Biosecurity Update – Protecting the places that make our famous wines

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BIOSECURITY NEVER SLEEPS: SUMMER'S BIRD FLU AND FRUIT FLY THREAT

In early December 2024, a strain of high pathogenicity avian influenza (HPAI, or 'bird flu") was detected on Mainland Poultry's farm at Hillgrove in Otago. Then, in early January 2025, another high-risk exotic pest, the oriental fruit fly, was found in a surveillance trap in Papatoetoe, Auckland. Both of these detections triggered immediate, intensive biosecurity responses, aiming to eradicate these unwanted organisms before they could spread further.

As biosecurity planning becomes a requirement for Sustainable Winegrowing New Zealand (SWNZ) vineyard members in the 2025/26 season, these incursions are a timely reminder of why it's important for primary industry properties to have a biosecurity plan in place and to remain vigilant for unusual pests or disease symptoms.

HPAI INCURSLON IN OTAGO

HPAI is a viral disease affecting birds, and has the ability to spread rapidly, particularly where it infests a property where birds live together in high densities. This particular strain, H7N6, is not the same as the more deadly H5N1 strain causing issues internationally and was likely acquired by the poultry farm birds via contact with wild waterfowl. It causes lethargy, reduced appetite, swelling, poor coordination and a drop in egg production, and eventual death of the infected bird.

After noticing several sick and dead birds on the Mainland Poultry property, the farmer acted quickly to seek veterinary advice and make contact with the Ministry for Primary Industries (MPI). It was likely this awareness and quick action prevented the disease spreading to other farms within Mainland's network and more widely around the country. The subsequent biosecurity response has had significant impacts on the Otago property, with the culling of about 200,000 chickens, strict movement controls, and ongoing cleaning and decontamination processes. Repopulation of the farm will likely take several months, after a waiting period to ensure there is no trace of the disease remaining. Although difficult for the affected property, this response represents a great outcome for the New Zealand poultry industry as a whole, with early detection and reporting minimising the impacts to the wider industry and enabling eradication of the disease.

ORIENTAL FRULT FLY INCURSION IN PAPATOETOE

The oriental fruit fly feeds on many different species of host plant; it has been recorded on more than 200 types of fruit and vegetables. Fruit fly larvae develop inside the host fruit or vegetable, causing significant damage and rendering the produce unmarketable. While grapes (Vitis vinifera) are listed among their potential hosts, the actual risk of infestation in grapes is considered low; studies indicate that grapes have a low infestation rate by oriental fruit fly, suggesting that they are not a preferred host for this species.

The Papatoetoe detection early this year was made in a backyard fruit fly surveillance trap, and at the time of writing of this article, only a single fly has been found, despite enhanced surveillance and significant response work underway. More than 100kg of fruit from within the response zone has been processed with no sign of eggs or larvae, and no further flies have been found, despite 100 additional surveillance traps being set up. Again, this is a great outcome, with the additional response work helping to provide confidence to international markets that New Zealand does not have an established Oriental fruit fly population.

CONCLUSION

Biosecurity incursions can happen anywhere, at any time. The better prepared we are, and the earlier an incursion is detected, the better the likelihood of eradication without ongoing, long-term impacts to industry. New Zealand Winegrowers works with other primary sectors and the government to prepare for unwanted pests and diseases through the Government-Industry Agreement and also encourages members to ensure they have a biosecurity plan in place for their vineyards. Biosecurity planning will become a mandatory requirement for vineyard SWNZ certification from the 2025/26 season onwards.