

Nursery Stock Approved Treatment Protocol

May 20, 2021

Shipping of nursery stock by a nursery operator from an area infested with glassy-winged sharpshooter (GWSS) to a non-infested area, partially infested area, or area under active control is permissible under the following conditions:

1. Compliance Agreement

- a. Each shipping nursery facility (each individual site) shall enter into an approved treatment protocol compliance agreement with the origin County Agricultural Commissioner (CAC). Portions of the GWSS Nursery Approved Treatment Best Management Practices (BMP's), as specified by the origin CAC and/or CDFA, shall be mandated as components of the facility's GWSS Pest Management Plan and treatment and safeguarding procedures, as applicable. The BMP's shall be enforceable as a part of the compliance agreement. Each compliance agreement will be reviewed and renewed annually.
- b. To qualify for an approved treatment protocol compliance agreement, a nursery must establish a written GWSS Pest Management Plan.
- c. The GWSS pest management plan is subject to approval by the origin CAC and CDFA.
- d. The nursery must comply with all compliance agreement and protocol requirements.
- e. The nursery will ensure all management practices and mitigation measures are consistent with the California Department of Food and Agriculture's (CDFA) Statewide Pest Prevention Program Final Programmatic Environmental Impact Report.

2. GWSS Pest Management Plan

- a. The plan shall be designed to minimize GWSS pest pressure in the growing area.
- b. The plan shall utilize concepts and principles of pest management at all times and implement and maintain BMP's as currently posted at CDFA's website: <https://www.cdfa.ca.gov/pdcp/Guidelines.html#Nursery> . When any changes occur in the BMP's, the origin CAC will notify the nursery. Any new changes will be forwarded electronically or by other means to the nursery.
- c. The plan shall include an ongoing pest-monitoring program. This includes the placement and monitoring of yellow panel sticky traps evenly spaced throughout the nursery growing areas at a density of not less than 1 trap per ½ acre, and at 2 traps per ½ acre at nursery shipping docks. These traps will be inspected a minimum of once every two weeks by an origin CAC inspector.
- d. The required number of traps may be increased based on pest pressure as determined by the origin CAC and CDFA.
- e. Nurseries shall maintain a free-from loading (shipping) dock. *Since ATP nurseries exclusively use Sevin or Tame on outgoing shipments, staging area traps must not exceed six GWSS adults in the same one-half acre in a two week period.* If the loading dock traps exceed six GWSS adults in the same one-half acre in a two-week period, the nursery shall immediately suspend all shipments to non-infested areas. A 100' radius foliar treatment in/around the staging area must be conducted with a product from the included list (see #4i), other than Sevin or Tame. The nursery may resume shipping after one successful trap cycle below the threshold.

- f. The following applies to incoming shipments of nursery stock from locations that have a current Compliance Agreement with the Glassy-winged Sharpshooter/Pierce's Disease Control Program:
- i. From a non-infested premise (Program Regulation) nursery or approved treatment (ATP) nursery, nursery stock will be accepted "as is".
 - ii. From an infested premise (Master Permit) nursery, nursery stock will be cleaned of all GWSS life stages by nursery staff prior to arrival, **or**, the receiving nursery will establish a quarantine area for the incoming plants. The plants will be monitored using yellow sticky traps at a density of 1 trap per ½ acre for a period of no less than 30 days. The quarantine area will be a designated area approved by the County Agricultural Commissioner. ATP protocols will apply to any trap finds. *Verification of these methods described above may be required by the receiving county in the form of additional inspection or certification per each respective ATP Pest Management Plan.*
- g. If a nursery acquires plant material that *does not* originate from a nursery (and/or yard) under a GWSS compliance agreement, the following requirements apply: If acquiring plant material from nurseries lacking a GWSS compliance agreement or any other source outside of a nursery setting (e.g. harvested product from homeowners or private property) then the following must occur:
- i. Shipper must take possession of plant material and transport to a yard under their existing ATP compliance agreement.
 - ii. The plant material must be held in a quarantine area within the nursery for a period of 30 days. The nursery shall notify the CAC when this occurs. This area shall be trapped and monitored for GWSS. Chemical applications with a material effective against adult and nymphal stages of GWSS shall be applied, if necessary, to eliminate all GWSS life stages (see #4i). Sevin or Tame should not be used for this safeguarding treatment.
- h. Irregular Sized (e.g. Oversized) Plant Material from Other Sources: (The following information regarding the shipment of irregular sized plant material shall be used as a guideline for certifying plant material and is at the discretion of the CAC). All host material that originates from nurseries lacking a GWSS compliance agreement or any other source outside of a nursery setting (e.g. harvested product from homeowners or private property) must be of a size and condition that would allow for a 100% visual inspection. *Plant material is considered irregular if the CAC determines that a 100% visual inspection cannot be conducted.* The following shall occur:
- i. Shipper must take possession of plant material and transport to a yard under their existing compliance agreement.
 - ii. The plant material must be held in a quarantine area within the nursery for a period of 30 days. The nursery shall notify the CAC when this occurs. This area shall be trapped and monitored for GWSS. Two chemical applications shall be applied, approximately two weeks apart, with a material effective against adult and nymphal stages of GWSS to eliminate all GWSS life stages (see #4i). Sevin or Tame should not be used for this safeguarding treatment. These two chemical treatments shall be monitored by the origin CAC. Upon completion of the treatments, the plant material may be shipped from the nursery or added to the nursery's existing stock. For shipments destined to non-infested counties, the origin CAC shall contact the destination CAC to confirm the plant material was certified per protocol.

- i. Under this protocol, the current threshold for GWSS in shipping nurseries is no more than 10 GWSS trapped in a single yellow panel trap within a two-week period. If this threshold is exceeded, all host material, within a 100' radius around the trap(s) indicating greater than 10 adults, shall be suspended from being shipped and must receive a foliar chemical application (see #4i). Sevin or Tame should not be used for this treatment. The actual hold and treatment area required in response to a trap exceeding the threshold may be more or less than a 100' radius, at the discretion of the origin CAC. Factors to be considered when determining the treatment area include but are not limited to:
 - i. Nursery layout: evaluate where the trap is located within the nursery. Consider any physical barriers that might fall within or just outside of the 100' radius.
 - ii. Type of plant material: evaluate the plant material adjacent to the trap exceeding 10 GWSS, or at the perimeter of the 100' radius. Consider whether the plants are host or non-host. (Click [here](#) for the GWSS host list found on pages 454.3 - 454.6 of the Plant Quarantine Manual).
 - iii. Block size: evaluate the trap location in relation to block size. Consider the type of plant material throughout the block. If the block has preferred hosts throughout, a treatment beyond the 100' radius may be recommended.

In order to expedite the release of plant material, the shipping nursery may opt to treat the hold area within five days of notification by the CAC or CDFA of any trap(s) exceeding 10 GWSS. If the hold treatment is conducted within this five day period, the hold may be lifted immediately, with the approval of the origin CAC or CDFA. Shipping nurseries that use this option must coordinate the hold treatments with the CAC or CDFA so that appropriate staff can monitor the treatment and document the hold/treatment information accordingly. Treatments shall be conducted in the presence of a licensed origin CAC inspector.

If the hold area is not treated within the five day period then the plant material must remain on hold for at least one trap cycle (minimum two week period) after the hold treatment. If after one trap cycle the pest pressure is below the threshold level and with the approval of the origin CAC or CDFA, then the suspension can be lifted and shipping can resume.

3. Record-Keeping

- a. Growing area treatment records must be maintained and available on-site for a minimum of two years plus the current year.
- b. Treatment and personnel training records must be made available to CDFA or the origin CAC upon request.

4. Treatment and Safeguarding

- a. The nursery must demonstrate to the origin CAC that all plant material in each shipment intended for non-infested counties, partially infested counties, and areas under active control within California has originated from growing grounds under a compliance agreement. In addition, the nursery must apply the standards of cleanliness as directed in CCR 3060.2a and FAC 6902 (a-d) to maintain minimal levels of pest presence within the nursery.
- b. All plants and plant material destined for non-infested counties, partially infested counties, and areas under active control within California shall be treated at maximum label rates with CDFA-approved pesticides (currently Sevin SL or Tame) and

safeguarded until the time of shipment. Pesticide applications shall be made by an individual trained in accordance with item 7. Applications shall be made to meet label requirements and proper application techniques for Sevin SL and Tame.

- c. If the shipment contains both host and non-host plants, the entire load shall be treated as a safeguarding measure. Similarly, if a shipment destined to a non-enforcing county (*Alpine, Del Norte, Inyo, Lassen, Mono, Modoc, Plumas, Sierra and Siskiyou Counties*), or out of state, is co-mingled with material destined for an enforcing county, the entire load shall be treated as a safeguarding measure.
- d. Nursery stock foliage shall be generally free from surface moisture at the time of treatment. Additionally, any rain event occurring within 24 hours of a treatment will result in the revocation of the ATP Certificate of Quarantine Compliance (CQC) or State Phytosanitary Certificate (State Phyto). The exception will be if the plants are protected from the rain. Recertification of the plant material shall be conducted per label requirement.
- e. When factory recommendations do not specify the spray gun pressure (psi), it is the grower(s) and CAC(s) responsibility to determine the appropriate pressure by assessing spray coverage using water sensitive spray cards, spray dyes, or visual inspection.
- f. Treatments shall be conducted in the presence of a licensed origin CAC inspector.
- g. Nursery personnel shall ensure that treated nursery stock is safeguarded to prevent re-infestation prior to shipping. Safeguarding steps shall include isolating the shipment and ensuring that no plants are added to or removed from the shipment after treatment.
- h. Nursery stock shall not receive overhead irrigation following treatment and prior to shipment due to risks of pesticide degradation. Irrigation of nursery stock following treatment and prior to shipping shall be conducted through the use of a watering wand or hose with water applied only to the planting medium and avoidance of wetting foliage.

- i. The following pesticides can be used for control of the glassy-winged sharpshooter in nurseries:

Active Ingredient	Product
acephate	Acephate 97UP
imidacloprid	Admire Pro® *
imidacloprid	Alias 4F® *
flupyradifurone	Altus®
acetamiprid	Assail 30 SG®
acetamiprid	Assail 70 WP®
permethrin	Astro®
cyfluthrin	Baythroid XL®
imidacloprid	CoreTect® *
cyfluthrin	Decathlon® 20 WP
cyfluthrin/imidacloprid	Discus®
imidacloprid	Marathon II Greenhouse and Nursery Insecticide
tau-fluvalinate	Mavrik Aquaflow®
acephate	Orthene® 97
permethrin	Perm-UP 3.2 EC
imidacloprid	Quali-Pro Imidacloprid 2F®
dinotefuran	Safari 20 SG
carbaryl	Sevin SL®**
bifenthrin	Talstar S Select®
fenpropathrin	Tame 2.4 EC Spray®**
neem oil	Triact 70®
acetamiprid	Tristar® 30 SG
acetamiprid	Tristar® 8.5 SL

* These items can be used in nurseries to control GWSS, however may not be used for hold or quarantine area treatments (requiring a foliar treatment). **Sevin SL or Tame may only be used for safeguarding (outgoing certification) treatments.

5. Certification

- a. Shipments receiving approved treatments shall be certified via a Certificate of Quarantine Compliance (CQC, CDFA Form 66-079) or a State Phytosanitary Certificate (State Phyto), issued by the origin CAC.
- b. The CQC or State Phyto shall indicate:
 - The name and complete physical address of the nursery facility from which the nursery stock is shipped
 - Nursery approved treatment protocol compliance agreement number
 - The approved treatment material used
 - The application rate
 - The date of treatment
 - The signature of the inspector who witnessed the treatment
- c. CQC's or State Phyto's shall be prepared for each delivery (drop). Each CQC or State Phyto shall contain the following statement: "This shipment is being shipped under the approved treatment protocol".

d. The CQC or State Phyto shall expire at the end of the fifth day after being issued.

6. Notification

a. Shipping nursery personnel shall provide receiving CAC's with no less than 24 hours notice when certified treated shipments are being sent to that receiving county.

7. Training

- a. The nursery shall have personnel trained in the GWSS Pest Management Plan and the effective application of the Approved Treatment Protocol on staff at all times.
- b. All nursery staff shall receive training on the GWSS Pest Management Plan and the Approved Treatment Protocol at least annually. Pesticide training will be conducted at least annually and appropriate update training shall be conducted at any time which any new chemicals or spray techniques are implemented. All new employees shall be trained prior to participating in the program. The training shall be in addition to the required pesticide safety training.
- c. The training materials and curriculum shall be updated annually.
- d. Treatment personnel shall be trained in effective application techniques for GWSS control as outlined in the BMP's (<https://www.cdfa.ca.gov/pdcp/Guidelines.html#Nursery>).
- e. All training provided shall be documented through written records.
- f. All of the above must be documented and available for review at any time by the CAC and/or CDFA.

8. Origin Inspection Authority

a. CDFA, origin CAC inspectors, and origin CAC inspectors shall be afforded access to nursery growing areas, shipping docks, and treatment and training records for inspection.

9. Destination Inspection Authority

- a. Arriving nursery stock shipments are subject to inspection by the receiving CAC, at his/her discretion. The receiving CAC may require hold orders on such shipments.
- b. Arriving certified nursery stock shipments shall be subject to sampling by CDFA and receiving CAC inspectors for pesticide residues.

10. Enforcement Actions and Authority

- a. Any certified nursery stock shipment found at destination to have live nymphal or adult GWSS will be destroyed on-site or returned to origin, as ordered by the receiving CAC. The origin CAC and CDFA shall suspend the approved treatment protocol compliance agreement of any shipping nursery with a nymph or adult life stage rejection until the problem has been mitigated to satisfaction of the origin CAC and CDFA.
- b. Nursery stock shipments lacking a valid CQC or State Phyto shall be held at destination until such documentation can be produced. The receiving CAC may reject the entire load if such documentation cannot be immediately produced.
- c. Failure to meet any approved treatment protocol compliance agreement requirement may result in the suspension or cancellation of both the approved treatment protocol compliance agreement and the authorization to ship nursery stock to non-infested areas under this agreement. The suspension or cancellation will continue until the deficiencies are corrected, as determined by CDFA and the origin CAC.
- d. Repeated failures to meet approved treatment protocol compliance agreement requirements may result in the revocation of the approved treatment protocol

compliance agreement for a period of up to one year or until CDFA or origin CAC determine the nursery facility is in compliance with the conditions of the approved treatment protocol compliance agreement.

- e. The destination CAC shall have the authority to hold plant material with excessive egg masses and will immediately initiate discussion with origin CAC and CDFA to discuss the next action. This authority is at the discretion of the destination CAC.