor.

Regulators visited Stuart Bruere of Vet Services Wairarapa - a practice servicing the farming community doing routine veterinary work and animal health plans. Bruere has a special interest in the investigation of trace element deficiencies in livestock. He contracts his services to commercial pharmaceutical companies to test new products on farm animals.

We also visited a PGG Wrightson distributor store in Masterton, which also hosts an Agrecovery agrichemical container recycling collection site. We finished with a visit to Ata Rangi winemakers in Martinborough - a small rural village across the Remutaka mountain range - where it is protected by mountains on three sides.

Sheep, beef and mixed cropping

Regulators were guided through Mark and Susannah Guscott's South Wairarapa 800 hectare flat and hill country farm.

The Guscotts balance their exposure to risk by combining sheep and beef farming with cropping.

The cropping side of the business includes a mix of maize, wheat, barley, squash, clover and grass seed, and specialty crops.

Mark is the sixth generation of Guscotts to farm 'Glen Eden' but his heritage goes back to Maori ancestors living on the land before European settlement.

The farm has fenced waterways and wetlands, planted trees and a 20 hectare QEII covenanted block of native bush.



MPI biocontainment lab

Regulators got a tour of the construction site which will house New Zealand's biocontainment laboratory. The new 3,400 sqm veterinary laboratory in Wallaceville, Wellington, will be able to tackle large-scale biosecurity



emergencies. Regulators got a run-down of the intricacies of such a complex project. It will be where New Zealand diagnoses, researches and helps control animal diseases to protect our country and support trade.

The construction of the lab started in 2014 after two years of planning and is due to open this year and cost \$87 million.

The National Biocontainment Laboratory continues more than a century of animal disease diagnostics at Wallaceville. The original facility was built in 1905 and was the first veterinary lab in the southern hemisphere.

AGCARM HOSTED REGULATORS ON A FIELD TRIP OF THE GREATER WELLINGTON AND WAIRARAPA AREA IN NOVEMBER 2018.

Arable farm

Wairarapa-based arable farmer, Karen Williams discussed all things agrichemical with the regulators as she showed them around her 224 hectare property in Gladstone. The farm specialises in mixed cropping over spring and summer, and beef and lamb finishing through autumn/winter.



The Williams family runs an agricultural contracting business and grows barley, wheat, ryegrass and red clover seed. The family is also



trials some ancient grains for more specialist bread products.

Williams, who is also Chair of the Arable Industry Group and a Board Member of Federated Farmers, enjoyed the discussion, saying that "an open discussion, with learning on both sides, is always positive".

She iterates the importance of engaging with regulators to explain what is required to produce healthy and sustainable food. ■

AGCARM TE AO MAORI TRAINING

Building a strong bond with Iwi will assist in the active protection of New Zealand's unique environment. The recently-held Agcarm Te Ao Māori member training and workshops involve active experimental learning to ensure core Māori concepts, protocols and their importance are acknowledged and understood.

As guardians of our land, Iwi are important to Agcarm and our members. Member companies interact with Māori land owners when product applications are made to regulators, and when attending Māori related events.

The first workshop involved Agcarm Board members, the second Iwi engagement training was for members – at a leadership and operational level. These included a Māori welcome with whaikorero and waiata, Te Reo Māori learning, a seminar on the Treaty of Waitangi, an overview of the Māori world view, marae protocols and customs, along with role-playing on Iwi consultation using case studies. Further workshops will be held in 2019, including a Marae stay.

Agcarm is seeking opportunities for ongoing collaboration with identified iwi groups, thus ensuring the long-term protection and management of our taonga.

By developing mutually beneficial relationships with a range of stakeholders, we help ensure the sustainability of New Zealand as a food producer and champion of environmental management. ■



AGCARM IWI ENGAGEMENT TRAINING



Rural recycling project will clear more farm waste



■ Agrecovery board and staff with Minister Sage at the launch

Government funding of \$381,000 will beef up Agrecovery’s presence in its ongoing campaign to recycle and re-use.

The Associate Minister for the Environment Eugenie Sage announced the launch of the New Zealand Rural Waste Minimisation Project at the South Island Agricultural Field Days in Kirwee in March.

The successful grant application to the Ministry for the Environment’s Waste Minimisation Fund will enable Agrecovery to hold a series of one-stop-shop waste recovery events later this year. As well as agrichemicals and their containers, farmers will be able to bring along other farm waste such as fertiliser bags, used oil, silage/baleage wrap and other soft plastics.

“By providing a ‘one-stop-shop approach’, we will be removing barriers to recycling and encouraging our rural communities to participate in sustainable disposal practices for a variety of waste,” Agrecovery board chair Adrienne Wilcock said at the launch.

Minister Eugenie Sage said that “businesses must take responsibility for their products throughout their whole life cycle.

“Agrecovery has long recognised this and started one of the earliest voluntary product stewardship schemes. There have been a few in the industry who haven’t participated in the process and it is clear that government intervention may be necessary.”

“ **Businesses must take responsibility for their products throughout their whole lifecycle,** ”

The project builds upon two trial events held last year which collected almost 20 tonnes of rural waste. Agrecovery has appointed Brian Vass (pictured above, far left) to manage the project.



■ Eugenie Sage

Agrecovery has high ambitions to clear more rural waste by partnering with industry groups, product stewardship schemes and councils around the country. The programme is focussing on facilitating the processing of products that are difficult to clean and recycle. The challenging part is finding markets

for recycled products. Plans are in motion to address these issues – which are wider than just for farming.

Agrecovery General Manager, Simon Andrew says “we’re striving for greater levels of product stewardship and ultimately more processing facilities for these kinds of materials in New Zealand, so recyclables don’t have to go overseas for re-purposing.”

“This Agrecovery project will also help develop options for New Zealand’s first mandatory product stewardship – for agrichemicals and their containers,” Eugenie Sage said.

■ Recycling rates keep rising ↑

As of April 2019, Agrecovery collected over 382 tonnes of plastic, compared with 268 tonnes at the same time last year and almost double the amount of two years ago. This shows that more farmers and growers are using the programme.

Female Food Hero

Wairarapa farmer and leader Karen Williams is one of many inspirational women working in agriculture. She was selected by CropLife to feature in it's Female #FoodHeroes campaign - profiling women working to improve plant science and nutrition.



Karen is a farmer, Chairperson for the Arable Industry Group and a Board Member of Federated Farmers.

She describes herself as a town girl with a resource management degree and a passion for improving the environment who then married a farmer and embraced farm life. “I have a vision to see agriculture and food production thrive, but it must not be at the expense of our environment and our decisions must be made with a view to the impacts on our children and future generations,” she says.

To achieve her vision, she has worked hard to upskill, learn, network and voluntarily commit time to ensure that agriculture and food production have a sustainable future. This, she says, has required “perseverance, tenacity, resilience and a focus on my long-term goals. It has also required the ongoing support of my husband and family.”

Williams has the ability to understand both sides of the issues around developing a

profitable farming business and ensuring a healthy environment for our future generations. She completed an environmental degree (Master of Regional and Resource Planning), and then worked on policy development for local and regional government “espousing for the control of adverse effects on our environment”.

“When I married a farmer and became heavily involved in our farming business and what was required to be profitable, I understood the importance of writing policy and regulation that was encouraging of on-farm profitability and environmental sustainability.

“I love that I can actually make a difference. That I can help government and regulators to see that farmers are real people and real families trying to make a living and be stewards of the land, and that I can encourage farmers to be more aware of the impacts on the environment and how they can change and adapt - it's a pretty exciting role”.

[Read more about Karen.](#) ■



GLOBALISATION OF ANIMAL MEDICINE REGULATIONS

Animal medicine regulatory agencies and industries gathered in South Africa for the VICH Steering Committee, Outreach forum meetings and conference in February.



Animal medicine regulatory agencies and industries gathered in South Africa for the VICH Steering Committee, Outreach Forum meetings and conference in late February. Representatives joined together in Cape Town, to pursue the common goal of increasing global access to safe, effective and high quality animal medicines.

VICH is a trilateral cooperation programme among the European Union, Japan and the United States of America – driving the harmonisation of technical requirements for the registration of veterinary medicines. New Zealand,

Australia, South Africa and Canada are included on the Steering Committee as observer members.

Attendees heard from regulators from around the world, the World Organisation for Animal Health (OIE), industry organisations, the World Bank and the Bill and Melinda Gates Foundation. 127 participants from 28 countries attended the sixth conference including 64 regulators. There were 75 attendees from Africa and 49 from the host country.

The conference was held in conjunction with the 37th VICH

Steering Committee and 11th VICH Outreach Forum (VOF) meetings. The meetings were attended by 50 participants representing 21 national regulatory agencies or animal health industry organisations.

The Outreach Forum, co-chaired by VICH and the OIE, drew participants from six continents. The forum featured technical training on VICH Guidelines, breakout discussions on withdrawal period studies, and interactive sessions to exchange ideas and shared experiences between forum participants. The VOF co-chairs promoted opportunities to members on contributing to its guideline development. Presentations by VOF members included the Kingdom of Saudi Arabia, Russian Federation, and the Republic of India.

New training materials on the quality guidelines were made available and can be accessed via the [VICH website](#).

The VICH GL 57 Metabolism and Residue Kinetics: Residues in Fish – Studies to evaluate the Metabolism and Residue Kinetics of veterinary drugs in food-producing species: marker residue depletion studies to establish product withdrawal periods in aquatic species. This guideline will be implemented in the VICH regions by February 2020.

Progress continues in seven active Expert Working Groups: Electronic Standards Implementation (Pharmacovigilance), Safety, Quality, Biologicals Quality Monitoring, Metabolism and Residue Kinetics, Combination Products Guideline and Anthelmintics.

The presentations made at the Conference are publicly available on the [VICH 6 Conference website](#).

All VICH draft and final Guidelines are available on the [VICH website](#). ■



Four ways digitalisation is changing livestock



Precision farming techniques have been applied to real farms for decades. Digital advancements are bringing them into the mainstream and they've become a buzz-term in livestock farming.

Traditional health and welfare strategies, such as visual checks, are getting a digital makeover. Technology allows farmers to achieve the same goal through 'smart' solutions – enhancing health and welfare operations.

We take a look at some of the ways technology is being used to improve farming practices in a growing world.

Greater nutrition transparency

Getting nutrition right is essential for livestock production and is often the highest outgoing cost for farmers. Nutrition needs to work hard to provide a return on this investment.

Variability in the quality of raw materials for feed can be difficult to detect until it's affected the animal's performance or health.

New mobile near-infrared devices are enabling farmers to better monitor exactly what is in their feed and troubleshoot issues early. The devices scan samples of feed and send the nutritional information direct to the farmer's mobile phone, giving them access to this information from anywhere in real time.

It can provide a more dynamic way of controlling feed quality than traditional methods – often requiring the farmer to send samples to be tested in a lab, an expensive and lengthy exercise.

These new capabilities give farmers better control of their feed to confidently rear healthy animals, and predict production and profitability for their farms.

HOW DIGITALISATION IS OPTIMISING LIVESTOCK FARMING



Cattle RFID tags work like your smartwatch, providing detailed data to improve animal health, welfare and productivity.

Sound diagnostic tools monitor 24/7 for the very first tell-tale cough that indicates respiratory disease in swine.



Mobile apps provide instant, precision analysis powered by big data for livestock evaluations like body condition scoring.

Tackling respiratory diseases on pig farms

Pigs are vulnerable to respiratory issues. Traditionally farmers monitor this by listening out for a symptomatic cough. But swine farms are noisy places – animals and equipment make it difficult to detect abnormal coughs in a sea of sound.

Researchers are exploring sound diagnostic tools to be the farmer's ears. These pieces of kit use acoustic sensors to listen out for abnormalities. They also measure other factors in the barn linked to respiratory health, such as temperature and humidity, which is relayed back to the farmer digitally.

These devices may be able to detect issues up to two weeks earlier than conventional methods.

Digitalising body composition score

Body composition score, or BCS, is a visual evaluation farmers use to determine a sow's reproductive stage and understand her wellbeing.

Researchers have developed a mobile phone solution to bring this into the digital age – making the process more consistent, objective and enabling data collection over a longer period of time. By inputting the usual measurements digitally, they can be added to farm management software and shared with veterinarians to better care for the animals.

Remote herd health tracking

Animal trackers have developed considerably. They allow farmers to access detailed data on disease and export welfare as well as tracking.

Today's 'connected cows' use RFID tags, which identify and register each animal to a farmer – tracking their location and creating significant efficiencies for herds grazing across large distances.

This technology also enables farmers to easily record health management events, such as vaccinations or diseases, for each animal using their mobile phones. When combined with location technology, it enables farmers and veterinarians to monitor disease and act more quickly to any outbreaks.

It's clear that digitalisation opens up a field of possibilities to enhancing animal health and wellbeing, offering new opportunities for farms of the future. These technologies give us insight into what the 'new normal' could look like. ■

Content provided by HealthforAnimals

Understanding risks leading to triple resistance is vital for pastoral farmers

IT'S ONE OF THE MAJOR CAUSES OF PRODUCTION LOSS IN NEW ZEALAND PASTORAL FARMING SYSTEMS. WORMWISE FACILITATOR AND VET, SIMON MARSHALL DISCUSSES THE COSTS OF PARASITES ON FARMS.



As well as production losses, parasites can lead to fly strike and welfare issues. Drenches are part of the tool kit used to combat this and their appropriate use is vital for protecting animal welfare.

The issue we're facing now is that we have instances of triple drench resistance – this occurs when a parasite that was sent to an early death, can now survive not only one anthelmintic – but three different active ingredients that target that worm.

There is no hard and fast answer as to why this is occurring, but there are some risk factors involved and they are addressed in the Wormwise handbook. The advice in the book is a cohesive response from those in the know – vets, industry and academics.

“The parasites that live on a farm are 95 percent on the pasture and 5 percent in the gut of the animal. So over time, if we expose the parasites in the animals to chemical, they have a chance of surviving the drench and then passing on their genetic material,” says Marshall.

It is effectively a genetic mutation that some parasites have acquired. “If we select heavily for these genetics, we can change the majority of the population and ‘voila’ we have a resistant population,” he adds.

There is probably a combination of factors that lead to resistance

issues – such as lack of appropriate management, or knowledge of the risk factors. “No one would set out to cause drench resistance, but people’s risk averseness differs,” says Marshall. Understanding the risks leading to resistance is vital.

Spreading out drench intervals is not a risk factor for creating resistance, but in certain circumstances, over-drenching is.

Marshall also postulates that in some circumstances triple-drench options are being resorted to once individual actives have had resistance issues. In this case, the useful lifespan of the triple drench is not as long as it would have been if it had been used sooner with good refugia practices in place.

To help with parasite management, it is useful to have different stock classes and species on the farm – to be able to create integrated grazing and, therefore, reduce parasite challenge.

Farmers with only one type of stock could investigate using different types of forage and/or crops. Certain forages have less of a parasite challenge on them and higher protein feeds are better for stock to fight incoming parasite challenge. This is because the protein is



used in the immune response. This is a good option for farmers who don't have the resources to move stock or alternate with different stock.

His advice to farmers is to “identify high risk practices on the farm and find ways to mitigate them,” using the handbook as a guide. He also encourages farmers to ask questions about the origins of stock to ensure that issues are not unintentionally brought onto the farm. This is a lot simpler than tackling issues posed by a farm with triple-resistance status once you have brought it onto the property. Often it is not possible to carry out due diligence on trading stock so implementing a robust quarantine procedure is imperative.

Farmers also need to work closely with their vet or parasite advisor to complete a parasite management plan which will probably involve changes to their farming systems.

■ Wormwise handbook

AGCARM DISCUSSES ASIAN CROP PROTECTION ISSUES

CropLife Asia brings together crop protection experts



Asian and Australasian agricultural sector experts share insights on how to ensure a safe and sustainable food supply at the CropLife Asia annual general meeting in Singapore. Global issues facing the crop industry were also addressed at a training day for CropLife leaders in March.

Without crop protection products, almost 50 percent of the world's food would be lost to pests and disease. The protection these advanced pesticides provide isn't limited to the field – they help prolong the viable life and prevent

post-harvest losses of crops while in storage as well. With arable land being converted for other uses, crop protection products help farmers to grow more food on less land.

Meanwhile, biotech crops are helping increase crop productivity, conserve biodiversity and increase farmer incomes. New technology is helping slow the advance of climate change by reducing carbon emissions. In 2015 alone, it's estimated that biotech crop plantings lowered carbon dioxide emissions by 26.7 billion kg –

equivalent to removing around 12 million cars from the road for an entire year. Farmer income gains from 1996-2015 generated globally by biotech crops amounted to about US \$167.8 billion.

Sector experts discussed access to new products, barriers to innovation, consumer behaviours and smart agriculture. New Zealand's challenges with pest and disease management are not as significant as some Asian countries. Counterfeit products are rife in India and account for almost 40 percent of crop protection sales. Political interference in Vietnam sees crop protection products cancelled overnight without industry consultation.

Asia is home to the smallest-sized farms and the largest number of smallholder farmers globally. It's estimated that 85 percent of the world's 525 million smallholder farmers live and work within our continent – around 100 million in Southeast Asia alone. With fewer resources and more unique challenges to mitigate – such as access to technology, landholder rights, finance availability, and climate change – smallholder farmers in the region face a daunting task.

Advancements in Asia's plant science industry are providing invaluable tools for the region's smallholder farmer toolbox. These technologies are enabling farmers to sustainably increase their yields,

use fewer resources, and minimise environmental impacts.

It is important that we work together with our closely-aligned Asian markets to ensure safe and healthy food throughout the Asia-Pacific. ■



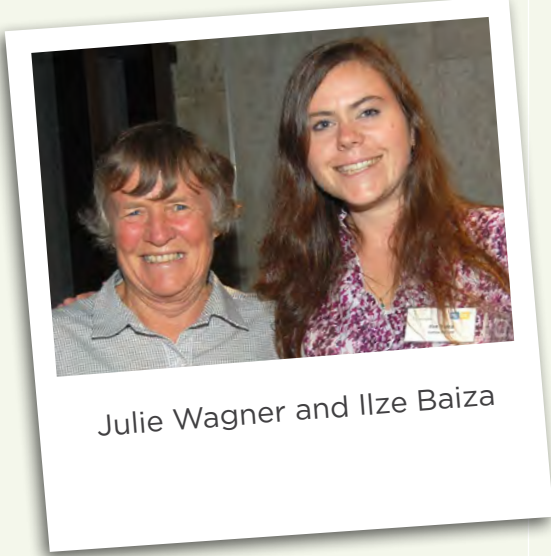
Mark Ross, Pauline Calvert and Barbara Kuriger



Summer conference February 21, 2019



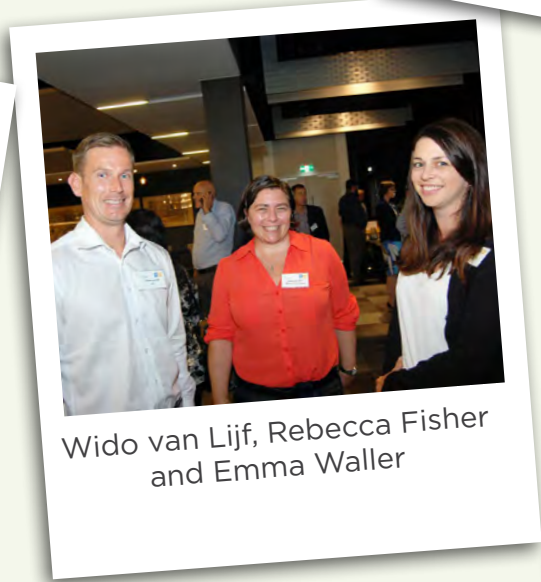
Rafaei Barberi and Andrew Dyson



Julie Wagner and Ilze Baiza



Networking a key focus of the event



Wido van Lijf, Rebecca Fisher and Emma Waller



John Yates farewells Lee Sheppard, Agcarm's conference organiser who recently retired

Summer conference

A diverse range of people spoke at the notable event.



Mark Thomas

Antibiotics are vital, but we “need to use them only when necessary” to avoid the development of resistance, says Auckland University’s Medical and Clinical Professor, Mark Thomas.

“AMR is a consequence of abusing an environment,” says Thomas, in people that can be “our organs, our intestines or our skin.

“We are collectively degrading the quality of the microbiome that lives in and on us.”

In New Zealand, it’s not the farmer, it’s the community that’s lifting consumption rates of antibiotics. This is antibiotics prescribed in GP practices.

Greece, France, Belgium, Italy Luxembourg, Poland are the only countries using more antibiotics in the community. “We use far too much.”

Antibiotic prescribing peaks in winter in NZ, with a seasonal variation of 26 percent, compared to 12 percent in Denmark and 14 percent in the UK. This indicates that we are using antibiotics for colds and flu. “People can’t stop themselves going to the doctor and the doctor

can’t stop rewarding the patient for coming by giving them an antibiotic prescription,” Thomas purports.

Carrot and stick ‘works a bit’ he says. “If I was to say to a GP, ‘I’ll give you a new Bentley if you drop antibiotic prescriptions by 50 percent’, they would do it like that”. GPs say that the problem is, ‘I want to fulfil patient expectations’. If a patient isn’t given anything, they won’t bother going to the GP. “That’s what we want, it’s not necessarily what GPs want.”

There is a rapid emergence of resistance to ciprofloxacin – which we use a lot in NZ – mainly for ecoli – a common bacterial cause of disease. But, the more you use it, the more resistance you have. The high users with high levels of resistance include Italy, Hungary and Spain - with Norway, Sweden and Finland at the other end of the spectrum.

In 2015, 44 percent of all GP registered patients were dispensed more than one antibiotic course. “We use a lot, we’re going to get a lot of AMR.

“If it wasn’t a problem, we wouldn’t be talking about it.

“This is an environmental tragedy that our children and grandchildren will inherit, as the result of our actions,” says Thomas.

In the first five years of life, 97 percent of children have had an antibiotic prescription – with an average of 10 per child. In the first year of life, 62 percent of children have had one.

Hospital consumption in NZ is relatively conservative - rating as the third lowest prescriber of antibiotic prescriptions globally.

Thomas said that companies can’t be bothered making new antibiotics because they’re used for days or a maximum of a few weeks. If it’s a new antibiotic, it will be used for a rare situation where something else does not work. “They would rather spend money on products that will make you more horny or to get more sleep - products that people will take day after day.”

Just because someone discovered a new antibiotic, it doesn’t mean it’s coming to market, because “the money is not there”.



Pauline Calvert

Agcarm President, Pauline Calvert, asserts that there will always be significant changes in the pipeline for crop protection and animal health industries. “They are so vulnerable to changing economies, political landscapes and public perceptions”, she says. Calvert says the issues are more than just about biosecurity – “remember, dig deep, work to find champions and a new voice. Agcarm is that forum”.

“Agcam has a huge amount of output for a small team. This benefits us as members,” says Calvert.

Some of our key activities in the last six months include.

- Sales data – ensuring the continuity of sales data as we transfer from the Scotts to Market Access Solutionz.
- Media – responding to media and promoting our industry. “We need Agcarm to be there – a collective voice.”
- Agrecovery – this year has recovered 50 percent of eligible containers. This is an added benefit to our customers and, more importantly, part of a sustainable future.
- Some EU decisions based on public perception, rather than science. “Our work through global association HealthforAnimals can’t be underestimated”.
- Work with regulators, including the MPI cost recovery exercise – must be the only regulator that does this and reduces its hourly rate.
- Updating labelling guidelines – important in our toolbox
- VICH participation – a huge amount of work.
- NZIER report – an important document demonstrating the value of crop protection to agriculture.
- Iwi training and an opportunity to engage with Māori leaders.

There is also a lot going on behind the scenes with governance groups, waste management and antibiotic resistance.

Running to the fire to address mental health issues



There is a negativity bias in our brain designed to look after us. Worrying way too much is “part of a legacy we no longer need,” says Lance Burdett. This is our fight and flight response



dictated by the part of our brain that ensures our survival – the amygdala.

“Anxiety is just survival,” but Burdett warns that fight or flight can turn into ‘panic mode’.

Burdett suggests “running to the fire” – doing something about it and discusses some techniques.

“It takes 80 days to change destructive thought patterns. Repeating thoughts can drive the neural pathway – start with writing down what is to change.” Getting excited helps as it releases dopamine which makes the brain malleable.

He asserts that ‘having a small piece of protein before bed,’ can help the anxious person sleep – because an enzyme from the liver engages with our fight and flight response.

As breathing also controls the brain, he is an avid believer in tactical breathing – breathing in for six seconds and out for six seconds. “This helps us go into an alpha state,” he says.

He says men, in particular, compartmentalise emotions – “we feel and bottle up”.

Brain rewiring occurs in adolescents – at 13 for girls and 14 for boys. That’s when we are “susceptible to ourselves. Young people can’t compartmentalise”.

Burdett's tips for wellbeing

Start a ritual, not a routine.

Slow is smooth, smooth is fast.

Have little milestones.

Look forward to stuff.

Exercise your eyes, it exercises your brain.

Pressure is good for you. Type 2 stress is ‘forgetting to put your parachute on’. You need to change type 2 stress into type 1, with your thoughts.

Switch off as you leave work, let it go at the door.

Maintain a positive diary.

Turn to spiritual practices.

Lance Burdett has worked with elite international tactical units across police, the military, emergency services, prisons and the FBI.



Ewe want milk?

Craig Pritchard, Associate Professor at Massey University, discussed the challenges and promise of the sheep milk industry in New Zealand.

He offered conference attendees a taste of ewe’s milk - which had a sharp flavour - and cheese made from ewe’s milk. ■

Annual Conference

THURSDAY 25 JULY 2019
TE PAPA TONGAREWA
55 CABLE STREET, WELLINGTON

Agcarm is holding its 72nd annual conference on July 25 at Te Papa in Wellington.

Attendees will have the opportunity to meet government ministers and officials, and listen to quality speakers from New Zealand and overseas.

Speakers include the Minister of Conservation, Land Information and Associate Minister for the Environment, Hon Eugenie Sage; Chief Executive Officer of the Australian Pesticides and Veterinary Medicines Authority, Dr Chris Parker; New Zealand Institute of Economic Research's, Principal Economist, Chris Nixon; and Chris Miller of Chris Miller Coaching who will discuss personal and business development.

After cocktails, members and invited guests will join us for dinner and a quiz.

Please note that non-member attendance is subject to Agcarm approval.

Further details of the day, including accommodation options and costs, are available on our [conference page](#) or by contacting the conference organiser, Melanie Murray - events@agcarm.co.nz or ph 499 4225. ■

Agcarm welcomes new members

TROY LABORATORIES

Animal health

Troy Laboratories is a manufacturer of animal health pharmaceuticals and has over 140 registered products in global markets.

www.troylab.com.au



HODDER & TAYLORS

Distributor

Hodder & Taylors (H&T) was founded in 2003 to improve crop and forage systems on New Zealand farms. The Feilding-based company consists of 11 forage and crop advisers that champion the delivery of new and profitable technology into farm systems.

H&T aims to lead the development of seed-applied technology and animal nutrition.

hnt.co.nz



LEANNE STEWART

Individual associate

Deputy Chief Executive Officer,
Horticulture New Zealand

Horticulture New Zealand (HortNZ) is an industry good organisation that represents 5,000 commercial fruit and vegetable growers, providing services in biosecurity, natural resources and the environment, grower support (GrowSAFE and NZGAP) and advocacy. The work HortNZ does for growers centres around protecting their right to grow through access to resources, including crop production tools such as agrichemicals. With a strong focus on sustainability, HortNZ together with other organisations in the horticulture, arable and viticulture sectors, has recently gained approval for a Primary Growth Partnership (PGP) project 'A lighter touch: Agroecological crop protection to meet future consumer demands'. Agcarm is also a partner in this project.

By becoming a member of Agcarm, HortNZ hopes to increase situational awareness of the agrichemical regulatory system in New Zealand and inform HortNZ's work for growers and the PGP.



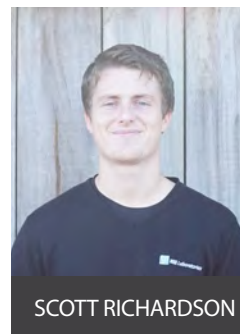
LEANNE STEWART

SCOTT RICHARDSON

As the Key Account Manager for the horticultural sector at Hill Laboratories, Scott Richardson works with clients requiring pesticide residue testing - including agrichemical companies needing it for registration purposes - as well as developing new formulations. He worked for the company as a laboratory technician and within sample reception, before joining the commercial team in his current role.

He holds a Bachelor of Science from Waikato University.

"I have joined Agcarm to keep up to date and expand my knowledge of the industry, and for the excellent networking opportunities," he says.



SCOTT RICHARDSON

SEAN LANGE

Sean Lange is the Managing Director of Field-Tek Ltd - an independent research company providing contract research and technology services to the agrichemical industry in New Zealand and around the world.

Lange has almost thirty year's experience in the primary industries. He has spent 21 years conducting field research - 12 in the Hawkes Bay and the last nine in Canterbury. He has conducted trials from Nelson and Marlborough through to Southland, across a wide range of crops.

Lange has a keen interest in technology. ■



SEAN LANGE

What is Agcarm?

Agcarm is the industry association which represents crop protection, animal health, and rural supplier businesses. Agcarm members distribute and sell the majority of veterinary medicines and crop protection products in New Zealand. Agcarm members promote responsible use of products right through the product life cycle, from research to disposal. Agcarm is also a positive voice for its members and lobbies for progressive and sensible policy.

For information on joining Agcarm, go to www.agcarm.co.nz

Our mission is to protect and enhance the health of crops and animals through innovation, development and responsible use of products.

We work with governments and stakeholders from around the globe to shape policy and meet the shared goals of health and safety to protect the environment and the food chain.

Our ability to source information from experts around the world gives legislators access to the best advice.

Agcarm's priorities:

Safe Food / Provision of Innovative Compounds / Resistance Management / Healthy Animals and Crops / Product Stewardship / Bee Health / Sustainability.



**The voice of crop protection
and animal health.**

