Systems Approach to Nursery Certification

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History of SANC (Systems Approach to Nursery Certification)

- Cooperative effort involving:
  - AmericanHort, HRI, and collaborators
  - National Plant Board (State Departments of Agriculture)
  - USDA–APHIS
- Began in 2010
- SANC pilot initiated 2014
What Is It?

- Risk-Based Certification Program based on:
  - Hazard Analysis for plant pests
  - Critical Control Points identification
  - Risk Prevention and Mitigation through Best Management Practices

- Alternative method to certify plant material
  - Moves away from reliance on annual and/or pre-shipment inspections
  - Voluntary
Implementing SANC in Plant Production

- **Risk Assessment**
  - Identifies hazards (risks), critical control points, and mitigation strategies (BMPs)

- **Development of SANC Manual**
  - Formalizes and documents facility’s procedures
  - Pest Management Plan (BMPs and Scouting)

- **Approval of SANC Manual**
  - Ensures facility’s plan meets SANC Standard

- **Implementation of components in SANC Manual**
  - BMPs, Recordkeeping, training, etc.

- **Audits**
  - Ensures facility’s plan is being implemented as described in its SANC Manual
Risk Assessment

1. Identify Hazards and review Cultural Practices for BMP's that apply to your entire operation—Use BMP Matrix to guide the process.

2. Identify Specific Crop Needs—Use Additional Controls for certain crops and shipping locations.

3. Identify Cultural Practices or Chemical Controls that meet Specific Crop Requirements.

4. Add Specific BMP's / Controls / Management / Measurements to meet Requirements.

5. Address any PPQ / State Requirement.
BMPs to mitigate identified hazards (CCP Checklist):
- Inputs (Plants)
- Propagation Practices
- Media & Containers
- Site
- Shipping
- Water
- Production Practices
- Disposal
## Hazard / CCP / BMP Checklist

<table>
<thead>
<tr>
<th>Component, site, or stage of production</th>
<th>Target pests or pathogens</th>
<th>Contamination Hazard</th>
<th>BMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water management</td>
<td>Waterborne pathogens</td>
<td>Infected surface irrigation water</td>
<td>Disinfect irrigation water using effective methods.</td>
</tr>
<tr>
<td>Water management</td>
<td>Waterborne pathogens, fungus gnats, moth flies, shoreflies, molluscs, nematodes</td>
<td>Splash dispersal of pathogens; pest damage from standing water</td>
<td>Prevent standing water by not overwatering and correcting drainage problems, or by raising containers off the ground.</td>
</tr>
<tr>
<td>Water management</td>
<td>Waterborne pathogens</td>
<td>Recycled or recaptured water</td>
<td>Disinfect recycled and recaptured water using effective methods. Note: runoff from production may be regulated.</td>
</tr>
</tbody>
</table>

- **SANC Website:** [sanc.nationalplantboard.org/](http://sanc.nationalplantboard.org/)
- **Click:** Tools for Industry
- **Click:** SANC CCP Checklist and BMP Companion Document
The Manual

- This is the actual agreement signed with the Certifying Authority and the basis for annual External Audit
- Broadly worded document to prevent the need for constant revision
- A record of revisions will be maintained
- The Manual is the property of the Grower, but available to the Certifying Authority at any time.
The Pie Chart; Risk Assessment of the slices to write the Pest Management Plan

Outer Wheel: Management System Required for SANC

Inner Wheel; Documentation and Records Required for SANC
SANC Pilot Initiated 2014: Pilot Operations

- Walla Walla Nursery
- McKay Nursery Co.
- Conard–Pyle Co.
- Oregon Pride Nurseries
- Lucas Greenhouse
- Greenleaf Nursery Co.
- Forrest Keeling Nursery
- Southeastern Growers, Inc
<table>
<thead>
<tr>
<th>Pilot Nursery</th>
<th>Risk Assessment</th>
<th>Pest Management Plan</th>
<th>Documentation and Records</th>
<th>Staff and Training</th>
<th>Management</th>
<th>Audit program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conard Pyle</td>
<td>Complete and reviewed</td>
<td>Complete, being implemented</td>
<td>Complete, being implemented</td>
<td>Complete, being implemented</td>
<td>Complete, being implemented</td>
<td>Complete, being implemented</td>
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<tr>
<td>Forrest Keeling</td>
<td>Onsite Complete.</td>
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<tr>
<td>Walla Walla</td>
<td>Complete, ready for review</td>
<td>Drafted</td>
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<td></td>
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<tr>
<td>Oregon Pride</td>
<td>Complete, ready for review</td>
<td>Drafted, being reviewed</td>
<td>Drafted, ready for review</td>
<td>Drafted and reviewed</td>
<td>Drafted, ready for review</td>
<td>Drafted, ready for review</td>
</tr>
<tr>
<td>Lucas Greenhouses</td>
<td>Onsite complete. RA essentially finished</td>
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<td></td>
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<tr>
<td>Greenleaf</td>
<td>Complete and ready for review</td>
<td>Drafted and Reviewed</td>
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<tr>
<td>McKay</td>
<td>Complete and ready for review</td>
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<tr>
<td>Southeastern Growers</td>
<td>Complete and ready for review</td>
<td>Drafted and Reviewed</td>
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</table>
Issues Impacting Timelines

- Management Structure
- Current Level of Documentation
- Seasonality of the Industry
  - Nursery is in control of timeline
- Operational Complexities
Perceptions of “Pilot-ees”

- Making them better growers, managers
- Useful structure, especially with training, recordkeeping
- Will facilitate info and knowledge transfer when management changes
- Incentives…!?
SANC – The Final Product

- Scalable
  ◦ Works for small and large operations
- (Relative) Ease of Implementation
- Consistent across states
- Accepted by states
- International trade?
For more information:

http://sanc.nationalplantboard.org/

Growing Better

GROWING THROUGH EDUCATION
Get the Training - Get the Facts

What's New at SANC

SANC News – February 2015
2015 SANC Workshop: We’re Gaining Momentum!

SANC News – December 2014
Carl Schulte, Visionary Voice of the SANC Initiative, Retires

SANC News – September 2014
His Eastern Chapter holds 2014 Multi-State Inspector Training in Connecticut

One of eight facilities in the first phase of a SANC Program Pilot. Greenleaf Nursery Company, Oklahoma

Started in 1945 as a retail nursery in Muskogee, Oklahoma, Greenleaf Nursery has grown into a multi-state operation, one of America’s largest, most diverse