



## ACVM



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### Ministry for Primary Industries' antimicrobial resistance team

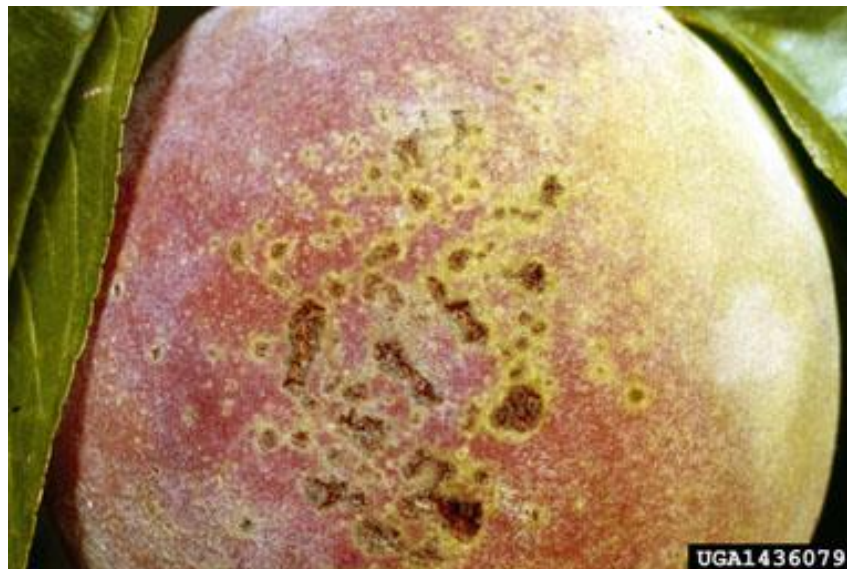
In September 2022, the Ministry for Primary Industries' (MPI) New Zealand Food Safety business unit established a team dedicated to antimicrobial resistance (AMR) in plants and animals. The team of six is part of the Agricultural Compounds and Veterinary Medicines (ACVM) team. The core function of the AMR team is to update and implement actions of the [New Zealand Antimicrobial Resistance Action Plan](#) as they relate to animals and plants.

### Antibiotic use to manage bacterial disease in horticulture

Streptomycin is used as a bactericide to manage bacterial spot, blast, and *Pseudomonas syringae* in stone fruit; fire blight in pome fruit; and *Pseudomonas syringae* pv. *actinidiae* in kiwifruit. Streptomycin is one of two aminoglycoside antibiotics registered for use in horticulture in New Zealand. Streptomycin is an antibiotic that is also used to treat animals and, in some countries, tuberculosis in humans.

Use of antibiotics in New Zealand horticulture is managed by controls set under the Agricultural Compounds and Veterinary Medicines (ACVM) Act 1997.

Each year MPI publishes a report of antibiotic sales used in animals and horticulture. The 2022 sales report found that overall sales of antimicrobials were down for a fifth year in a row, however horticulture sales were 60% above the five-year sales averages and the total was more than double the amount sold in 2017. It is understood that most use of antibiotics in horticulture is for pome fruit and kiwifruit, with stone fruit use accounting for a small percentage of total sales. The 2023 report is expected to be released during September 2024.



Bacterial spot of stone fruit. Clemson University- USDA Cooperative Extension Slide Series, Bugwood.org.

## AMR audits and antibiotic reassessments

Starting in September this year, the AMR team is commencing an audit on the use of antibiotics to manage disease in stone fruit. The AMR team's audit programme started in 2023 to survey, assess, and help mitigate risks associated with antimicrobial resistance (AMR) in plants and animals in New Zealand. The audit programme covers manufacturers, retailers, distributors, veterinarians, and horticultural users of antibiotics. The audits focus on compliance with the conditions of registration of antibiotics used in animals and plants, the general understanding and awareness of AMR by different sectors, and any surveillance being undertaken to monitor for and manage AMR. The information gathered from the audits is used to identify where any regulatory changes are needed and to inform the team where outreach and training, as well as surveillance resources, should be directed.

Our audits of the kiwifruit and pome fruit sectors highlighted how important it is for growers and spraying contractors to understand the conditions of registration of antibiotic bactericides to reduce the risks of antibiotic resistance developing in target and non-target organisms. It is important to keep excellent records and follow all controls on the antibiotic's conditions of registration to reduce exposure of the environment and non-target plants and animals, such as bees and grazing stock.

The AMR team are currently reviewing all antibiotics registered under the ACVM Act. Tranche two of this review, which includes the horticultural antibiotics streptomycin and kasugamycin, has just started. We will be reviewing the labels and conditions of registration and will use our audit findings to see if improvements are required for use guidance and labelling, to help users better understand how to use these products safely.

## How can fruit growers get involved with managing AMR?

Growers can help by:

1. Having integrated pest-management strategies in place for their orchards to reduce infection risks and ensuring they only use antibiotics when absolutely necessary.
2. Following the label instructions and [website conditions of registration](#) for ACVM treatments. For streptomycin products this includes minimising the risk of exposure of bees on the property and neighbouring properties.
3. [Reporting adverse effects](#), including lack of efficacy to the ACVM team.
4. Carefully disposing of used containers and taking care not to contaminate the environment with unused spray.

### Contact the AMR team

If you would like more information on antimicrobial resistance or AMR surveillance, contact the AMR team at [amrteam@mpi.govt.nz](mailto:amrteam@mpi.govt.nz).

See the [MPI website](#) for more details of the AMR team's work programme, including:

- World Antimicrobial Resistance Awareness Week
- the Animal and Plant Sector AMR Implementation Plan
- AMR surveillance
- antibiotic reassessment and classification
- antibiotic sales analysis reports

