



# Technical Requirements on Trade Standards

Vietnam Agricultural Exports & Food Safety  
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Hanoi, Vietnam

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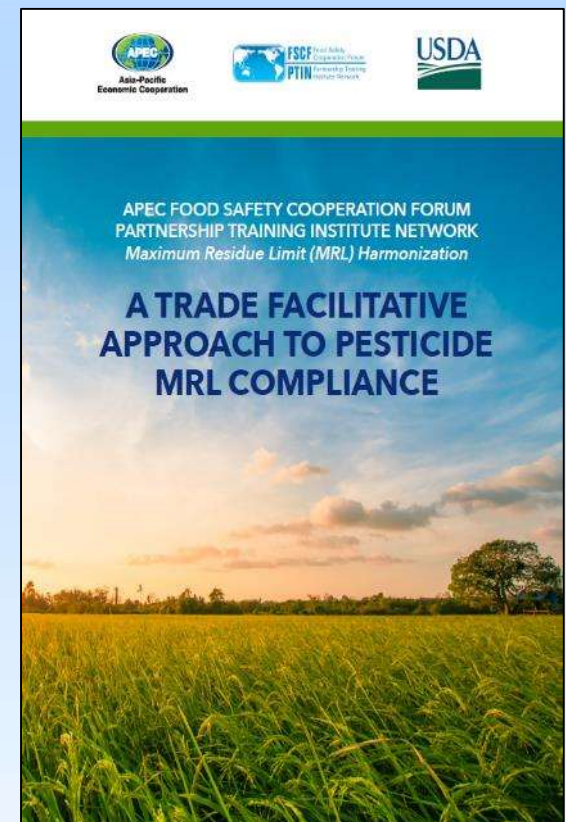


# MRL Cooperation in APEC

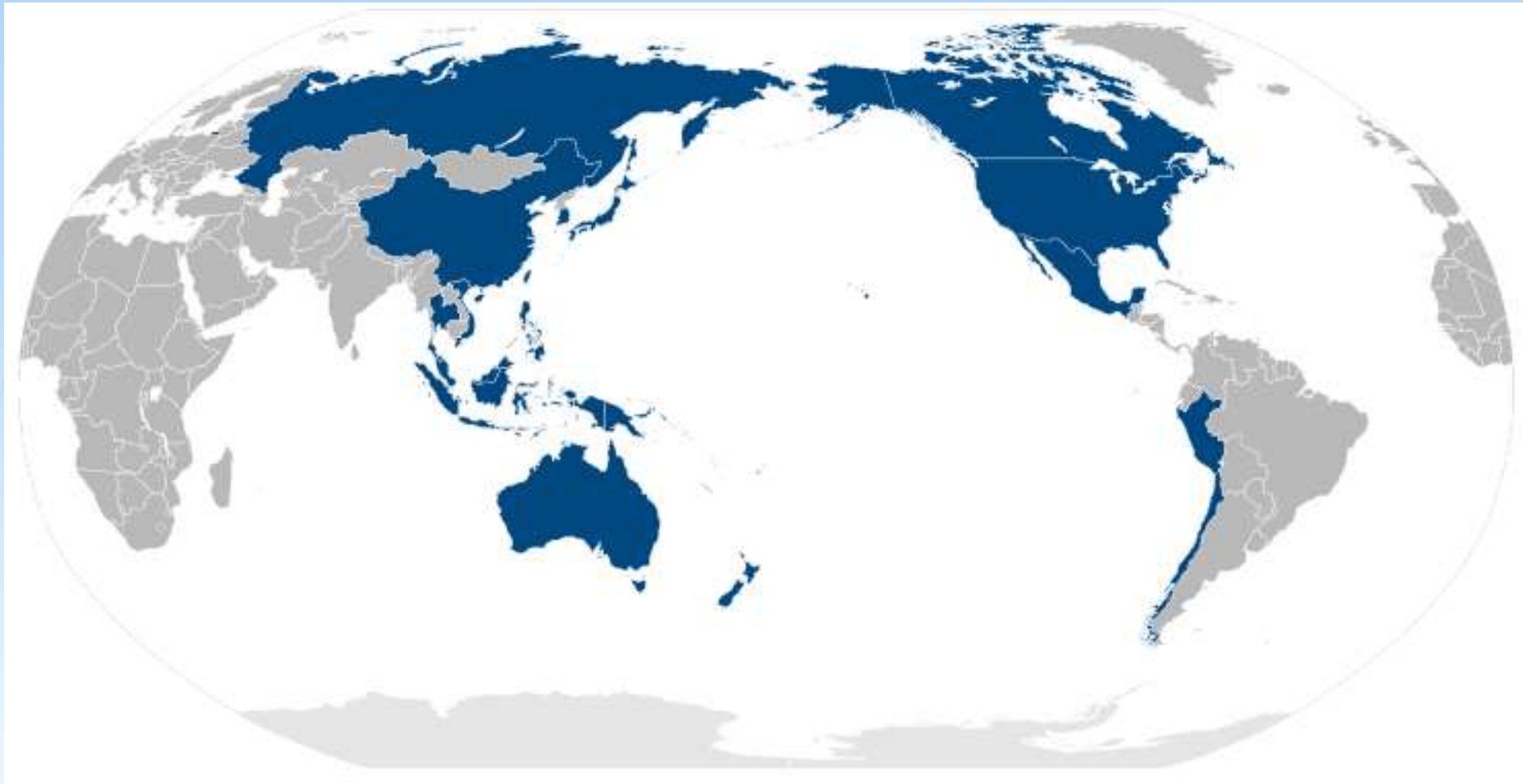
- How can economies respond responsibly and flexibly to an MRL violation?
  - Immediately and in the months/years afterwards
- When does an MRL violation pose a health risk?
- How can governments address consumer-driven public health concerns about pesticides?

# A Trade Facilitative Approach to MRL Enforcement and Compliance Assistance

October 9-10, 2018; Brisbane, Australia



# Trade Importance of APEC

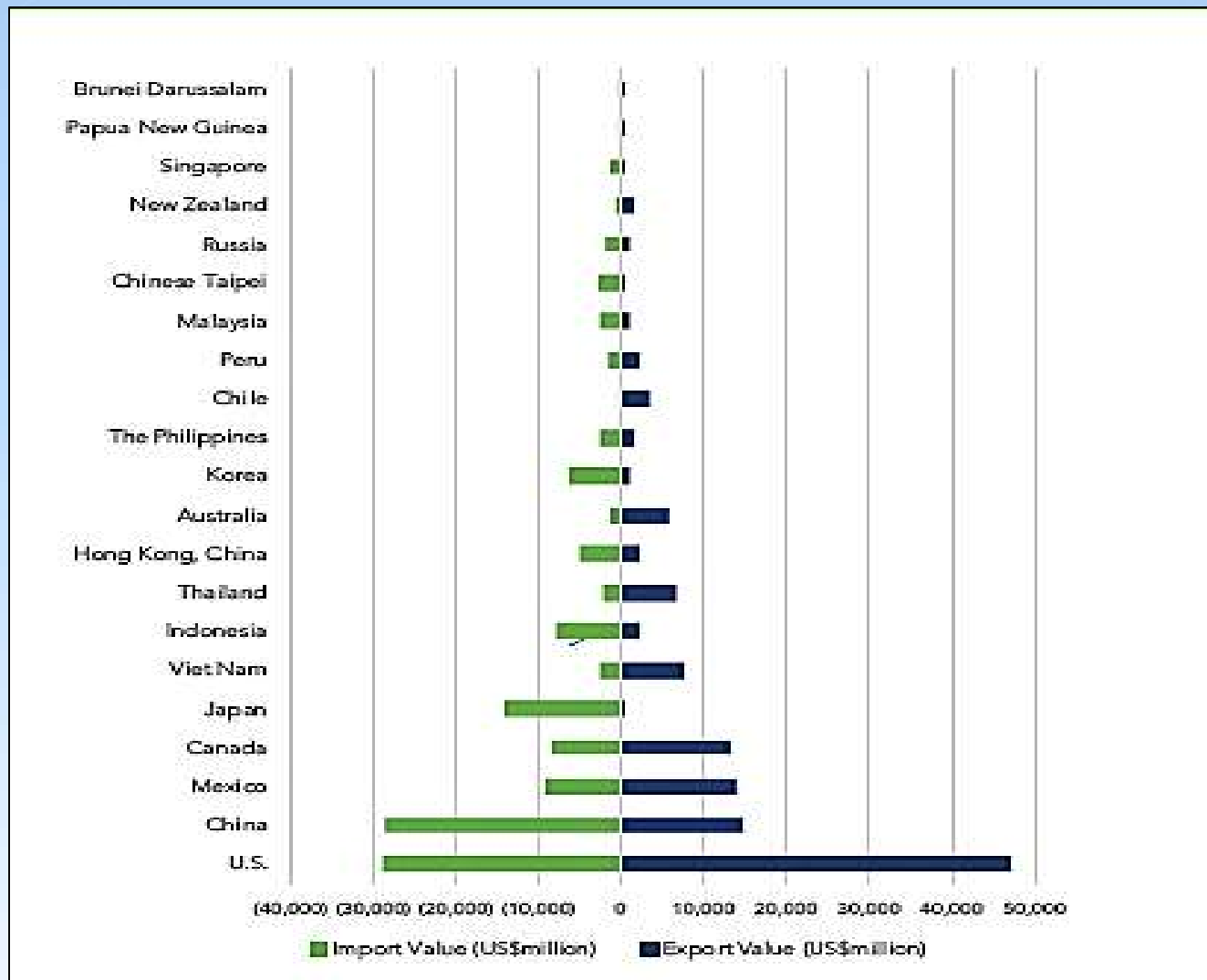


## Trade Importance of APEC

- **\$15 billion** in specialty crop exports (2017)
- Approximately **20%** of comments on World Trade Organization **SPS notifications** were related to MRLs in 2017
- Substantial **regional commitments to capacity-building**



# Trade Importance of APEC



# Consensus Findings: Approaches

- Value and efficiency of risk-based approaches to testing;
- Most MRL violations do not pose food safety risks or human health concerns;
- Essential need for better risk communication in reassuring the public that food safety systems are operating effectively.



# Consensus Findings: Compliance

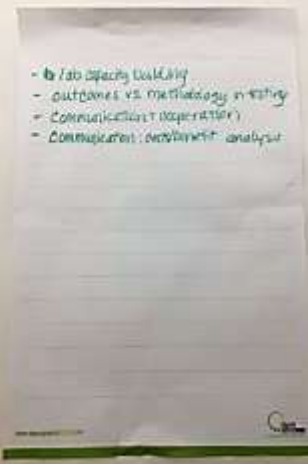
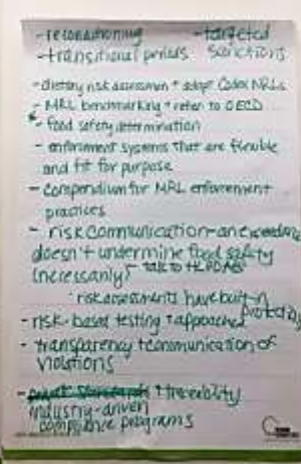
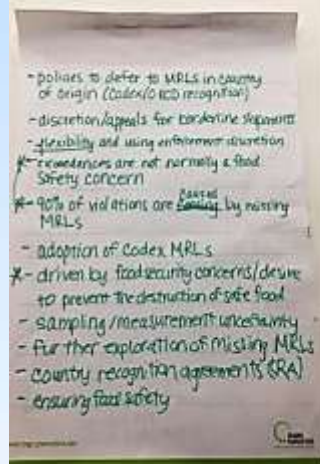
- Importance of regulations being transparent and easily accessible to facilitate compliance;
- Need for targeted enforcement that focuses on specific violators rather than whole industries;
- Critical nature of timing for fresh and perishable commodities;
- Possibility of enforcement discretion when there is no food safety risk or health concern.





# Consensus Findings: Next Steps

- Develop compendium on MRL enforcement practices across APEC economies;
- Develop APEC guidance on best practices for MRL compliance, enforcement, and risk communication;
- Provide capacity building to implement these best practices.



## Take Away Message

APEC economies are committing to work cooperatively to adopt best pesticide regulatory practices, including:

- registration processes (science-based, risk-based assessments and decisions),
- monitoring (sampling and testing), and
- Enforcement (MRL violations).

## Example on Registrations....U.S. and China

- ~ 2008 ICAMA pesticide regulatory restructuring
- ~2008 – 2012 U.S. and China regulatory cooperation and exchange program
- Alignment of risk-assessment practices and sharing of regulatory experiences
- Joint risk assessments

# 中美农药管理合作项目阶段工作总结会

Workshop on Sino-U.S. Pesticide Management Project









## Example on Monitoring (sampling and testing)

- USDA and International Atomic Energy Agency (IAEA) regional workshop on pesticide monitoring (host Vietnam, March 2018)

## Example on Enforcement (MRLs)

- Series of workshops in Latin America during 2019

# Pesticide Quiz!

Maximum Residue Levels (MRLs) are safety standards (True or False)

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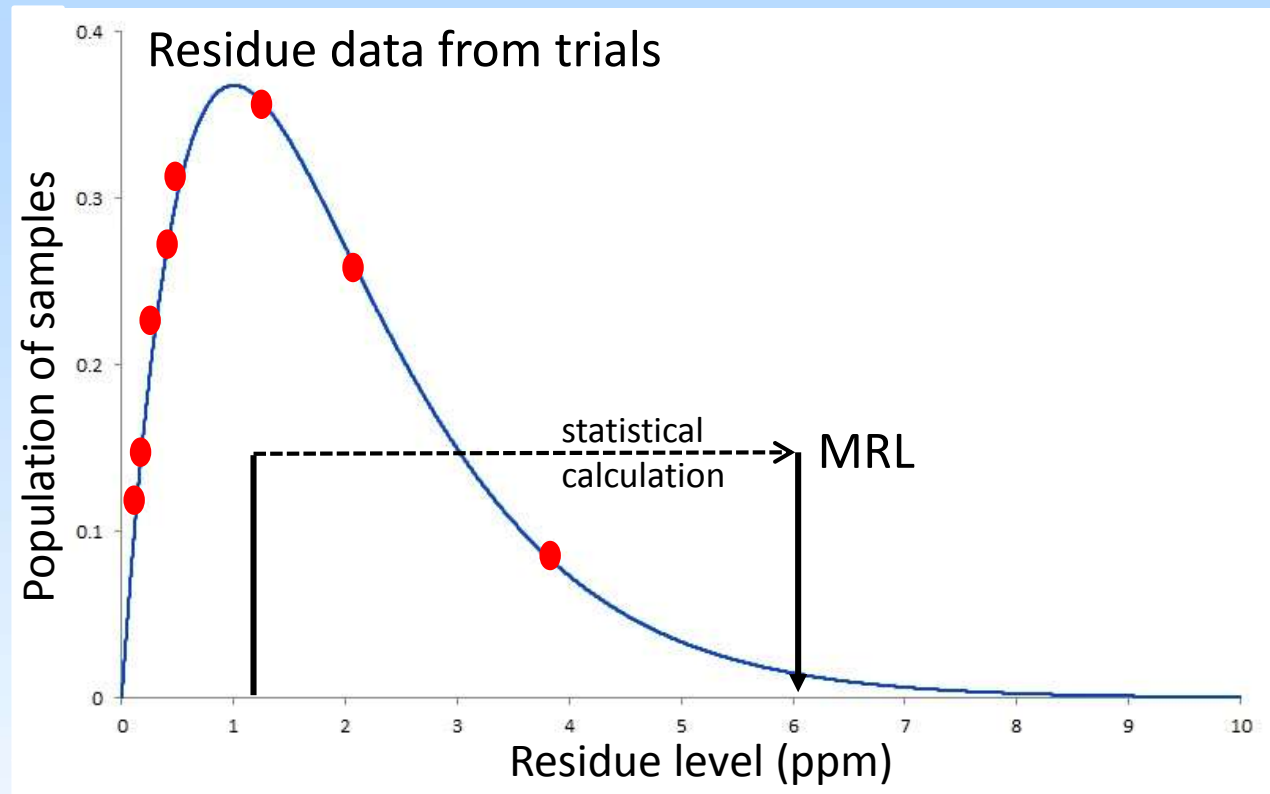
MRLs are **trade/enforcement** standards

MRLs are **within** safety limits...

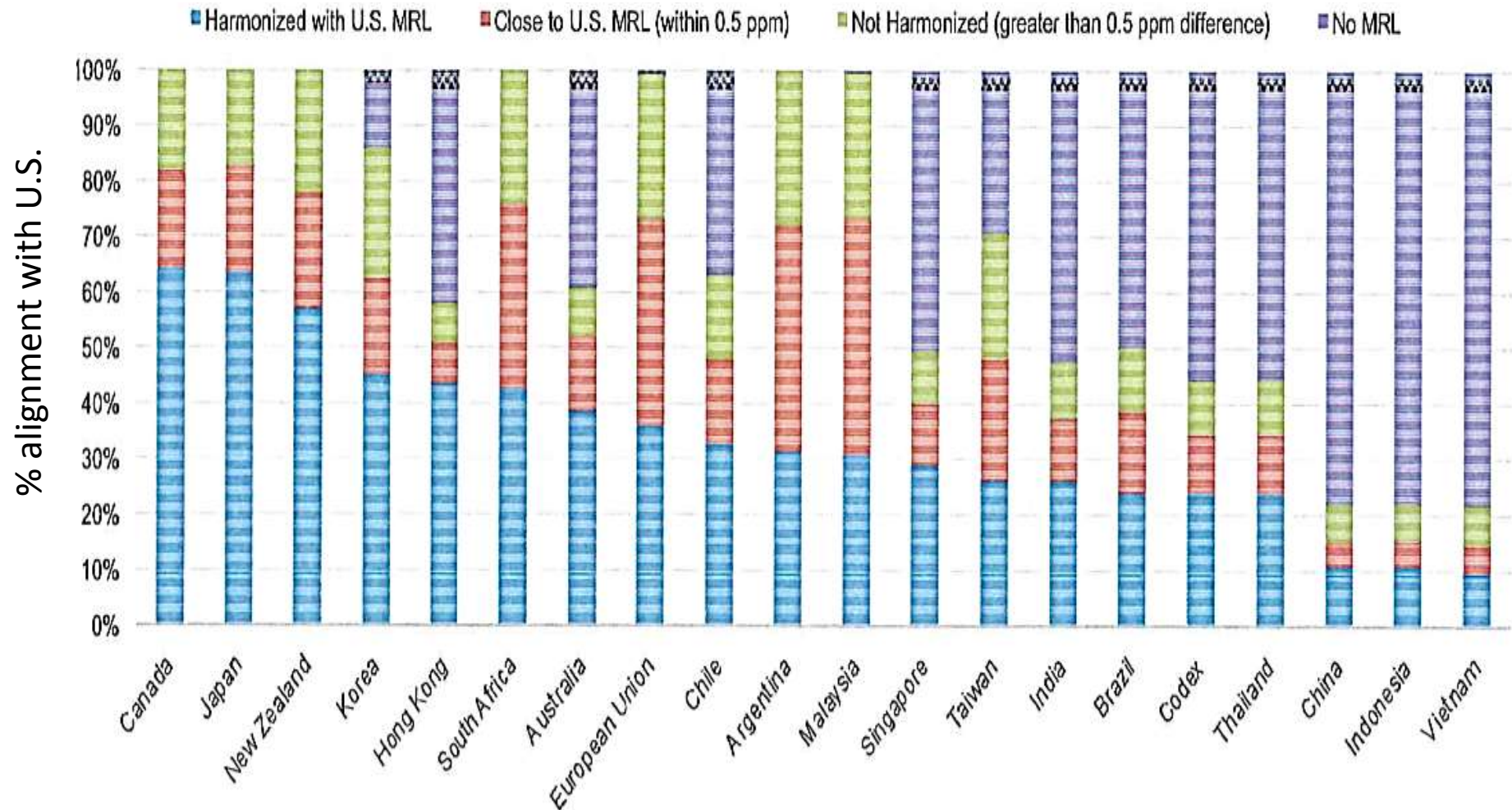


# How is an MRL determined?

MRL is the highest level of residue expected to be on a crop – if pesticide is used according to the label.



# How do U.S. MRLs align with other country MRLs?



Based on 779 commodities, 389 pesticides

# What are the main reasons for MRL differences?

- Different data sets from field trials
- Different residue definitions
- Different application rates
- Different climatic conditions
- **Different Pre-harvest Intervals (PHI)**

# PHI as a driving factor of MRL dis-harmonization

Label: 3 applications; 80 day PHI



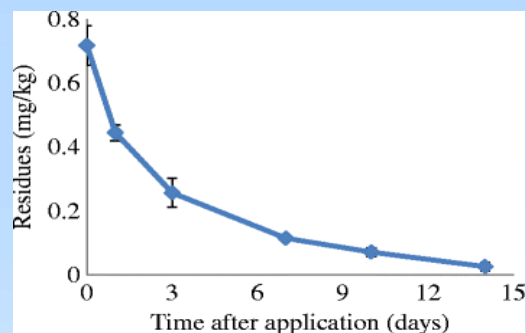
120 PH



100 PH



80 PH



At harvest  
residue = 0

0 PH





# PHI as a driving factor of MRL dis-harmonization

Label: 3 applications; 80 day PHI



120 PH



100 PH



80 PH



No need for a shorter PHI:  
not biologically relevant

At harvest  
residue = 0

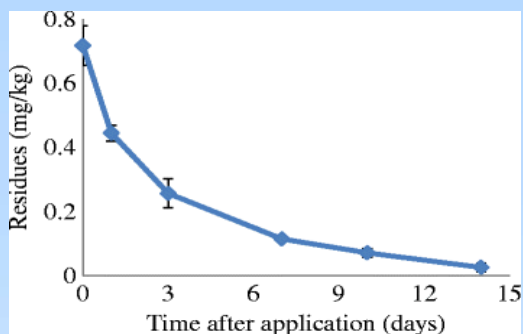
0 PH





# PHI as a driving factor of MRL dis-harmonization

Country A Label: 2 applications; 12 day PHI



40 PH



12 PH



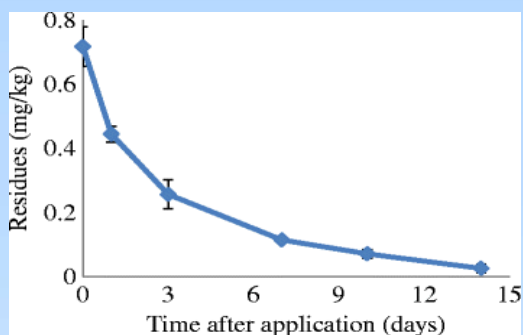
At harvest  
residue = 0.05

0 PH



# PHI as a driving factor of MRL dis-harmonization

Country B Label: 2 applications; 7 day PHI



40 PH



7 PH

At harvest  
residue = 0.1  
0 PH



# PHI as a driving factor of MRL dis-harmonization

If Country A sets their MRL at 0.05 (based on their growing practices) and Country B sets their MRL at 0.1 (based on other requirement)

Country A **can** export to Country B,  
but Country B **can not** export to Country A







Highly marketable and require less investment  
Production is high and grows in all climates

## PHI as a driving factor of MRL dis-harmonization

- PHIs are mostly driven by pest/plant biology
- If safety becomes a factor, longer PHIs help reduce residues
- Lower toxicity pesticides can have shorter PHIs, but lower toxicity pesticides can have very long PHIs if they are needed early in the growing season
- Shortening the PHI unnecessarily can lead to higher than normal residues and result in trade violations
- **APEC economy cooperation requires common regulations based on common science and common field practices**



# Risk-based Assessment is the driving tool for registrations in APEC economies

- **APEC economies are working towards harmonization, founded on science-based, risk-based practices (registrations, monitoring, enforcement)**
- First – farmers need a range of pest control tools (not fewer tools) in order to remain competitive in the international market
- Pesticides are evaluated by science experts based on “risk” not “hazard”
  - This means that both hazard and exposure are considered to determine true “risk”
  - Hazard determinations, like GHS, do not help farmers gain the range of tools they need to be competitive

# Risk-based Assessment is the driving tool for registrations in APEC economies

- GHS is not a risk assessment tool – GHS should not replace a risk assessment
- Although many pesticides may not pass a GHS “test”, they can still be considered very low-risk chemicals (because amount of active ingredient used is very little and exposure is very low).
- Pesticides rarely supplied and used as concentrated active ingredient by farmers
- GHS is useful as a hazard communication tool for some industrial handlers
- Use of GHS as risk tool removes many important commonly used pesticides by APEC economies from farmers, creating trade complications

# Risk-based Assessment is the driving tool for registrations in APEC economies

- Use risk assessments conducted by WHO and FAO (JMPR) for reference and basic information
- Use FAO and WHO guidelines to conduct own risk assessments (Look at risk assessments from other countries)
- Worker safety assessments can be done using JMPR toxicology assessments

# Take Away Messages

Farmers need government help to help them grow and sell food

Farmers, Government, and Industry need to cooperate to create the tools

Pesticides and herbicides should be consistently regulated  
Antibiotics and PPI for similar pest control

Working in the shadows of Blues/MRI

Herbicides need to be evaluated for safety, not just efficacy

Regulation of pesticides and herbicides for food safety –

Food system is not designed for food safety

Food safety is a trade-off



# THANK YOU!

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