



The Beyond Compliance Tools for Systems Approach: Could They Apply to PFA?

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Where does Systems Approach support Pest Free Areas/PFPS/PFPoP/ALPP?

During **eradication** to establish
a **PFA**

After the PFA is established,
for the surrounding **buffer
zone**

PFPS or PFPoP in order to
manage movement in and out
of the surrounding area (buffer
is integral)

For ALPP – e.g.

- Poor host + ALPP
- To manage the presence of other hosts in the area
- To monitor for threshold when a limited seasonal period is permitted

If trust is not well established
between the contracting
parties [although this is not
stated in ISPMs]



Beyond Compliance Global Tools

Two main tools:

- ❖ Production chain (or pathway chain)
 - Graphic representation of activities to be used in a Systems Approach organised by stage (time and place), objective and type of measures
 - Could be used to show the steps along the pathway to establishment of a PFA, or the measures to ensure it is maintained
- ❖ Decision Support for Systems Approach (DSSA tool)
 - A framework for ranking measure performance over a range of indicators, with the possibility of showing a range of opinion
 - Could be used to agree on the methods to maintain freedom, or measures used to establish freedom (if actually reducing or eliminating pest, not just administratively)



Production or Pathway Chain

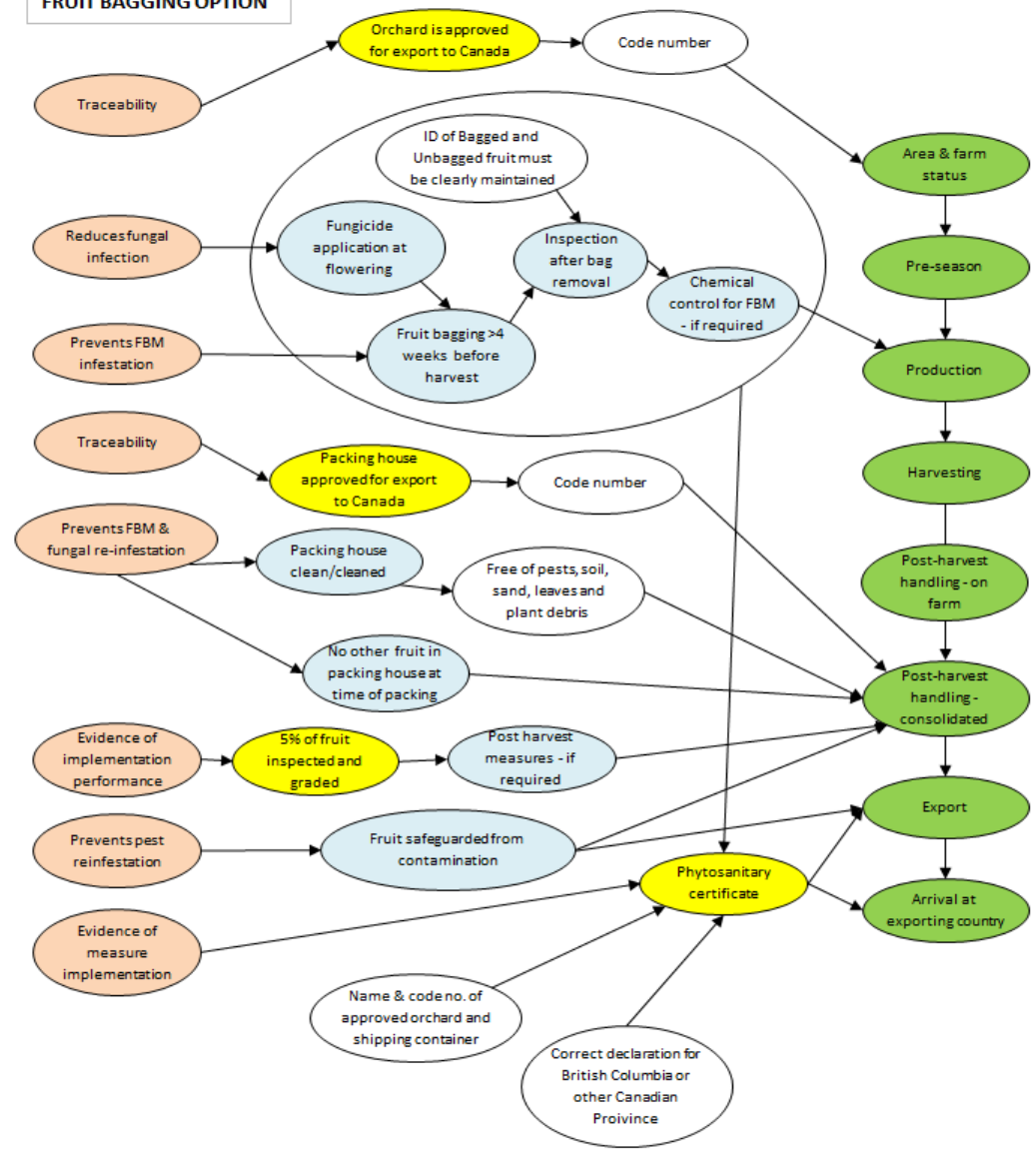
- Show measures
- Show other activities (if desired)
- Show stage (time/place)
- Show objective of the measure in terms of risk reduction
- Show potential Control Points

This has proven to be the most popular and intuitive tool. It is a harmonized way to view pest risk management along the different stages of a production chain (or with different wording, along a pathway).

Production Chain

FBM = Fruit-boring moths

FRUIT BAGGING OPTION





Decision support for systems approach – DSSA

- The Excel based DSSA generates graphs from the compilations of the inputted data or opinion to support discussion and decision making
- Comparisons (e.g. among options, or between existing and proposed equivalent systems) or updates can also be supported
- Allows expert stakeholders to give their opinion on the performance of each measure (6 indicators)
- This can be combined with data and publications or other evidence



DSSA Part A – Background Information

TABLE A1. Basic information

A.1.01	Identify the commodity or pathway addressed by this management plan	Orchids
A.1.02	Intended use of the commodity/ pathway	Cut flowers
A.1.03	Original exporting country	Thailand
A.1.04	Importing country/countries	EU
A.1.05	Regulated pest(s) identified by the importing country that is/are addressed in this management plan	Thrips palmi
A.1.06	Means of entry considered in the PRA (Commercial trade [air, sea, land, post]; Informal trade; Natural spread ...)	Commercial trade
A.1.07	Declared means of transport covered in this management plan	Air
A.1.08	What part of the importing country is covered by this plan? (Entire country or a defined area?)	All
A.1.09	Key host plants in the area covered by this plan	Various including Cucurbitae and Solanaceae
A.1.10	Is a specific time period for the pest risk assessed indicated?	Yes
A.1.11	What is the restricted area for cultivation for the proposed trade?	No restriction
A.1.12	Is there similar existing trade that could help inform this management plan?	Yes
A.1.13	What is the initiating driver for this plan?	Maintaining trade



DSSA Part A ... continued

TABLE A2. Key factors to consider based on the proposed commodity / pathway				
Key Factors		Rating	Uncertainty	Comment
A2.01	Overall rating - Entry			
A2.02	Overall rating - Establishment			
A2.03	Overall rating - Spread			
A2.04	Overall rating - Impact			
		Description		Comment
A2.05	How easy is it to detect the key organism(s) on the commodity / pathway? For example can you see the symptoms or signs on the sample?	Difficult		
A2.06	How easy is it to identify the key organisms? For example, is there an available, reliable, accurate technique that has been agreed?	Difficult		
A2.07	How well organised is the sector at risk in the importing country?	Very well organised		
A2.08	Is there a way (current, feasible measures) to control or eradicate the regulated pest if it were to enter the importing country?	Yes		
A2.09	Are there mechanisms to help put in place measures across the sector?	Yes		
A2. Conclusions on key factors relating to risk management measures:				

DSSA Part C – Show a group’s opinion or research outcomes on evaluation of measures over six criteria

TABLE C1. Indicators of Measure (Risk reduction and Implementation Standard)							
	Pest management measures available (from Part B)	Contribution to risk reduction of infestation in exported consignment			Implementation standard		
		Maximum contribution to risk reduction achievable by the measure is:			Implementation standard of the measure in the field is:		
		Rating	Uncertainty	Graphic	Rating	Uncertainty	Graphic
i	Avoid cultivating host plants of Thrips palmi around planting area	Medium	Low		Medium	Medium	
ii	Dipping of stem cuttings against Thrips palmi	High	Low		High	Low	
iii	Sanitation both inside and surroundings of farm or green house	High	Low		Medium	Medium	
iv	Provide area to dispose of damaged orchids due to pests and planting materials which may be the host of Thrips palmi and insecticides should be applied to them	High	Very low		High	Low	
v	Pest monitoring on flowering stage either by eye or using berlese funnel				Very high	Medium	
vi	Use Blue sticky traps	Low	Medium		Very high	Very low	
vii	Foliar and flower sprays programs (see Part C for details):	Very high	Low		High	Low	
viii	Field sanitation	High	Medium		Medium	Medium	

- Criteria:
- 1. Contribution to risk reduction
 - 2. Implementation standard

DSSA Part C ... continued

TABLE C2. Indicators of Measures (Direct cost, Environment, Time and Management, Scale and Independence

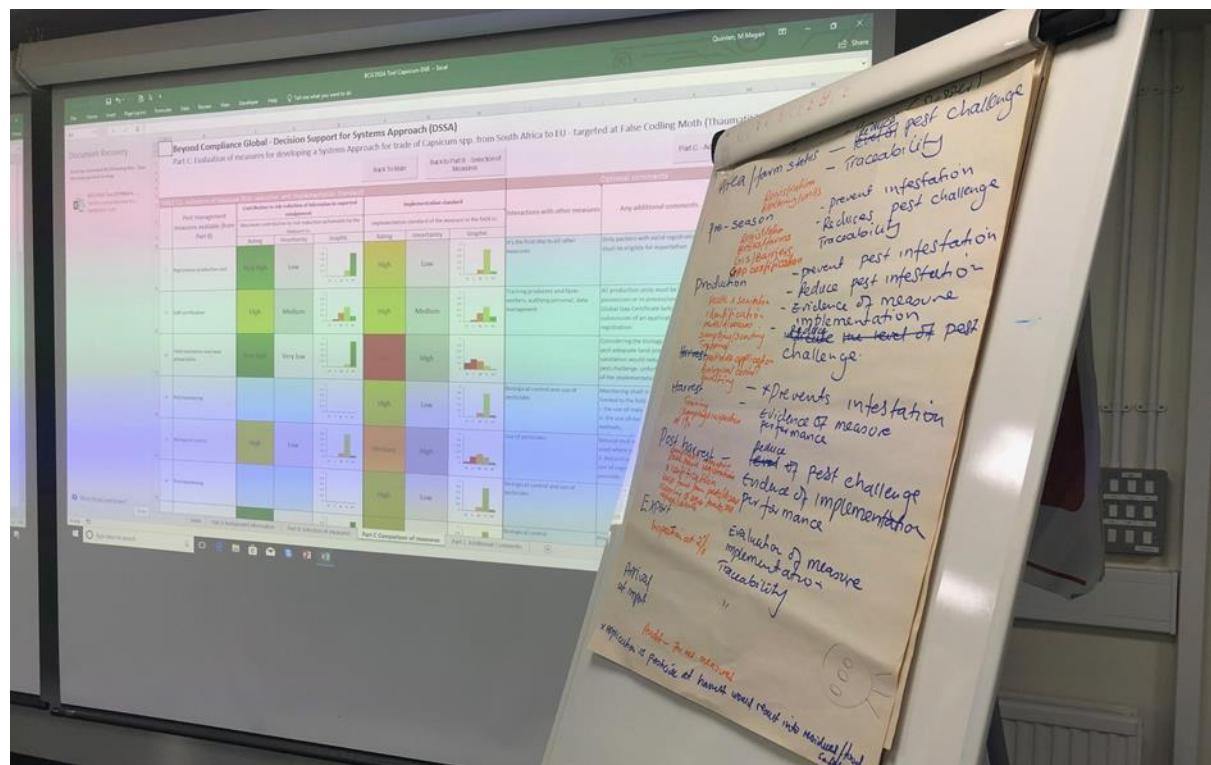
	Pest management measures available (from Part B)	Ability to verify effect of measures to that CP			Producer acceptability			Sector acceptability			Societal acceptability		
		Ability to use the Control Point to adjust system is:			Acceptability of the measure to producers is:			Acceptability of the measure to the sector is:			Acceptability of the measure to society is:		
		Rating	Uncertainty	Graphic	Rating	Uncertainty	Graphic	Rating	Uncertainty	Graphic	Rating	Uncertainty	Graphic
i	Avoid cultivating host plants of Thrips palmi around planting area				Medium	Medium		High	Low		High	Low	
ii	Dipping of stem cuttings against Thrips palmi				High	Low		High	Low		High	Low	
iii	Sanitation both inside and surroundings of farm or green house				Medium	Medium		High	Low		Very high	Very low	
iv	Provide area to dispose of damaged orchids due to pests and planting materials which may be the host of Thrips palmi and insecticides should be applied to them				High	Low		High	Low		Medium	Medium	
v	Pest monitoring on flowering stage either by eye or using berlese funnel	High	Low		High	Low		High	Low		Very high	Very low	
vi	Use Blue sticky traps	Low	Low		High	Low		High	Low		High	Low	
vii	Foliar and flower sprays programs (see Part C for details):				Medium	Low		Medium	Medium		Medium	Medium	



Ultimately, we are trying to represent complex biological ideas with representations, regulations and schematics to support plant health. Let us know if this is useful in this instance.



QUESTIONS??



Beyond Compliance Global - Decision Support for Systems Approach (DSSA)
Part I: Evaluation of measures for developing a Systems Approach for trade of Capsicum spp. from South Africa to EU - Targeted at Tabe Codling Moth (Thaumetopaea)

Measure	Pre-season	Production	Post-harvest	Export
Pre-season	High	Medium	Low	High
Production	High	Medium	Low	High
Post-harvest	High	Medium	Low	High
Export	High	Medium	Low	High

Handwritten Notes:

- Pre-season:** - prevent pest infestation, - reduces pest challenge, - traceability
- Production:** - prevent pest infestation, - reduce pest infestation, - evidence of measure implementation, - challenge
- Post-harvest:** - prevents infestation, - evidence of measure performance, - reduce pest challenge, - evidence of implementation performance
- Export:** - evidence of measure implementation, - traceability