



agriculture, forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

FINAL PHYTOSANITARY WORKPLAN FOR THE IMPORTATION OF STONE FRUIT (*Prunus* spp.) FROM SPAIN TO SOUTH AFRICA

In order to safely export stone fruit (*Prunus* spp.) from Spain to the Republic of South Africa (RSA), the Spanish Ministry of Agriculture, Food and Environment (hereinafter referred to as MAGRAMA) and the Department of Agriculture, Forestry and Fisheries of South Africa (hereinafter referred to as DAFF), on the basis of pest risk analysis (PRA), exchanged views and reached consensus as follows:

ARTICLE 1

REGISTRATION AND APPROVAL

1. The stone fruit (*Prunus* spp.) for export to South Africa shall originate from production sites, pack houses and storage facilities registered annually by MAGRAMA and jointly approved by DAFF and MAGRAMA.
2. A list/database of the registered facilities that have been inspected and approved by MAGRAMA for the export of stone fruit to South Africa must contain the following details:
 - 2.1. Name and registration number of each production unit
 - 2.2. List/database of the pesticide/fungicide applications used in each production site as part of its Integrated Pest Management program
 - 2.3. Name and registration number of each pack house
 - 2.4. Name and registration number of each storage facility.
3. A list/database of the registered facilities that have been inspected and approved by MAGRAMA for export of stone fruit to South Africa, shall be made available to DAFF annually for consideration at least four weeks prior to the departure of the first consignment. DAFF will assess the list and the approved facilities will be updated on DAFF website and immediately notify MAGRAMA.
4. Production sites, packing facilities and storage facilities shall comply with production and packaging standards (e.g., Integrated Production, GLOBALGAP, UNE 155000). MAGRAMA shall ensure that *Prunus* spp. fruit for export to South Africa originate from production sites that follow these

production standards and comply with this phytosanitary workplan.

ARTICLE 2

PRE-HARVEST PEST MANAGEMENT PROGRAM AND GENERAL SURVEILLANCE

1. MAGRAMA shall be responsible for inspection before approval of production sites, pack house and storage facilities.
2. MAGRAMA shall through inspection and continuous surveillance programs ensure that the production sites are free from *Acalitus phloeocoptes*, *Amphitetranychus viennensis*, *Drosophila suzukii*, *Eotetranychus carpini*, *Erwinia amylovora*, *Monilinia fructicola*, *Monilinia fructigena* and *Neonectria ditissima*. Surveillance records shall be made available for review upon request by DAFF.
3. Should *Erwinia amylovora* and *Neonectria ditissima* be detected in any registered production site, the production site shall be rejected for the rest of that export season for South Africa.
4. Monitoring of pests shall be conducted regularly in the registered production sites by MAGRAMA. Should new potential quarantine pests be detected in association with *Prunus* spp., MAGRAMA shall immediately notify DAFF for appropriate action to be taken. DAFF shall then notify MAGRAMA of any phytosanitary measures to be implemented and subsequent changes to the quarantine pest list and phytosanitary import requirements.
5. Pest control, inspection and other relevant records and information shall be made available for review upon request by DAFF.
6. MAGRAMA shall ensure that the producers apply only authorised preventative measures (Integrated Pest Management).
7. Pre-harvest measures for *Drosophila suzukii* shall include the following: pest free production sites, orchard sanitation and area wide management:
 - 7.1. Pest free areas, places and sites of production.
 - 7.1.1. Importation from areas free from *D. suzukii* is allowed based on surveillance records of at least 100 days with zero detections up to the time of harvest from each registered production site and from surveillance records in a radius not less than 2km surrounding each production site. If any specimens of

D. suzukii are detected in surveillance traps during harvesting all production sites within a 2km radius will be suspended for the remainder of the season.

7.1.2. In areas where *D. suzukii* has been detected during the previous production season comprehensive control programs need to be implemented which comprise of sanitation and area wide chemical control.

7.1.3. No fruit shall be allowed to be exported after the detection of *D. suzukii* in surveillance traps on any production site. MAGRAMA shall notify DAFF within 4 business days when detections of *Drosophila suzukii* result in a change to the pest free status of any of the registered production sites.

7.1.4. MAGRAMA will work collaboratively with DAFF to ensure that appropriate measures are implemented to mitigate the risk, or that the pest free status of the production site is reinstated before exports from that production site may resume.

7.2. Orchard sanitation

7.2.1. Growers shall remove over-ripe and fallen fruit from fields continuously to minimize *D. suzukii* egg laying and larval development. Any fruit remaining on plants after harvest shall be removed. The removed fruit shall be placed in a durable plastic bag, sealed, and solarised or buried at least 50 cm deep.

7.2.2. Growers shall remove unmanaged alternative host plant plantings near production sites in order to suppress *D. suzukii* populations.

7.3. Area-wide management of *Drosophila suzukii*.

7.3.1. Management practices carried out over a wide area are essential. Detections of *D. suzukii* in previously known infested areas from 30 days before harvest will necessitate a chemical control program additional to the sanitation programme and normal bait spray programs. Every land user within a radius of 2km from where *D. suzukii* has been detected will have to follow a chemical control program on all host plants in the area. Chemical control should also be extended to areas with scattered fruit trees, abandoned orchards and private gardens. Chemical control is also required to protect fruit from ovipositing females of *D. suzukii* during ripening and throughout the harvest period.

7.3.2. Pack houses shall separate fruit for export to South Africa from over-ripe fruit to minimize egg laying and larval development. Pack houses shall regularly remove bins with rejected fruit that may have overripe, damaged fruit which may serve as oviposition sites for *D. suzukii*.

7.3.3. At least two surveillance traps shall be placed within each pack house during the whole period of packing. No fruit will be allowed to be exported from a packhouse where *D. suzukii* has been detected without a post harvest treatment

8. Pre-harvest measures for *Monilinia* spp. shall be implemented according to Annex 3, Article 1 of the “Workplan specific to *Monilinia* spp.

ARTICLE 3

POST-HARVEST MEASURES

1. Only fruit sourced from production sites that meet the export requirements set out in this phytosanitary workplan shall be delivered to the storage and packing facilities. Fruit destined for South Africa shall not be mixed with fruit destined for other markets in pack houses or storage facilities.

2. During harvest and packing of fruit, growers shall avoid bruising the fruit.

3. During the packing period for export to South Africa, no fruit for the domestic market is to be packed at the same site and time. Rejected host material must be removed from the packing area at the end of each day.

4. *Prunus* spp. fruit must be appropriately cleaned, inspected, packed, stored and transported, so as to guard against contamination with quarantine pests of concern to South Africa.

5. Post-harvest treatments may include chemical treatments or heat treatments (EFSA, 2011). For *Drosophila suzukii* mitigation treatment providing proven and published phytosanitary security will be considered with a high mortality rate to meet the level of protection needed as demonstrated by the NPPOZA.

6. Post-harvest inspection will be according to the following procedure:

6.1. The principle of inspection according to a specific rate for fruit must be based on a sample of 143 packing units for a consignment of 2000 packing units or less. The inspection for consignments with more than 2000 packing units must be based on 150 packing units. This will provide for a 95% confidence level of detecting packing units with infested/ infected fruit if the infestation rate is 2% or higher.

6.2. Fruits showing symptoms of infestation by internal feeders listed in Annex 1 shall be dissected to determine if larvae are present.

- 6.3. Post-harvest inspection for *Monilinia* spp. shall be implemented according to Annex 3, Article 2 of the “Workplan specific to *Monilinia* spp.”.
7. Should any quarantine pests of concern as listed in Annex 1 be detected during post harvest inspection, the consignment/lot shall be rejected for export to South Africa and the production site shall be suspended for the rest of the export season.
8. Fruit shall be free from leaves and plant debris.
9. The registered pack house and storage facility shall be clean and maintained free of pests, soil, plant debris and safeguarded and equipped to avoid fruit contamination.
10. The packing materials for *Prunus* spp. fruit destined for South Africa shall be new and clean cardboard boxes/cartons.
11. No packing material of plant origin, including straw, shall be used.
12. Wood packaging material that are used, shall comply with the requirements of ISPM 15: Regulation of wood packaging material in international trade (FAO, 2009).

ARTICLE 4

LABELING

1. Each carton (box) of *Prunus* spp. shall be marked in English with correct and accurate information as indicated in Annex 2.

ARTICLE 5

PHYTOSANITARY CERTIFICATION

1. An import permit is required in terms of the Agricultural Pests Act, 1983 (Act No. 36 of 1983).
2. Upon completion of fruit sampling and inspection, a phytosanitary certificate shall be issued by MAGRAMA within 14 days prior to shipment. A phytosanitary certificate shall only be issued for fruit that meet the requirements of this phytosanitary workplan. Entry of consignments into South Africa shall be subject to the availability of the original phytosanitary certificate.

3. MAGRAMA shall provide DAFF with a model of their phytosanitary certificate for confirmation and record keeping.

4. Each consignment of *Prunus* spp. fruit to be exported to South Africa must be accompanied by a phytosanitary certificate endorsed as follows:

4.1. Additional Declarations

4.1.1. The fruit in this consignment comply with all the requirements of the Phytosanitary Workplan for the Importation of Stone Fruit (*Prunus* spp.) agreed upon between DAFF and MAGRAMA and are free from pests listed in Annex 1.

ARTICLE 6

PHYTOSANITARY INSPECTION ON ARRIVAL

1. Once a shipment of *Prunus* spp. arrives at the designated port of entry, DAFF shall examine the consignment, relevant documents and markings.

2. Any consignment with certification that does not conform to the specifications set out in this phytosanitary workplan shall be rejected.

3. Upon arrival of the consignment at the port of entry, a representative sample shall be drawn and inspected for all quarantine pests listed in Annex 1 and suspect fruit shall be dissected to determine the status of infestation.

4. Should pests or symptoms of infection be found, the samples shall be sent for laboratory identification, and the shipment shall be detained pending the result of laboratory identification. DAFF shall notify MAGRAMA of such interception immediately.

5. Should any of the quarantine pests in Annex 1 be detected on arrival, the consignment shall be sent back or destroyed and DAFF shall immediately notify MAGRAMA in accordance with the notification procedures outlined in ISPM 13: Guidelines for the notification of non-compliance and emergency action (FAO, 2001). The production site shall then be suspended while an investigation is carried out by MAGRAMA. DAFF and MAGRAMA shall consult and implement corrective measures as deemed necessary. Fruit certified for South Africa prior to the date of suspension and which are already at sea shall remain eligible for export. Such consignments shall be detained, inspected and a sample shall be taken and laboratory tests conducted for the quarantine pests in Annex 1. Should any quarantine pests of concern to South Africa be detected, the consignment/lot shall be rejected.

6. Should any pest be detected on *Prunus* spp. from Spain that has not been categorized, it shall require assessment to determine its quarantine status and whether phytosanitary action is required. The detection of any pest of potential quarantine concern not already identified in the analysis may result in a review of this phytosanitary workplan to ensure that phytosanitary measures provide appropriate level of phytosanitary protection for South Africa.

7. DAFF shall inspect up to 100% of the shipments and suspend any production site at any time should pests of quarantine concern be detected or should other phytosanitary import requirements not be met. DAFF will immediately advise MAGRAMA of any pest interceptions and other instances of non-compliance with any condition stipulated in this phytosanitary workplan.

8. In case of non-compliance with this phytosanitary workplan the importer shall be responsible for all costs relating to disposal, removal or rerouting, including costs incurred by DAFF to monitor the action taken.

ARTICLE 7

VISIT BY DAFF

1. As part of initial market access, DAFF shall send two quarantine experts to the relevant *Prunus* spp. producing areas in Spain to review the production practices and the laboratories that will be used for *Monilinia* spp. detection, in cooperation with MAGRAMA.

2. After program initiation, when necessary and agreed by both sides (i.e., in light of any significant changes in pest status and/or detections of quarantine pests on arrival), DAFF may send quarantine officials to Spain to conduct on-site inspections.

3. Based on the official documents and technical information provided by MAGRAMA and the report of the South African experts, DAFF may approve resumption of this program.

ARTICLE 8

RE-INSTATEMENT OF PRODUCTION SITES PREVIOUSLY REJECTED OR SUSPENDED FOR EXPORT TO SOUTH AFRICA

1. A production site previously rejected or suspended for export to South Africa shall only be re-instated if detailed corrective measures that comply with the requirements set out in this phytosanitary workplan are provided to DAFF.
2. MAGRAMA shall monitor and approve the reinstatement of the rejected or suspended production sited and provide the list and recommendations to DAFF.
3. DAFF shall assess and approve the list of the reinstated production sites provided, update it on the DAFF website and notify MAGRAMA as soon as possible.

ARTICLE 9

IMPLEMENTATION AND DISPUTE SETTLEMENT

1. MAGRAMA and DAFF agree to make every effort to settle any dispute arising from the interpretation or implementation of this phytosanitary workplan through bilateral consultation or negotiation.
2. This agreement is subject to review, revision and amendment as necessary.

ANNEX 1: QUARANTINE PESTS OF CONCERN TO SOUTH AFRICA

Mites: *Acalitus phloeocoptes*
Amphitetranychus viennensis
Brevipalpus chilensis
Cenopalpus lanceolatisetae
Cenopalpus pulcher
Eotetranychus pruni
Eotetranychus sexmaculatus
Tetranychus canadensis
Tetranychus mcdanieli
Tetranychus pacificus
Tetranychus schoenei
Tetranychus tumidus

Insects: *Amyelois transitella*
Anarsia lineatella
Anastrepha fraterculus
Anastrepha ludens
Anastrepha obliqua
Anastrepha suspensa
Bactrocera dorsalis
Bactrocera invadens
Bactrocera tryoni
Bactrocera zonata
Choristoneura rosaceana
Conotrachelus nenuphar
Cydia funebrana
Drosophila suzukii
Epiphyas postvittana
Eupoecilia ambiguella
Rhagoletis cerasi
Rhagoletis pomonella
Thrips palmi

Fungus: *Monilinia fructicola*
Monilinia fructigena
Neonectria ditissima

Bacteria: *Erwinia amylovora*

ANNEX 2: THE PACKING MARK

Country of origin

Production site name or its registered unique code

Packing facility name or its registered unique code

For the Republic of South Africa

ANNEX 3: WORKPLAN SPECIFIC TO *MONILINIA* SPECIES

ARTICLE 1

PRE-HARVEST PEST MANAGEMENT PROGRAM AND GENERAL SURVEILLANCE

1. CULTURAL MEASURES

1.1.1. During winter months, growers shall remove and destroy mummified fruits and infected tissues in order to reduce the inoculum potential. The residues of pruning shall be destroyed or inactivated.

1.1.2. After blossoming, infected or symptomatic twigs and branches shall be removed. Any infected fruit shall be destroyed.

1.1.3. Growers shall improve, when possible, ventilation and insulation by green pruning and the application of herbicides to avoid excess of moisture. Drip irrigation is recommended.

2. PRE-HARVEST TREATMENTS

Pre-harvest treatments shall include a minimum of 3 fungicide sprays during bloom and a further three sprays 28 days before harvest with the last application not more than 10 days before harvest. Resistance against the benomyl, dicarboximides and demethylation-inhibiting fungicides (Cyproconazole, Difenoconazole, Fenbuconazole, Tebuconazole) have been reported in countries where fungicides have been used regularly (Leeuwen *et al.* 2001). All isolates of *M. fructicola* tested from Spain showed resistance to benzimidazole fungicides and a few of these isolates showed resistance to dicarboximide fungicides (EFSA, 2011). An anti-resistance strategy shall therefore be implemented to prevent development of pesticide resistance.

3. PRE-HARVEST INSPECTION OF FRUITS AND TESTING

MAGRAMA shall inspect each registered production site for pests listed in Article 2, paragraph 2 of the Phytosanitary Workplan for importation of Stone Fruit from Spain to South Africa at least six weeks before harvest. During inspection a sample of 600 fruit shall be taken from each production site registered for export to South Africa. This sampling procedure provides for a 95% confidence level of detecting infested fruit, if the infestation rate is 0.5% or higher. The sample shall be sent to a laboratory for *Monilinia* spp. diagnosis. The samples shall be treated with paraquat as described by Northover & Cerkauskas (1994) or freeze treated as described by Michailides *et al.* (2000)

and cultured in a humid chamber in the laboratory. Fruit showing brown rot shall be tested by PCR in accordance with one of the identification techniques (methods) for *M. fructicola* and *M. fructigena* recommended by EPPO, i.e., Hughes *et al.* (2000), Iosif & Frey (2000) or Côte *et al.* (2004). If the result of the PCR testing for *M. fructicola* and/or *M. fructigena* is positive, the production site shall be rejected for export to South Africa.

ARTICLE 2

POST-HARVEST MEASURES

1. Post-harvest inspection and testing

1.1. A sub-sample of 750 or 630 fruit must be taken from a sample referred to in Article 3. Paragraph 6.1 of the phytosanitary workplan for importation of stone fruit from Spain to South Africa (i.e. 143 packing units from a consignment of 2000 packing units or less or 150 packing units from a consignment with more than 2000 packing units) for both *Monilinia* spp. and *D.suzukii*.

1.2. The sub-sample shall be sent to a laboratory for *Monilinia* spp. diagnosis. The samples shall be treated with paraquat as described by Northover & Cerkauskas (1994) or freeze treated as described by Michailides *et al.* (2000) and cultured in a humid chamber in the laboratory. The sample size provides for a 95% probability of detecting 0.5% infestation in 630 fruit 7 days after paraquat or freeze treatment and in 750 fruit 5 days after paraquat or freeze treatment. Fruit showing brown rot shall be tested by PCR in accordance with one of the identification techniques (methods) for *M. fructicola* and *M. fructigena* recommended by EPPO, i.e. Hughes *et al.* (2000), Loos & Frey (2000) or Côte *et al.* (2004). If the result of the PCR testing for *M. fructicola* and/or *M. fructigena* is positive, the consignment/lot shall be rejected and the production site/production site shall be suspended for the rest of the export season to South Africa.

AUTHORIZATION

1. The workplan will remain in effect unless rescinded or due to any of the circumstances given above as a cause of such action. Either DAFF or MAGRAMA may suggest changes in this workplan for discussion at any time.
2. DAFF reserves the right to suspend or change (in this workplan with MAGRAMA) the requirements for the importation of stone fruit from Spain to South Africa in the event that South Africa's phytosanitary requirements are not met.