Bilateral Quarantine Arrangement

between the

Department of Agriculture of the Republic of South Africa (DoA SA)

and the

Plant Protection and Inspection Services of Israel (PPIS)

regarding the

Conditions for the Importation of fresh persimmon fruit (Diospyros kaki)

from the Republic of South Africa into Israel

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1. Introduction

1.1 Purpose

This arrangement on plant quarantine requirements is between the Plant Protection and Inspection Services (PPIS) of the Ministry of Agriculture and Rural Development, Israel and the National Department of Agriculture of the Republic of South Africa (DoA SA). This arrangement is to enable South Africa to send consignments of fresh persimmon (*Diospyros kaki*) to Israel while minimizing the phytosanitary risks involved. It is understood that the producing country's national plant protection organization is officially and directly responsible for assuring that the requirements detailed herein are fully implemented prior to export.

1.2 Scope

This paper contains the conditions that permit the importation of fresh persimmon fruit from the Republic of South Africa into Israel. It also outlines the responsibilities in implementing this arrangement by the two quarantine services.

1.3 Background

Until now, fresh persimmon from the Republic of South Africa have not been permitted entry into Israel. This is consistent with the policy that prohibits the import of plant material from new sources until a pest risk analysis (PRA) has been completed. The PRA has now been completed, and the PPIS has concluded that the importation of fresh persimmon from the Republic of South Africa may be permitted, provided that the Republic of South Africa meet the requirements described in this paper to minimize pest risk.

2. <u>Regulated pests</u>

2.1 Quarantine pests

According to information received from the exporting country or from the literature these pests may occur in the Republic of South Africa on persimmon and are not known to occur in Israel or are present in Israel but are not widespread and are being officially controlled.

Arthropods

Aleurocanthus spiniferus Ceroplastes destructor Cryptophlebia leucotreta Grapholita molesta Hypocala subsatura Pseudococcus calceolariae Toxoptera citricida

Disease agents or pathogens

None specified

Ceratitis rosa Ceroplastes rubens Delottococcus elisabethae Heliothrips sylvanus Paracoccus burnerae Quadraspidiotus perniciosus This list does not include all quarantine pests, such as contaminating (passenger) pests that may arrive or a new pest of persimmon in the Republic of South Africa.

2.2 Regulated non-quarantine pests (RNQP)

According to ISPM #5 (April 2002) these are non-quarantine pests whose presence in plants for planting affects the intended use of those plants with an economically unacceptable impact and which is therefore regulated within the territory of the importing contracting party (IPPC, 1997).

Not Applicable

3. General requirements

3.1 Quality and safety standards

Pesticide residues should conform either to the Israeli Regulations on Maximum Pesticide Residue Limits (Doc 585 1997 or its amendments) or to the maximum residue limits of pesticides according to Codex Alimentarius (1998) of the FAO / WHO.

Israeli Regulations on Maximum Pesticide Residue Limits can be found on the Ministry of Agriculture web site: <u>http://www.moag.gov.il/ppis/english</u>. Press SEARCH \rightarrow PESTICIDE RESIDUES.

Quality requirements should conform to the Israeli quality standards for Persimmon (2004).

3.2 Variety restrictions

This arrangement covers only persimmon variety "Triumph".

3.3 Seasonal and quantity restrictions

In the first season import will be restricted to a maximum of two containers per Israeli importer.

Thereafter, importation is not restricted to a specific season or quantity.

3.4 Trial period

A trial period is required in order to evaluate the ability of the exporting country to meet requirements under varying conditions over a period of time extending more than one growing season.

The trial period will be effective immediately and end after two years. If the trial shipment period is completed successfully, importation may continue after the trial period, without further notice from the Plant Protection and Inspection Services (PPIS).

During the trial period DoA SA must send a copy of the Phytosanitary Certificate (PC) by facsimile at least three working days prior to the arrival of the shipment in Israel to the PPIS main office in Bet-Dagan, Fax: 00972-3-9681571

It is agreed that importation may be suspended if quarantine pests are found or if improper documentation is supplied or if other failures to meet requirements are encountered. In such cases the trial period may be extended, if and when importation is renewed.

4. <u>Responsibilities of DoA SA</u>

4.1 **Production site requirements**

DoA SA, in arrangement with PPIS, will approve production sites for export to Israel, where cultural practices and chemical control measures are carried out to ensure freedom from pests and diseases. A list of approved orchards must be sent to PPIS prior to export.

Orchards should be homogenous in character. Orchards with other fruit trees or other crops present are disqualified for export to Israel.

Persimmons must originate from orchards free from *Quadraspidiotus perniciosus* during the last two growing seasons.

4.2 Inspection during active growth

The orchards must be monitored, with the aid of pheromone specific traps, and found free from *Ceratitis rosa* for at least three months prior to export.

4.3 Recording and reporting of new pest discovered in the production areas

Any discovery of a new pest in any area from which persimmons are exported to Israel will be reported immediately to PPIS.

4.4 Packinghouse requirements and labeling

A list of approved packinghouses should be sent by DoA SA to PPIS prior to initializing shipments to Israel.

Only new, unused cartons are acceptable. Each box should be marked with the packinghouse name, grower's name and orchard number or codes identifying this. Each pallet should be marked with a label stating "Export to Israel" facing outwards.

Label specifications:	Size:	5 X 12cm ²
	Background colour:	Orange
	Writing colour:	Black
	Font size:	36

4.5 Post-harvest treatments

See appendices II (methyl bromide) and III (cold treatment).

4.6 Handling and storage of export

Boxes should be safeguarded after inspection and packing and kept separately in cooled rooms until they are shipped. Boxes should not be left outside, exposed to the environment or in close proximity to incoming harvested or culled fruit.

4.7 Pre-shipment inspection

The persimmons must be pre-shipment inspected at the packinghouses by PPECB personnel and then by DoA SA officials at the port, before shipment, for freedom from pests and diseases. Each pallet, after the phytosanitary inspection of DoA SA at the port, should then be marked on each side with a label stating "Approved for Israel". During the first season of this arrangement the inspection at the port will also be under the supervision of PPIS. Inspections should be according to the following:

Lot size:	1-160	cartons	Sample size	25 cartons
	161-800	cartons		50 cartons
	801 and abo	ove cartons		100 cartons

The definition of lot for this purpose is per grower and orchard plot.

These samples should be taken in a representative manner from each pallet.

Presence of quarantine pests or diseases should automatically disqualify that lot and the orchard from which it was harvested, to export to Israel during that season.

4.8 Shipping requirements

Shipments should be sent from Cape Town or Durban seaports only. Fruit should be cold treated intransit according to appendix II. Each container should be sealed with a seal approved by the DoA SA and the seal number stated in the Phytosanitary Certificate.

Shipments must be free of pests, soil, sand, leaves, and plant debris, including woody material, except stems of fruit. If the pallet is made of wood, it must comply with the requirements of the Internaional Standard for Phytosanitary Measures (ISPM #15) prior to their use in the shipment

5. Documentation:

5.1 Import permit

An import permit from PPIS is required.

5.2 Phytosanitary certificate and additional declarations

A Phytosanitary Certificate (PC) is required and the original must accompany the shipment to Israel. Copies should also be given to the captain of the ship and also faxed to the PPIS office in Bet Dagan. The importer should bring the original certificate to the PPIS official at the port of arrival.

The phytosanitary certificate should include,

a) the additional declaration:

"The consignment is in accord with the bilateral quarantine arrangement on persimmon from the Republic of South Africa to Israel of June 2006. The fruit originate from orchards free from *Quadraspidiotus perniciosus* during the last two growing seasons. The fruit originate from orchards free from *Ceratitis rosa* for at least three months prior to export according to pheromone traps. The persimmons were inspected prior to shipment and found free of quarantine pests and diseases."

b) the seal numbers of the containers in the consignment.

c) the persimmon in this consignment have been produced in (Swellendam or Greyton)

d) methyl bromide treatment must be stated including fumigation facility number or name. Details of methyl bromide fumigation must also include dosage, treatment duration, and persimmon pulp temperature.

5.3 Required additional information

The following information should be sent to PPIS at the beginning of each fruit-growing season.

- a) A list of approved orchards and a map showing their locations (# 4.1 above).
- b) A list of approved packinghouses (# 4.4 above).

The following information should be sent to PPIS at least two weeks before commencement of shipments to Israel:

c) A report on the pheromone trapping surveys for *Ceratitis rosa* for each approved orchard (# 4.2 above).

6. <u>Responsibilities of PPIS</u>

6.1 Pre-clearance and/or supervision

Pre-clearance by PPIS is not required but may be required, e.g. if a problem arises.

6.2 Preshipment: on-site inspection, sampling and testing

On site inspections by PPIS are not required but may be required, e.g. if a problem arises.

6.3 On-arrival inspection

PPIS inspectors will verify that the PC conforms to the requirements specified in the Israeli Import Permit and in this document.

Shipments will be examined for freedom from pests, soil, sand, leaves, and plant debris.

Shipments are subject to inspection and sampling on arrival to determine if pests are present. A representative sample of the contents will be randomly selected, at the inspector's discretion, and examined. If live pests are found, samples will normally be sent for laboratory identification, and the shipment held pending the results.

6.4 Quarantine action

On arrival in Israel the persimmon may be refused entry and returned to origin, disposed of or treated if they do not meet the requirements or if they are found to be infested with any live quarantine pests.

The discovery of living stages of any quarantine pest/s in any shipment may result in suspension of the importation program until remedial action is taken at origin.

The importer is responsible for any costs relating to disposal, removal or rerouting, including costs incurred by PPIS to monitor the action taken. Treatments, where they are possible, will be applied only with the arrangement and at the expense of the importer.

The PPIS will report to DoA SA any pest interceptions or non-compliance with any of the conditions of this arrangement.

7. Contact details

Mr Eldad Landshut, Director, Plant Protection and Inspection Services PPIS Beit-Dagan, 50250 Israel Tel: 972-3-9681500 Fax: 972-3-9681571 or 07 Dr. Marinda Visser Department of Agriculture Directorate Plant Health Private Bag 14 Gezina 0031Pretoria Republic of South Africa Tel: 0027-12-319-6539 / 29 Fax: 0027-12-319 6580

8. Authorization

8.1 Applicability

This arrangement will commence on the date of the signature below. The arrangement will remain in effect unless rescinded or due to any of the circumstances given above as cause for such action. Either side may suggest changes in this arrangement for discussion at any time. After two years the arrangement will be reviewed and if no action is specifically recommended, will stay in force automatically.

PPIS reserves the right to suspend or change (in arrangement with DoA SA) the requirements for, the importation of persimmon from the Republic of South Africa in the event that Israel's phytosanitary requirements are not met or a change in the pest status of the commodity in South Africa has occurred.

8.2 Signatures

on the of day of 6 I of the year doob Signed at (in the English language) name Landshart Elded name Marinda V title Director PPIS title Sunior Managar: Mont Health signature signature

For the Directorate Plant Health Republic of South Africa For the Plant Protection and Inspection Services, Israel

Appendix I

Areas permitted for export to Israel

- 1. Swellendam area
- 2. Greyton area

Appendix II

Treatment Schedule for Persimmon for external pests:

The fumigation will be carried out after removing astringency and before pre-cooling and containerising.

The persimmon must be fumigated with methyl bromide for external pests according to the following.

Temperature	Dosage rate	Minimum Concentration Readings At:		
	Methyl Bromide	0.5 hr	2 hr	
°C	g/m ³	g	g	
27 or above	24	19	14	
21-26	32	26	19	
16-20	40	32	24	
10-15	48	38	29	
4-9	64	48	38	

Appendix III

PROCEDURE FOR IN-TRANSIT COLD TREATMENT TO ERADICATE FALSE CODLING MOTH IN PERSIMMON

1. Containers

- a) Containers' type and series must be USDA-approved (PPQ Treatment manual). The data list of the container to be used should be mailed to PPIS-Israel in advance prior to the export season or, if a new container is added to the list, with the updated USDA-approved container list (including mark-numbers, owner name, volume, type of recording device and designated date).
- b) Must be sound, insulated, in good working order and of close type (doors of a tight sealing).
- c) Must have the capacity to maintain the persimmon pulp temperature for cold treatment.
- d) Must be equipped with an automatic (on board, built-in) recording device.
- e) Must be pre-cooled to the cold treatment temperature (or below) prior to loading for at least 12 hours ((preferably 24h) in a container with a calibrated recording device and sensors, placed according to the location plan). During the 12 hours the temperature of the cold treatment is continuously maintained and the temperature recording device and sensors are operating effectively.

2. Temperature Recording System

- a) Must be an automatic recording device (preferably the built-in Datacorder Microlink Type 1 or 2i) to continuously monitoring the persimmon pulp temperature in at least 3 locations in the container (according to the enclosed plan) at outside of the container during the cold treatment.
- b) The automatic temperature reading must be recorded continuously at least once every hour in units of 0.1°C for a minimum of one month after calibration or up to the end of the cold treatment, which ever is the longest (see 6b below).
- c) The recording device must be capable to produce a printout of the accumulated temperature data at any request. The data may be first downloaded into a laptop computer before printing.

3. Sensors

- a) Sensor's type must have an optimal accuracy for the temperature range of this cold treatment (like PT100).
- b) Outer sheath of sensor must be fitted for insertion to persimmon through a puncture and without breaking the fruit (ca 5cm or less long, ca 4.5mm diameter or less and sensing unit located within the first 20mm or less of the sensor's tip).
- c) Sensor's connection to the cable must be waterproof to prevent malfunctions caused by immersion in the ice-water mixture (during calibration) or by persimmon's juice during cold treatment.
- d) Must be tagged with a number identical to sensor's number accompanying its readings in the printout produced by the recording system. The tag of the sensor's number shall be firmly attached to the sensor cable 10cm from the sensor.
- e) Only calibrated sensors (which must be calibrated immediately prior to loading) will be used for cold treatment (see 6b below).

4. Calibration of Temperature Monitoring System

- a) Calibration of the temperature monitoring system must be conducted by the DoA SA authorized personnel.
- b) The calibration of the temperature-recording device together with its sensors must be conducted simultaneously as an effectively operating system.
- c) The calibration must be conducted using a mixture of crushed ice and water in a clean, insulated container. At least 10 minutes of adaptation period, and confirmation (with a calibrated thermometer) that the water temperature has reached a steady state of 0.0°C is essential before the next steps.
- d) During the calibration all the temperature sensors, and the calibrated thermometer, must be immersed in the water part of the mixture without touching each other, sides or bottom of the container or ice pieces. The mixture must be constantly stirred while testing. Only after the readings are stabilized at the lowest constant temperature the calibration readings can be conducted.
- e) A cylinder made metal net (mesh diameter ca. 2mm) with one end closed, immersed with it's closed end down into the water of the mixture, can be a useful means. This cylinder prevents a direct contact between the temperature sensors immersed in the water inside it and the ice particles that are limited to the ice/water mixture outside the net.
- f) Two consecutive readings, of the lowest temperature, must be recorded to ensure that there is no change in the readings during the calibration. If the range between the two readings of a sensor is 0.2°C or more and this is also the case in the third reading this sensor must be replaced and rejected for further use for cold treatment (only a 0.1°C difference is allowed between two consecutive readings). The time interval must be 10 minutes, or more, between the two readings.
- g) Any sensor which reading shows a deviation of more than $\pm 0.2^{\circ}$ C from 0.0°C must be replaced and rejected for further use for cold treatment.
- h) The temperature of the mixture's water must be carefully maintained. The temperature must be checked regularly with the calibrated thermometer and additional ice shall be added, if needed. After each addition of ice or water, 10 minutes of adaptation period is needed.

5. Fruit Loading and Location of Temperature Sensors in Fruit Pulp

- a) Loading and locating of fruit temperature sensors must be conducted by the DoA SA authorized personnel.
- b) Containers must be pre-cooled to the cold treatment temperature (or below) for at least 12 hours prior to the loading.
- c) Persimmon pallets must be marked with a label of identification number. Each number may be used only once in a season. Rejected pallets must be excluded from shipment and their number must not be in use throughout the season.
- d) Palletized persimmon, after being subjected to quality and phytosanitary inspections, in their final packages with an indication of destination ("Export to Israel" on each pallet), must be pre-cooled uniformly to the cold treatment temperature, or below prior to loading.
- e) The loaded persimmon must be uniformly at the temperature of -0.55° C, or below.
- f) During the loading the temperature sensors used to measure the fruit pulp temperature must be inserted carefully into the fruit. Sensors inserted into persimmon must penetrate two or more fruit in order to be fixed in place and conduct accurate temperature measurements. The sensor's tip must not extend beyond the fruit, as well as fruit rupture and opened by sensor insertion, to prevent measuring air temperature instead of fruit pulp temperature. In these cases, the cold treatment is rejected.

- g) Records from at least 3 fruit temperature sensors are requested in order to monitor the old treatment in a container. These sensors must be distributed throughout the fruit in a representative cross section of the container that enables an adequate monitoring of the temperature.
- h) Location of fruit temperature sensors must be according to the plan (Annex IV) as follows:
 - 1. Sensor No. 1: near the cooler, in right pallet, 2nd level from the floor, center of corner box, nearest to cooler & right side wall.
 - 2. Sensor No. 2: in the center of the container, in mid-height of the pallet, center of box.
 - 3. Sensor No. 3: near the door, in left pallet, 2nd level from the top of the pallet, center of corner box, nearest to door & left side wall.
- i) After the completion of loading, the container door must be closed properly and sealed with a numbered metal seal. The seal must be intact until arrival at the port of entry in Israel, where the PPIS inspectors only are authorized to open it. Containers with a broken seal must be rejected.
- j) The cooling system must be stopped during fruit loading or before any door opening.

6. Cold Treatment Temperature

- a) The cold treatment temperature and duration are **-0.55°C or below for at least 22 days**. If the temperature exceeds -0.3°C the treatment must be extended for at least 8 hours for each day or part of a day the temperature is above -0.3°C. If the temperature exceeds +1.1°C at any time, the treatment is rejected. Only when all fruit pulp sensors measure temperatures of the cold treatment (-0.55°C) the treatment is initiated.
- b) Temperatures must be recorded at least once every hour.
- c) The accuracy and calibration of the temperature recording system must be maintained until recalibration has been performed in Israel.
- d) Re-calibration at port of entry, which shows a deviation from the original calibration at South Africa, may change the readings to be above the temperature of -0.3°C and thus cause extension of the treatment, or above +1.1°C and thus cause rejection of the treatment.

7. Documentation

Shipment documents for the total load must be provided to PPIS offices as follows:

- a) Sent by email (<u>rinad@moag.gov.il</u>), except the PC copies which should be sent by facsimile (Fax: 00972-3-9681571) at least 3 working days prior to the arrival of the shipment.
- b) Original documents (hard copies) to be given to the Ship's Master for handing over to PPIS office at the point of entry.
- c) The following documents apply:
 - 1. Report to officer in charge at the port of entry (see Annex I).
 - 2. Phytosanitary document.
 - 3. Certificate of Origin and Load (see Annex II).
 - 4. Certificate of Loading and Calibration (see Annex III).
 - 5. Temperature readings printout taken from the temperature recording system, including sensors calibration and temperature data of the cold treatment.
 - 6. Location of Temperature Sensors (Annex IV).

8. PPIS Inspection at the Point of Entry

- a) No container will be allowed entry into Israel or opened until the cold treatment has been confirmed as required and all relevant documents are checked and found satisfactory.
- b) Both phytosanitary and quality inspection must be conducted.
- c) The PPIS inspector shall reject/destroy/reship the shipment or complete cold treatment if one or more of the following cases arises:
 - 1. The shipment is not accompanied with a valid phytosanitary certificate.
 - 2. Essential documents of the load, calibration of temperature recording system, cold treatment data, export inspection sensor locations etc. are lacking or ill-prepared (see Annex II, III & IV).
 - 3. Cold treatment was unsuccessful.
 - 4. Container doors are not completely closed (see 1b above).
 - 5. Container seal is broken or was replaced (see 5i above).
 - 6. Temperature sensor extends beyond the fruit or is not located in the planned box (see 5h above), or fruit was ruptured.
 - 7. If more than 2% of the cartons are broken (cartons containing sensors are excluded).
 - 8. Cartons are not marked with the destination "Export to Israel" and/or pallets are not marked with "Approved for Israel" (see 5d above).
 - 9. Re-calibration at the point of entry show higher values than that calibrated in RSA and which require correction of the temperature data received over the designated temperatures of the cold treatment (see 6d above).

ANNEX I

Date	

PPIS Officer in charge	
Port of	
ISRAEL	

Dear Mr. / Ms.,

Enclosed please find location records of temperature recording instruments in _____ containers:

and a copy of our certificates covering the consignment of the product:

These containers are due to arrive in ISRAEL at _____ port on _____, 200__, on board of M/V _____.

Yours sincerely,

Inspection place

Name of Authorized Inspector

Signature and Stamp

ANNEX II

Date:			
	Certificate of Orig	in and Load	
This is to certify that the	(Name of pro	duct)	-
	(ivane of pro	this container is a product	of South Africa and
	111 \	uns container is a product	of South Affica and
from the	area . The loading of the co	onsignment was carried out	under my
supervision.			
Description of the consign	nment:		
Exporter:			
Consignee:			
Name of vessel:			
Loading was completed on	: Date:	Time:	-
Port of destination:			
Number of cartons:			-
Container No:			
In-transit cold treatment : (temperature and duration)	:		
Inspection place N	ame of Authorized Inspector	Signature and Stan	np

ANNEX III

Date:	
Certificate of Lo in Self-R	ading and Calibration for Cold Treatment efrigerated Container for ISRAEL
Country of origin: South Africa	Area:
Location of loading:	
Name of vessel: M/V	
Container No.:	
Name of product:	
Type of air delivery: Bottom / Upp Type of loading pattern: Palletized	er (Y/N)
Recording instrument type: Data Recorder Serial No.: Printing interval: 1 Hour.	corder Micro Link 1 / Datacorder Micro Link 2 I
Sensor calibration (at 0.0° C)):
Sensor Test No. I II	Correction factor (during cold-treatment the readings are corrected automatically?: Y /N)
2	
3	
Start of loading : Date	Time
End of loading: Date	Time
Recorder start time: Date	Time
Average pulp temperature at load	ling :
Container Seal No.:	
Inspection place Name of A	Authorized Inspector Signature and Stamp

ANNEX IV

Date_____

Location of Temperature Sensors in Self-Refrigerated Container for ISRAEL

Name of vessel: M/V _____

Container No.:_____

Sensor No. 1: near the cooler [in right pallet, 2nd level from the floor, center of corner box, nearest to floor, cooler & right side wall].

- Sensor No. 2: in the center of the container [in mid-height of the pallet].
- Sensor No. 3: near the door [in left pallet, 2nd level from the top of the pallet , center of corner box, nearest to door & left side wall].



UPPER VIEW (schematic)

Inspection place

Name of Authorized Inspector

Signature and Stamp