3273. WALNUT AND PECAN PESTS

State Exterior Quarantine

A quarantine is established against the following pests, their hosts, and possible carriers:

A. Pests. Walnut husk flies (*Rhagoletis suavis*), (*Rhagoletis juglandis*), and (*Rhagoletis boycei*); nut tree casebearers (*Acrobasis spp.*); butternut curculio (*Conotrachelus juglandis*); black walnut curculio (*Conotrachelus retentus*); pecan weevil (*Curculio caryae*); and hickory shuckworm (*Laspeyresia caryana*).

B. Area Under Quarantine.

On account of the walnut husk flies, nut tree casebearers, and curculios, all states and districts of the United States, except the *State of Arizona.

On account of the pecan weevil and hickory shuckworm, the states of Alabama, Arkansas, Florida, Georgia, Kansas, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia.

C. Articles and Commodities Covered. The following articles and commodities are hereby declared to be hosts and possible carriers of the pests quarantined against:

1. Unhusked nuts of walnuts and butternuts (*Juglans* spp.), and any such husks or hulls or fragments thereof moved as such, or adhering to, or moved in connection with any article or thing.

2 Husks or hulls, and fragments thereof, and nuts in the shell of pecan and hickory (*Carya* spp.).

3 Boxes, sacks, and other containers, equipment, appliances, machinery and vehicles used in connection with harvesting, hulling, dehydrating, shelling, transporting, or storing of any unhusked nuts of walnut and butternut or hulls of walnut, butternut, pecan, and hickory.

D Restrictions.

1. Certificate of Treatment Required. Restricted articles originating in or shipped from the area under quarantine shall be refused admittance into the State of California unless each lot or shipment is accompanied by a certificate issued by an authorized representative of the Department of Agriculture in the state of origin of the article or commodity evidencing treatment for the pests quarantined against approved by the Secretary and under official supervision of an authorized representative of the Department of Agriculture in the state of origin prior to arrival in this state. The certificate must show kind and amount of articles covered, except that in the case of small noncommercial quantities of unhusked nuts of walnut and butternut transported via mail, express or as personal belongings, the Secretary may permit the removal and destruction of husks or hulls, or permit treatment of the lot, under the Secretary's supervision, at the risk and expense of the owner or receiver, after which the lot may be released.

2. No restrictions are placed by this regulation on the movement of nuts in the shell of walnut and butternut from which all husks or hulls have been completely removed, or on the movement of extracted nut meats of walnut, butternut, pecan, and hickory.

APPROVED TREATMENTS FOR IN-SHELL PECANS: APPENDIX A 05-05-87

1. Cold Treatment

-18°C (-0.4°F) for 7 days,

or

-11°C (+12.2°F) for 14 days.

Note: Timing of treatment shall begin when the desired holding temperature within the commodity layer has been reached.

2. Hot Water Dip

60°C (140°F) for 5 minutes.

To prevent spoilage due to fungal growth, the exposure period may be increased 10-15 minutes, or,

77^oC (170.6^oF) for 3 minutes.

Note: Water must be continually agitated throughout the dipping period. Commodity must be completely immersed. The exposure period shall begin when water has regained the desired temperature following introduction of commodity.

3. Steam Treatment

Subject the commodity inside a pressure container, to pressurized steam a 5-lb./square inch, for 3 minutes. Timing of treatment shall begin when the required pressure has been regained following commodity introduction.

*WALNUTS FROM ARIZONA APPENDIX B

01-12-89

Arizona Department of Agriculture has informed us that the walnut husk maggot, *Rhagoletis juglandis*, is now a well-established pest in Arizona. Therefore all unhusked walnuts or butternuts or associated equipment from Arizona should be rejected under authority of Section 6461.5 of the California Food and Agricultural Code until this quarantine is amended.