NIPM Item #4

NURSERY INSPECTION

GUIDELINES AND PROCEDURES

A. <u>PROGRAM</u>

- The "Regulations for Nursery Inspection" authorizes the commissioner to make as many inspections as necessary at any nursery location to ensure compliance with nursery stock pest cleanliness, labeling, and quality standards. The Department contracts with counties require that inspections be made at producing nurseries. In addition, historical compliance with the pest cleanliness standards ("commercially clean" and "free from" pest) factors in determining the appropriate inspection frequency. The statewide goal for compliance with pest cleanliness is 95.
 - a. Pest risk is an important factor in determining the frequency of growing season inspections. Generally, Department contracts will indicate that one properly timed inspection will be adequate. However, the actual frequency must be based on pest risk factors such as the sales category of the firm (wholesale, retail, incidental, jobber, broker, commission merchant, landscaper, etc.), the host status for the kinds of stock handled, propagative stock sources (local, intrastate, interstate, or foreign), technical expertise, and past record of cooperation and compliance with quarantine requirements.
 - b. At least one inspection per day is recommended when fruit and nut tree, grapevine, berry, vegetable plant, kiwi, and other nursery stock for farm planting is being harvested and/or graded. The time devoted by the commissioner to such inspection is determined by factors such as the number of plants dug and graded daily, disease or pest problems encountered, such as crown gall and nematode infestations, the percent of damaged or defective roots; and proficiency of the graders.

Less than one inspection per day may be justified when there are no pest or disease problems, no defective or damaged roots, and established grades are being met.

- c. The frequency and intensity of inspection(s) of cut flowers and cut greens is at the discretion of the commissioner. Inspection(s) should be adequate to validate the use of the California Nursery Stock Certificate by the authorized firms. The primary considerations should be pest hazards. Pests such as mites, mealybugs, aphids, leaf miners, pine tip moths, armored and soft scales, may present pest risks but, only rarely are they expected to become major pest-spread hazards.
- A monthly schedule should be maintained to indicate when pest cleanliness inspection or re-inspection is due. Inspections for pest cleanliness and grades and standards should be performed together. Inspection should be scheduled to correspond with expression of symptoms caused by viruses, viroids, phytoplasmas (mycoplasmas), or other disease agents.
- 3. At least once or twice a year, notify nurserymen of the requirements for pest cleanliness and grades and standards that must be met when inspections are made. The notices may include a summary of possible regulatory action that will be taken.

- 4. Files of nurseries due for inspection should be examined for:
 - a. Active hold orders or noncompliance notices.
 - b. Items pending clean-up that should be added to the nursery inspection report form as special attention items.
 - c. Reports of previous finds of serious pests and/or unusual pest conditions that should be considered.
 - d. Determining the appropriate inspection method(s) to be employed.
 - 5. Necessary equipment and forms to be assembled include:
 - a. Nursery Inspection Procedures Manual.
 - b. Report of Nursery Inspection and Notice of Noncompliance (64-064), and Notice to Hold Commodities on Premises (64-069).
 - c. Noncompliance warning tags, pest identification forms.
 - d. Insect vials, plastic bags, pocketknife, pen or pencil, etc.

B. INSPECTION PROCEDURE

1. General Nursery

- a. Contact the nursery owner or the authorized representative and review inspection procedure.
- b. Unless the suggested statistical inspection procedure outlined in the Nursery Inspection Procedures Manual Item No. 4.1 or another statistical inspection procedure approved by the Director is to be used, examine each lot of nursery stock in a systematic manner to determine compliance with pest cleanliness standards. In grading the degree of pest infestation, male and female, adult, and all other stages of insects should be considered. Do not consider dead or parasitized insects.
- c. Violations should be recorded on the Report of Nursery Inspection form. Infestations not representing violations may be noted at the discretion of the commissioner.
 - (1) Use common and/or scientific names of the pests found. Examples of common names are greedy scale, Baker's mealybug, greenhouse whitefly, etc. Do not use "scale," "mealybug," "whitefly," or other general classifications.
 - (2) Specimens of <u>all</u> pests found should be submitted for identification unless the inspector is <u>certain</u> of its identity. Pest and host records are essential for effective evaluation of the pest status of the pest submitted, as well as for the diseases they may vector.

- d. Each lot of nursery stock found infested with common pests of general distribution in excess of "commercially clean" standards should be removed from sale by:
 - (1) Affixing a Non-compliance Warning Tag to each infested lot (a string or light twine may be tied around the lot to avoid confusion about how many plants are being held).
 - (2) If only a few plants are infested, moving the plants to an isolation area is recommended; but, prolonged isolation is discouraged when the value of the nursery stock is not worth the cost of treatment.
- NOTE: Common species of aphids, thrips, mites, whiteflies, ants, and weeds, as well as other pests, should be under effective control. The commercially clean definition applies (see F, 2 and 3.).
 - e. Pests New to or of Limited Distribution in California. Pests new to or of limited distribution in California require eradication or intensive control and infested lots of nursery stock should be isolated immediately pending treatment. See California Code of Regulations, "Regulation for Nursery Inspection," Sections 3060.2(b) and 3060.4(a)(1)(B). Follow up by:
 - (1) Affixing a Noncompliance Warning Tag to each infested lot.
 - (2) Issuing a "Notice to Hold Commodities on Premises" and sending a copy of the notice to Pest Exclusion/Nursery Program, Sacramento.
 - (3) Collecting and submitting specimens to CDFA Plant Pest Diagnostic Laboratory at Sacramento for identification or confirmation of the pest (official records as to distribution, frequency of finds, and hosts are necessary for proper evaluation of pest ratings). Detection of "A" rated pests is followed up, if required, with an "eradication letter" designating the required control procedures.
 - (4) Determining the origin of the infested lot and whether or not any plants have been sold or shipped. If plants have been shipped, the commissioner in the destination county should be notified. If the pest is highly mobile, the county and the state supervisors of nursery inspection should jointly evaluate the need for detection survey. Recommendations for detection survey should be relayed to Pest Exclusion/Nursery Program first by telephone, and later by a memorandum.

2. Turf or Sod

- a. Pest Inspection
 - (1) Weeds are the major pest problem in turf. Emphasis should be on preventing weed pest problems through control of sources of infestation in adjacent areas and in the growing site itself. Section 3060.2(b)(2) requires fumigation of the site where the commissioner determines that a history of weed pest problem exists (Ref. NIPM items 3). Cultural controls may be permitted if required.

The seed lot(s) to be used by the grower must be ensured to be free from weed seeds. Seed lots received-without a Nursery Stock Certificate should be inspected for weed pests. In most cases, this will be a quarantine requirement.

Water may also serve as a carrier of weed seeds; so, suitable precautions should be taken by the grower to screen out this source.

- (2) The timing of inspections is important and should precede harvest enough to allow for pest determination and effective communications of requirements to the grower.
- (3) Like other nursery stock, turf must meet either the "commercially clean" or "free of" standard for cleanliness.
 - (i) Turf must be "commercially clean" with respect to common pests of general distribution in California. However, not all common weed pests are of the same seriousness. The more serious weed pests such as Bermudagrass, Johnsongrass, and other "noxious" weed pests should not be allowed in harvested rolls of turf (Ref. Sections 3060.2(b)(2), California Code of Regulations). Consequently, when such pests are found, the grower should be instructed on the Nursery Stock Notice of Noncompliance not to harvest from any infested area. Other common pests such as annual bluegrass, *Poa annua*, may be present to a light (commercially clean) degree. In the judgment of the enforcing officer, they must be "under effective control."

Any crop not indicated as a kind and cultivar component on the label of the seed lot planted should be considered as weed pests. For example, seeds of perennial ryegrass in Kentucky bluegrass seed lot should be considered as weed pests, if the mixture not correctly labeled as such.

(ii) The "free of" standard applies to limited distribution weed pests, such as yellow and purple nutgrass, quackgrass, etc.,and are therefore not allowed in turf. They are both "noxious weeds" and "B"-rated pests. However, if the infestation is limited and can be clearly delimited, the grower may be permitted to harvest uninfested portions of the field. The Nursery Stock Notice of Noncompliance should instruct the grower of proper disposition.

C. <u>COMPLETING INSPECTION</u>

- 1. The nursery owner or the authorized representative is notified of pests found and advised to follow control methods. If a written order to isolate infested stock is given, the stock shall be isolated in a manner approved by the commissioner; however, isolation should be considered only as a temporary measure pending/during treatment. A reasonable length of time, usually 30 to 60 days, should be specified and allowed for clean-up.
- 2. Nursery Stock Notice of Noncompliance form should be completed by:
 - a. Recording the total number of lots not in compliance with the pest cleanliness, labeling, and/or quality standards and reporting this total on the Nursery Inspection Report form.
 - b. Specifying the length of time permitted for controlling the infestation(s).
- 3. The nursery owner or the authorized representative must sign the Nursery Stock Notice of Noncompliance.
- 4. A Copy of both the Nursery Stock Notice of Noncompliance and Report of Nursery Inspection is given to the nursery owner or the authorized representative.
- 5. It should be made clear to the nursery owner or the authorized representative that:
 - a. Nursery stock to which "warning" tags have been affixed shall not be sold or relocated without permission of the commissioner.
 - b. The infestation(s) shall be controlled or eradicated within the time specified on the Nursery Stock Notice of Noncompliance.
 - c. It is the responsibility of the nursery to notify the commissioner when the infestation has been controlled.
- 6. The original copy of the Nursery Stock Notice of Noncompliance and Report of Nursery Inspection are submitted to the commissioner's office.
- 7. Nursery inspection program supervisor should review the Report of Nursery Inspection and Nursery Stock Notice of Noncompliance to confirm that suggested procedures have been followed and that the nursery stocks or lots listed as not in compliance are checked ($\sqrt{}$) or circled.
- 8. Nursery inspection program supervisor obtains the checked or circled list, and a typed summary.
 - a. The summary or a photocopy is filed in reinspection file.
 - b. Original inspection report and noncompliance notice are stapled together and filed in the nursery file folder.
- 9. Upon expiration of the time allowed for clean up, or at any earlier date that the nurseryman indicates the infestation(s) has been controlled and the results of his

efforts can be determined, the summary or photocopy is returned to the inspector for re-inspection.

If the nursery owner or the authorized representative requests re-inspection before the specified time limit, it should not be for a few lots or even a major portion of the infested lots held. All lots should be in compliance.

D. <u>REINSPECTION</u>

- 1. Inspect all lots of nursery stock held to determine if the infestations have been controlled. Allow sufficient time after treatment so that the pest has been controlled before re-inspection.
- The disposition of each re-inspected lot should be shown on the re-inspection summary or photocopy under the proper heading. Suggested statements are: "infestation has been reduced to commercially clean," "released," "held and isolated," or "destroyed."
- 3. Upon completion of re-inspection, the original Notice of Noncompliance may be amended or a new Notice of Noncompliance issued to cover any lots that still do not comply.
- 4. The Inspector(s) should inform his/her supervisor of any noncompliance.
- 5. Re-inspection summary or a photocopy of it should be reviewed by nursery inspection program supervisor and filed along with the original report of nursery inspection.

E. CALIFORNIA NURSERY STOCK CERTIFICATE AUTHORIZATIONS

- 1. The commissioner may authorize a nursery to reproduce and use facsimiles of the California Nursery Stock Certificate when he/she determines that the nurseryman is in compliance with:
 - a. Applicable provisions of the California Food and Agricultural Code and "Regulations for Nursery Inspection."
 - b. Nursery stock labeling, grades and standards, and quality laws and regulations.
- 2. Generally, certificates of authorization are prepared in triplicate (see Nursery Inspection Procedures Manual Item Nos. 3.1 and 3.2).
 - a. The original and both copies are signed by the commissioner.
 - b. Original copy is forwarded to the firm or the authorized person, along with a suggested letter of authorization.
 - c. The first copy is retained by the commissioner in the respective nursery file.
 - d. The second copy is forwarded to Pest Exclusion/Nursery Program.
 - e. Additional copies are to be prepared only when authorized as a result of cooperative agreement between the commissioners in counties where a firm has branch locations (see NIPM Item 3.2, A.2.d., "Note"). Send a copy to each county where branches are located.

3. The Pest Exclusion/Nursery Program should be notified when authorization to a nursery has been suspended or revoked and when a change in ownership occurs. A change in ownership requires a new certificate of authorization. Annual authorization is required for those firms shipping into states requiring annual filing of a certificate of inspection (see Q.C. 102).

F. REGULATORY NOTES AND GENERAL RECOMMENDATIONS

- 1. Separate files should be maintained for each nursery. Reports of nursery inspections, hold orders, noncompliance notices, written orders or statements, pest identification slips, certificate use authorizations, and other paperwork, should be maintained in the files. Retention schedules are usually three to five years, depending upon individual county procedure or policy.
- "Regulation for Nursery Inspection," Section 3060.2 Standard of Cleanliness, is specific to the nursery stock itself. Pests on the premises, but not infesting nursery stock, are handled under the enforcement provisions of Section 3060.4. Subparagraph (c), Suspension, states that the certificate shall be suspended, as to all nursery stock or as to infested and exposed host plants. Paragraphs (1), (2), and (3) also relate to the handling of pests which are established on the premise, but not necessarily infesting nursery stock.
- 3. Common Weed Pests in containers should be kept under effective control. The "commercially clean" definition applies. Noxious weed pests on the premises should be kept under effective control to a point that they are not likely to infest nursery stock. If reasonable safeguards are in effect, the presence of a noxious weed would not preclude the use of origin certificates. Weeds in the ground which hamper inspection or which may harbor insects or other pests should also be subjected to reasonable control. Regulatory practice should be to:
 - a. List weed conditions for clean-up under general remarks on the Report of Nursery Inspection form.
 - b. Determine the reason for weediness and initiate corrective controls.
- 4. Changes in business operations of a nursery may affect compliance with laws and regulations. The nursery inspector should be alert to changes in the kinds of stock handled, in management, and in employees in responsible positions.
- 5. The nurseryman should designate and maintain an isolation area for incoming shipments. The inspector and nurseryman should agree on the location of this area.
- 6. Each nursery authorized to use the California Nursery Stock Certificate should develop a system for assuring compliance with nursery stock laws, regulations, and quarantine restrictions. Responsible employees handling the billing and shipment should be fully informed of these requirements.
- 7. For additional information concerning inspection and enforcement procedures for nematode pests of nursery stock, refer to Nursery Inspection Procedures Manual Item Nos. 3, 6, 7, 7.1, 8, and 9.
- 8. When in doubt on inspection procedures, check with your supervisor or your local Pest Exclusion/Nursery Program representative. They will be glad to assist you.