Canadian National Certification Systems and Plant Quarantine

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Our vision:
To excel as a science-based regulator, trusted and respected by Canadians and the international community.

Our mission:
Dedicated to safeguarding food, animals and plants, which enhances the health and well-being of Canada’s people, environment and economy.
Canadian national certification programs

- Canadian Fruit Tree Export Program (CFTEP) for *Malus, Pyrus, Chaenomeles* and *Prunus* (D-08-05)
- Plant Protection Export Certification Program for Grapevine Nursery Stock, *Vitis* spp. (D-97-06) – under review
Canadian national certification programs - tree fruit

• Based on:

- NAPPO standard RSPM No. 35, Guidelines for the Movement of Stone and Pome Fruit Trees and Grapevines into a NAPPO Member Country

- NAPPO standard RSPM No. , The use of integrated measures in a systems approach for pest risk management
Tree fruit program…

- Administered by the Canadian Food Inspection Agency (CFIA)

- Voluntary system
  - A requirement for export of tree fruit and grapevine material to the United States

- Facilities wishing to participate must:
  - Be located in Canada
  - Complete, sign and submit application prior to planting agreeing to comply to program
Tree fruit program...

- Stock must originate in Canada with the following exception:
  - Originate from a USDA recognized certification program
  - Must be planted and maintained to generation 4 requirements
  - Can be exported to US only if it meets the USDA requirements 7 CFR 319.37-5(b)
  - Foreign sources (outside US) must be grown in Canada for 2 years and meet USDA 7 CFR 319.37-5(b)
Systems approach to certifying facilities

• Integration of several components to mitigate the risk of pests listed in ISPM no. 35.
  ➢ Virus-testing
  ➢ Documentation of all processes
  ➢ Field inspection
  ➢ Isolation distances
  ➢ Vector control
  ➢ Labelling
Facility requirements

- Develop, document and maintain a quality management system (QMS)
- Designate a Pest Control Manager (PCM)
  - Overall responsibility and authority for developing, maintaining and compliance to the quality management system
- Development of a Pest Management Plan (PMP)
- Prepare a facility inventory declaration and detailed map of cultivar locations
Facility requirements…

• Record maintenance
  ➢ Complete detail of stock in programs
  ➢ Dates of newly established blocks
  ➢ Data from monitoring, control or eradication of pests
  ➢ Cultural activities
  ➢ Maps of blocks
Approval Process

- Completed application and documentation received by CFIA
- QMS and PMP are reviewed prior to visit
- Facility evaluation inspection
- Approval and registration
Certification Levels

• All propagative material must be derived from 1st generation virus-tested stock (G1)

• Levels of certification:
  ➢ Generation 1 (Nuclear) – Tested and maintained at the CFIA Sidney Laboratory, Centre for Plant Health or other facility approved in writing by the CFIA
  ➢ Generation 1A (Pre-elite)
  ➢ Generation 2 (Elite)
  ➢ Generation 3 (Foundation)
  ➢ Generation 4 (Certified) – Grown for retail

• At each stage of propagation, generation level drops
Production requirements

• Planting sites
  - Restrictions on ground covers
  - Tested for virus-vectoring nematodes or fumigated
  - Sites selected to minimize infection of nematodes

• Isolation requirements
  - Buffer zone requirements are dependent on certification level of block and species
  - Based on the biology of pests and whether the vector is present
Production requirements…

• Pest Management
  - Follows PMP and provincial guidelines to control the infestation of potential virus-vectoring insects

• Sanitation requirements
  - Prevent movement of soil between blocks

• Containerized plants
  - Permitted for selling at the G4 level
  - Soil free growing media
Inspection and Testing Requirements

• One systems audit per year

• Minimum of one surveillance audit during production season
  ➢ Performed by CFIA personnel

• Regular testing for pollen, insect and nematode vectored viruses
  ➢ Collected by CFIA personnel
  ➢ Tested at the Sidney Laboratory, Centre for Plant Health
Non-compliance

- CFIA has the right to suspend a facility if non-compliances threaten the integrity of the program
  - Detection of quarantinable pest
  - Labelling mix-ups

- Facility informed in writing of non-compliances

- Non-critical non-compliances must be addressed in a timely manner
  - Corrective action agreed to with consultation with CFIA personnel
Grapevine export program

• Under review
• Currently:
  ➢ Not based on NAPPO guidelines
  ➢ QMS and PMP is not required
  ➢ Participants still require to maintain records of origin, planting information, maps, etc.
  ➢ 4 levels of certification—nuclear, elite, foundation and certified
Sidney Laboratory, Centre for Plant Health
Quarantine Activities
Centre for Plant Health - Roles

• To prevent the introduction and spread of plant virus diseases

• National post entry quarantine facility

• Research and scientific support for CFIA

• Invasive alien species
Location

- Ideal year-round climate favourable for growth of commercial plants
- Geographical separation from major production areas to safeguard against disease outbreak
Activities in support of certification programs

• Provide post-entry quarantine requirements for and test non-approved material from foreign sources
  ➢ Fruit tree, grapevine, small fruit

• Test domestic material
  ➢ E.g., Domestic breeding programs

• Provide regular testing for registered certified facilities
  ➢ E.g., Pollen and nematode transmitted viruses
Activities in support of certification programs

- Virus elimination

- Maintenance of virus-tested generation 1 (nuclear) stock
  - Tree fruit and grapevines
Other quarantine activities

- Test approved material from foreign sources
- Provide post entry quarantine requirements for unique plant samples
- Provide testing support for national surveys
  - E.g., Plum pox virus and grapevine phytoplasma
- Method development and validation in support of testing activities