



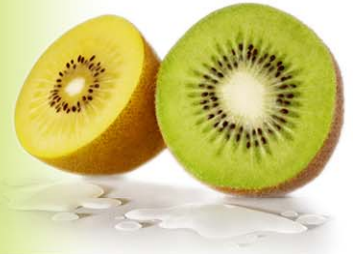
# Kiwifruit's Psa Response

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21 February 2011



# Agenda



- About ZESPRI
- What is Psa
- Psa around the globe
- Life before Psa was confirmed in NZ
- The timeline - what happened when
- Immediate priorities
- What worked well
- Kiwifruit Vine Health Inc
- Key learnings

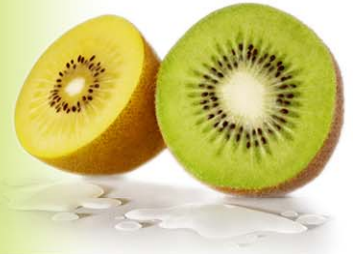


## About ZESPRI International



- ZESPRI® Brand the **world leader** in premium-quality kiwifruit
- **Sales** of \$1.5 billion
- 100% **owned** by current or past kiwifruit growers
- 2700 NZ growers and 1200 offshore
- ZESPRI International is **responsible for**:
  - Kiwifruit innovation
  - Supply management
  - Distribution management
  - Marketing of ZESPRI GREEN, GOLD and ORGANIC Kiwifruit
- Strong **focus on quality** through the ZESPRI™ System
- Approx. 108 million **trays sold** each year
- **Integrated** industry structure
- 80% of kiwifruit grown in the Bay of Plenty

# About Psa



- *Pseudomonas syringae* pv *actinidiae* = Psa
- **Bacterial aerosol vine disease** – spreads more aggressively in cold, wet conditions – no evidence of soil or fruit infection
- Psa affects the plant only, **fruit quality is not compromised**
- Affecting kiwifruit vines around the globe for over 25 years





# Psa around the globe



- **Japan (since 1989)**
  - 4-6% (58ha) of GOLD affected by Psa each year
  - Managed by cutting back, strict orchard hygiene and the use of antibiotics
- **South Korea (first confirmed in 1992)**
  - GREEN thriving until the late 1980s when Psa wiped out the industry
  - Reduced infection due to tunnel house production methods – several orchards still battling Psa
- **Italy (since 1993)**
  - Significant vine damage and crop losses in 2007, 2008, 2009 and 2010
  - Approx. 30% of vines cut out
  - 25% of ZESPRI GOLD orchards have had complete vine removal - 70% are reporting Psa
- **New Zealand (since 2010)**
  - Approximately 1% of orchard area affected (across more than 115 orchards)
  - Approximately 20 orchards have cut out vines to some degree (3 have removed the majority of vines)
  - Urgent industry action and warmer weather reducing spread within and between orchards
- Also recorded in **China (2004), France (2010) and Portugal (2010)**
- **Chile** is testing for Psa but anecdotal evidence suggests it has been present there for some time



## Life before Psa in NZ



- **Growers optimistic** about the future (72% vs 46% in 2007)
- High level of **industry engagement** with high levels of attendance at industry meetings
- **Strong support** for ZESPRI (93%), NZKGI (87%), and the industry structure (90%)
- Three new varieties launched in 2010 with strong industry interest
- **Challenges facing green growers** due to increasing costs and tough market conditions
- **Crisis experience** with hail event and tsunami warnings in 2009
- 1.4m trays of **fruit on the water** (to China and India) ; over 25% yet to be sold



## The timeline : Day 1 - 2



### **Fri 5 Nov: ZESPRI CEO notified of potential infection**

- Crisis management plan invoked
- Internal notifications (Board, key staff)
- MAF and P&FR liaison
- Prepare communications plan/circulate immediate key messages
- Develop mitigation strategy for in-transit fruit
- Visit orchard to understand extent of issue and secure site
- Consider cutback/insurance/compensation options
- Brief key government ministers and officials
- Establish monitoring, reporting and orchard hygiene protocols
- Prepare Grower Contact Centre for incoming queries



## The timeline : day 3,4



### **Mon 8 Nov: Confirmed as Psa**

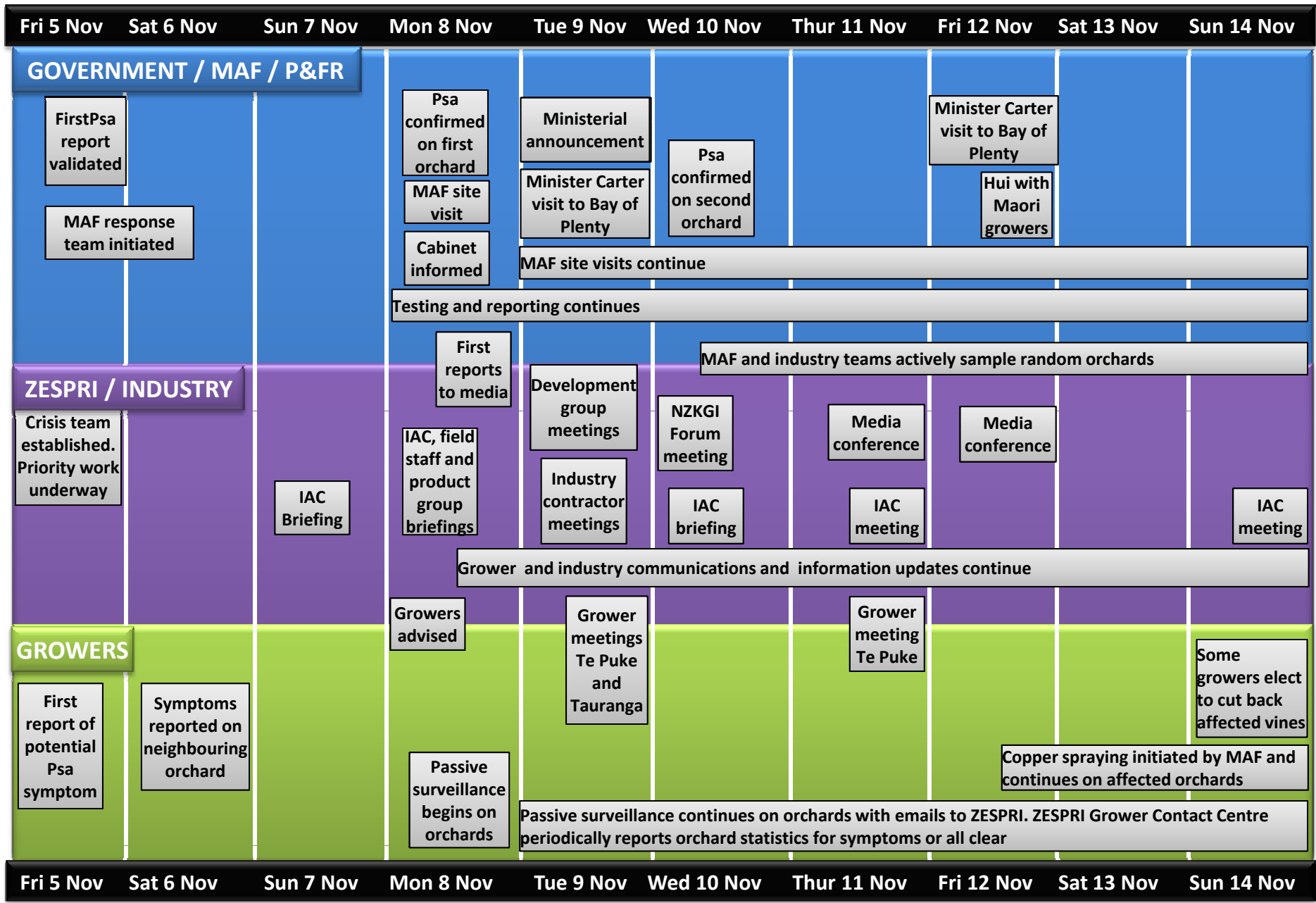
- Commenced proactive industry, customer and media communications
- MAF Notification to key trading partners
- Implement passive monitoring programme

### **• Sun 7 Nov: Wider industry involved**

- Industry Advisory Council meet and agree on initial response strategy
  - *(Industry Advisory Council represents kiwifruit industry with elected representatives from growers, suppliers / post harvest / ZESPRI)*
- Media engagement plan developed



- Focus :
  - **Containing** the immediate risk of spread from infected area
  - **Identifying** where Psa has spread to
  - Trying to **protect markets** so no restriction of product
  - **Understand** whether eradication is feasible and viable
- MAF Incursion Team on the ground inspecting orchards and tracing risk plant material
- 2nd orchard placed under a 'Restricted Place Notice'
- In past two days have met with 1300 growers (50% of the industry) in urgent industry meetings
- US have advised that NZ fruit continues to have full market access but restrictions on plant material
- Offers of solutions start pouring in
- Acting quickly to deal with a few instances of inaccurate media reporting



Orchards placed under RPN:				3		5		5		6		8		11
Orchards with Psa confirmed:				2		2		3		3		4		10

Mon 15 Nov	Tue 16 Nov	Wed 17 Nov	Thu 18 Nov	Fri 19 Nov	Sat 20 Nov	Sun 21 Nov	Mon 22 Nov	Tue 23 Nov	Wed 24 Nov
<b>GOVERNMENT / MAF / P&amp;FR</b>									
Ministerial briefing		Ministerial briefing Ministerial announcement re support package		Ministerial announcement welcoming uptake of package MAF initiate incineration of affected plant material	MAF advise of Psa positive pollen				
Testing and reporting continues									
MAF and industry teams actively sample random orchards									
<b>ZESPRI / INDUSTRY</b>									
Media conference with Psa +ve grower	IAC meeting		Grower consultation meetings	NZKGI Forum meeting IAC meeting Industry announcement	Structure and administration of support package worked through On Orchard practices revised and communicated to growers				IAC meeting
Grower and industry communications and information updates continue									
<b>GROWERS</b>									
			Grower consultation meetings						
Copper spraying continues on affected orchards, cutting back of affected vines									
Passive surveillance continues on orchards with emails to ZESPRI. ZESPRI Grower Contact Centre periodically reports orchard statistics for symptoms or all clear.									
									Grower meetings
<b>Mon 15 Nov</b>	<b>Tue 16 Nov</b>	<b>Wed 17 Nov</b>	<b>Thu 18 Nov</b>	<b>Fri 19 Nov</b>	<b>Sat 20 Nov</b>	<b>Sun 21 Nov</b>	<b>Mon 22 Nov</b>	<b>Tue 23 Nov</b>	<b>Wed 24 Nov</b>
<b>Orchards placed under RPN:</b>									
16	16	28	40	54	54	58	64	70	71
<b>Orchards with Psa confirmed:</b>									
13	13	25	37	51	51	55	61	67	68



## Immediate priorities – November 2011



- Urgently understand how widespread the issue was
- Mitigate risk of spread
- Strong two-way industry communication and wider stakeholder communication
- Rapid response from MAF who understood the seriousness
- Industry agreed that aggressive action was necessary to minimise potential destruction
- Government agreement on financial support package
- Moved quickly – didn't get hung up on who pays for what

**Key constraint** - Very little on-the-ground information; very little international info



## What worked well – first 4 weeks



- Strong two-way **industry communication** and wider stakeholder engagement – “took the industry with us”
- **Rapid response from MAF** who understood the seriousness
- Having **MAF working from the same offices** – including senior MAF staff right from the start, plus the Minister, fronting growers and industry leaders
- An **open media strategy** to help spread our messages
- Close collaboration with MAF on communications



## What worked well – first 4 weeks



- **Moved quickly** – didn't get hung up on who pays for what
- **Integrated industry** – could mobilise resources and gain agreement quickly ; sophisticated and multiple grower support mechanisms
- Government agreement on **financial support package**
- **Offers of support** flooding in from around the globe
- Trained and prepared **crisis management team**
- Good **experience of Psa** in Italy – and access to world-leading experts through Plant & Food Research



## Challenges – first 4 weeks



- We needed the ability to **“resource up” very quickly**
  - allowing for substituting of key staff
    - Fatigue among key Crisis Team members after day 4
    - Some MAF staff working 5 days on, 3 days off – created continuity challenges
- Very little on-the-ground or international **information**
- **Management of information**
  - Inefficiencies and frustrations with developing systems / tools
  - Leaks quick to occur, had to be controlled
  - Deluge of advice and “solutions”
  - Media would get hold of the story and we needed to be the experts so we had to be skilled with communications
- **Financial support package** – still defining timeframe for spending the money and what the funds would be used for



# Kiwifruit Vine Health Inc.

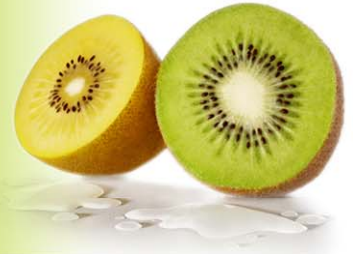


- Establishment of Industry body in week 4
  - (incorporated 6 December 2010)
- Kiwifruit Vine Health Inc.
  - Established to implement the aggressive containment strategy including financial assistance to growers
  - Industry leadership of long-term management strategy (grower/supplier/ZESPRI)
  - Ongoing R&D and industry communication regarding Psa





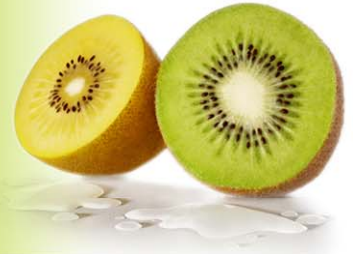
# KVH Primary Objectives



- **Prevention:** To prevent the establishment of virulent Italian-like Isolate Psa ("Psa-V") in the Exclusion Zone
- **Containment:** To contain Psa-V within the Priority Zone
- **Recovery:** Within 5 years enable the return to viable production those orchards that have been affected due to Psa-V



## Why KVH Formed



- To permit other industry organisations to continue with **business as usual**
- To provide **full focus on Psa**
- To **leverage pan-industry support**
  - KVH Board drawn from ZESPRI, suppliers / post harvest and growers
- To **coordinate immediate response**
- To **develop long term solution**
- To **professionally** and **competently** deal with Psa



# Funding for KVH



- **Third / Third / Third principle:**
  - Third from the grower cutting out
  - Third from Government
  - Third from Grower Funds (via ZESPRI)
- Funding for:
  - **Grower financial assistance package**
  - **KVH administration**
  - **KVH monitoring and zone controls**
  - **Research and development**
  - **50% of MAF's cost** - \$2M in first four weeks



## 4 Months On



- Growers in Psa Priority Zone **reluctant** to agree to **cut out**
- On average 16 isolate tests a week – making it **difficult to determine Psa Priority Zone**
- **Cause of Psa-V outbreak** as yet unknown – MAF tracing
- **Uncertain future** for orchards in Te Puke
- **Funding agreement with MAF** signed last week on 17 February 2011



## Constraints After 4 Months



- Development of a **clear strategy** very difficult – *(but now achieved)*
  - **Strategy changed** as perimeter of priority zone not established – GREEN cut out on 2<sup>nd</sup> symptoms
- **Isolate testing** – *working to speed up*
- **Harvest in 2 weeks** – *protocols developed*
- **Growers worried and impatient** with progress
- **Funding flows** – now on track as MAF has signed funding agreement and set up authorities



## Key Learnings for GIAs



- Each party (MAF / industry) to **communicate their processes / needs / drivers**
  - Reliance on the expertise of each party in “their” area
  - Ongoing and regular communication in advance of an “event”
- **Pre-arrange the quality systems** and MAF requirements for expanding laboratory resources
- Need to have **agreed beforehand** when MAF should exit, and industry takes over
- MAF is **well prepared** for a containment or small number of hotspots
  - National or dispersed situation is harder
- Ability to resource up quickly, work long hours and substitute key staff



# Key Learnings for GIAs



## Response Strategic Leadership Team

- **Start of a response the key issues:**
  - (1) getting an united industry voice;
  - (2) managing the media;
  - (3) understanding the science so an appropriate response can be developed; and
  - (4) working with MAF BNZ
- **Industry need direct representation on the team in the capacity as a full member**
- **The team need to re-locate to the epicentre**



# Key Learnings for GIAs



- Vital for **compulsion** to make strategy effective
- **Funding** needs to be pre-determined and in place
- MAF and Industry operations / response team need to be a **joint operation**
- All parts of the **industry** need to be able to **contribute** and be **part of response**
- Needs to be **joint and coordinated media plan**
- **Laboratories** need to be ready to respond
- **Performance standards** pre-agreed and in place



THANK YOU

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