Ongoing biosecurity protection:
a fruit fly economic impact case study

A single fruit fly detection might seem small, but in a growing region like Te Puke, the financial impact can be significant.

Economic modelling specific to the Bay of Plenty shows that a fruit fly incursion in Te Puke could cost the kiwifruit industry up to $700 million in a single season, depending on how widespread the outbreak becomes and how markets respond.

The biggest cost isn't the response itself; it's lost market access. Even a small incursion can trigger restrictions from key export markets.

Recent responses in Auckland highlight the contrast. These operations successfully eradicated the pest but still cost around $1.5 million, a relatively small investment compared to the hundreds of millions at risk if fruit fly established in a growing region.

Early detection and a rapid response keep costs lower and protects market access. But without strong readiness and investment, the financial consequences for growers could escalate quickly.

Strong investment in biosecurity readiness now helps detect threats earlier, respond faster, and reduce the scale - and cost - of an incursion before it causes far greater loss to growers and the wider industry.

The numbers:

Costs climb sharply as the incursion area grows:

- Base scenario: $198.72m (8% of industry income)
- Medium scenario: $533.69m (22%)
- Larger scenario: $694.97m (29%)

Preparedness reduces losses:

- Cold disinfestation could reduce losses by 30% to 40%, helping maintain market access for more fruit during an incursion.

Read more:

The cost of incursion: Kiwifruit Journal Aug/Sep 2023: Summary of the financial impacts of different incursion scenarios based on previous fruit fly incursions in New Zealand and overseas and economic modelling by Underwood (2023), commissioned by Zespri.