

California Orange Work Plan for Export to Korea

I. Subject fruits

Oranges produced in California for exports to the Republic of Korea are subject to this Work plan. However, the requirements of a molecular PCR or incubation testing and on-site monitoring will be limited to the oranges produced in Tulare and Fresno Counties as well as all oranges produced north of Highway 178/58 in Kern county and all positive lots detected in California or Korea from Kern County. Additionally, remaining orchards outside of this designated area in Kern County should be encouraged to voluntarily participate in the molecular PCR or incubation testing.

II. Cultural Practices

Growers will use irrigation equipment and/or management practices that minimize canopy wetness.

III. Preharvest Fungicides

A zinc-copper-lime or alternative recommended by APHIS for control of *Septoria* spot will be used. The first spray should be applied prior to fall rains in October/November. A minimum of 0.33 to 1 lb. of hydrated lime per 1 lb. of copper fungicide (any basic copper) will be used to prevent copper injury and to increase persistence.

A second application of zinc-copper-lime or alternative must be applied based on the *Septoria* spot-forecasting model for citrus following the first treatment for those varieties that will be harvested after February. Growers will be instructed as to the timing of the second application which will be based on regional climatic conditions (temperature and rainfall) conducive to the development of *S. citri*.

A third application of zinc-copper-lime or alternative must be applied based on the *Septoria* spot-forecasting model for citrus following the second treatment, if regional climatic conditions conducive to the development of *S. citri* are observed after the second treatment. Growers will be instructed as to the need and timing of a third application.

IV. Molecular PCR or incubation testing

All grower lots from the designated areas will be sampled. Samples will be evaluated and tested as described below. The suspect fruit that was sampled will be submitted for evaluation and testing.

Fruit harvested from a grower lot can be shipped within 45 days from the lab result date.

The sample size for navel oranges will be 20 fruit taken from each grower lot, except for navel oranges submitted for testing after February 7, when 30 fruits will be taken. The sample will be representative of the fruit to be shipped to Korea.

The sample size for Valencia oranges will be 10 fruits taken from each grower lot. This sample will be representative of the fruit to be shipped to Korea.

Agreed upon molecular PCR testing procedures using *Septoria citri* specific primers may be used to detect the presence of *S. citri*. Alternatively, an incubation procedure of up to 7 days using isolated lesions may be used to detect the disease.

During the on-site monitoring visit, upon their request, NPQS inspectors will be granted access to the results of the incubation or molecular-testing and the data accumulated for the *Septoria citri*-forecasting model.

APHIS will provide NPQS a weekly report of grower lots testing positive for *S. citri*.

At the conclusion of the orange season, APHIS will provide NPQS with the results of all grower lots tested.

V. Re-participation

In order to be eligible to export fruit to Korea, each grower lot of oranges produced **in the designated areas** and excluded for export to Korea in the previous season after testing positive for *S. citri* must be subjected to an initial incubation test or molecular PCR test with a sample size of double the normal rate.

Thereafter, the incubation test or molecular PCR test protocol described in IV above will apply to these grower lots.

If *S. citri* is detected in the same grower lot for 3 consecutive seasons, this grower lot will be excluded from further exports to Korea for 3 years. NPQS and APHIS will consult on re-participation of the grower lot, prior to it becoming eligible again to be exported to Korea.

VI. Packing House

All packing houses exporting fruit to Korea will be registered with APHIS.

The packing houses will be responsible for maintaining a list of growers and grower lot numbers packed at the facility. This information should be made available upon request by APHIS and NPQS inspectors.

The packing houses will be responsible for assembling a pallet with a clearly marked representative sample from each grower lot that is contained in the shipment and listed on the phytosanitary certificate.

The packing houses will be responsible for clearly marking on the cartons with grower lot numbers.

This “sample pallet” will be located near the doors of the container to facilitate location by NPQS officials upon arrival in Korea.

No more than 7 grower lots per container will be accepted in Korea by NPQS.

Each facility packing California oranges for export to Korea must have at least two technicians trained in identifying the symptoms of *S. citri*. Training will be conducted by County, State, Federal or University specialists. The technician(s) must be present during the packing process to pre-screen fruit for symptoms of *S. citri*.

Should *S. citri* be detected in the packing house, the involved grower lot will be ineligible for certification to Korea for the remainder of the season.

VII. On-site Monitoring by NPQS

NPQS will conduct on-site monitoring of the orange export program for Korea **in the designated areas** to ensure compliance with the protocol by dispatching the following number of inspectors(s) for the specified durations.

Navel season: 4 inspectors for 4 weeks.

Valencia season: 1 inspector for 3 weeks.

During the monitoring visits, the inspectors may visit groves, observe packing house operations, and observe phytosanitary inspections.

Also, NPQS inspectors may monitor sampling and laboratory activities as relates to incubation testing or molecular PCR testing.

The U.S. will cover all travel expenses for the NPQS inspectors in accordance with the Korean regulations for NPQS TDY officers in foreign countries.

VIII. Phytosanitary Inspection

Before any phytosanitary inspection is performed, regulatory officials must verify that the above program requirements have been met.

This includes verification that the copper spray(s) had been applied, and for **oranges from the designated areas**, that the fruit from that grower lot had passed the incubation tests or molecular PCR testing.

Fruit will be inspected at the 2 percent level making sure that representative samples are taken from each grower lot making up the shipment.

Each phytosanitary certificate will list in the Distinguishing Marks block the name of the packing house, and the specific grower lot number(s) in the shipment, which will be indicated on each carton. The origin block will state the county (or counties) of origin.

Each phytosanitary certificate shall include the additional declaration.

“The fruit in the shipment meets all the program requirements for the export of California oranges to Korea and was inspected and found free from *Septoria citri*.”

The additional declaration for *S. citri* will no longer be included on phytosanitary certificates for fruit from other States.

Phytosanitary certificates will not be issued for shipments containing more than 7 grower lots per container.

Should *S. citri* be confirmed, the involved grower lot will be ineligible for certification to Korea for the remainder of the season.

IX. Port of Entry Inspection

NPQS will fumigate California oranges prior to, or after inspection, based on the request of the importer.

Only shipments of less than 7 grower lots per container will be inspected by NPQS. Shipments of more than 7 grower lots per container presented for inspection will be rejected by NPQS.

In the event of a discrepancy between the grower lot numbers listed on the phytosanitary certificate and the grower lot numbers contained in the shipment, NPQS will reject only those grower lots associated with the discrepancy.

Should *S. citri* be detected in a shipment, NPQS shall limit the regulatory action to all cartons bearing that identical grower lot number. This is with the understanding that the importer requesting the inspection applies to have the shipment inspected by grower lot.

Those grower lot numbers would be removed from the containers and excluded from further exports to Korea for the remainder of the season.

If the inspection unit identified by the importer is the shipment and *S. citri* is found, all fruit in the shipment will be remanded for re-export or destruction.

In the event of an interception of *S. citri*, NPQS will notify APHIS and provide APHIS with an electronic copy of the phytosanitary certificate along with the involved grower lot number to facilitate trace-back procedures enabling USDA/CDFR to conduct an investigation.

If a phytosanitary certificate is issued for a shipment containing a *S. citri* positive lot the day after official notification is received from NPQS, the entire shipment will be rejected.

If phytosanitary certificates have been issued on or before the day APHIS is notified of a *S. citri* positive grower lot, NPQS will reject only the involved grower lot(s) upon arrival in Korea.

NPQS will hold positive cultures or PCR results and send them to APHIS if requested. **NPQS will hold half of the sample (lesion) that was subjected to PCR at -20°C for a week.**

APHIS inspectors may visit Korea to observe inspection, isolation and the identification process used by NPQS.

In case of highly unusual detection of *S. citri*, APHIS will investigate the reasons and take necessary measures for correcting the situation should there be program non-compliance. The result will be provided to NPQS for review.

X. Effective Dates of this Work Plan

This work plan will be subject to revision at the request of either NPQS or APHIS. However, it will go into effect from the day it is signed and remain in effect until revised.

Plant Protection and Quarantine Division
Animal and Plant Health Inspection Service
United States Department of Agriculture
Forestry

International Quarantine and Cooperation
National Plant Quarantine Service
Korean Ministry for Food, Agriculture,
Forestry and Fisheries

Murali Bandla
Assistant Deputy Administrator

Chang Yong Park
Director