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# IPPC Global Workshop on Systems Approaches

Santiago, Chile  
1 – 4 December 2025

In partnership with:



Australian Government  
Department of Agriculture,  
Fisheries and Forestry

## Systems approach for *Anastrepha grandis*

**Ensuring Phytosanitary Safety in the Export of Cucurbitaceae to Argentina**



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## Commercial Context

Strategic Brazil–Argentina relationship in cucurbitaceae as part of regional agricultural trade.

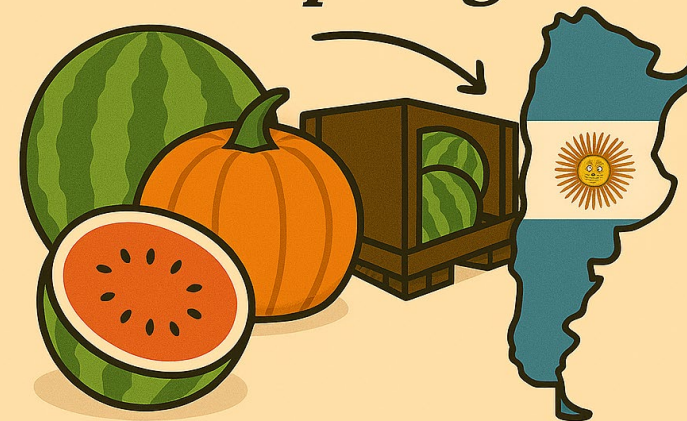
## Innovative Solution

Based on ISPM 35 (Systems Approach for Fruit Flies), allowing exports from areas where the pest is present, as an alternative to a Pest-Free Area.

## Demonstrated Growth

Area under the SA increased from 51 ha (2020) to 680 ha (2024), showing viability and confidence.

## SMR para *Anastrepha grandis*





## *Anastrepha grandis*: Biology, Distribution and Risk

### ■ Identification

South American cucurbit fruit fly, family Tephritidae;  
Commonly present in Brazil.

### ■ Main hosts

*Cucurbita* spp. (pumpkins, watermelons, melons).

### ■ Distribution and impact

Present in several producing regions of Brazil except the Northeast.  
Impact: fruit loss due to infestation and trade restrictions as a quarantine pest.







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## The Systems Approach

### ■ ISPM 35

- Integrated measures;
- Two or more independent measures;
- Appropriate level of protection;
- Auditability and transparency;

### ■ Bilateral Agreement

- Harmonized requirements;
- Reduced transaction costs;
- Fewer onsite audits.





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## Independent and Auditable Measures

- **Pillar 1: Registration and Authorization**

Registered and approved Production sites and Packing Houses.

- **Pillar 2: Frequent Monitoring**

McPhail traps with attractant used to detect presence and density of *A. grandis*.

- **Pillar 3: Pre-harvest Inspection**

Inspection and sampling of fruits;  
Cutting fruits to verify absence of larvae.



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## Monitoring of *A. grandis*: Detection and Decision-making

McPhail traps with hydrolyzed protein attractant:

- 1 trap per 5 ha (minimum 1/ha)
- Placed on borders and high-risk areas
- Weekly inspection and attractant replacement
- Data recording
- Fly/Trap/Day (FTD)  $< 0.1$

If FTD 0.1–0.4:

- Chemical control
- Increase trap density (1 trap: 2 ha)
- Intensify fruit sampling





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## Non-conformity Management — Containment

- **Emergency**

Immediate emergency protocol if  $FTD \geq 0.1$  or larvae are found.

- **Suspending the field**

Immediate suspension until  $FTD$  reaches  $< 0.1$  again.

\*Larvae in fruit leads to the exclusion until the end of the season.

- **Root Cause Analysis**

Detailed evaluation of monitoring records, control applications and cultural measures.

- **Containment Measures**

Intensive chemical/cultural control;  
reinforced monitoring.



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## Non-conformity Management — Transparency

- **Comunicación Transparente:**

Immediate notification to SENASA;  
Coordinated actions with Argentinian authorities.

- **Foundational rule:**

Transparency and quick communication maintain bilateral trust;  
Any detection should be quickly reported, allowing corrective and efficient responses.





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## Phytosanitary Certification: Final Verification

- Verification of monitoring and control records;
- Statistical sampling: 0.3% of fruits;
- Inspection and cutting suspect fruits;
- Phytosanitary Certificate issued only if no larvae are found;
- Packages must include Field and lot identification.





## Conclusions

- **Phytosanitary Assurance:** The Systems approach, based on ISPM 35, is a robust, auditable, and effective system that ensures the phytosanitary safety of cucurbitaceae exported to Argentina, even in areas where *Anastrepha grandis* is present.
- **Mutual Benefits of Safe Trade:** This Systems approach benefits both countries. For Brazil, it enables the expansion of exports from diverse production areas; and for Argentina, it ensures a supply of high-quality products with mitigated and controlled phytosanitary risk.
- **Results:**  
The area under SA expanded from 51 hectares (2020) to 680 hectares (2024). Together with the absence of interceptions at destination, demonstrates the effectiveness and reliability of the system implemented.



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Gracias

Thank you

Obrigado