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
GROWING BETTER WITH SANC
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
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**
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.”

<table>
<thead>
<tr>
<th>Critical Control Point</th>
<th>Hazard</th>
<th>Best Management Practice (BMP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imported cuttings, bare-root, tissue culture</td>
<td>Regulated pests or pathogens, Introduction from offshore propagators</td>
<td>Follow import regulations and applicable compliance agreements. Purchase from a systems approach certified source if possible. Inspect or test for pests and pathogens.</td>
</tr>
<tr>
<td>Incoming cuttings, bare-root, tissue culture from domestic sources</td>
<td>Regulated pests or pathogens, Introduction on purchased stock or cuttings</td>
<td>Follow state regulations or compliance agreements.</td>
</tr>
<tr>
<td>Incoming cuttings, bare-root, tissue culture from domestic sources</td>
<td>Systemic bacterial and viral pathogens, Introduction from purchased stock or cuttings from domestic source</td>
<td>Purchase from state-certified source where pre-shipment inspections have occurred. If not from a state-certified source or unknown. Grow out and inspect all deliveries prior to accession into inventory.</td>
</tr>
<tr>
<td>Incoming cuttings, bare-root, tissue culture from domestic sources</td>
<td>All pests and pathogens, Introduction on purchased stock or cuttings</td>
<td>Inspect all deliveries and scout for root and root pests, vectors, and inoculum upon receipt. Send all suspect to a diagnostic lab. Determine appropriate treatment, either chemical or biocontrol, prior to propagation. Inspect and scout during the first few weeks of propagation. Consider determining and controlling in areas of mingling of shipments prior to propagation.</td>
</tr>
</tbody>
</table>
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?