

# SCIENCE & INNOVATION

## Work Programmes 2021–2022



### 1. SUSTAINABLE PLANT PRODUCTION SYSTEMS

Over the next decade, plant producers must tackle a wide-range of issues, from sourcing and discharging water, to the use of plastics, chemical fertilisers, herbicides and insecticides, and in energy efficiency.

NZPPI Science is leaning into a few of these issues over the next two years, including:

#### THE NEW PLASTICS ECONOMY VISION



##### ELIMINATE

the plastics we don't need.



##### INNOVATE

to ensure that the plastics we do need are reusable, recyclable, or compostable.



##### CIRCULATE

all the plastic items we use to keep them in the economy and out of the environment.

#### Reducing plastic waste

Most of the plants produced by our sector are sold in plastic containers and there is growing pressure from consumers for recycling schemes and biodegradable alternatives. We need to understand the drivers and concerns of importers and manufacturers, suppliers, transport/logistics firms, local government, recyclers and interest groups.

NZPPI will seek funding for a survey to gather **statistics on the volumes and types of plastic used by our sector** and the existing opportunities for recycling and recovery. We can present options for getting plastic products back to manufacturers in the easiest and most cost-effective way, and we can encourage manufacturers of biodegradable alternatives.

## Water consumption and leachate management

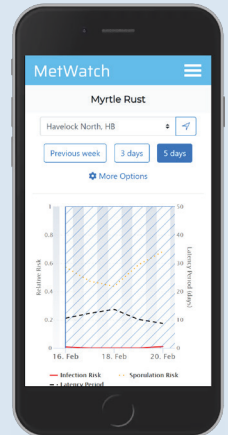
New Zealand is experiencing more frequent and severe drought and local authorities are tightening their consenting processes and implementing metering. Under or over watering can result in uneven nutrient uptake which affects plant quality and uniformity, and plant producers are joining the list of horticultural businesses who are required to manage the nutrient and pollutant runoff from their sites.

NZPPI will continue to build on its draft **Code of Practice guideline for water-use management** and develop standards for monitoring irrigation, water quality and fertiliser application, so that waste water and nutrient leaching are kept to a minimum.



## Cost effective technologies to monitor plant health and detect pathogens

NZPPI is supporting the development of an **online tool for disease management of Myrtle rust**. The tool will enable producers to use their local weather station data to predict the best time to apply fungicides to manage myrtle rust within the nursery. This will be a huge step-forward for our industry in being able to better manage this devastating pathogen.



**TELL US  
WHAT YOU  
THINK!**

## 2. SOIL HEALTH, PLANT QUALITY AND VIGOUR

Nursery plant production depends on soil and media quality, whether for in-ground production or container stock. New tools to measure soil and media biological properties are available to improve sustainable nursery production and enhance plant quality and vigour. Growing media preparation and storage influences the chemical and physical properties of the media, and the presence of plant pathogens and disease-causing organisms.

NZPPI is developing a **Container media quality standard** over the next two years, including guidelines for composting bark and sawdust to ensure minimal contamination by plant pathogens, living insects and weed propagules.

Email [kathryn@nzppi.co.nz](mailto:kathryn@nzppi.co.nz)