COLEACP GUIDELINES
ON EXPORTING FRESH CAPSICUM
FROM THE CARIBBEAN

NEW PLANT HEALTH RULES
FROM THE EUROPEAN UNION
DISCLAIMER:

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PART 1

Background and guidelines on meeting EU requirements for the regulated pests Pepper weevil (*Anthonomus eugenii*), Tomato Fruit Borer (*Neoleucinodes elegantalis*), Fall Armyworm (*Spodoptera frugiperda*) and the tomato psyllid (*Bactericera cockerelli*) on *Capsicum*
1.1. BACKGROUND

The European Union (EU) is overhauling its plant health (phytosanitary) regulations. On 14 December 2019, the new Plant Health Regulation (EU 2016/2031) came into operation bringing rigorous new rules to prevent the introduction and spread of pests and diseases in the EU. This takes a much more proactive approach that affects the European fruit and vegetable sector, as well as imports from third countries outside the EU.

Over the past three years, special measures have been introduced for crops that are a known pathway into the EU of serious pests that could damage EU agriculture or the environment. These measures have now been incorporated into the new regulation. They include stringent new requirements covering the export of capsicum to prevent the introduction into Europe of the pepper weevil (Anthonomus eugenii), tomato fruit borer (Neoleucinodes elegantalis), fall armyworm (Spodoptera frugiperda) and tomato psyllid (Bactericera cockerelli).

The new rules stipulate certain conditions that exporting countries must meet before exports of capsicum are allowed. Some of these conditions refer to International Standards for Phytosanitary Measures (ISPMs). ISPMs are developed by the International Plant Protection Convention of the UN Food and Agriculture Organization (FAO), and are recognised by the World Trade Organization (WTO) Sanitary and Phytosanitary Agreement. Exporting countries must refer to the relevant ISPMs in order to fully understand and comply with the EU regulatory requirements.

Meeting these new rules requires immediate and concerted action from producers, exporters and National Plant Protection Organisations (NPPOs). There is no room for complacency by any capsicum-exporting country. If there are any interceptions of these pests in exported capsicum, the EU is expected to react and impose more stringent measures.

National action plans and stakeholder engagement

Experience has shown that meeting the new EU rules requires effective dialogue and engagement between public and private sectors. All stakeholders must agree on the actions needed to prepare any dossiers required by the EU prior to export, and to ensure that exported capsicum is free of the designated pests. This means identifying and agreeing on actions to be taken by private sector operators at all stages, from production to export. It also means agreeing to the responsibilities of the public sector authorities, in particular the NPPO.

COLEACP recommends the establishment of committees or task forces that bring all major stakeholders around the table to develop (and oversee the implementation of) a national capsicum action plan. To be effective, this national action plan must be appropriate to the local context, and usable by the range of different producers and exporters concerned (large and small). It is essential that all stakeholders agree to and implement the national action plan; if only one exporter sends infested consignments to the EU, this could bring down the entire export sector.
COLEACP support

This document has been prepared by COLEACP for national authorities and capsicum export sectors to help orient the development of national action plans and dossiers to meet the new rules. It provides a framework to guide the process, and outlines the various elements that can be incorporated into a national approach to manage the pests concerned. It identifies the information to be provided, and actions to be taken, at all stages from production to export, by both public and private sectors. References and links to the relevant ISPMs are provided.

Note that the elements included here are not exhaustive. The national capsicum action plan and dossier could include all or a selection of the measures outlined, as well as any others that may be available and appropriate locally.
1.2. REGULATORY CHANGES AFFECTING CAPSICUM EXPORTS TO THE EUROPEAN UNION

New rules on pepper weevil (*Anthonomus eugenii*)

Regulation (EU) 2019/2072, issued on 28 November 2019, contains specific requirements for Capsicum exports from countries where the pepper weevil (*Anthonomus eugenii* Cano) is known to occur. This covers Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Puerto Rico, USA and French Polynesia. These requirements are detailed in Point 72, Annex VII of the Regulation, and they state that capsicum exported to the EU from these countries must conform with one of the following options. It must originate from either:

a. an area free from *Anthonomus eugenii* Cano, established by the national plant protection organisation in accordance with the relevant International Standards for Phytosanitary Measures, and which is mentioned on the phytosanitary certificate referred to in Article 71 of Regulation (EU) No 2016/2031, under the rubric ‘Additional declaration’,

or

b. a place of production, established in the country of origin by the national plant protection organisation in that country, as being free from *Anthonomus eugenii* Cano, in accordance with the relevant International Standards for Phytosanitary Measures, and which is mentioned on the phytosanitary certificate referred to in Article 71 of Regulation (EU) No 2016/2031, under the rubric ‘Additional declaration’, and declared free from *Anthonomus eugenii* Cano on official inspections carried out at least monthly during the two months prior to export, at the place of production and its immediate vicinity.

**Recommended action by NPPOs**

National monitoring data will reveal the distribution of the pest in each of the countries covered by the regulation. The likely widespread distribution of this pest in these countries means that in most circumstances Option a above will not be feasible. Instead it will be necessary to use Option b, which requires official inspections to be carried out by the NPPO at each production site during the two months prior to export. Information on traceability must also be available.
New rules on fall armyworm (Spodoptera frugiperda)

On 26 September 2019, the European Commission (EC) published Implementing Decision (EU) 2019/1598 introducing emergency measures covering fall armyworm (FAW). The aim is to prevent the introduction and spread of this noxious pest within the EU. It extends the geographical scope of an earlier Directive (EU 2018/638), which was limited to Africa and the Americas. These emergency measures apply from 1 October 2019 until 30 June 2021.

The Implementing Decision applies to a number of fresh products exported to the EU from any country (except Switzerland). These crops include the fruit of capsicum species; *Momordica*, Ethiopian eggplant (*Solanum aethiopicum*); African eggplant (*Solanum macrocarpon*) and eggplant/aubergine (*Solanum melongena*).

Capsicum exports must be accompanied by a phytosanitary certificate (see section 1.3) and must meet requirements set out in one of the following options. They must either:

a. originate in a country recognised to be free from fall armyworm in accordance with the relevant international standards for phytosanitary measures (ISPM 4);

or

b. originate in an area established by the national plant protection organization in the country of origin as being free from fall armyworm (ISPM 4). The name of that area must be stated in the phytosanitary certificate under the section ‘Place of Origin’;

or

c. they are not from a country or area recognized as free from fall armyworm, but they comply with the following conditions:
   i. they have been produced in a production site that is registered and supervised by the NPPO;
   
   ii. official inspections have been carried out in the production site during the three months prior to export, and no fall armyworm has been detected;
   
   iii. prior to export, the produce has been subject to an official inspection and found to be free from fall armyworm;
   
   iv. there is full traceability covering all movements from the place of production to the point of export;
   
   v. the specified plants have been produced in a production site which has complete physical protection against the introduction of fall armyworm;

or
d. they are not from a country or area recognized as free from fall armyworm, but they comply with points (c) (i to iv) above, and they have been subjected to an effective treatment to ensure they are free from fall armyworm; or

e. they are not from a country or area recognized as free from fall armyworm, but they have been subjected to an effective post-harvest treatment to ensure freedom from fall armyworm; this treatment must be indicated on the phytosanitary certificate in the ‘Treatment’ section.

Selecting options

In the Caribbean, Options (c) and (d) are likely to be the most feasible for the capsicum sector. Achieving pest free country or area status will be difficult where the pest is widespread. Option (e) is also problematic as there are few effective single treatments available for post-harvest control of FAW on capsicum that will guarantee it is pest free.

Option (c) requires a place of production designated as pest free. This can be achieved using insect-proof screen houses coupled with the required inspections by the NPPO. This can be an effective option, but requires significant investment in infrastructure.

Option (d) is the most accessible for the majority of exporters and requires capsicum to be subject to an effective treatment, in addition to specified supervision and inspections by the NPPO. This allows for the use of a systems approach to control the pest. For more details see Part 2 of this document.

Option (d): National Spodoptera action plan and the role of the NPPO

Unlike some other export crops and regulated pests, in the case of fall armyworm there is no specific requirement for a dossier to be submitted to the EC outlining the systems approach used for the “effective treatment” of this pest. Nevertheless, COLEACP strongly recommends that exporting countries prepare and implement a national action plan that specifies the measures to be taken by all stakeholders along the supply chain to manage fall armyworm in capsicum; it is critical to ensure that there is no risk of it being present in exported consignments.

There are specific actions that must be taken by the NPPO for all production sites that supply capsicum for export to the EU. The NPPO must:

- register and supervise all production sites
- carry out official inspections at all production sites during the three months prior to export; exports can be permitted only if no fall armyworm has been detected at the production site
- conduct an official inspection prior to export; exports can be permitted only if the produce is found to be free from fall armyworm.
If there is a problem or interception, or if a country is subject to an audit by the EU authorities (DG Santé) at any stage, the national authorities in the exporting country must be able to provide all the necessary documentation to demonstrate that the correct registration, supervision and inspections have been conducted.

The NPPO must inspect all export consignments to ensure that there is full traceability covering all movements of capsicum from the place of production to the point of export.

New rules on tomato fruit borer (*Neoleucinodes elegantalis*)

Implementing Directive (EC) 2019/523, which was introduced in March 2019, brought in stringent rules for the tomato fruit borer. This Directive entered into force on 1 September 2019, and the rules were updated and clarified in Implementing Regulation (EU) 2019/2072, issued on 28 November 2019.

The rules apply to a number of fresh products exported into the EU from any third country including fruits of *Capsicum annum* L., *Ethiopian eggplant* (*Solanum aethiopicum*), *tomato* (*Solanum lycopersicum*) and *eggplant/aubergine* (*Solanum melongena*).

Capsicum exports must be accompanied by a phytosanitary certificate (see section 1.3) and must meet requirements set out in one of the following options. There must be an official statement that the fruit originates in either:

a. a country recognised as being free from *Neoleucinodes elegantalis* (Guenée) in accordance with the relevant International Standards for Phytosanitary Measures, provided that this freedom status has been communicated in advance in writing to the Commission by the national plant protection organisation of the third country concerned;

or

b. an area established by the national plant protection organisation in the country of origin as being free from *Neoleucinodes elegantalis* (Guenée) in accordance with the relevant International Standards for Phytosanitary Measures, which is mentioned on the phytosanitary certificate referred to in Article 71 of Regulation (EU) No 2016/2031, under the rubric ‘Additional declaration’, provided that this freedom status has been communicated in advance in writing to the Commission by the national plant protection organisation of the third country concerned,

or

c. a place of production established by the national plant protection organisation of the country of origin as being free from of *Neoleucinodes elegantalis* (Guenée) in accordance with the relevant International Standards for Phytosanitary Measures and official inspections have been carried out in the place of production at appropriate times during the growing season to detect the presence of the pest, including an examination on representative samples of fruit, shown to be free from
Neoleucinodes elegantalis (Guenée), and information on traceability is included in the phytosanitary certificate referred to in Article 71 of Regulation (EU) No 2016/2031;

or
d. an insect proof site of production, established by the national plant protection organisation in the country of origin as being free from Neoleucinodes elegantalis (Guenée), on the basis of official inspections and surveys carried out during the three months prior to export, and information on traceability is included in the phytosanitary certificate referred to in Article 71 of Regulation (EU) No 2016/2031.

Recommended action by NPPOs

National monitoring data will reveal the distribution of the pest in each country of the Caribbean zone. The likely widespread distribution of this pest means that in most circumstances Options a and b above will not be feasible. Instead, it will be necessary to use Option c or d. Both of these options require official inspections to be carried out by the NPPO at each production site during the three months prior to export. Information on traceability must also be available.

New rules on the tomato psyllid (Bactericera cockerelli)

Implementing Directive (EC) 2019/523 and Implementing Regulation (EU) 2019/2072 also contain specific new rules concerning tomato psyllid. These cover all fresh fruits of Solanaceae exported into the EU from Australia, the Americas and New Zealand, including Capsicum annum, bitter tomato (Solanum aethiopicum), tomato (Solanum lycopersicum), eggplant/aubergine (Solanum melongena) and African eggplant (Solanum macrocarpon).

Exports of these crops must be accompanied by a phytosanitary certificate (see section 1.3) and must meet requirements set out in one of the following options. There must be an official statement that the fruits originate in either:

a. a country recognised as being free from Bactericera cockerelli (Sulc.) in accordance with relevant International Standards for Phytosanitary Measures, provided that this freedom status has been communicated in advance in writing to the Commission by the national plant protection organisation of the third country concerned, or EN L 319/148 Official Journal of the European Union 10.12.2019;

or

b. an area established by the national plant protection organisation in the country of origin as being free from Bactericera cockerelli (Sulc.) in accordance with the relevant International Standards for Phytosanitary Measures, which is mentioned on the phytosanitary certificate referred to in Article 71 of Regulation (EU) No 2016/2031, under the rubric ‘Additional
declaration’, provided that this freedom status has been communicated in advance in writing to the Commission by the national plant protection organisation of the third country concerned;

or

c. a place of production, where official inspections and surveys for the presence of *Bactericera cockerelli* (Sulc.) including its immediate vicinity are carried out during the last three months prior to export and subject to effective treatments to ensure freedom from the pest, and representative samples of the fruit have been inspected prior to export, and information on traceability is included in the certificate referred to in Article 71 of Regulation (EU) No 2016/2031;

or

d. an insect proof site of production, established by the national plant protection organisation in the country of origin, as being free from *Bactericera cockerelli* (Sulc.), on the basis of official inspections and surveys carried out during the three months prior to export, and information on traceability is included in the phytosanitary certificate referred to in Article 71 of Regulation (EU) No 2016/2031.

**Recommended action by NPPOs**

National monitoring data will reveal the distribution of the pest in each country. The likely widespread distribution of this pest means that in most circumstances Options a and b above will not be feasible. Instead, it will be necessary to use Option c or d. Both of these options require official inspections to be carried out by NPPOs at each production site during the three months prior to export. Information on traceability must also be available.

Option (c) requires fresh products to be subjected to an effective treatment, in addition to specified supervision and inspections by the NPPO. The effective treatment allows the use of a systems approach for management of the pest.

Option (d) requires a place of production designated as pest free. This can be achieved for example by using insect-proof screen houses coupled with the required inspections by the NPPO.

**Other quarantine pests**

Under national plant health legislation, a number of plant pests and diseases are classified as quarantine organisms. These are pests that are mainly or entirely absent from a country, but which could have a potentially serious economic, environmental or social impact if they were to be introduced. Most countries have a quarantine list that identifies the most dangerous harmful organisms whose introduction must be prohibited.
The new EU Plant Health Law, Regulation (EU) 2016/2031, classifies all plant pests according to the following four categories:

- **Union quarantine pests**: Not present at all in the EU territory or, if present, just locally and under official control. Strict measures must be taken to prevent their entry or further spread within the EU. Union quarantine pests are listed in Directive 2000/29/EC.¹

- **Protected zone quarantine pests**: Present in most parts of the Union, but still known to be absent in certain ‘protected zones’. These pests are not allowed to enter and spread within these protected zones.

- **Regulated non-quarantine pests**: Widely present in the EU territory, but because they have an important impact, plants for planting should be guaranteed free or almost free from the pest.

- **Priority pests**: Those with the most severe impact on the economy, environment and/or society. The EU Commission released a list of 20 priority pests in October 2019 (Regulation EU 2019/1702).

Fall armyworm (*Spodoptera frugiperda*) is listed as a priority pest and consequently is subject to the very strict measures outlined in this document. The other pests included here are classed as Union quarantine pests, which are also subject to statutory controls.

It is important to note that this document is not exhaustive. There are other Union quarantine pests that concern capsicum, and whose introduction into the EU is banned. For example, non-European isolates of potato viruses A, M, S, V, X and Y are Union quarantine pests.

Potato virus Y (PVY) is particularly serious and is a major problem in potato production. It is mainly transmitted by aphids, but also through mechanical contact. Capsicum is a known alternative host, and each year there are several interceptions of imported capsicum where this disease is detected and the consignment is detained at EU border controls. It is therefore essential to monitor and avoid the presence of PVY in capsicum for export.

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1.3. COMPLETING THE PHYTOSANITARY CERTIFICATE

All plants and plant products imported into the EU from non-EU countries are subject to compulsory plant health checks (Regulation (EU) 2016/2031; Annex V Part A). These include:

- a review of the phytosanitary certificate and associated documents to ensure that the consignment meets EU requirements
- an identity check to make sure that the consignment corresponds with the certificate
- an inspection of the produce to ensure that it is free from harmful organisms.

All capsicum exported to the EU must be accompanied by a phytosanitary certificate. There are strict requirements on how this should be filled, and it is important to note that:

- the phytosanitary certificate must include information on all regulated pests of concern for the exported product; at the present time, pepper weevil (Anthonomus eugenii), tomato fruit borer (Neoleucinodes elegantalis), fall armyworm (Spodoptera frugiperda) and tomato psyllid (Bactericera cockerelli) are regulated pests for capsicum originating in the Caribbean, and information on all of them must be included
- the information to be provided varies between pests, and depending on which management option is selected.

It is critically important to complete the certificate correctly as there is a low tolerance of mistakes by European importing countries. COLEACP has received information that consignments of capsicum entering Europe from third countries in recent weeks have been rejected and destroyed because the phytosanitary certificate has been filled incorrectly.

The European Commission has provided clear advice on what information must be given in the ‘Additional declaration’ section of the phytosanitary certificate, and the wording that must be used. The guidance below from COLEACP is based on this advice from the Commission.

Occasionally, operators experience challenges at EU border controls due to the wording of the Additional declaration. If they have followed the COLEACP guidance closely, they should refer the border control agents to the following website that explains the wording agreement from the EC: https://ec.europa.eu/food/sites/food/files/plant/docs/sc_plant-health_20200123_sum.pdf (Point 2, pages 7 and 8).2

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According to ISPM 12, if the space provided in the phytosanitary certificate is not sufficient to insert all the necessary information (e.g. in the Additional declaration), it is permitted to add an attachment. If you do so, it is very important to adhere to the following:

- each page of any attachment must bear the number of the phytosanitary certificate and be dated, signed and stamped in the same manner as required for the phytosanitary certificate itself
- you must state in the relevant section of the phytosanitary certificate if there is an attachment
- if an attachment has more than one page, the pages must be numbered, and the number of pages must be indicated on the phytosanitary certificate.

For pepper weevil (Anthonomus eugenii) according to Implementing Regulation (EU) 2019/2072

**Option (b)**

If exporting countries are using Option (b) for a pest free place of production, it is essential to include the following words in the phytosanitary certificate:

- In the Additional declaration write: “The consignment complies with Option (b) of Annex VII, Point 72 of Implementing Regulation (EU) 2019/2072: production from an officially designated place of production free of Anthonomus eugenii based on official inspections carried out at least monthly during the two months prior to export”.

- Information on traceability must be provided: in the phytosanitary certificate, alongside the description of the product, you must write the unique identification number or name of the approved production site from which the produce was sourced.

For fall armyworm (Spodoptera frugiperda) according to Implementing Decision (EC) 2019/1598

**Option (c)**

If exporting countries are using Option (c) for a pest free production site (for example with capsicum grown in insect-proof screenhouses), it is essential to include the following words in the phytosanitary certificate:

- In the Additional declaration write: “The consignment complies with the following conditions in accordance with Option (c) of Article 4 of Decision (EU) 2018/638:
  i. the specified plants have been produced in a production site which is registered and supervised by the national plant protection organisation in the country of origin;
vi. official inspections have been carried out in the production site during the three months prior to export, and no presence of the specified organism has been detected on the specified plants;

vii. prior to their export, the specified plants have been subject to an official inspection and found free from the specified organism;

viii. information ensuring the traceability of the specified plants to their site of production has been ensured during their movement prior to export;

ix. the specified plants have been produced in a production site which is provided with complete physical protection against the introduction of the specified organism

- Information on traceability must be provided: in the phytosanitary certificate, alongside the description of the product, you must write the unique identification number or name of the approved production site from which the produce was sourced

**Option (d)**

If exporting countries are using Option (d) for an effective treatment, it is essential to include the following words in the phytosanitary certificate:

- In the Treatment box/section write: “Systems approach”.
- In the Additional declaration write: “The consignment complies with Option (d) of Article 4 of Decision (EU) 2018/638 and a systems approach for *Spodoptera frugiperda* has been applied”.

**For tomato fruit borer (*Neoleucinodes elegantalis*) according to Implementing Regulation (EU) 2019/2072**

**Options (c & d)**

If exporting countries are using Option (c) linked to a place of production free of *N. elegantalis*, it is essential to include the following words in the phytosanitary certificate:

- In the Additional declaration write: The consignment complies with the following conditions in accordance with Option (c) of Annex VII, point 68 of Implementing Regulation (EU) 2019/2072: It comes from a place of production established as being free from *Neoleucinodes elegantalis* in accordance with the relevant International Standards. Official inspections have been carried out in the place of production at appropriate times to detect the presence of the pest, including an examination on representative samples of fruit, shown to be free from *Neoleucinodes elegantalis* (Guenée).
Information on traceability must be provided: in the phytosanitary certificate, alongside the description of the product, you must write the unique identification number or name of the approved place/site of production from which the produce was sourced.

If exporting countries are using Option (d) insect-proof site of production, it is essential to include the following words in the phytosanitary certificate:

- In the Additional declaration write: The consignment complies with the following conditions in accordance with Option (d) of Annex VII, point 68 of Implementing Regulation (EU) 2019/2072: It comes from an insect proof site of production, established as being free from *Neoleucinodes elegantalis* (Guenée), on the basis of official inspections and surveys carried out during the three months prior to export.

- Information on traceability must be provided: in the phytosanitary certificate, alongside the description of the product, you must write the unique identification number or name of the approved production site from which the produce was sourced.

For the tomato psyllid (*Bactericera cockerelli*) according to Implementing Regulation (EU) 2019/2072

**Option (c)**

If exporting countries are using Option (c) for an effective treatment, it is essential to include the following words in the phytosanitary certificate:

- In the Treatment Box/section write: “Systems approach”.

- In the Additional declaration write: “The consignment complies with Option (c) of Article 67, Annex VII of commission implementing regulation (EU) 2019/2072: a place of production, where official inspections and surveys for the presence of *Bactericera cockerelli* (Sulc.) including its immediate vicinity are carried out during the last three months prior to export and subject to effective treatments to ensure freedom from the pest, and representative samples of the fruit have been inspected prior to export.

- Information on traceability must be provided: in the phytosanitary certificate, alongside the description of the product, you must write the unique identification number or name of the approved production site from which the produce was sourced.

**Option (d)**

If exporting countries are using Option (d) for a pest free production site, it is essential to include the following words in the phytosanitary certificate:
In the Additional declaration write: The consignment complies with the following conditions in accordance with Option (d) of Article 67 of commission implementing regulation (EU) 2019/2072: an insect proof site of production, established by the national plant protection organisation in the country of origin, as being free from *Bactericera cockerelli* (Sulc.), on the basis of official inspections and surveys carried out during the three months prior to export.

Information on traceability must be provided: in the phytosanitary certificate, alongside the description of the product, you must write the unique identification number or name of the approved production site from which the produce was sourced.
1.4. PEST FREE STATUS

International standards for phytosanitary measures (ISPMs) describe what needs to be done in order for an area, country, place of production or production site to be officially recognised as pest free. In each case, the process must be led by the officially designated NPPO in each country, and it must follow closely the methodology outlined.

Establishing pest free area (PFA) status requires data to be collected so that the presence or absence of the pest can be verified. Establishing pest free status needs to follow strictly the guidelines described in the relevant ISPM, and requires the NPPO (and its designated agents) to have the necessary training, resources and capabilities in data collection and pest risk analysis.

Pest free areas and countries

Pest free area or pest free country status would be difficult to obtain in the case of pepper weevil or fall armyworm on capsicum, as these pests are highly mobile and widely dispersed. This option would only be worth pursuing in areas that are geographically distinct or isolated from the main areas of pest distribution. Establishing and maintaining an area of low pest prevalence may be a possibility (where the capacity and resources are available nationally) and can be part of the systems approach.

Pest- or disease-free area: An area in which a specific pest or disease does not occur. This can be an entire country; an uninfested part of a country in which a limited area is infested; or an uninfested part of a country within a generally infested area.

An area of low pest or disease prevalence: An area, whether all of a country, part of a country, or all or parts of several countries (as identified by the competent authorities) in which a specific pest or disease occurs at low levels and is subject to effective surveillance, control or eradication measures.

There are three main stages to establish and maintain a PFA:

- systems to establish freedom;
- phytosanitary measures to maintain freedom;
- checks to verify freedom has been maintained.

The work needed in each case varies according to factors such as the biology of the pest, the characteristics of the PFA, and the level of phytosanitary security required.
The work involved in establishing and maintaining pest free area/country status is detailed and time consuming, and involves:

- data collection (pest surveys for delimiting, detection, monitoring);
- regulatory controls (protective measures against the introduction into the country, including listing as a quarantine pests);
- audits (reviews and evaluation);
- documentation (reports, work plans).

The following documents and guides from IPPC/FAO provide further information:

- ISPM 4 on requirements for establishing a PFA;
- Guide for Establishing and Maintaining Pest Free Areas: Understanding the principal requirements for pest free areas, pest free places of production, pest free production sites and areas of low pest prevalence;
- ISPM 6 (Guidelines for surveillance) and ISPM 2 (Framework for pest risk analysis) provide further details on general surveillance and specific survey requirements.

Pest free place of production: Place of production in which a pest is absent (demonstrated by scientific evidence) and generally maintained officially pest free for a defined period.

A place of production is “any premises or collection of fields operated as a single production or farming unit”.

Pest free production site: Place of production in which a pest is absent (demonstrated by scientific evidence) and generally maintained officially pest free for a defined period.

A production site is “a defined part of a place of production, that is managed as a separate unit for phytosanitary purposes”.

Directives covering three of the regulated pests in capsicum allow countries to export if the capsicum has been produced in a “pest free place of production”. As noted above, some countries have adopted this option by using insect-proof screen houses. Screen houses require significant investment in infrastructure, and are therefore out of reach of many smallholder farmers. However, where resources are available, this can be an effective option.

A place of production can only be designated as pest free by the NPPO. The NPPO and producers/exporters are required to conduct surveillance and inspections according to the international guidelines.

In addition, producers growing capsicum in screen houses must use an appropriate design of screen house so that it is insect proof, and ideally with an entry lobby. Strict
biosecurity measures need to be in place when people or goods move in or out of the screen house to prevent pest entry.

The following documents and guides from IPPC/FAO provide further information:

- **ISPM 10** for the establishment of pest free places of production and pest free production sites;
- **Guide for Establishing and Maintaining Pest Free Areas**: Understanding the principal requirements for pest free areas, pest free places of production, pest free production sites and areas of low pest prevalence.
PART 2
Guidelines for preparing a dossier for submission to the EU on management of fall armyworm
2.1. THE FALL ARMYWORM ACTION PLAN

On 26 September 2019, the EC published Implementing Decision (EU) 2019/1598 introducing emergency measures covering fall armyworm (FAW, Spodoptera frugiperda). The aim is to prevent the introduction and spread of this noxious pest within the EU. It extends the geographical scope of an earlier Directive (EU 2018/638), which was limited to Africa and the Americas. These emergency measures apply from 1 October 2019 until 30 June 2021. Several crops are affected, including Capsicum L.

As noted in Part 1, COLEACP strongly recommends that horticultural export sectors affected by this regulation should prepare and implement a national action plan that indicates the measures to be taken by all stakeholders along the supply chain to manage FAW; it is critical to ensure that there is no risk of it being present in export consignments.

Part 2 of this document addresses the development of a national action plan to help the export sector meet Option (d) of Implementing Decision (EU) 2019/1598. This stipulates that the produce concerned must comply with the following conditions:

i. it has been produced in a production site that is registered and supervised by the NPPO;

ii. official inspections have been carried out in the production site during the three months prior to export, and no fall armyworm has been detected;

iii. prior to export, the produce has been subject to an official inspection and found to be free from fall armyworm;

iv. there is full traceability covering all movements from the place of production to the point of export;

and

v. it has been subject to an effective treatment to ensure it is free from fall armyworm.

The use of an effective treatment is the most accessible option for the majority of exporters, and the rules allow for the use of a systems approach.

A systems approach means developing an action plan that combines several different pest management measures that, used together, will significantly reduce pest risk. These measures may include surveillance, cultural practices, pest control treatment, post-harvest disinfestation, inspection, and others. The use of integrated measures in a systems approach for pest risk management is described in ISPM 14.

These guidelines are intended to assist national authorities and exporters of fresh capsicum in developing a national FAW action plan in the context of Implementing Decision (EU) 2019/1598. It provides a framework to guide the process, and outlines the various elements that can be incorporated into a systems approach to manage FAW. It identifies the information to be provided, and actions to be taken, at all stages from production to export, by both public and private sectors.
Note that the elements included here are not exhaustive. The national action plan could include all or a selection of these measures, as well as any others that may be available and appropriate locally.

2.2. WHAT TO INCLUDE IN THE NATIONAL ACTION PLAN

This section covers the following information that should be included in the national action plan:

- An overview of the national export sector for capsicum;
- Phytosanitary measures taken before, during and after harvest to prevent and control FAW;
- Phytosanitary inspection and certification system;
- Quality management system put in place by the NPPO to ensure that the national FAW management dossier is effectively implemented and monitored.

According to ISPM 14, the characteristics of a systems approach are as follows:

- A systems approach requires two or more measures that are independent of each other, and may include any number of measures. An advantage of the systems approach is the ability to address [local] variability and uncertainty by modifying the number and strength of measures [needed] to meet phytosanitary import requirements.
- Measures used in a systems approach may be applied pre- and/or post-harvest wherever national plant protection organizations (NPPOs) have the ability to oversee and ensure compliance with phytosanitary procedures.
- A systems approach may include measures applied in the place of production, during the post-harvest period, at the packing house, or during shipment and distribution of the commodity.
- Risk management measures designed to prevent contamination or re-infestation are generally included (e.g. maintaining the integrity of lots, pest-proof packaging, screening of packing areas, etc.).
- Procedures such as pest surveillance, trapping and sampling can also be components of a systems approach.
- Measures that do not kill pests or reduce their prevalence but reduce their potential for entry or establishment (safeguards) can be included in a systems approach. Examples include designated harvest or shipping periods, restrictions on the maturity, colour, hardness, or other condition of the commodity, the use of resistant hosts, and limited distribution or restricted use at the destination.
**Effective engagement between stakeholders**

Experience has shown that engagement between public and private sector stakeholders is essential during development of the dossier to ensure that it is adapted to the local context, and to secure the buy-in of all involved. The national action plan must be rigorously followed by all stakeholders involved in exports of capsicum to the EU. It is very important therefore that the dossier is appropriate for the context, and is appropriate for the range of different producers and exporters concerned (large and small).

**2.2.1. Overview of the national export sector**

According to ISPM 14, the following information is important for the evaluation of pest risk:

- The crop, place of production, expected volume and frequency of shipments.
- Production, harvesting, packaging/handling and transportation.
- The crop/pest dynamics.
- Plant health risk management measures that will be included in the systems approach, and relevant data on their efficacy.
- Relevant references.

**Information on the national sector**

Crop details:

- species and varieties of capsicum grown for export (scientific names and common names);
- characteristics of each species and variety;
- production zones: describe and map the main production zones for export;
- describe the production seasons (timeframe), by zone;
- describe the climate in each production zone, assessed according to risk of pest infestation.

Production and export statistics for the past 2 to 3 years, specifying if possible:

- destination country;
- method of shipment (sea, air, land);
- presence and distribution of FAW in the country: geographical distribution and prevalence;
- period of infestation;
- other host plants in production areas.
2.2.2. Phytosanitary measures to prevent and control fall armyworm

According to ISPM 14, the following pre- and post-harvest measures may be integrated into a systems approach:

- surveillance and monitoring (traps)
- treatment, including the use of plant protection products
- post-harvest disinfestation
- inspection
- others.

Combined into an integrated management system, these measures will reduce the risk of any capsicum exported to the EU being infested with FCM.

Measures at plantation level to monitor and control fall armyworm

Pre-harvest

Growers producing for export to the EU should:

- **Apply good crop hygiene.**
  
  Good field management and crop hygiene are critical to eliminate FAW adults and larvae in fallen fruit, and to remove injured fruit. In all production sites, growers must:
  
  - remove all damaged and injured fruit, including fruit on the plants or on the ground;
  - remove all dead or dying plants;
  - destroy all crops and crop waste as soon as possible after harvest.

- **Conduct surveillance and monitoring.**
  
  Surveillance is a major component of the integrated management of FAW:
  
  - all production sites growing capsicum for export should undertake monitoring on a daily basis;
  - the authorities should agree with industry the thresholds of intervention.

- **Agree the procedure to be followed by companies when there is an FAW alert.**
  
  Strict procedures should be maintained until the pest is under control and crops are certified FAW free by the NPPO. For example:
  
  - quarantine all harvest from the infested site and initiate a product recall of fruit recently harvested in the vicinity;
  - implement an eradication programme;
o apply cultural and chemical control;
o adhere to biosafety measures on the farm to eliminate pest transfer.

- Implement cultural control of FAW to reduce pest incidence.
  For example:
  o rotate susceptible crops with non-susceptible or low-risk crops;
  o produce capsicum away from other host crops.

- Control FAW using plant protection products.
  The national authorities should provide guidance on which products to use, and how to use them (including application method, dose rate, pre-harvest interval). These must be in accordance with the registration status in the country of origin, and the maximum residue level (MRL) of the active ingredient in the EU.

- Receive up-to-date training.
  Growers and workers must be trained (and updated) in good practices relating to the identification, prevention, surveillance and control of FAW.

**During harvest**
Growers producing capsicum for export to the EU should:

- During harvest, ensure that procedures are in place for sorting, isolating and disposing of all damaged fruit.
- Ensure that handling and transport conditions are managed carefully to reduce the risk of FAW gaining access to harvested fruit.
- Operate a traceability system that allows for the identification of plantations, and strict separation of harvest lots.
- Ensure that all people involved in harvesting are trained so that they are aware of and apply good practices to reduce the risk of FAW attack; this includes good practices for prevention, control, crop hygiene, and traceability.

**Measures at the packhouse to prevent introduction, infestation and spread of fall armyworm**
On receiving the fruit, packhouse managers must:

- Have procedures in place to record the condition and phytosanitary status (pest presence) of the harvested produce when it arrives at the packhouse.
- Have a system in place to record all FAW control treatments applied pre- and post-harvest to each lot.
- Have a traceability system in place to ensure that each lot is identified and maintained separately through all post-harvest operations.
Measures post-harvest to monitor and control fall armyworm

- Ensure that all operators involved in harvest and post-harvest activities can recognise FAW damage, and know what to do when they find it.
- Have procedures in place in the field and packhouse to inspect for FAW presence and damage at all handling, packing and storage sites.
- Operate an FAW alert system, and put intervention and isolation procedures in place when infested fruit is identified.
- Maintain a system to keep records of packhouse inspections.
- Ensure practices and facilities are in place for the management of all crop waste, including pest-damaged fruit.
- Use refrigerated storage facilities where possible.
- Apply post-harvest treatments, when necessary, using plant protection products.
- As in the case of field applications, the national authorities should be able to provide guidance on which products to use, and how to use them (e.g. application method, dose rate, pre-harvest interval).
- These must be in accordance with the registration status in the country of origin, and the maximum residue level (MRL) of the active ingredient in the EU.
- Ensure that harvested fruit is never exposed to pest attack during packing, storage (including temporary storage), or transport (road, port or airport). This includes physical screens protecting transported consignments, and packing areas to prevent pest entry. Use of pest-proof packaging is also an option.
- Train all people involved in post-harvest handling so they are aware of and apply good practices at all times to reduce the risk of pest damage.
2.2.3. Phytosanitary inspection and certification system

As noted in Part I, there are specific actions that must be taken by the NPPO for all production sites that supply capsicum for export to the EU.

To recap:

- The NPPO must register and supervise all production sites.
- The NPPO must carry out official inspections at all production sites during the three months prior to export. Exports can only be permitted if no FAW has been detected at the production site.
- The NPPO must conduct an official inspection prior to export. Exports can only be permitted if the produce is found to be free from FAW.

If there is a problem or interception, or if a country is subject to an audit by the EU authorities (DG Santé) at any stage, the national authorities in the exporting country must be able to provide all the necessary documentation to demonstrate that the correct registration, supervision and inspections have been conducted.

The NPPO must inspect all export consignments to ensure that there is full traceability covering all movements of the products concerned from the place of production to the point of export.

The following sections outline the administrative and regulatory frameworks that need to be in place for the effective functioning of the official control system, and its enforcement by the NPPO.

**Administrative and regulatory framework governing exports of capsicum to the EU**

- There should be a system in place to register and identify all individual operators in the production and export chain (e.g. with a unique number).
- There should be a system for the identification and traceability of all production sites that supply for export to the EU.
- Authorities should conduct risk categorisation of exporters (high, medium and low risk).
- Authorities should conduct risk categorisation of exports (e.g. locations and seasons with higher pest pressure).

**National system for monitoring FAW populations**

This includes:

- Surveillance: monitoring of FAW populations (using traps) in and near areas where these crops are grown for export. This needs to be accompanied by a system to compile and analyse the data.
- Risk mitigation measures: according to the results of the monitoring, measures may be needed to reduce the risk of infested fruit entering the export supply chain.
Alert system: needs to be in place to inform stakeholders of any increased risk of FAW infestation, and any mitigation measures they must take.

Control and certification system

The NPPO (or its designated agents) must be active at all stages of the export value chain. This includes providing advice and training, as well as monitoring the implementation of plant health measures (which may include specific controls and certification). In brief:

- At the plantation level, the NPPO provides advice and training to private sector operators on crop production, and on the monitoring and control of FAW. They should oversee and ensure the application of good practice.
- At the packhouse level, the NPPO controls infrastructure and packing conditions. Training of private sector operators will be provided in identification of FAW presence and damage, crop waste management, among others.
- At the point of export (ports, airports, road borders), procedures are in place, and implemented effectively, for the inspection of produce, issuing of plant health certificates, and preparation of all necessary documentation.

Action to be taken by the NPPO at producer level for export of capsicum to the EU

- Confirming exporter registration.
- Checking traceability of all plantations that supply these crops for export.
- Assessing and documenting the application of good practices by producers, covering:
  - cropping practices;
  - crop hygiene and crop waste management;
  - FAW monitoring system using approved traps;
  - implementation of FAW control;
  - others.
- System to verify the training of operators in good practices for the prevention and control of FAW.

Action to be taken by the NPPO at all packhouses supplying capsicum for export to the EU

The NPPO will conduct an assessment of:

- Premises and equipment, to ensure the prevention of FAW entry and spread.
- Implementation of good hygiene practices and measures to prevent the risk of FAW infestation.
- Implementation of inspection/monitoring by packhouse personnel at all
handling and storage sites to check for FAW.

- Effectiveness of sorting and isolation systems, and suitability of infrastructure, to deal with produce that shows FAW presence and damage.
- Facilities and procedures for disposal of damaged fruit and waste.
- Effectiveness and implementation of the traceability system.
- Effectiveness of the system in place for the isolation of lots.
- Frequency and effectiveness of staff training.

**Issuing of phytosanitary certificates**

The NPPO must operate a system of controls and certification according to the method of shipment. This must address:

- implementation of document checks;
- physical inspection;
- identity checks;
- sampling method;
- a system in place for tracking and archiving inspection data;
- a system for tracking and archiving phytosanitary certificates.
2.2.4. NPPO quality management system

According to ISPM 14, the exporting country authorities are responsible for:
- monitoring, auditing and reporting on the effectiveness of the system;
- taking appropriate corrective measures;
- keeping the relevant documentation up-to-date;
- use of phytosanitary certificates in accordance with requirements.

**Internal audit**

This should describe the monitoring and internal audit system in place to ensure the effective implementation of the plant health inspection and certification system, including:
- training of NPPO managers and technical personnel (inspectors, enforcement officers);
- designing and implementing effective procedures for the inspection of production sites and packhouses.

**Management of interceptions/notifications**

This should describe the system in place for tracking notifications and communicating with stakeholders, including:
- statistics on FAW notifications;
- information on processing, tracking and communicating official notifications.

The following steps are recommended for the preparation and submission of the national action plan.
Step 1: Setting up a Technical Working Group

The Technical Working Group (TWG) will bring together stakeholders (private and public sector) to consider and agree the elements that should be included in the national FAW action plan.

The TWG can be convened by the NPPO. The composition of the group may vary according to the local industry and public authorities. As a general rule, a small group will be more effective than a large one. As a minimum, it is important for the group to ensure that the membership:

- contains representatives of the NPPO with sound knowledge and experience in the relevant phytosanitary controls and enforcement;
- is acceptable to organisations representing the private sector;
- is representative of the capsicum export sector, including both large- and small-scale operators who have a sound knowledge of production and export;
- contains representatives with strong scientific and technical expertise – this is essential to document the phytosanitary measures that will be included in a clear and precise manner.

These COLEACP guidelines can be used to provide a framework for the national action plan. The content of each section can be adapted and customised according to local circumstances.

Step 2: Validating the national action plan with stakeholders

Consultation with the key public and private stakeholders is essential to ensure that the action plan is fit for purpose, locally appropriate, and accepted by all the major stakeholders who will be involved in implementing it.

If resources are available, consultation is best achieved through the organisation of a national workshop where the action plan can be presented to a large group, and discussed. If this is not possible, the draft may be presented to smaller meetings/groups, or circulated via industry associations or other representative bodies.

This consultation process will give the wider industry a chance to obtain clarification and to recommend changes. The aim is to use feedback from the consultation to develop a final version of the action plan that is approved and recognised by all.
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