# CNCI ICPC
CANADIAN NURSERY CERTIFICATION INSTITUTE
INSTITUT DE CERTIFICATION DES PÉPINIÈRES DU CANADA

# Clean Plants
## Domestic Phytosanitary Nursery Certification Program
# Standard

### Version 2.0
*Revised January 2013*

Investment Agriculture Foundation *of British Columbia*

Agriculture and Agri-Food Canada    Agriculture et Agroalimentaire Canada

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**Please Note:**

Please ensure you are using the most current version of this Clean Plants Standard by checking the version number and date on the CNCI's website at www.cleanplants.ca

All appendices and templates for the Clean Plants Phytosanitary Nursery Certification Program can be accessed and downloaded from the CNCI's website at www.cleanplants.ca

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# Clean Plants
Domestic Phytosanitary Nursery Certification Program
# Standard Version 2.0

## Objectives

1. Prevent the spread of regulated pests outside of regulated areas.

2. Certify nurseries for domestic movement of plants.

3. Implement and document best management practices related to pest management for production of nursery stock in Canada.

4. Implement and document best management practices related to plant traceability for production of nursery stock in Canada.

## Glossary of Terms

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| *Appendix* | *A body of separate additional material at the end of a book, magazine, etc., especially one that is documentary or explanatory. For the purposes of this Certification Standard, the explanatory documents following the Standard are called 'the Appendix' or 'Appendices'* |
| *Attachment* | *For the purposes of this Certification Standard, 'Attachments' are used by the nursery to provide the corroborating or additional information when writing their individual Nursery Manual* |
| *Audit Service Provider* | *An organization or entity, approved by the Canadian Nursery Certification Institute to conduct Clean Plants external audits.* |
| *Audit Report* | *Report produced by the approved audit service provider's external auditor; copies are provided to the Clean Plants nursery, the approved audit service provider and CNCI.* |
| *Biosecurity* | *Measures taken to prevent the introduction and/or to minimize the risk of establishment and spread of a specific pest.* |
| *CAR (Corrective Action Request)* | *A report created by an auditor to describe non-conformance detected during an audit and to describe the corrective action to be taken.* |
| *Certification Status* | *Status of a nursery that has undergone all components of a Certification Program and has been audited to verify that all components are properly implemented.* |
| *Certification Identification Number* | *The unique number assigned by the CNCI to a Clean Plants certified nursery.* |

*Certification Stamp*       The stamp or seal issued annually by CNCI providing the nursery's certification identification number as well as any additional pest specific modules for use by the nursery on their own documents.

*Certification Manager*       Nursery manager that is responsible for all aspects of the Clean Plants program.

*CFIA*       Canadian Food Inspection Agency

*CFIA Directives*       Policy documents that outline specific requirements for the import, export and domestic movement of plants and plant products.

*CFIA Movement Certificate*       A document issued pursuant to the Plant Protection Act and signed by an inspector that authorizes the movement of things within Canada (Plant Protection Regulations, SOR/95-212).

*CFIA Phytosanitary Certificate*       An official document issued by the plant protection organization of Canada to the plant protection organization of an importing country.  It attests that the plants or plant products covered by the certificate have been inspected according to appropriate procedures and are considered to be free from other injurious pests and that they are considered to conform with the current phytosanitary regulations of the importing country.

*Clean Plants*       An industry designed and delivered, systems-based certification program for the movement of nursery stock within Canada.

*Clean Plants Manual*       Document prepared by a nursery that outlines all components of the Clean Plants Standard; it includes the Phytosanitary Management System and the Pest Management Plan.  Certified nurseries are audited against their Clean Plants Nursery Manual.

*Clean Plants Stamp*       Ink or electronic stamp, issued by CNCI, that bears the Certification Identification Number for the nursery and any pest specific modules for which the nursery is also certified.

*Clean Plants Standard*       Document that outlines all the required components of the Clean Plants program.

*CNCI*       Canadian Nursery Certification Institute, a nursery industry organization with the responsibility for accreditation of auditors and certification of nurseries for domestic phytosanitary purposes.

*CNCI Accredited Auditor*       Auditors that have been trained and accredited by CNCI for purposes of conducting Clean Plants external audits.

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| *CNCI Adjudication Committee* | *Committee which reviews Clean Plants Nursery Manuals, initial facility audit reports and audit reports, when critical non-conformances occur.* |
| *CNCP (CFIA D04-01)* | *The CNCP is a directive describing a phytosanitary certification program for Canadian nurseries and greenhouses that ship nursery stock to the United States (US) or within Canada.* |
| *Control Measures* | *Methods of pest control.* |
| *Corrective Action Plan* | *The plan, created by the nursery and agreed to by the auditor, to correct non-conformances identified in Corrective Action Requests (CARs).* |
| *Crop Protection Manager* | *A member of the Clean Plants certified nursery management team or a contractor who is responsible and accountable for the overall implementation of the Pest Management Plan.* |
| *CSI* | *Centre for Systems Integration, a national organization that conducts various types of independent verification or audits in the Agri-food sector.* |
| *External Audits* | *An objective appraisal of the Clean Plants program at a facility that is carried out by a CNCI or a CFIA Audit Team to verify that all components as specified in the Certification Nursery Manual have been implemented.  External auditors can conduct either systems or surveillance audits.* |
| *Facility* | *This term is used synonymously with "nursery".* |
| *Growing Cycle* | *The period in which plants grow from a propagative state (e.g. cuttings, tissue culture plantlets, pre-finished plants, etc.) to a commercially acceptable size for either retail or wholesale trade. For the purposes of Clean Plants, a growing cycle must be no shorter than 28 days.* |
| *Growing Season* | *Period or periods of the year when plants actively grow in an area, place of production, or production site (FAO 2004). For the purposes of Clean Plants, a growing season must be no less than 120 days.* |
| *Internal Audit* | *An audit conducted by an approved staff member for the purposed of providing an objective appraisal of the Clean Plants system used at the nursery.  An internal audit may be a surveillance audit or a systems audit.* |

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| *Internal Auditor* | *An employee or contractor that is independent and objective and is designated by management to perform an internal audit to verify that all of the components of the Clean Plants Nursery Manual have been properly implemented.* |
| *Isolation Area* | *An area of the nursery set aside to hold plants that may pose a pest risk to other plants on the nursery.* |
| *Non-Conformance* | *Minor, major, and critical non-fulfillment of requirements of the Clean Plants Nursery Manual.  Definitions are included elsewhere in the Standard.* |
| *Non-Conforming Plant Material* | *Plant material that is found to not conform with the requirements of the Clean Plants Nursery Manual.* |
| *Non-Regulated Pests* | *A pest that is not under official control.  Often referred to as "other pests."* |
| *Nursery* | *A facility for the production of woody or herbaceous plants either in ground or containers.  Production may be outdoors or in a greenhouse.* |
| *Nursery Stock* | *Any plant for planting, propagation or ornamentation including greenhouse, containerized and field grown plants.* |
| *Origin* | *The point at which something comes into existence or from which it derives or is derived.* |
| *Pest* | *Any thing that is injurious or potentially injurious, whether directly or indirectly, to plants or to products or by-products of plants and includes any plant prescribed as a pest (Plant Protection Act 1990).* |
| *Pest Management Plan (PMP)* | *A written description of procedures or processes designed to control a pest population, to exclude it from entering the system, or when present to either to eliminate it or to suppress it to a level that meets phytosanitary requirements.* |
| *Pest Specific Module* | *A certification program designed to control the spread of a specific pest which is integrated as part of a nursery's overall Clean Plants Nursery Manual.* |
| *Phytosanitary Management System (PMS)* | *A systems approach that is used to direct and control an organization with regard to consistently meeting all the requirements of the Clean Plants program* |

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| *Phytosanitary Management Practices* | *A series of production practices designed to ensure a nursery meets all phytosanitary regulations.* |
| *Phytosanitary Risk* | *The possibility of introducing a potentially harmful pest.* |
| *Practically Free* | *A consignment, field, or place of production, without pests (or a specific pest) in numbers or quantities in excess of those that can be expected to result from, and be consistent with, good cultural and handling practices employed in the production and marketing of the commodity (ISPM 5, 2004).* |
| *Quarantine Pest* | *A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled (ISPM No. 5).* |
| *Regulated Area* | *An area into which, within which and/or from which plants, plant products and other regulated articles are subjected to phytosanitary regulations or procedures in order to prevent the introduction and/or spread of quarantine pests or to limit the economic impact of regulated non-quarantine pests (ISPM No. 5).* |
| *Regulated Pest* | *A quarantine pest or a regulated non-quarantine pest (ISPM No. 5).* |
| *Regulated Non-Quarantine Pest* | *A non-quarantine pest whose presence in plants for planting affects the intended use of those plants with an economically unacceptable impact and which is therefore regulated within the territory of the importing contracting party (ISPM No. 5).* |
| *Segregate* | *Keep separate, identifiable as a separate unit.* |
| *Surveillance Audit* | *An audit of an entire facility to ensure all phytosanitary processes are in place as specified in the Clean Plants Nursery Manual. Surveillance audits should also include field inspections to verify freedom from regulated pests.* |
| *Suspension* | *Nursery can no longer ship plants as being Clean Plants certified and loses its privilege of using the CNCI stamp/logo; decision is made by the CNCI.* |
| *Systems Audit* | *A systematic examination of the organizational structure, procedures, processes and resources to ensure they are adequate to implement the requirements of the Clean Plants Standard.* |
| *Traceability* | *The ability to follow an item or group of items – animals, plants, food products or ingredients – from one point in the supply chain to another. (AAFC Website definition)* |

## Introduction

### The 'Clean Plants' Program

This industry designed and managed Clean Plants Domestic Phytosanitary Nursery Certification Program, commonly called 'Clean Plants' was developed to allow industry to take a more active role in ensuring the plants traded within Canada meet high standards in terms of the absence of pests of economic and quarantine significance. The program utilizes a systems based approach to address pest and phytosanitary management on domestic nurseries.

The Clean Plants program was introduced in 2006 to provide production nurseries in Canada with the basis for which to develop and implement a systems approach including Best Management Practices (BMP's).  The purpose of the program is to minimize the risk of importing or moving pests through the wholesale nursery industry within Canada.

The main purpose of the Clean Plants program is a comprehensive nursery quality management system covering a wide array of management activities that relate to pests and diseases.

A systems approach is a set of actions that are independent of each other, that cumulatively provide a risk mitigation program.

The Clean Plants program was developed to assist growers to work within government requirements, while minimizing the incidents of regulatory actions through Best Management Practices at the nursery.  This program does not override provincial and federal regulations; regulatory requirements are integrated into the nursery's Clean Plants program.

A Clean Plants nursery can sell its plants with the confidence that comprehensive pest management has assisted to produce plants of a very high quality from a pest and disease point of view.  The Clean Plants program does not guarantee freedom from pests or diseases.  However the program, when properly developed and implemented, provides a level of confidence that pest issues are effectively identified and controlled.

The basic practices that are covered by the program are:

- Monitoring and surveillance of pests found on plants when received, in the nursery and when shipped.  Recording of monitoring activities and resulting actions are a critical component to the Clean Plants program

- Recording of actions at the nursery, including IPM practices, staff training, production methods, and others.

- Documenting the source, movement and buyers of plants, for incoming and outgoing plants to allow traceability (trace forward or trace back)

- Developing and implementing appropriate BMP's as required by pest specific modules, to further minimize the risk of pest incidence and movement

## The Canadian Nursery Certification Institute

The Clean Plants Phytosanitary Nursery Certification Program is accredited under the auspices of the Canadian Nursery Certification Institute (CNCI).

This independent organization was created in 2005 specifically to provide nursery certification accreditation in Canada.

CNCI is a not for profit entity which is at arm's length to the production nursery industry.

The Board of Directors is made up largely of experienced ornamental nursery professionals.  The CNCI aims to be efficient and effective, and to be responsive to industry, consumer and government needs.

CNCI takes significant direction from industry and government but will maintain an impartial, fair and objective role in the delivery of programs.  As the certifying body for the Clean Plants certification program, the CNCI is responsible for the design and implementation of the main domestic phytosanitary component of the program and for various other pest specific modules under the umbrella of the Clean Plants Standard.

The CNCI is responsible for the delivery of the Clean Plants program within all provinces and territories.  The CNCI policy ensures uniform national certification processes are in place and that audits are conducted in accordance with the specifications outlined in this document.  Various audit tasks will be delegated to an accredited audit service provider.  The CNCI currently is administered by the Canadian Nursery Landscape Association in Milton, Ontario.

## The Systems Approach

The Clean Plants core incorporates all the common systems required to produce nursery stock that is relatively free of pests and free of regulated pests.  It is based on a generic approach and is not intended to address the very specific production requirements needed to manage specific pest problems that may appear from time to time somewhere in Canada.

Specific pest certification modules will be developed, as needed, through a partnership between the local industry association and the CNCI.  These "pest specific modules" will be offered to Clean Plants nurseries as an add-on to their core Clean Plants systems.  Many of the systems required to properly certify for the specific pest will already be operating on the nursery as part of the core Clean Plants program.

It is conceivable that nurseries in an area faced with a new pest and requiring certification to maintain their market may need to very quickly implement a new pest specific module, even before they have availed themselves of becoming certified under the Clean Plants core.  CNCI intends to allow this flexibility to nurseries facing this sort

of emergency situation.  However, in order to retain the integrity of the whole Clean Plants system, such nurseries will be expected to apply to become fully Clean Plants certified within one year.  The nursery will then have two years to complete the implementation of the Clean Plants program.  This grace period is intended to help nurseries who are not yet Clean Plants certified to respond to a very acute need in their area.

There may be some additional incremental costs to administer pest specific modules in addition to Clean Plants

Clean Plants certification does not allow you to export to the US without a CFIA phytosanitary certificate.

## Certification Process

1. Application submission by nursery
2. Payment of fees by the nursery
3. Preparation of Clean Plants Nursery Manual by the nursery
4. Implementation of the Clean Plants Nursery Manual at the nursery
5. Evaluation and approval of:
   - the application,
   - the initial facility evaluation
   - the Clean Plants Nursery Manual
6. Audit – Initial Facility Evaluation by CNCI approved auditors
7. Signed Compliance Agreement between the nursery and the CNCI
8. Certification is granted by CNCI to the nursery
9. An external audit must be completed the year following the initial facility evaluation
10. Maintenance – annual internal audits to be submitted to CNCI, external audits (determined randomly over a three year period), compliance with corrective action requests within the agreed time line,
11. Issuance of annual certification status by CNCI – electronic stamp with nursery specific certification number and a list of pest specific modules, for which the nursery is certified.

    (Suspension of Certification, if required, is done by the CNCI Board.)

## Application Process

One application can be used for each nursery provided that the entire nursery is under one management structure.  This includes nurseries that use multiple sites for production.  However, if the nursery decides that specific sites should not be certified (not audited), then these sites can be left out of the application and subsequent Certification process.  Plants from these non-certified sites cannot be sold as Certified. Plants that are transferred internally from a non-certified site must go through the same procedures as plants coming from another non-certified nursery.

If a nursery has multiple production sites and each of these sites has its own management team, individual applications must be submitted for each site requesting certification status.  As noted above, plants that are transferred from a non-certified site to a certified site must move through the same procedures as other incoming plants that are from a non-certified source.

Your nursery must identify any Clean Plants pest specific modules for which you also wish to be certified.

A nursery will be given two years from the time of application to fully implement the Clean Plants program or its application will be considered to have been withdrawn.  However, plant material cannot be certified until Clean Plants is fully implemented.

The Application Form is Appendix 1.

A nursery may withdraw from Clean Plants at any time by submitting a Notice of Withdrawal in Appendix 2.

## Risk Analysis

A first step in the certification process will be to complete a risk analysis of your nursery business.  The next step is to write a description of your operation and its particular risk factors to identify the relative risk situation at your facility.  Refer to the Appendix 4 Nursery Manual to complete a Risk Analysis specific to your nursery.

## Nursery Manual Description

The nursery must prepare a Nursery Manual that describes the responsibilities, procedures and documentation required in the Clean Plants Standard.

The nursery must follow the template found in Appendix 4.

The completed Nursery Manual is submitted as part of the application process to become 'Clean Plants' certified.

## 1.0 General Description of Nursery

The following general description of your nursery needs to be included in your Nursery Manual.

1.  The nursery name, address and contact information must be clearly stated.

2.  The size of the properties that are used for production (owned and leased), as well as the location of these properties if they are located in different areas from the main property must be described.  Section 3.0 of this Standard provides details for maps of the nursery.

3.  State the number of employees that work full-time and part-time.  A list of the key positions in the implementation of Clean Plants systems must be included in the Nursery Manual.

4.  Describe the type of production that your nursery employs (field, container), the types of plants that are produced (broadleaf evergreens, ground covers, herbaceous perennials, conifers, deciduous trees, fruit trees, etc.).

5.  A nursery catalogue or inventory list must  be  available and accessible in hard copy, via website or in e-files:

    • If provided in hard copy, it must be appended to the Nursery Manual.

    • If available on a website or e-file, the link must be included in the Nursery Manual and accessible by staff and the CNCI external auditor.

## 2.0 Management Responsibilities

The management at your nursery must implement all aspects of the Clean Plants Nursery Manual.  Management must make a statement of confirmation of the nursery's commitment to the Clean Plants Standard and adherence to its Clean Plants Nursery Manual.  This involves the initial planning of all procedures and the detailed writing of the Nursery Manual.

- Managers and staff will be given assignments with specific tasks and responsibilities.

- Adequate training for these tasks will be arranged and conducted as necessary.

- The management will make available all records and access to nursery staff to the auditor for external audits.

- In the case of personnel records for individual employees it is acceptable for them to be referenced in the Nursery Manual and stored in secure files for confidentiality purposes.

- It will be the responsibility of management to determine actions to be taken to correct non-conformances.

- It is the responsibility of management to ensure the Clean Plants Nursery Manual is kept up-to-date as necessitated by changes in nursery operations or by changes to the Clean Plants Certification Standard.  Management is responsible for ensuring that all Clean Plants fees are paid.

- Nurseries will be notified in advance if they are required to have an external audit in a particular year.  It is also the **nursery's responsibility to arrange for the required external audits, as well as conduct their own internal audits.**  A nursery that has not maintained the required internal and external audit frequencies cannot remain certified by CNCI.

### 2.1 Management Personnel

2.1.1 Certification Manager

The Certification Manager is responsible for all aspects of the Clean Plants program and must carry out the following duties:

- Attend the Clean Plants Training Workshop, or watch the Clean Plants Workshop DVD if no live workshops are scheduled during the period of time of application.

- Design and implement a Phytosanitary Management System (see Section 3.0 for a full description of the Phytosanitary Management System).

- Update the Nursery Manual on a schedule suitable to the nursery situation to ensure a current Nursery Manual is available for the internal and external audits.

- Design and implement record management and retention procedures.

- Schedule external audits as required for core Clean Plants or pest specific modules.

- Attend all audits and follow-up examinations.

- Maintain records of non-conformance and records of corrective actions.

- Notify CFIA of any unusual or regulated pest finds.

- Ensure that all nursery staff is appropriately trained for the specific tasks they are assigned within the Clean Plants Nursery Manual.

- Maintain records of Clean Plants program training of all employees involved in the Clean Plants program.

- Provide performance feedback to employees on a regular basis.

- Designate an alternate for periods of time when the Certification Manager is on vacation or away from the nursery.

These duties can be designated to others provided the position and areas of responsibility are identified in the Clean Plants Nursery Manual.

### 2.1.2 Crop Protection Manager

The Crop Protection Manager must be adequately trained to carry out the requirements of the Pest Management Plan.  The Crop Protection Manager may be the same person as the Certification Manager at a small nursery where the number of managerial staff is limited.  This position can also be assigned to a third-party consultant.

Duties of the Crop Protection Manager are as follows:

- Attend the Clean Plants Training Workshop, or watch the Clean Plants Workshop DVD if no live workshops are scheduled during the period of time of application.

- Develop and implement the Pest Management Plan (see Section 5.0 for a full description of the Pest Management Plan).

- Notify the Certification Manager if certified plants become infested with a regulated pest or incoming plants are found with a regulated pest.

- Organize the disposal of infested plants in the event that other pest control methods are not available.

- Monitor and control non-regulated pests.

- Maintain records of pest-control procedures.

- Designate a qualified alternate.

### 2.1.3 Internal Auditor

The internal audit is intended to provide the nursery an opportunity to confirm for itself that all aspects of the Clean Plants Nursery Manual are being implemented properly and that staff are conducting their assigned Clean Plants tasks.

- Internal audits will be conducted by a person designated by the Certification Manager (CM) as specified with the Clean Plants Nursery Manual.

- The auditor must not audit the tasks they conduct themselves.  An exception is a small nursery with a sole operator and no permanent employees who may audit their own facility.

- The auditor must be empowered to look at records and ask questions to complete the audit.

Qualifications of the auditor include:

- Be familiar with the Clean Plants Nursery Manual for the facility.

- Be familiar with the Clean Plants Standard.

- Know the Phytosanitary Management System used at the nursery.

- Know the functions of an auditor, as specified by CNCI.

- Have completed the CNCI internal auditor orientation.  To view this downloadable online course about basic auditing, go to [www.cleanplants.ca](www.cleanplants.ca)

An internal audit is intended to confirm that the plants produced by the nursery comply with the requirements laid out in the nursery's Clean Plants Nursery Manual.

A nursery has considerable flexibility in designing an audit process that will work for them.  This process must be documented in the Clean Plants Nursery Manual and must include the method of sign-off to be used in the nursery for audits and any subsequent improvements they generate.

Note:  Not all portions of the audit need to be completed at one time.  The internal auditor may choose to split the audit into several portions, to focus on different aspects of the nursery at different times of the year.

Audits provide an opportunity to discover ways of improving the Phytosanitary Management System as well as to detect non-conformance.

## 2.2 Nursery Staff Training

Employees who are required to perform specific functions for the Clean Plant Program shall be trained in the area for which they are responsible.

Training records pertaining to the Clean Plants program shall be maintained. This documentation shall be available to the external auditor. (Nursery Manual Appendix 4 for a training record template)

# 3.0 Phytosanitary Management System

## 3.1 Nursery Map

A map detailing specific areas of the nursery (i.e. potting, propagation, shipping, isolation, etc.) as well as the location of each zone within the production areas, must be included in the Clean Plants Nursery Manual. Include all locations of your nursery which fall under the same Certification ID number (may also be known as number or facility number or seal). Include in the Nursery Manual a regional road map showing driving directions to the nursery.

## 3.2 Plant Product Suppliers and Plant Identity

### 3.2.1 Plant Suppliers

The manual should describe how the nursery maintains a record of current plant suppliers including company name, location and business address, plant genera purchased from that supplier, quantities and sizes.

This may be accessible via the nursery's accounts payable data. In this case, the information must be accessible to the external auditor.

### 3.2.2 Traceability (Origin)

For the nursery to be Clean Plants certified, they must demonstrate they have an identification system that allows trace back and trace forward to be carried out.

The nursery must be able to document plant movement from origin or a specific period of time through the production in the nursery and out to the purchaser or next grower. The nursery should document growing locations within the nursery.

The level of detail of the growing location that the nursery provides is the nursery's prerogative.

However, when a serious pest is discovered, the more distinctively a location can be identified, the less regulatory action may result.

Plants or blocks of plants from unknown origin must be sold as non-certified plants unless they meet residency time requirements. 'Unknown origin' means coming from an uncertified supplier, or collected in the wild, or no documentation about production at the nursery.

Certified plants that are misplaced during production retain their certification.

Plants that are shipped but have not been removed from the nursery's own delivery vehicle and are immediately returned to the nursery will remain certified.

### 3.2.3 Plant Identity

Plant identification records must be maintained to genus, species and cultivar to facilitate the trace forward or trace back of all plants on the nursery, regardless of their source.

### 3.2.4 Inadequate Identification

Plants or blocks of plants with inadequate identification can be sold as non-certified without jeopardizing the Clean Plants certification status of the nursery.

Inadequate identification includes plants of unknown origin (cuttings gathered in the wild, or plants received as non-certified) or an unknown growing location (plants returned from non-certified facilities or lack of documentation).

Under the terms of Clean Plants certification, plants sold as non-certified because of inadequate identification will be the exception rather than a regular production practice.

### 3.3 Inspection of Incoming Plants

Each shipment of plants that are brought into the nursery from outside sources must be inspected and documented:

- To verify the certification status of the plants.
    - Canadian suppliers are responsible for designating whether the stock is 'Clean Plants certified' or not.
    - When stock comes from outside of Canada, CFIA will regulate their entry.  Where stock is allowed for entry, plants entering with a phytosanitary certificate are considered certified.

- Plants arriving certified must be inspected for pests before being moved into the production area.

- Plants arriving non-certified must be intensively inspected for the presence of pests.  Follow-up actions for control of pests must occur before plants are moved into production areas.

See Appendix 5 for lists of records that need to be maintained depending on the supplier's certification status and location.

See Section 3.4 for specific inspection and growing-on requirements.  For example, plants that originate from a CNCP nursery will be inspected differently than if they originated from a non-certified nursery.

The staff positions delegated to conduct incoming inspections must be listed in the Clean Plants Nursery Manual and shall initial each inspection record.

When a pest is detected during inspection at receiving, the plants can be placed in an isolation area to reduce the risk of transferring pests to other plants in the nursery.

Non-certified plants that have been inspected and found to be free of regulated pests and practically free of other pests may be moved into the appropriate production area.  Non-certified plants can be grown next to certified plants.  The non-certified plants should be clearly identified to be easily recognized as such by persons working in the nursery.  Intermingling non-certified plants into a block of certified plants, without maintaining the identity of the non-certified group of plants would reduce the status of the whole block to "non-certified"

Non-certified plant purchases that are held for immediate re-sale (within 30 days) `cannot` be sold as Clean Plants certified plants.  The non-certified status must be clearly stated on the packing slip and invoice.

### 3.4 Residency Time Requirement for Clean Plants Certification

The period of time required to certify plants received at your nursery depends on the supplier's certification status.

All plants will be considered certified if they:
- Are received as certified stock from CNCP or Clean Plants certified Canadian suppliers, or

- Have been received accompanied by a Phytosanitary Certificate from the country of origin.  The record must be available for inspection.

In some situations, CFIA may inspect plants at the originating facility or at your nursery and issue a 1337 Inspection Report.  Plants inspected under this procedure would be recognized as certified.

Plants with a non-certified status will become 'Clean Plants' certified after meeting the following criteria:

- The plants are in residence at the certified nursery for a minimum of 30 days

- **And,** the plants are inspected within the 30 days as per nursery protocol and a follow-up action is implemented when a pest problem is detected.

- **And,** where applicable, has met the requirements of other programs such as CFIA regulatory pest programs, or modules of Clean Plants, i.e.  *P. ramorum.*

Non-certified plants that have not been on the nursery for the minimum 30 days can be sold as non-certified without jeopardizing the Clean Plants certification status of the nursery.

## 3.5 Inspection at Shipping

Each shipment of plants must be inspected prior to shipping for both regulated and unregulated pests regardless of certification status in accordance to inspection procedures as outlined in the nursery's Clean Plants Nursery Manual.  The inspection must ensure that the plants are shipped practically free of pest problems.

Plants which are inspected and are found free of regulated pests and practically free of other pests must not be mixed with plants that have not been inspected.

Detection of a regulated pest must be reported to the Certification Manager immediately.  The Certification Manager will determine the appropriate course of action.  Refer to Section 5.1 for further action.

Non-certified plants must be clearly identified on the packing or pick slip as well as the delivery memo and invoices.

### 3.5.1 Special Requirements for CFIA Regulated Areas

Nurseries located within areas that are regulated to control the movement of regulated pests may require Movement Certificates (MC) from CFIA to provide for movement of plant materials out of the regulated area.  Contact the CFIA office in your area to access a list of pests regulated in your area.

### 3.5.2 Special Requirements for Other Pest-Specific Modules

Nurseries that wish to incorporate other pest-specific certifications may include the requirements for those programs within their Clean Plants Nursery Manual. The procedures related to the pest specific module should be added as an attachment to the Nursery Manual.  Clean Plants Nursery Manuals will be audited for compliance to the pest-specific module as well as the Clean Plants program.

### 3.5.3 Sale of Plants with Minor Pest Infestations

Plants must be sold practically free of un-regulated pests and free of regulated pests.

**To be considered practically free of other pests, plants must be without pests in numbers or quantities in excess of those that can be expected to result from, and be consistent with, good cultural practices employed in the production and marketing of those plants.**

Plants with minor infestations of un-regulated pests that are normal for the time of year or due to weather conditions could be considered practically free and could be sold as Clean Plants certified.

Plants with a major pest infestation cannot be sold as 'Clean Plants Certified'.  A major pest infestation is one where the un-regulated pest levels are above the acceptable threshold as designated by the nursery.

## 3.6 Clean Plants Stamp

Each year an electronic formatted version of the Clean Plants Stamp (also known as the Certification Seal) showing your Certification Identity Number will be issued to your nursery.

Your nursery can use the stamp electronically to "stamp" shipping documents or have an ink stamp made.  All stamps will show the year to which they apply.

The manual will specify under which conditions the Clean Plants Certification Stamp and Certification Identification Number (electronic or ink stamp) will be used.

The Clean Plants Certification Stamp must be used only as authorized.  When the Clean Plants Certification Stamp is used on shipping documents, the following information must also be provided on the slip:

- o   Shipping destination
- o   Genera and species, variety/cultivar
- o   Number of Plants
- o   Number of Certified Plants

If the plant order contains certified and non-certified plants:

- The difference between the two designations must be clearly shown on the shipping documentation, and
- The non-certified plants will be identified through a separate label, physical space separation or other similar method.

Nurseries which are both Clean Plants certified as well as certified for a pest specific module will be provided with both the Certification ID number as well as the module on their Stamp.  Nurseries may use their Certification ID number as well as their specific pest module designation on nursery documents.

Some crops may also require a CFIA Domestic Movement Certificate or a CFIA Phytosanitary Certificate (for exports).  The Clean Plants certification does not supercede regulatory requirements either provincially or federally.

### 3.7 Records and Documents

It should be noted that various sections of this Standard refer to records.  In many cases the normal records used by the nursery will contain the information required by the specific section of the Clean Plants Standard.  In such cases the nursery does not need to create duplicate records just for the Clean Plants program.

It is however, important in your Clean Plants Nursery Manual to make appropriate reference to the records used in this fashion.  It is also critical for the nursery to review the content of such records to ensure that they capture what is required for the Clean Plants Program and make any modifications to close such gaps (i.e.  an internal audit will detect these deficiencies).  The records produced for the Clean Plants program must be securely stored and be available to the CNCI auditor.

Records that track the identity of plants and provide information for trace back and trace forward searches must be kept for seven (7) years.  Other records that are required by the Clean Plants program must be maintained for a minimum of three (3) years.

A Clean Plants certified nursery must maintain the following records and have them available on request by the auditor or CNCI administrators.

1. Clean Plants Program training records for managers and staff.

2. Supplier List: The nursery must be able to provide a list of plant and planting materials suppliers either in hard copy, or easily accessible via the accounts payable data.

3. Incoming Packing/Shipping Slip or Invoice: The nursery must include on its incoming plants packing slip or invoice the following information:

   - Supplier
   - Plant name
   - Quantities
   - Phytosanitary Certificate for imports,
   - Certification status
   - Incoming plant inspection notation
   - Follow up action,
   - Inspector's name or initials

4. Outgoing Shipments – Delivery memos, packing slips or invoices:

   - Purchaser
   - Plant name
   - Quantities
   - Phytosanitary Certificate for exports
   - Certification status
   - Outgoing plant inspection notation
   - Follow up action,

- Inspector's name or initials

5. Monitoring inspections and subsequent control actions:

   The nursery may use its own format or a modified version of Template: Pest Log and Follow-up Action found in Appendix 4 Nursery Manual.

   A. The monitoring record will include the:

      - Date of Inspection
      - Location
      - Plants
      - Pests Found
      - Inspector Initials
      - Samples (when appropriate) sent to outside diagnostic laboratories.

   B. A corresponding pest control record should be used when control measures are required as a result of the monitoring.

      The pest control record will include:
      - Pest
      - Date of Application
      - Control Method
      - Product used
      - Product Rate
      - Applicator Name

   The follow-up to the pest control action should be included in the next monitoring record.

6. Inventory and documentation related to traceability:

   - Depending on the nursery, any of the following records could be kept to ensure plants are traceable from its origin off or on the nursery, through the production period and off the nursery site.

     Records could include:

     - Propagation records shown in the Nursery Manual Template.
     - Potting Records
     - Movement records
     - Inventory

7. Audit reports – internal and external

8. Follow-up actions from audit reports, showing remediation of non-compliant issues.

## 3.8 Regulated Pest Finds

When requested by CNCI, the nursery must provide a list of any regulated or quarantine pests that have been found on the nursery within a designated time.

The nursery must also comply with provincial and federal regulatory requirements including notification to CFIA for all regulated pest finds outside of a regulated area.

# 4.0 Audit Overview

## 4.1 Internal Audits

An internal audit is intended to confirm that the plants produced by the nursery comply with the procedures outlined in the nursery's Clean Plants Nursery Manual.

A nursery has considerable flexibility in designing an audit process that will work for them.  This process must be documented in the Clean Plants Nursery Manual and must include the method of sign-off to be used in the nursery for audits and any subsequent improvements they generate.

Refer to the internal auditor training course at www.cleanplants.ca for details about the audit function and internal audit options, including splitting audits into several sections

### Internal Auditor Designation

The Certification Manager must appoint an internal auditor and management must empower that individual to conduct audits of the facility's systems and the staff that are engaged in delivering the Clean Plants program at the nursery.  Other staff must cooperate with the internal auditor and the auditor must be given access to the information they need.

The Certification Manager must allow the internal auditor to report findings without fear of reprisal from colleagues.

### Audit Process

A system must be developed to determine appropriate corrective action, to implement it in a timely fashion and to confirm success through follow-up review.

The Clean Plants Nursery Manual must contain provide the procedure for the internal audit, including:

- Number of audits to be performed per year,
- The audit checklist which will be used
- System for addressing non-conformances
- System for implementing corrections.

A third party contractor may be retained to do internal audits, or a designated facility staff who does not have primary responsibility for the functions being audited, may be used.

Internal Audit reports must be sent to the CNCI office no later than December 31st of each year to remain on the Clean Plants program.  Records of audits must be filed and made available for review by external auditors.

## Audit Scope

Audits must be done on all aspects of the Phytosanitary Management System and the Pest Management Plan described in the Clean Plants Nursery Manual.  The audit can focus on staff activities, interviews or documentation.  Internal audits offer the opportunity for the nursery to detect areas for improvement to their systems.  They will also show where procedures written in the Nursery Manual are not being carried out, where staff needs training or retraining, or where the Nursery Manual needs to be changed to reflect current or updated methods used.

It is suggested that internal auditors utilize the same tools to complete their internal audits as the external auditor would use.  These Check Lists can be found in Appendices 7b and 7c.  This enables the nursery to detect any non-conformances that the external auditor would find when conducting their audit.

The internal audit should review responsibilities procedures and documentation appropriate for the activities and the time of year.

- The certified nursery may conduct as many internal audits as necessary.
- The nursery may choose which parts of the Nursery Manual to review at each audit.
- At minimum, there must be two internal audits per year, one during shipping season and one during the growing season.
- All parts of the Nursery Manual should be audited over one year.  Internal audit reports, and any changes to the Nursery Manual need to be submitted to the CNCI office annually to remain on the program.

It would be wise to complete an internal audit in advance of each external audit.

The audit must be conducted by means of:

- staff interviews,
- observation of activities,
- examination of documents and records,
- examination of the Clean Plants Nursery Manual, and
- confirmation of the facility's ability to carry out the Phytosanitary Management System and Pest Management Plan as described in their Clean Plants Nursery Manual.

## 4.2 External Audits

CNCI accredited external auditors will conduct a systems audit as per the prescribed schedule.  Full details of this process can be found in the Appendix 7d.

**It is the facility's responsibility to schedule their external audit.**

The nursery may choose their auditor from the list of accredited auditors posted on the CNCI website at www.cleanplants.ca .

## 5.0 Pest Management Plan

The Pest Management Plan (PMP) outlines methods used for pest control of regulated and non-regulated pests of plant species commonly grown at your nursery.

### 5.1 Regulated Pests

Regulated pests must be controlled during the production period and no evidence of these pests must be found during inspections.  Requirements (inspections, pesticide applications, etc.) which comply with specific regulated pest certification programs or CFIA Directives when shipping outside of a regulated area must be met.

Similarly, requirements of specific Clean Plants pest modules, which are attached to the Clean Plants Stamp, must also be followed.  The Clean Plants Nursery Manual for the nursery should include a list of all pest specific programs which apply to the nursery.

### 5.2 Pest Detections and Control

 All plant shipments must be inspected for pests on arrival and at shipping.

In addition, certified and non-certified plants at the nursery shall be monitored for pests, including CFIA regulated pests, throughout the growing cycle.

The Nursery Manual must describe procedures or processes designed to detect and control a pest population to a level that meets the nursery's definition of practically free of non-regulated pests and free of regulated pests.  The Nursery Manual may detail frequency of monitoring, numbers of plants examined per block, and record keeping.

Follow up corrective actions and control measures must be performed in a timely manner.  Those records must correspond to the detection records.  The staff positions responsible for inspections and follow up actions must be listed in the Clean Plants Nursery Manual

### 5.3 Biosecurity

Biosecurity will follow requirements of Clean Plants pest specific modules as well as any required CFIA specific regulated pest programs.

The nursery may also choose to implement other biosecurity programs to prevent the introduction and/or to minimize the risk of establishment and spread of pests.

## 6.0 Updates and Changes to the Clean Plants Nursery Manual

All revisions to procedures, assignments of tasks, etc. should be summarized and noted in the Clean Plants Nursery Manual.  When the Nursery Manual is updated, the changes will be incorporated into the Nursery Manual.  Updated Nursery Manuals should be dated

Changes must be incorporated into the Nursery Manual prior to a scheduled external audit.  CNCI may request a copy of the updated Nursery Manual.

The Certification Manager is responsible for all updates to the Nursery Manual.

Nurseries should report substantive changes in nursery practices, procedures or growing facilities or Nursery Manual revisions to the CNCI.

## 7.0 External Audits

For external audit processes, responsibilities and details refer to Appendix 7d.

## 8.0 Administration

For full details of the administrative processes within Clean Plants, please refer to the Introduction: The Canadian Nursery Certification Institute. Contact information is available on the CNCI website at www.cleanplants.ca .