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Treatment Manual

Certifying Facilities

Certification of Niger seed Treatment Facilities

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PPQ Regulation Policies Governing the Entry of Niger seeds into the United States

Seeds of *Guizotia abyssinica* (Niger seed) from any foreign place, at or before the time of arrival at the port of first arrival, shall be heat treated for possible infestation with noxious weeds or prohibited pathogens in accordance with the applicable provisions of PPQ's Treatment Manual.

The Certification Process

Certification of a niger seed treatment facilities includes the following steps:

1. The facility submits an engineering construction plan
2. APHIS approves the engineering construction plan
3. The facility formally requests certification
4. APHIS conducts a performance test for certification
5. APHIS makes final approval for certification and issues a Certificate of Approval (PPQ Form 482)

Approval of engineering construction plan

Plans and specifications showing dimensions, capacity, heating units and temperature time recording system must be sent for approval through the appropriate State officials and through:

USDA-APHIS-PPQ-CPHST
Treatment Quality Assurance Unit (TQAU)
1730 Varsity Drive, Suite 400
Raleigh, NC 27606

Foreign treatment facilities must be constructed to meet foreign standards. The equipment must be designed in a manner to hold the temperature at or above temperatures prescribed in the treatment schedule for heat treatment of niger seed (T412-a). When the engineering plans are approved, the treatment plant will be constructed accordingly. Any modification of the original plans, will require advanced approval in writing from PPQ.

Requesting certification for a treatment plant.

To obtain certification from APHIS, a Niger seed treatment plant should submit a written request to the APHIS. The request should include the following:

- ◆ Listing of names, addresses and phone numbers of the facility, facility manager or supervisor and plant construction engineer,
- ◆ Assurance that the facility manager accepts responsibility for facility operations
- ◆ Assurance that required equipment is on-site
- ◆ Data from at least two preliminary performance tests indicating that the plant meets performance requirements for certification, including copies of completed treatment sheets and related temperature printout sheets for test treatments.



The appropriate permits and approval to import niger seeds for tests must be approved by PPQ Permit Unit prior to shipment of the commodity to the United States.

Performance test for a Niger seed treatment facility.

Initial certification/performance testing will be conducted by CPHST-TQAU in conjunction with PPQ. CPHST may delegate this responsibility to others for the purpose recertification.

Equipment/materials needed by APHIS or its designee to conduct facility performance tests for certification.

The facility must supply the following equipment and materials to conduct a performance test for certification:

- ◆ Copy of plans and specifications showing dimensions and other details of heating and temperature recording systems.

- ◆ Certified calibrated thermometer (temperature range to at least 270° F (132.2° C))
- ◆ Stop watch and tape measure
- ◆ Temperature recording system to record temperature and processing time.

Minimum standards and specifications

To qualify for certification/recertification, the facility must meet the following minimum standards and specifications:

- ◆ Temperature probes (a minimum of 2) situated in the heat treating equipment in such a way as to determine when the niger seeds reaches the target temperature. Probes or sensors shall be placed in the commodity in order accurately record commodity temperature.
- ◆ Temperature recording chart shall be in increments of **not** less than 0.10 inch for each degree F. (or 5mm for each degree C)
- ◆ Temperature readings shall be recorded on a chart in time intervals **not** to exceed four minutes between each reading.
- ◆ Accuracy of the total temperature recording system shall be within plus or minus 0.5 degree F. (0.3 degree C.) of actual temperatures as measured with a certified calibrated thermometer.
- ◆ Speed indicator shall be present for continuous flow systems.
- ◆ All the valves and controls that affect heat flow to the treatment system shall be secured to avoid manipulation during the treatment process by unauthorized personnel.
- ◆ Heating controls shall be automatic and run continuously throughout the treatment process, manual adjustments are allowed.
- ◆ Gear systems used to control the niger seed conveyor (if applicable) shall be capable of being adjusted as needed to meet treatment requirements.
- ◆ An audible alarm or highly visible light shall be installed on burners or other equipment to indicate system failure and/or when **not** operating properly.
- ◆ A system shall be in place to divert any untreated niger seeds for treatment.
- ◆ An action plan shall be available to address any pests which may be associated with the storage, treatment and shipment of niger seeds.

- ◆ Proper sanitation measures shall be implemented to ensure that there are no potential breeding grounds for pests on the premises and therefore, little risk of re-infestation or cross-contamination.
- ◆ Treated seeds shall be stored in a location separate from the non-treated seeds. The treated and non-treated seeds shall be handled in a manner to prevent cross-contamination.
- ◆ Seed processing equipment shall have the capability to divert for re-treatment any non-treated, or treated seeds which do **not** meet treatment standards.

Actions Required During Plant Certification

Also, the facility must conform to the following operating procedures:

- ◆ Sufficient niger seeds for two (2) test runs at the maximum load for one (1) hour must be on hand for APHIS personnel overseeing the tests.
- ◆ All temperature sensing probes must be verified during the test runs or evidence provided that the probes have been calibrated by an official calibration company within a 12 month period.
- ◆ The temperature and conveyer speed must be verified to coincide with the readings taken during manual testing and calculation.
- ◆ Check the continuity of the system to verify the lack of any cross-contamination.
- ◆ Ensure that after treatment and cooling, the niger seeds are immediately bagged in new bags. The old bags must be treated or disposed of in a manner that will preclude regulated pests.

Certification (approval) of a Treatment Facility.

If treatment standards are **not** met during performance testing, APHIS will record the test as **not** acceptable for certification. A copy of the data sheet with explanation as to why the test was **not** acceptable, should be provided to the facility operator for corrective action.

Final approval of niger heat treating equipment will be given after two (2) consecutive successful runs of maximum capacity at the longest treating period consecutive successful runs of maximum capacity at the longest treating period (at least 15 minutes at 248 degrees F. minimum or 120 degrees C). Upon approval, APHIS will issue a Certificate of Approval (PPQ form 482).



Any compliance agreement/workplans or standards developed by APHIS for the facility must be adhered to.

Quality Assurance

PPQ will monitor by sampling the treated seeds periodically to find actionable contaminants. Every 25th lot after treatment is to be sampled according to PPQ sampling protocol.

