

California Certified Seed Garlic

The following sections are extracts from the California Code of Regulations. They have been prepared by the Nursery, Seed, and Cotton Program, Pest Exclusion Branch, California Department of Food and Agriculture. These extracts are provided for information purposes only. For the official text, the user should consult the California Code of Regulations published by Barclays Law Publishers.

California Code of Regulations
Title 3. Food and Agriculture
Division 4. Plant Industry
Chapter 3. Entomology and Plant Quarantine
Subchapter 2. Nursery Stock
Article 8. California Certified Seed Garlic

3044. Disclaimer of Warranties and Financial Responsibility.

The provisions of Section 3069 shall apply to this article.

Note: Authority cited: Sections 407 and 5823, Food and Agricultural Code.
Reference: Sections 5821 and 5822, Food and Agricultural Code.

3044.1. Definitions.

- (a) "Garlic" means plantlets, plants, bulbs, or cloves or any part of *Allium sativum* and its cultivars.
- (b) "Off-type" means different from the variety listed on the application for registration or certification or exhibiting symptoms of a genetic or non-transmissible disorder.
- (c) "Foundation block" means a garlic planting established using garlic subjected to laboratory disease elimination procedures and propagated under the supervision of the Department for the production of foundation stock.
- (d) "Foundation stock" means garlic produced in a foundation block.
- (e) "Nursery increase block" means a garlic planting which has been established using foundation or registered stock for the production of registered stock.
- (f) "Registered stock" means garlic produced in an nursery increase block.
- (g) "Certified block" means a garlic planting which has been established using registered stock for the production of certified stock.
- (h) "Certified stock" means garlic that has been produced in a certified block.
- (i) "Certified seed garlic" means garlic certified in accordance with the provisions of this article.
- (j) "Participant" means any person or legal entity whose application has been submitted to and accepted by the Department.
- (k) "Farm" means an enterprise that includes all land, growing facilities, equipment, storage facilities, and labor that are utilized in a common effort to produce garlic and other *Allium* sp. crops.
- (l) "Program" means the seed garlic certification program administered by the Department pursuant to these regulations.



(m) "Department" means the California Department of Food and Agriculture, the Secretary of Food and Agriculture, and its agents, employees, or representatives.

Note: Authority cited: Sections 407 and 5823, Food and Agricultural Code.
Reference: Sections 5821 and 5822, Food and Agricultural Code.

3044.2. General Provisions.

Participation in this program is voluntary and may be withdrawn at the option of the participant. Approval, supervision, inspection, sampling, determination, registration and certification, shall be conducted by the Department or its authorized agents.

(a) Approval of Registration or Certification. Planting locations accepted by the Department, laboratory examinations, and visual inspections form the basis for approval of registration as a propagative source and certification as California certified seed garlic. The Department may authorize the use of official certification tags or other indicia of certification for the identification of garlic which meets the requirements of this article. Except as otherwise provided, certification is based solely on a sample of garlic from each planting entered in the program.

(1) Approval of Registration. The Department may approve the registration as a source of propagative material, either foundation or registered stock which has tested and found free of stem and bulb nematode, *Ditylenchus dipsaci*, and has been inspected and found free of white rot fungus, *Sclerotium cepivorum*.

(2) Certification. The Department may certify garlic as California Certified Seed Garlic stock which has been inspected and found free of white rot fungus, *Sclerotium cepivorum*.

(b) Refusal, Suspension or Cancellation of Registration or Certification. The Department may refuse certification services to anyone or may refuse, suspend, or cancel registration or certification for part or all of a planting under the following conditions, whether or not caused by actions or omissions of participants.

(1) The requirements of this article have not been met; or

(2) The participant has failed to comply with participant responsibilities as specified in Section 3044.3 during current or past program participation; or

(3) The participant has failed to pay in a timely manner, any fee or late charge required by this article.

(4) Any condition exists which would hinder or prevent the accurate determination of whether or not the disease, pest, varietal purity, or other requirements of this article have been met; or

(5) The planting is infested with stem and bulb nematode; or

(6) The planting is infected with white rot fungus; or

(7) The planting is infected or infested with any pest new to or of limited distribution within the State, unless the Department determines that the pest is of minor economic importance or determines that the pest can be safely delimited and the infected or infested garlic can be treated or rogued to eliminate the pest; or

(8) A plant or plants are found to be off-type unless rogued to the satisfaction of the Department; or

(9) For any reason the identity of the garlic becomes uncertain or has not been maintained; or

(10) The certification seals or tags are misused or stock is materially misrepresented, whether or not the participant knew or should have known of the misrepresentation.

Note: Authority cited: Sections 407 and 5823, Food and Agricultural Code.
Reference: Sections 5821 and 5822, Food and Agricultural Code.

3044.3. Participant Responsibilities.

All participant responsibilities specified in this article shall be performed at the expense of the participant. Notifications as specified are required in order to assure that approval(s) may be granted before work is performed, to ensure that inspections may be made properly and in accordance with state laws governing worker health and safety for pesticide exposure, and to provide close working knowledge of filed operations. The participant shall be responsible for:

- (a) Application for registration or certification of a planting.
- (b) Selection of the planting location.
- (c) Selection and trueness to variety of garlic in a planting.
- (d) Propagation, record keeping, and pest freedom of all garlic subjected to laboratory disease elimination to be planted in a foundation block.
- (e) Culture, maintenance, farming and sanitation practices of a planting.
- (f) Maintaining the identity of all garlic entered in the program.
- (g) Protecting garlic in possession from exposure to or damage from conditions and pests, including diseases, which could materially reduce the viability or productivity of the stock.
- (h) Notifying the Department at least one week in advance of planting and replanting, propagation operations, harvest and storage location, and movement of stock during storage.
- (i) Notifying the Department of the date of all pest control treatments in plantings for which inspections or other departmental activities are scheduled, the product(s) used, dosage(s) and any re-entry or worker safety requirements which apply. Such notification need not be made at times when inspections or other departmental activities are not scheduled to be performed.
- (j) The proper use of certification seals and tags provided by the Department and for marking on each tag the participant's name, harvest date (month, year), variety and the assigned block number and other information for identification purposes specified by the Department.
- (k) Maintaining production, tag use and sales records of the stock produced and/or sold. The tag use records shall be kept on an inventory sheet(s) supplied by the Department, unless otherwise specified by the Department in writing, and shall be submitted annually after the close of the season for sale or distribution of certified stocks.
- (l) Compliance with the requirements of this article and with other lawful orders specified by the Department.

Note: Authority cited: Sections 407 and 5823, Food and Agricultural Code.
Reference: Sections 5821 and 5822, Food and Agricultural Code.

3044.4. Eligibility Requirements.

To be accepted for approval of registration or certification, garlic shall have been inspected and tested in prior growing season of production by the Department, as provided in Section 3044.6 or by another

jurisdiction performing said inspections or testing under standards at least as strict, and not found to be infested with stem and bulb nematode or infected with white rot fungus. Garlic which has been exposed to a stem and bulb nematode infestation or a white rot fungus shall not be eligible for recertification.

(a) In a Foundation Block. To be eligible for planting, garlic plants shall be produced via laboratory disease elimination techniques. Garlic planted in a foundation block shall be subject to inspection and testing procedures during the first year growth and development of the bulb.

(b) In an Nursery Increase Block or Certified Block. To be eligible for planting, garlic shall be foundation stock or registered stock.

(c) Qualification of Stock. A history of compliance may be established by inspection and testing as prescribed by this article for any garlic for which the disease status cannot be demonstrated to the satisfaction of the Department. The stock may be approved as registered stock or as certified stock at the end of three successive growing seasons provided it meets the requirements of this article. In addition, the initial amount to be entered shall be not more than 100 pounds and shall be inspected, sampled, and tested for stem and bulb nematode and white rot fungus as specified by the Department prior to planting.

Note: Authority cited: Sections 407 and 5823, Food and Agricultural Code.
Reference: Sections 5821 and 5822, Food and Agricultural Code.

3044.5. Requirements for Plantings.

(a) Location of Plantings. Each planting location shall be subject to inspection by the Department and shall be in a geographic area where contamination by stem and bulb nematode and white rot fungus from drainage, flooding, irrigation or other means is not likely to occur. The location requirements may be waived if the planting is made in a facility approved by the Department or if the land or soil has been treated in a manner approved by the Department to eliminate soil-borne pests.

(1) Each planting shall be on land which no *Allium* sp. has grown for five years prior to planting.

(2) Each planting shall be on land which is not known to be infested with white rot fungus.

(3) Each planting shall be on a farm where all plantings of garlic shall be planted with garlic that has been certified or the equivalent, and all plantings on the farm of any *Allium* sp. planting shall be subject to inspection and testing as required in this article.

(4) Each planting shall be at least 500 feet from any *Allium* sp. planting not entered in the program. This requirement may be waived if, in the judgement of the Department, there exists a sufficient natural barrier or if garlic not entered in the program has an equivalent history.

(5) Each planting in an area which the disease status is unknown or cannot be demonstrated to the satisfaction of the Department may be granted a conditional acceptance. The Department may accept a site after a history of compliance has been established at the end of three successive growing seasons. At the end of such time, the Department may certify the stock as registered or certified provided the requirements of this article have been met.

(b) Maintenance of Plantings. Plantings entered in this program shall be kept in a good growing condition and pests shall be kept under effective control. Precautions shall be taken in cultivation, irrigation, movement and use of equipment and in other farming practices to guard against spread of soil-borne pests to plantings entered in this program.

(1) Laboratory propagation of garlic to be entered in this program shall be carried out under standard aseptic microbiological techniques at all stages prior to potting. Potting media shall be sterile. Suitable precautions shall be taken to guard against the introduction or spread of soil-borne pests into greenhouse facilities being used to grow-out such laboratory propagated garlic.

(2) Each foundation block, nursery increase block, and certified block shall be a separate planting of garlic. There shall be a minimum of six feet or one or more blank beds separating blocks or varieties within a block unless suitable precautions are taken to maintain identity.

(c) Harvesting, Cracking, and Storage of Garlic. Precautions shall be taken during harvesting, cracking, and storage to prevent the contamination by stem and bulb nematode and white rot fungus.

(1) Garlic shall be harvested, cracked, and stored separately in such a manner to preclude intermixing.

(2) Garlic shall be kept in containers that are new or clean and not previously used for any *Allium* sp. or that have been sanitized.

(3) Garlic shall be stored in sanitized storage areas after harvest and shall not be stored within the same storage facility with *Allium* sp. known to be infested with stem and bulb nematode or infected with white rot fungus. Certified garlic may be stored, with prior approval by the Department, with non-certified garlic provided that the non-certified garlic is not known to be infested with stem and bulb nematode or infected with white rot fungus, and further provided, that suitable precautions have been taken to preclude intermixing.

Note: Authority cited: Sections 407 and 5823, Food and Agricultural Code.
Reference: Sections 5821 and 5822, Food and Agricultural Code.

3044.6. Inspection and Testing Procedures.

Inspection and testing procedures approved by the Department to detect stem and bulb nematode and white rot fungus shall be conducted at times determined as suitable. To establish a history of compliance for the qualification of stock, Section 3044.4(c), or for a location, Section 3044.5(a)(4), the inspection and testing procedures shall be the same as those required for an nursery increase block. Additional inspections or tests may be required by the Department if seasonal conditions or other factors tend to obscure disease symptoms or make adequate inspection, or when stem and bulb nematode or white rot fungus or other serious pests are suspected. The Department may sample garlic from any planting or storage facility for inspection or testing purposes. Samples shall be furnished without charge.

(a) Inspections. To determine eligibility of a planting, the following inspections shall be made:

(1) For laboratory/greenhouse production, at least two inspections shall be made annually and may include the grow-out of laboratory propagated stock in greenhouse facilities.

(2) For all field plantings including plantings not entered in the program and other *Allium* sp., at least one growing season inspection.

(3) Harvest and/or storage inspection.

(b) Nematode Testing. Laboratory examination of a sample of garlic for the stem and bulb nematode shall be conducted for all plantings except as otherwise provided. Sampling for nematodes may be combined with the growing season inspection at the discretion of the Department.

(1) For laboratory/greenhouse production, a sample may be collected of mother stock or explant.

(2) For foundation plantings, a sample of garlic shall be collected at approximately 20-foot intervals and composited on a one acre basis; for plantings less than a quarter acre, a reasonable sample, but not more than 5% of the plants shall be collected from each selection or variety.

(3) For nursery increase block plantings, a sample of garlic shall be collected at approximately 20-foot intervals and composited on a one acre basis.

(4) For certified block plantings, at the option and on the request of the participant, a sample of garlic bulbs may be collected at approximately 40-foot intervals and composited on a four acre basis.

Note: Authority cited: Sections 407 and 5823, Food and Agricultural Code.
Reference: Sections 5821 and 5822, Food and Agricultural Code.

3044.7. Application and Fees.

(a) Application. Upon submitting an application, the applicant shall furnish information requested regarding each planting and shall consent to the taking of samples or plants by the Department from any planting for inspection or testing purposes. A separate application shall be submitted for each planting and may include more than one variety provided that they are entered as the same class.

(1) In the case of participants engaged in laboratory/greenhouse production, application, along with the required fees, shall be made 15 days prior to initiation of propagation or planting.

(2) A preliminary application for site approval of field plantings along with the required fees shall be submitted by August 1, prior to planting.

(3) A final application for all field plantings, including farm survey when required, along with the required fees shall be submitted for each planting by March 15.

(4) A late application may be accepted by the Department provided that a late fee is paid and that the application is made sufficiently in advance of the times required to determine the eligibility of the stock and the suitability of the location, to supervise any treatment that may be required, and to adequately perform the inspections and tests outlined in this article.

(b) Fees. Fees established in this article are payable in advance of the work to be done and are for the sole purpose of defraying expenses incurred in the approval, inspection, testing, registration and certification procedures herein provided and are not to obtain any right or privilege. The schedule of fees for the services provided in this article are based upon the approximate cost of the services rendered. The Secretary of Food and Agriculture, pursuant to Section 5822 of the Food and Agricultural Code, hereby establishes fees for approvals and inspections, including sampling and testing for the seed garlic certification program. The fees shall be:

(1) Laboratory/Greenhouse Production. \$200.00 for each facility.

(2) Preliminary Application. \$150.00 for all field plantings at the same location.

(3) Acreage Fee. In addition to the preliminary application fee, an acreage fee for each acre in excess of one acre or portion of an acre for the following field plantings:

(A) Foundation Block. \$75.00 per acre or portion of an acre.

(B) Nursery Increase Block. \$75.00 per acre or portion of an acre.

(C) Certified Block. \$25.00 per acre or portion of an acre.

(D) Qualification of Stock or Site Inspection for a New Location. \$75.00 per acre.

(4) Farm Survey of Non Certified Garlic and Other Allium sp. \$10.00 per acre or portion of an acre.

(5) Stem and Bulb Nematode Testing.

(A) Qualification of Stock. \$200.00 per variety or selection submitted.

(B) Optional Field Testing For Certified Plantings. \$15.00 per acre or portion of an acre.

(6) The late fee shall be \$100.00 for each application postmarked after the times established in this article.

(7) The Department may charge additional fees when due to conditions, total acreage entered, or number of tests performed, the fees established do not cover the cost of the service.

(8) The hourly rate for certification services shall be \$50.00 per hour applied to travel time (portal to portal), field time, and documentation time.

(9) Fees paid for services that are not rendered shall be refunded to the applicant, less direct costs incurred by the Department.

(10) No fees shall be charged to the University of California or the United States Department of Food and Agriculture for registration or for inspection and testing of garlic provided there is no additional expense to the Department other than for observation of the inspection and testing required by this article and for the keeping of records. When the procedures prescribed in this article are conducted by the University of California, or by the United States Department of Agriculture, they shall not be less than provided in this article, and the Department shall be notified each year of the garlic to be entered or continued in the program.

Note: Authority cited: Sections 407 and 5823, Food and Agricultural Code.
Reference: Section 5822, Food and Agricultural Code.