



Study shows New Zealanders in favour of genetic technologies when employed in areas associated with food production

A recent study was undertaken by Primary Purpose which shows a majority of New Zealanders have a favourable opinion of using genetic techniques to advance agriculture and food production, especially if it meant less chemicals and pesticides, and helping to control pests and diseases that damage the natural environment.

Primary Purpose is a New Zealand company working in the area of strategic planning and marketing for companies in the primary production and food sectors to help drive their growth and expansion.

The New Zealand government has signalled its intention to review legislation governing the use of genetic technologies in New Zealand. It was never clear however what the opinion of the New Zealand public might be of such a change. Primary Purpose conducted their survey in May of this year to find out whether the public mood was in tune with the intentions of the new government.

Although generally positive about the benefits when it came to environmental considerations, in other areas the public was more circumspect with regards genetic technologies. Many to most admitted that they had little knowledge of how genetic technologies actually related to food production.



When given context about areas of potential gene technology use, 14% said they would like to see regulations eased, 45% that further exploration should be undertaken on a case-by-case basis, and 29% said that New Zealand food production should be completely free of genetic technology.

However, only 14% opposed the use of genetic technology when it came to pest control, lowering farm costs, improving drought resistance and increasing food's nutritional value.

New Zealand's Minister of Science, Innovation and Technology, Judith Collins, has recently been in the news communicating the government's intention to pass legislation to reform rules around gene technologies by the end of 2025.

Although the benefits to science and industry in New Zealand from such a regulation change are clear, the findings of Primary Purpose's survey suggest that good communication between the government and the public will be necessary to keep the population on side.

BioSouth playing a key role in government project to discover and develop biological controls against bacterial pathogens

The project is called “Adaptable phage solutions: an Aotearoa-NZ platform for precision biocontrol for primary industries”. It has a five-year timeframe with a grant of almost \$9 million from the Endeavour Fund.

Bacteriophages (phage’s) are viruses that infect bacteria. These phages can be employed to kill bacterial hosts without causing any harm to plants or animals. This makes them highly beneficial for human health in addressing antibiotic-resistant bacteria, but also for the protection of crops from bacterial pathogens. The project itself has as its objective the creation of a pipeline for phage discovery and development for use against a host of bacterial pathogens that threaten New Zealand’s horticultural and agricultural industries.



BioSouth is rapidly becoming a global expert in phage promulgation and production and will be doing the heavy lifting in producing at scale.

“BioSouth is a key player in the production and scaleup of bacteriophage, and how to grow phage at commercial volumes” said BioSouth’s Chief Science Officer, Professor Travis Glare.

As the project evolves it is expected that an entirely new industry will emerge in New Zealand for the production and manufacture of phage-based products, generating skilled jobs and new business ventures.

Bioeconomy facts and figures

Biomolecules: are substances produced by cells such as nucleic acids and proteins. These substances, once produced by the cells employed for the task, can be separated out or “harvested” and used for a multitude of purposes. In human health they can be used for the treatment of regenerative diseases or cancer.

Upcoming International Events in 2024

Biologics Contract Manufacturing Asia 2024

11-12 September 2024, Singapore

BioSouth’s John Mead will be a speaker at this important event.

BioProcessing Network 2024

8-10 October 2024, Brisbane, Australia

BioSouth will be speaking.

ABIM 2024 – Annual BioControl Industry Meeting

21-23 October 2024, Basel, Switzerland

BioSouth will be exhibiting on stand 007 in Hall 4.

European Green Deal could be a non-tariff barrier for NZ agricultural and horticultural exporters

The European Green Deal aims to create a net-zero green economy by 2050. It is ambitious in its aim, making Europe the first climate-neutral continent in the world.

With broader objectives, in line with the Kunming-Montreal Global Biodiversity Framework, the EU will work to restore biodiversity, address pollution, and use resources as efficiently as possible.

The focus will be to ensure that not just greenhouse gas emissions but indeed anything damaging to the environment is not simply “offshored” to another geography.

The EU has stressed that more needs to be done to achieve the EU’s zero pollution targets to reduce by 50% the use and risk of chemical and more hazardous pesticides by 2030. Widespread pesticide use has been identified by the EU authorities as a major source of pollution, contaminating water, soil and air, provoking the loss of biodiversity and leading to pest resistance. Human exposure can cause chronic diseases, cancer, heart, respiratory and neurological diseases.

To ensure banned chemicals did not come in the back door, exporters of food and beverages to the EU would need to prove that their products contained no banned agrochemicals.



“New Zealand horticultural producers in particular need to think carefully about their pest management strategies and look to embrace biological controls as opposed to relying on chemical pesticides the use of which may impact exports to the EU in future,” said Professor Travis Glare, Chief Science Officer at BioSouth.

NZTE has also suggested that NZ exporters need to keep abreast of new policies and laws coming into force in the EU and ensure they make the necessary preparations to avoid any barrier to export to that region.

BioSouth takes the stage at NZPPS 2024 symposium

This year the New Zealand Plant Protection Society (NZPPS) will be holding its annual symposium in Auckland in August.

Themes this year include local and international trends in crop protection and presenting some of the latest science and tools available to growers.

The symposium will bring together leading scientists, kaitiaki (guardians), international experts, representatives from government agencies

and industry leaders to share their knowledge and latest findings impacting crop protection.

Professor Travis Glare, Chief Science Officer at BioSouth will be briefing delegates to the New Zealand Plant Protection Society (NZPPS) Annual Conference in Auckland on the work that BioSouth is doing on the scale-up and production of biologicals.

The conference will take place on 12 August 2024 at the Marriott Hotel in Auckland.

For more information:

<https://nzpps.org/events/nzps-symposium-2024/>



BioSouth takes part in Brazil's first bio control and bio stimulant congress

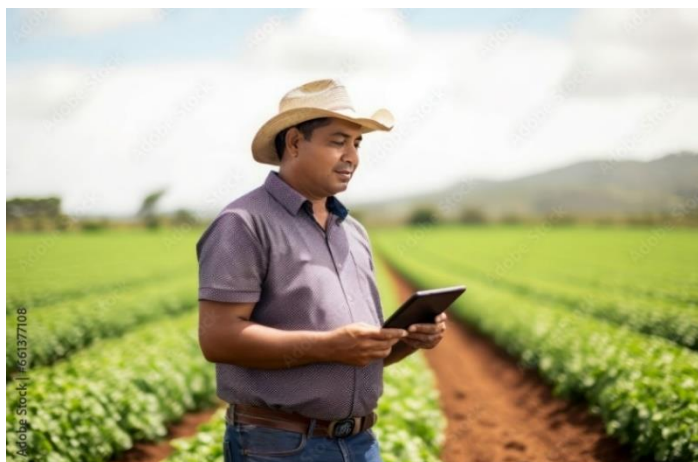
The BioSummit 2024 took place in the city of Campinas about one hour's drive from São Paulo in late May of this year.

BioSouth has a presence in Brazil and was on the ground to network with emerging players in that market in such diverse areas as microbial fermentation equipment, research and development organisations, and producers of bio controls and bio stimulants.

Brazil is the second largest market in the world for biological inputs into agriculture. The country has a long history of using biological control agents as a more cost-effective alternative to expensive imported chemical pesticides.

The increase in fertilizer prices since the start of the war in Ukraine has also proved a major driver for the adoption of bio stimulants to substitute chemical fertilizers.

At the event it was announced that biological inputs reached a total of US\$ 827 million in the 2022-2023 harvest year which was a 52%



increase over the previous 2021-2022 harvest year.

The private equity market has been extremely active in Brazil in the agricultural biologicals space in recent years. From 2020-2022 there was heightened activity in the M&A space between national and international companies in the area of bio control agents.

Challenges in Brazil are the same as in other markets, primarily market development and awakening farmers to the clear benefits of such products.

Preparations are underway for ABIM in October

ABIM, the Annual Biocontrol Industry Meeting, is the largest meeting of the biocontrol industry to discover and unveil new products, discuss market opportunities, present research findings and liaise with other professionals from around the world.



This year BioSouth will be exhibiting without Grasslanz, Plant & Food and AgResearch, but will be representing not just its own capabilities in microbial fermentation and scaleup services, but the wider capabilities of New Zealand's expanding biocontrol industry.

BioSouth will be firming up global partnerships for production and distribution of biological products and advancing discussions with some new customers. A focus for 2024 will be promoting BioSouth's capabilities around scale production of *Beauveria* and bacteriophage.

This year ABIM will take place from 21-23 October at the Congress Centre Basel in Switzerland. You will find BioSouth at stand 007 in Hall 4.