

## Systems Approach to Nursery Certification-Update

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## **Topics**

□Industry Facts and Figures

☐ Systems Approach to Nursery Certification (SANC) overview

☐Some Thoughts on Future



#### **Some Facts and Figures**

- Specialty crops half of all crop value
- Nursery & floriculture 1/3 of specialty crops
- Nursery & floriculture \$16.7B at farmgate
- Total sales all sectors \$136.4B
- Direct employment all sectors 1.6 million
- We remain
  - An industry of small & family farms, businesses
  - Mainly domestically focused





A Systems Approach to Nursery Certification

### **Nursery Certification --**

Domestic, state-level certification of nursery and greenhouse "plants for planting," established by law to:

- Protect plant resources from harmful pests and diseases
- Facilitate orderly movement of nursery stock in commerce



#### SANC is....

Certification based on *how plants are produced* rather than how those plants look at the time of a single inspection.

#### Systems Approach

Combines **independent measures**, which together appropriately manage risk.



# If you were certifying that a plant is free from harmful pests, would you rather:



Look at it once? (Inspection)

~~~~ Or ~~~~

 Know that the plant originates from cleanest available stock, that good sanitation measures are practiced and a scouting program is in place at the growing site, and that the grower recognizes key pests and employs appropriate controls for pests? (Systems Approach)



#### All Based on a Standard

- Scope, definitions, references
- Technical requirements
- Training, Recordkeeping, Traceability
- Facility manual
  - What the producer/facility says it will do
- Regulatory approval and oversight
  - Are you doing what you said you will do?
  - Audits, addressing noncompliance



#### **Key SANC Steps**

- Pest Risk Assessment of the nursery ---
- Identify Hazards and Critical control points
- Identify and implement appropriate best management practices
- Implement, Monitor
- Keep records, including IPM practices, staff training and production methods
- Ensure traceability



#### **Cutting Through the Jargon**

#### **Critical Control Point (CCPs)**

Specific steps in the plant production process where something can be done to manage risk – The "What."

#### Best Management Practices (BMPs)

Actions taken to address the hazard at a critical control point – The "How."



#### Critical Control Points / Best Management Practices Matrix is available at <a href="http://sanc.nationalplantboard.org/">http://sanc.nationalplantboard.org/</a>

#### **Critical Control Point**



|       | Component, site, or<br>stage of production                                  | Target pests or<br>pathogens             | Contamination Hazard                                              | ВМР                                                                                                                                                          |                          |
|-------|-----------------------------------------------------------------------------|------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| NPUTS | h ported cuttings,<br>baleroot, tissue<br>culture                           | Regulated pests and pathogens.           | Introduction from offshore propagators                            | Follow import regulations and applicable compliance agreements. Purchase from a systems approach certified source if possible. Inspect or test for pests and |                          |
| Z     |                                                                             | Danieland and                            | Introduction on                                                   | pathogens.  Follow state regulations or compliance                                                                                                           |                          |
| ANTS  | Inco ling cuttings,<br>bare oot, tissue<br>cultire from domestic<br>sources | Regulated pests and pathogens            | purchased stock or<br>cuttings                                    | agreements.                                                                                                                                                  |                          |
| ء     | Incoming cuttings<br>by reroot, tisss<br>culture to estic                   | ystemic bacterial<br>and viral pathogens | Introduction from<br>purchased stock or<br>cuttings from domestic | Purchase from state-certified source<br>where pre-shipment inspections has<br>occurred. If not from a state-certifi                                          |                          |
|       | incoming cuttings,                                                          | All pests and                            | Introduction on                                                   | source or unknown, Grow out and<br>inspect all deliveries prior to accep<br>into inventory.<br>Inspect all deliveries and scout fo                           |                          |
|       | bareroot, tissue<br>culture from domestic<br>sources                        | pathogens                                | purchased stock or<br>cuttings                                    | and root pests, vectors upon receipt. Send qui to a diagnostic lab who                                                                                       |                          |
|       |                                                                             |                                          |                                                                   |                                                                                                                                                              | Management (Strice (BMP) |
|       | Incoming cuttings,<br>bareroot, tissue<br>culture from domestic             | All pests and pathogens                  | Introduction on<br>purchased stock or<br>cuttings                 | Inspect and scout buy-<br>during the first two we<br>propagation. Consider                                                                                   |                          |
|       | sources                                                                     |                                          |                                                                   | determine scouting intervals. Avoid co                                                                                                                       | -(10)- A                 |

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Hazard



# It all boils down to RISK MANAGEMENT



- Prevent problems coming in
- Monitor and scout crops for issues
- Accurately diagnose pests/diseases
- Address problems and Document
- Audit compliance



#### **SANC** on the Ground

- Two pilot phases
- 19 diverse facilities
- Coast to coast, border to border
- Three way partnership (States/Industry/USDA-APHIS)
- Governing board









#### Lake Mathews (Riverside), CA

- 670 contiguous acres
- 2 million sq. ft. greenhouse space
- 18 acres under shadecloth
- Recycle, reuse over 100 million gallons water each year
- 400 employees at peak (plus 8 robots)



#### **Altman Reflections on SANC...**

- 2 counties, distinct approaches
- A lot of work. Takes strong commitment
- Making us better growers. More vigilant, fewer problems
- Marketplace rewards? Not yet. Working with those we supply so they know
- Catalyst...



#### **Other Horticulture Systems Approaches**

 US-Canada Greenhouse-Grown Plant Certification Program

- Offshore "cuttings" pilot
  - Nearly 2 billion plant cuttings imported annually
  - Highly perishable
  - Standard covering facility design, sanitation, water mgmt., etc. must be met/exceeded



#### **Contrasting GCP/Offshore Cuttings and SANC**

- □SANC built upon:
  - ☐ Facility-specific risk assessment
  - ☐ Identification of hazards, control points
  - ☐ Selection and application of risk mitigation measures (best practices)

☐GCP, Offshore Cuttings built upon minimum requirements that must be met or exceeded





#### Facility Certification vs. Risk Based Sampling

- □APHIS moving toward Risk Based Sampling
  - ☐ Fewer inspection resources toward lower-risk consignments, pathways, shippers
- ☐Both have their place
- □ Facility (place of production) certification offers benefit of "cultural transformation" in same way as SANC
- □And, your fate is determined by how good a job YOU do!

#### Final Thoughts on SANC and Industry

- Connecting the dots...
- "Is the Juice worth the Squeeze?"
- Pilot growing operations speak positively of "culture change"
- Will marketplace reward adopters?

