JANUARY 31, 2022

RFP No.: GA213/REG

FINAL REPORT:

CONSULTING SERVICES FOR: DEVELOPMENT OF GUIDELINES TO FACILITATE INTRA-REGIONAL TRADE IN SELECTED PLANT AND ANIMAL PRODUCTS

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ABBREVIATIONS AND ACRONYMS

BMC	Borrowing Member Country
CAHFSA	Caribbean Agricultural Health and Food Safety Agency
CARICOM	Caribbean Community and Common Market
CDB	Caribbean Development Bank
COVID-19	Coronavirus Disease 2019
CPHD	Caribbean Plant Health Directors
CVO	Chief Veterinary Officer
EDF	European Development Fund
FAO	Food and Agriculture Organisation of the United Nations
IPPC	International Plant Protection Convention
NPPO	National Plant Protection Organisation
OIE	The World Organisation for Animal Health
PRA	Pest Risk Analysis
SPS	Sanitary and Phytosanitary
STDF	Standards & Trade Development Facility
TAC	Technical Advisory Committee
USA	United States of America
WTO	World Trade Organisation

INTRODUCTION

PURPOSE OF CONSULTANCY

The consultancy is primarily focused on the development of guidelines for facilitation of intra-regional trade in select animal and plant products and/or commodities amongst BMCs.

SCOPE OF CONSULTANCY

The scope of work of this consultancy *(See Appendix I)* was the primary guide to consultants in the conduct of production of the required consultancy outputs.

Several priority commodities identified as 1) critical to attainment and maintenance of food and nutrition security *(based on the CARICOM Regional Food and Nutrition Security Policy and Action Plan)*, 2) products generally available for intra-regional trade and/or in surplus for a number of reasons exacerbated by the COVID-19 pandemic, and 3) having high market value and import substitution potential, are the focus of this consultancy. Commodities of focus comprise five (5) animal products (eggs, sheep and goat meat, dairy products, beef and honey) and 14 plant products (banana and plantain, onions and scallions, crucifers [broccoli, cauliflower, cabbage, pak choi] and lettuce, cucurbits [cucumber, melons, watermelon, pumpkin, squash, West Indian gherkin], legumes [peas and beans], spices [ginger and turmeric], solanaceous products [tomato, pepper, eggplant], taro [dasheen] and eddo, yam, cassava, white potatoes, sweet potatoes, pineapple, and corn. The guidelines developed focused primarily on parts of the commodities intended for consumption with considerations for possible non-intended uses of same.

In addition to development of (and post-BMC-comment review on) the 19 draft commodity guidelines following acquisition of the regulated pest lists and import/export requirements for the selected commodities of the BMCs *(see Appendices II to XI)*, the consultants were also asked to review the draft CAHFSA document on the procedures for preparation and adoption/adaptation of regional SPS standards and technical regulations *(see Appendix XII)*.

BACKGROUND AND CONTEXT

The background to the consultancy as well as the context of same can be found in the Progress Report of August 31, 2021.

REPORT

SUMMARY OF ACCOMPLISHMENTS & CHALLENGES

The scope of work (and activities) of the consultancy alongside the respective achievements/results are included in Appendix I of this report.

The 19 draft commodity guidelines – the ultimate output of this consultancy – were produced and were well received as part of a mutually beneficial initiative. One of the main challenges faced in ensuring that these documents were prepared in a manner that is easily implementable by all member states is the moderate levels of (complete) responses to the requests for information by a significant number of the countries, inclusive of some countries that are currently major exporters of fresh agricultural commodities. The process was therefore unable to benefit from access to such information for incorporation into the documents.

RECOMMENDATIONS

IMPROVEMENT OF CAHFSA PROCEDURE FOR PREPARATION OF REGIONAL STANDARDS, GUIDELINES, PROTOCOLS & TECHNICAL REGULATIONS

The following are comments/observations/recommendations on the document provided for review. The information is presented under the various document headings.

Title: Is the intention of the document to refer to the procedures for preparation of guidelines and protocols in addition to standards and technical regulations? If this is the intention, it is recommended that wherever standards and/or technical regulations are mentioned throughout the document that 'guidelines and protocols' be also added. If this is not the intention, then it is recommended that a similar procedural document be developed for guideline and protocol preparation.

Status Table: Does the date in column 3 refer to the date of adoption of the specific version of the document? This should be specifically stated as the column heading for clarity.

Introduction: If the document is to include guidelines and protocols, a paragraph for each should also be inserted here. It should also be borne in mind of the hierarchy of the various tyoes of documents and the information included in said order: technical regulation (legislation) > standard > guideline > protocol.

Standard: How does the definition of CAHFSA standards compare with that for standards developed by CROSQ? If the definitions differ, then this should be clearly stated here.

Technical Regulations: Due to the legal nature of these regulations, care must be taken at the national level to ensure that the Competent Authorities have the necessary resources, both

human and financial, to implement. Additionally, mitigative action must be taken to ensure that the interests of micro to medium sized companies are managed. Further, it is recommended that the sentence "This implementation obligation can certainly be a substantial threat…." be rephrased to read "This implementation obligation may pose a substantial threat….".

Guidelines: If guidelines are to be covered by this document, it should be noted that guidelines are principles put forward to set standards or determine a course of action and are recommendations of how something should be done. Guidelines are to streamline processes according to a set routine or sound practice and comprise statements by which to determine a course of action.

Protocols: If protocols are to be covered by this document, it should be noted that protocols are explicit and specific in their detail and specify who does 'what', 'when' and 'how'.

Scope: Insert "CAHFSA" before "Technical Advisory Committees" to be specific that the TACs mentioned are those within the CAHFSA regime.

Actions, Step 1: Proposal for work on a new standard or technical guideline

Consultations should be carried out with those countries, organizations, companies that may be affected by this new standard or technical guideline. Alerting affected parties early in a process usually results in greater compliance later as there is a greater understanding of the need for the introduction of the new standard or technical guideline; there is a feeling of being part of the development of this new initiative and this also gives time for preparation for this new initiative.

A recommended deadline for submission which increases the likelihood of readiness for the nearest COTED, given the timelines for all stages in the process, could be stated here.

Actions, Step 2: Development of Specification

A template should be provided for the specification for the draft standard, so that all requests are uniform.

Actions, Step 3: Preparation of the draft document

Clarity is needed as to who approves the draft document. Additionally, it is recommended to replace the word "project" with "specification" in this section.

Actions, Step 4: Member States Comments

From experience, it is usually very difficult to get comments from the various member states (MS) and providing 2 -3 months may not be achieve the necessary results. The COVID-19 pandemic has introduced various methods of working online as a group. The following method which uses

a virtual platform (e.g. ZOOM or TEAMS) may be employed so that everyone can communicate. Simultaneously, the document being worked on can be shared live in Google Docs, OneDrive Docs or similar application so that comments can be added by each MS as each area of the document is being reviewed. Each MS will have to commit to meeting for one hour per day for a few days (depending on the length of the document). During each meeting, each MS is both connected via a virtual platform but also can view the live change or additions of comments in the Google Docs or OneDrive Docs. This will allow for active participation for short periods of time (one hour) to review documents. It is important that the facilitator is able to manage the time well.

The second paragraph in this section could be rephrased to read as follows: *Comments from MS will be compiled by CAHFSA within a week and submitted to the relevant TAC for consideration and adoption as appropriate. That TAC shall consider all the comments received and recommend a final document to the CAHFSA Board of Directors.*

Should a contentious issue be raised in the comments received from the member states, there should be a provision inserted at this point in the process that permits another round of consultation on the amended draft before the final presentation is made to the Board of Directors for sdoption.

Actions, Step 5: Adoption

In this new era of virtual meetings, it may be wise for the CAHFSA to have intersessional meetings virtually every quarter so that the process of adoption can be speeded up.

IMPLEMENTATION OF DRAFT PLANT AND ANIMAL COMMODITY GUIDELINES

Of the 19 Member States of focus in this project, 74 percent of the countries are contracting Parties to the International Plant Protection Convention (IPPC) and Member Countries of the World Trade Organisation (and by extension, obligated under the WTO Agreement on the Application of Sanitary and Phytosanitary Measures) while the remaining 26 percent comprises overseas territories of the United Kingdom (Table 1). Forty-seven percent (47%) of the BMCs are members of the World Organisation for Animal Health (OIE), 25 percent are not members, and the remaining countries are UK overseas territories (Table 1).

At the national level, it is important to note that the entities (private and public) to be affected by these guidelines should be consulted to ensure that they can understand the importance of these guidelines in the process of facilitating trade in a manner that does not jeopardize trading partners through movement of pests along with the commodities being traded. Further, for better acceptance and application of the trade guidelines, consultation is necessary to ensure that all stakeholders feel that they are a part of a collaborative process, the result of which will be mutually beneficial to all parties.

Table 1. Membership Status of BMCs in the IPPC, WTO and OIE

COUNTRY	IPPC[1]	WTO/SPS[2]	OIE[2]
Anguilla	UKT	-	-
Antigua and Barbuda	CP	1 Jan 1995	-
Bahamas	CP	Observer	18 Aug 2010
Barbados	CP	1 Jan 1995	29 Nov 1999
Belize	CP	1 Jan 1995	12 Jan 2002
British Virgin Islands	UKT	-	-
Cayman Islands	UKT	-	-
Dominica	CP	1 Jan 1995	-
Grenada	CP	22 Feb 1996	-
Guyana	CP	1 Jan 1995	10 Dec 1996
Haiti	CP	30 Jan 1996	28 Jan 1988
Jamaica	CP	9 Mar 1995	15 Oct 1997
Montserrat	UKT	-	-
Saint Kitts and Nevis	CP	21 Feb 1996	-
Saint Lucia	CP	1 Jan 1995	2018
Saint Vincent and the Grenadines	CP	1 Jan 1995	-
Suriname	CP	1 Jan 1995	10 Jan 2002
Trinidad and Tobago	CP	1 Mar 1995	18 May 1998
Turks and Caicos Islands	UKT	-	-

GUIDANCE FOR IMPLEMENTATION OF THE PLANT COMMODITY GUIDELINES

In the implementation of the plant commodity guidelines, the process could be assisted by a number of recommended actions being taken.

Public education on 1) the benefits to be had from voluntary application of the guidelines and 2) the recognition of the national obligations by BMCs as parties to the IPPC and the WTO, are pivotal to uptake of the commodity guidelines to facilitate intra-regional trade.

Directed focus on, or assistance to, the major exporters of the 14 identified plant commodities is paramount as these countries would serve as the best examples of how the application of guidelines can improve intra-regional trade. If possible, a cost:benefit analysis for countries using the guidelines could be conducted and used for comparison with countries that have not. In

[1] UKT = Overseas Territory of the United Kingdom; CP = Contracting Party

[2] Member since dates indicated

other words, a number of countries willing to participate in a pilot project could be used to demonstrate the utility of guideline use to facilitate trade within the region.

The robustness of the guidelines developed under this consultancy could be augmented if a further effort was made to acquire pending commodity pest lists and import/export requirements. Best practices thus gleaned can then be added to the database of information already provided by this consultancy and made available for reference by BMCs as needed.

Finally, national champions of the guideline implementation effort should be identified to facilitate the process.

GUIDANCE FOR IMPLEMENTATION OF SPS GUIDELINES FOR EGGS, DAIRY, HONEY, BEEF, SHEEP AND GOAT MEAT

When implementing these guidelines, the first step has to be at the National level in preparing the farms / places of production/processing plants to meet international best practices (OIE and CODEX guideline) with respect to SPS standards so that the product (dairy, beef, eggs, sheep and goat meat, honey) can be exported at a low level of risk to the importing country. There should be a level of confidence in the quality of the products coming from the member states for the consumer/importing countries etc.

To attain that confidence in product quality and safety, there has to be a regime in place at the country level providing food safety audits / testing results etc easily accessible online to the public.

Countries should be encouraged to strive for best practices for animal production and meat/product processing in line with the OIE and CODEX guidelines at a minimum, if exportation is of priority.

ISSUES IDENTIFIED FOR IMPLEMENTATION OF THE HONEY GUIDELINE

In the case of the trade in honey, the literature review unearthed the guidelines of various countries. In a subset of cases, the practices employed in developing guidelines were in evidence. For instance, the State of Queensland published a risk assessment of the import of honey from New Zealand where an exotic pest had been notified. Trinidad and Tobago beekeepers commissioned a similar assessment on the disease risks associated with the import of honey from Grenada. Several conversations have been held with representatives of the Association of Caribbean Beekeeping Organisations. National associations have also been consulted, including the Barbados Apicultural Society, Antigua and Barbuda Beekeepers Cooperative, among others. Beekeepers in Jamaica were also consulted.

The Team found that the trade in honey is riddled with acrimonious disputes between a handful of BMCs. At the same time, most countries are unaware of the full range of pests and diseases that may be affecting the health of the bees and the quality of honey. This is because the region lacks diagnostic capacity in this field, especially as regards diseases mediated by viruses, fungi and bacteria. Insect pests, such as the vampire mite, *Varroa destructor*, are more readily identified. Countries are therefore prone to adopt the precautionary approach with respect to the import of raw honey.

APPENDICES

APPENDIX I. SCOPE OF WORK TO INCLUDE ACTIVITIES, ACHIEVEMENTS & RESULTS

The scope of work of this consultancy covered all activities necessary to accomplish the Expected Results stated. The main task/activities and the respective results achieved are as follows:

Phase	Activity	Result
I	Hold an initial briefing meeting (virtual) with the Technical Advisory Team and CAHFSA on the objective, activities, approach, expected outputs and any other issues related to the Consultancy's execution that require clarification.	✔ Completed
I	Within five days of the briefing meeting with the Technical Advisory Team and CAHFSA, prepare an Inception Report that outlines the methodology, activities, and schedule to complete the key activities.	✔ Completed ✔ Inception Report and revised version submitted on March 1 & 15, 2021, respectively
II	Collect baseline information required for the execution of the activity. This activity should include: a) Reviewing all relevant, available documentation of pests and disease associated with the specific commodities and the conditions for import and exporting the specified commodities. b) Consulting with all relevant technical experts at the national and regional level regarding pest and disease occurrence in the Members States. c) Consulting with all relevant technical experts at the national and regional	✔ Completed as far as possible. ✔ Information on plant products (CARICOM list of quarantine pests, national pest lists, lists of quarantine pests was received from CAHFSA. A list of NPPO contacts for the BMCs covered by this consultancy were received from the CPHD *(See Appendix II)*. The status of responses received from the NPPOs is appended to this report *(See Appendix IV)*. ✔ The CVO list of contact information – specifically emails and phone calls *(See Appendix III)* – was used to contact each CVO for all the countries in question. It must be noted that in some cases the CVOs have

Phase	Activity	Result
	level regarding conditions for trade in specified commodities.	retired or have moved on to other positions and in some cases the neither the email address nor the phone numbers work. The status of responses received from CVOs to date is provided *(See Appendix V)*.
II	Compilation of a list of pests and diseases associated with the specific commodities that are present in the region. Compilation of a list of pests and diseases associated with the specified commodities regulated by the Member States.	✚ The regional priority plant pest list was provided by CAHFSA *(See Appendix VI-a)*. Responses were received from various BMCs *(See Appendix VI-b and Appendix VI-c)* but lack of response from some major exporting BMCs may affect implementability of the guidelines; with feedback from all BMCs, the guidelines would undoubtedly have been more robust and streamlined. ✚ Several of the CVOs indicated that the OIE list of diseases is used. This response came from both countries which are members of OIE and those which are not. Therefore, the disease list provided *(See Appendix VII)* is extracted directly from the OIE Terrestrial Animal Health Code. The import/export requirements of BMCs that was previously submitted has been updated *(See Appendix IX)*. ✚ Import/export conditions for plant commodities were received from some of the BMCs *(See Appendix VIII)* and have been considered in the development of the draft plant product guidelines.
II	Review global best practices for the preparation of SPS guidelines and extrapolate for preparation of regional guidelines. Review CAHFSA's procedure for preparation of regional SPS standards,	✚ Completed *(See recommendations in the main body of the Final Report)*

Phase	Activity	Result
	guidelines, protocols and technical regulations.	
III	Prepare draft commodity-specific sanitary and phytosanitary guidelines for the 6 priorities commodities. Guidelines should recommend to the CARICOM Member States the SPS measures which they should use or require when moving the specified commodities in regional trade. Each guideline should include a list of pests and diseases recommended for regulation and the measures necessary to manage their risk.	✓ Completed ✓ The format for the draft guidelines for plant commodities was primarily influenced by guidance provided in the draft ISPM "Commodity-based standards for phytosanitary measures (2019-008)" and guided by other standard development guidance documents found in the process of review of global best practices for standard development. ✓ In the case of the guidelines for Eggs and Honey the data for this were taken mainly from the OIE Terrestrial Animal Health Code and the Code of Hygienic Practice.
III	Prepare and submit a Progress Report including: a) Update on the Assignment. b) Completed drafts of the six priorities Guidelines, c) Compiled list or pest and disease present in the region by commodity d) Compiled list of pests and diseases being regulated by the Member States by commodity e) List of current import and export conditions	✓ Completed ✓ Progress Report submitted on August 31, 2021
IV	Prepare draft commodity-specific sanitary and phytosanitary guidelines for the remaining 13 commodities	✓ Completed ✓ The content and focus of the draft guidelines for the plant products would have been based primarily on the pest lists and import/export requirements received from the responding BMCs.

Phase	Activity	Result
		✚ In the case of the guidelines for Eggs, Honey, Dairy Products, Beef, Goat and Sheep Meat the data for this were taken mainly from the OIE Terrestrial Animal Health Code and the Code of Hygienic Practice.
IV	Disseminate the draft Guidelines for review by regional and national stakeholders and based on feedback, revise where necessary. Interactions with stakeholders should be undertaken virtually. Facilitate a regional (virtual) workshop in collaboration with CAHFSA to validate the draft Guidelines. After the meeting, revise Guidelines.	✚ CAHFSA disseminated the draft guidelines. A validation workshop, however, was not held. This workshop would have been helpful to discuss any issues that BMCs may have had with the draft guidelines to render them more implementable.
IV	Produce revised Guidelines for approval by the relevant regional ministerial bodies.	✚ A few comments were received with respect to the draft plant and animal product guidelines and the comments were taken on board as far as possible and the Guidelines updated accordingly *(See Appendix X)*.
V	Prepare and submit a draft final report for comments by the Technical Advisory Committee and the CDB.	✚ This document is the Final Report.
V	Prepare and submit Final Report of the consultancy.	✚ This version of the Final Report will be updated, if necessary, after receipt of comments from the TAC; the revised Final Report will then be submitted.

Appendix II. List of NPPO Contacts (from CPHD Secretariat)

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APPENDIX III. LIST OF CVO CONTACTS (UPDATED)

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APPENDIX IV. STATUS OF RESPONSES RECEIVED FROM BMCS ON PLANT COMMODITY PEST LISTS & IMPORT/ EXPORT REQUIREMENTS

COUNTRY	COMMODITY PEST LIST	REGULATED PEST LIST	IMPORT/EXPORT REQUIREMENTS	COMMENTS
Anguilla	✓	✗	✓	Only common names were provided for pests in pest lists. No pests were reported for spices, white potato, taro and pineapple.
Antigua and Barbuda	✓	✓	✓	Regulated pest list was general and not commodity specific. No pests were reported for turmeric and white potato.
Bahamas	✓	✗	✓	The draft commodity pest list was generated by the NPPO using CABI's PRA tool and the Crop Protection Compendium. The commodity regulated pest lists is currently being collated and receipt remains pending. Import/export requirements acquired from CAHFSA database.
Barbados	✓	✓	✓	No commodity export requirements provided.
Belize	✗	✗	✗	No information received to date. A promise was made by Mr. Gutierrez but information remains pending.
British Virgin Islands	✗	✗	✗	Apart from the email request, telephone contact was made with Ms. Maduro but no information has since been received as was promised during the telephone communication.
Cayman Islands	✓	✗	✓	Commodity pest list provided is based only on pests that have been officially identified by an accredited lab. No export requirements were provided. Import requirements were given only for commodities being exported from Jamaica.
Commonwealth of Dominica	✓	✗	✗	Several attempts were made to request the information, which has been promised but not yet received. The commodity pest lists were extracted from a document in the CAHFSA database.

COUNTRY	COMMODITY PEST LIST	REGULATED PEST LIST	IMPORT/EXPORT REQUIREMENTS	COMMENTS
Grenada	✓	✓	✗	Regulated pest list provided was not commodity specific. No response received to reminder to provide import/export requirements.
Guyana	✓	✓	✓	Pest lists were unavailable for onions/scallions and white potato as these are grown only on a small scale in the country.
Haiti	✓	✓	✓	Information was received in French and translated for use via Google Translate.
Jamaica	✓	✓	✓	Import and export requirements provided were specific to commodity and country of import/export.
Montserrat	✓	✗	✓	Some pests included in the pest list provided were noted as suspected and not yet confirmed. The majority of such pests, however, were also listed as pests in the lists received from other BMCs. The Plant Protection Act (revised edition as at January 1, 2002) was also provided and some import requirements were extracted from the appended schedules.
St. Kitts and Nevis	✓	✓	✓	Nevis also provided information on import requirements specific to Nevis in addition to the country information received from Ms. Kelly in St. Kitts.
Saint Lucia	✓	✗	✓	No response to reminder for regulated pest list.
St. Vincent and the Grenadines	✓	✓	✓	The commodity pest list was extracted from a document provided of the results of a general survey conducted in 2010.
Suriname	✗	✗	✗	Several attempts were made to acquire the information via Ms. Jankie who is no longer with the NPPO. Alternative emails of the NPPO as well as the Ministry of Foreign Affairs were received from her and contacted on two occasions with no response.

COUNTRY	COMMODITY PEST LIST	REGULATED PEST LIST	IMPORT/EXPORT REQUIREMENTS	COMMENTS
Trinidad and Tobago	✓	✓	✓	Pest lists were available only for onion, sweet potato, watermelon, banana and plantain. The regulated pest list provided was noted as comprising only pests that are not present in the country. A general statement was made regarding the import/export requirements which are country and commodity specific; it was noted that the information was being extracted from the crop/country matrix and provided when completed.
Turks and Caicos Islands	✗	✓	✗	The regulated pest list provided was noted as not having been recently updated. Import conditions were reportedly being currently updated and hence not yet available. Nothing was reported on export conditions.

APPENDIX V. STATUS OF RESPONSES RECEIVED FROM BMCS ON ANIMAL COMMODITY DISEASE LISTS & IMPORT/ EXPORT REQUIREMENTS (UPDATED)

COUNTRY	RESPONSES RECEIVED[3]		COMMENTS
	NOTIFIABLE/ DISEASE LIST	IMPORT AND EXPORT CONDITIONS	
Anguilla	-	-	No contact information provided. However, contact information for the CVO was acquired. Email were sent and calls were made but no response to date.
Antigua and Barbuda	OIE (verbally Confirmed)	Animal (International Movement and Disease) Regulations 1993 was provided	
Bahamas	OIE (verbally confirmed)	-	The contact information provided was for the retired CVO. However, I acquired the contact information for the new CVO and have since updated the CVO table. No further response received to date.
Barbados	OIE (confirmed by email)	-	Emails sent, no further response to date
Belize	-	-	Phone busy – tried several times at varying times. No response to date via email.
Bermuda	OIE but needs to confirm the actual diseases	-	Spoke to the CVO and they were to send import and export conditions. Nothing further received to date
British Virgin Islands	-	-	Emailed and tried all numbers no response. Nothing received to date
Cayman	OIE (confirmed via email)	Conditions Governing the Importation of Meat and Meat Products	

[3] Pending receipt of lists of diseases present in BMCs

COUNTRY	RESPONSES RECEIVED[3]		COMMENTS
	NOTIFIABLE/ DISEASE LIST	IMPORT AND EXPORT CONDITIONS	
		(Excluding Game Meat) into the Cayman Islands *Animals Law (2015 Revision) Part II-9 (1) & (2)*	
Dominica	-	-	Emailed without response. Phone numbers are not in service
Grenada	No indication	Importation and Exportation requirements for Meat and Meat products, Live Sheep and Goats, Hatching Eggs and Chicks, Exportation of Honey; Permits to import Meat and Meat Products, Sheep and Goats, Hatching eggs; Permit to export Honey (Animals (Diseases and importation) Ordinance Cap. 15 Revised Laws)	-
Guyana	OIE (confirmed via email)	-	Information promised but not received to date.
Haiti	-	-	Emailed and called but without response.
Jamaica	OIE (confirmed by email)	-	Sent several emails regarding import/export requirements; called and left a message. No further response to date
Montserrat	OIE (verbally confirmed)	-	Called and sent reminder emails. Promised information but no response to date.
St. Kitts and Nevis	SKN does not agree with the OIE list	-	Emailed but without response, called but promised information not received to date.
Saint Lucia	-	-	Called: The previous CVO that I sent emails to is now the Director. An email was sent to the present CVO. No response to date.

COUNTRY	RESPONSES RECEIVED[3]		COMMENTS
	NOTIFIABLE/ DISEASE LIST	IMPORT AND EXPORT CONDITIONS	
St. Vincent and the Grenadines	OIE (verbally confirmed and via email)	Conditions for the Importation of Eggs, Sheep and Goat meat, Beef, Pork, Poultry Meat (Animals (National and International Movement and Disease Prevention) Regulations 1994.)	-
Suriname	-	-	Re-sent email. No response to date
Trinidad and Tobago	OIE (verbally confirmed)	Confirmed via email that OIE related import and export conditions are used.	
Turks and Caicos Islands	OIE (verbally confirmed)	Import Conditions for Dairy Products, Cheese and Butter, Meat and Meat Products, Poultry and Poultry Products (Animal Health Ordinance and Regulations 2012)	

APPENDIX VI-A. REGIONAL PRIORITY PLANT PEST LIST

SOURCE: CAHFSA Annual Report 2018

List of Regional Priority Plant Pests for the Caribbean *(in descending order of priority)*

1. *Ceratitis capitata* (Mediterranean fruit fly)
2. *Fusarium oxysporum* f. *cubense* Race 4 (Banana Wilt)
3. *Tuta absoluta* (Tomato Leaf Miner)
4. *Ralstonia solaranaecearum* (Races 2 [Moko Disease] & 3)
5. *Monilliophthora roreri* (Frosty Pod Rot)
6. Lethal yellowing of Palms
7. *Xanthomonas axonopodis* (Citrus canker)
8. Citrus leprosis virus
9. Fiji Disease (Sugarcane)
10. Bacterial Panicle Blight (Rice)

APPENDIX VI-B. LIST OF PESTS PRESENT IN THE REGION BY COMMODITY: PLANT PRODUCTS

BANANA/PLANTAIN (*Musa* spp.)

Pest Type	Scientific name	Common name(s)	Host[4]
Bacterium	*Erwinia musae* (?)	Pseudostem heart rot	Banana
Bacterium	*Fusarium moniliforme* Sheldon	Bacterial head rot	Banana
Bacterium	*Pseudomonas solanacearum* race 2	Moko disease	Banana
Bacterium	*Ralstonia solanacearum race 2*	Moko Disease	Banana, plantain
Bacterium	*Ralstonia solanacearum race 2 (biovar 1)*	Bacterial wilt, Moko disease	Banana, Plantain
Fungus	*Athelia rolfsii*	sclerotium rot	Banana
Fungus	*Botryodiplodia theobromae* (Pat.)	Fruit rot	Banana, Plantain
Fungus	*Colletotrichum musae*	Anthracnose, tip rot of banana	Banana, Plantain
Fungus	*Cordana musae*	Cordana leafspot	Banana, Plantain
Fungus	*Corynespora torulosa* (*Deightoniella torulosa*)	leaf speck	Banana
Fungus	*Fusarium oxysporum*	basal rot	Banana, plantain
Fungus	*Fusarium oxysporum f. sp. cubense* (E.F. Smith) Snyder and Hansen	Panama Disease or Fusarium Wilt	Banana, plantain
Fungus	*Fusarium* spp.	Crown rot	Banana, Plantain

[4] As declared by BMCs

Pest Type	Scientific name	Common name(s)	Host[4]
Fungus	*Gleosporium musarum* (Cke & Masse.)	Anthracnose	Banana, Plantain
Fungus	*Glomerella cingulata*	anthracnose	Banana
Fungus	*Lasiodiplodia theobromae*	diplodia pod rot of cocoa	Banana, plantain
Fungus	*Mycosphaerella fijiensis* Morelet	Black Sigatoka or Black Leaf Streak	Banana, plantain
Fungus	*Mycosphaerella musicola* Leach	Yellow Sigatoka	Banana, Plantain
Fungus	*Phoma musicola*	leaf spot	Banana
Fungus	*Pseudocercospora musaea (*syn. *Mycosphaerella musicola)*	Yellow sigatoka	Banana, Plantain
Fungus	*Rosellinia bunodes*	black root rot	Banana, plantain
Fungus	*Sclerotium rolfsii*	Pseudo-trunk breakage	Banana, plantain
Fungus	*Thanatephorus cucumeris*	many names, depending on host	Banana
Fungus	*Verticillium theobromae*	Cigar tip	Banana, plantain
Fungus	*Zasmidium musae* (syn. *Stenella musae*)	leaf speck	Banana
Insect	*Alegoria dilatata* Cast.	beetle	Banana, plantain
Insect	*Aleurocanthus woglumi*	citrus blackfly	Banana, plantain
Insect	*Aleurodicus cocois*	coconut whitefly	Banana
Insect	*Aleurodicus dispersus*	Spiraling whitefly	Banana, Plantain
Insect	*Aonidiella aurantii*	red scale	Banana, plantain
Insect	*Aonidiella orientalis*	oriental yellow scale	Banana, plantain
Insect	*Aonidomytilus (Lepidosaphes) albus*	Cassava stem mussel scale	
Insect	*Aphis gossypii*	Cotton aphid	Banana, Plantain
Insect	*Aspidiotus destructor* (Sign.)	coconut scale	Banana, plantain
Insect	*Bactrocera dorsalis*	Oriental fruit fly	Banana, Plantain
Insect	*Ceroplastes cirripediformis*	Barnacle scale	
Insect	*Ceroplastes floridensis*	soft scale	Banana, plantain
Insect	*Chaetanaphothrips clarus (Moulton)*	Banana thrips, rust thrip	Banana, plantain
Insect	*Chaetanaphothrips leeuweni*	Rust thrips of banana	banana
Insect	*Chaetanaphothrips orchidii*	Anthurium thrips	banana
Insect	*Chaetanaphothris signipennis*	Banana Rust Thrips	banana
Insect	*Chrysomphalus aonidum* (L.)	Black scale	banana
Insect	*Chrysomphalus dictyospermi*	dictyospermum scale	Banana, plantain
Insect	*Coccus hesperidum*	brown soft scale	Banana, plantain
Insect	*Colaspis hypochlora*	Banana Fruit Scarring Beetle	banana
Insect	*Corynethrips stenopterus*	Thrips	
Insect	*Cosmopolites sordidus* (Germ.)	Banana root borer/weevil	Banana, plantain
Insect	*Danothrips trifasciatus* Sakimura	Rust thrip	Banana
Insect	*Diaprepes abbreviatus*	citrus weevil	Banana
Insect	*Diaspis boisduvalii*	Boisduval scale	banana
Insect	*Dysmicoccus brevipes*	pineapple mealybug	Banana, plantain
Insect	*Dysmicoccus neobrevipes*	grey pineapple mealybug	Banana, plantain
Insect	*Erinnyis ello*	Cassava hornworm	
Insect	*Ferrisia virgata*	striped mealybug	Banana, plantain
Insect	*Frankliniella insularis* Franklin	Flower thrip	Banana
Insect	*Frankliniella melanommata*	Thrips	
Insect	*Frankliniella parvula (Hood)*	Banana flower thrips	Banana, plantain
Insect	*Hemiberlesia lataniae*	latania scale	Banana, plantain
Insect	*Lachnosterna (Phyllophaga) sp.*	White grub	Banana, plantain

Pest Type	Scientific name	Common name(s)	Host[4]
Insect	*Lagochirus araneiformis*	Beetle borer	
Insect	*Lepidosaphes beckii*	purple scale	Banana, plantain
Insect	*Leptopharsa illudens*	Cassava lacewing bug	
Insect	*Ligyrus ebenus (Degeer)*	Black sugarcane chafer	Banana, plantain
Insect	*Longchaea chalybea*	Cassava shoot fly	
Insect	*Maconellicoccus hirsutus*	pink hibiscus mealybug	Banana, plantain
Insect	*Metamasius hemipterus (L)*	Silky cane weevil	Banana, plantain
Insect	*Metamasius maurus*	Bromeliad weevil	Banana, plantain
Insect	*Nezara viridula*	Green stink bug	
Insect	*Nipaecoccus nipae* (Mask.)	spiked mealybug	Banana, plantain
Insect	*Opatrinus gemellatus*	Darkling beetle	Banana, plantain
Insect	*Paracoccus marginatus*	papaya mealybug	Banana, plantain
Insect	*Parlagena benetti*	White mealybug	Banana
Insect	*Pentalonia nigronervosa Coq.*	Banana aphid	Banana, plantain
Insect	*Phyllophaga smithi*	white grub	Banana
Insect	*Pinnaspis strachani*	lesser snow scale	Banana
Insect	*Planococcus citri*	citrus mealybug	Banana, plantain
Insect	*Polytus mellerborgii (Bol.)*	Small banana weevil	Banana, plantain
Insect	*Pseudaulacaspis pentagona*	Scale	
Insect	*Pseudaulacaspis tubereularis*	Scale	
Insect	*Pseudococcus aonidium (L.)*	mealybug	Banana, plantain
Insect	*Pseudococcus elisae*	banana mealybug	Banana, plantain
Insect	*Pseudococcus jackbeardsleyi*	Jack Beardsley mealybug	Banana, plantain
Insect	*Saissetia coffeae (hemisphaerica)*	Scale	
Insect	*Selenaspidus albus* McKenzie	White euphorbia scale	Banana, plantain
Insect	*Selenaspidus articulatus* Morgan	West Indian red scale	Banana, plantain
Insect	*Spodoptera eridania*	southern armyworm	Banana, plantain
Insect	*Spodoptera frugiperda*	fall armyworm	Banana, plantain
Insect	*Tapinoma melanocephalum*	ghost ant	Banana, plantain
Insect	*Thrips florum*	Banana Flower Thrips	banana
Insect	*Trialeurodes vaporariorum* (Westwood)	Greenhouse whitefly	Plantain
Insect	*Unaspis citri*	Citrus snow scale	banana
Mite	*Roiella indica* Hirst	Red Palm Mite	Banana, plantain
Mite	*Tetranychus abacae*	Spider mite	Banana, plantain
Mite	*Tetranychus lambi*	Red Spider Mite	banana
Mite	*Tetranychus urticae* Koch	Spider mite	banana
Mollusc	*Lissachatina fulica*	Giant African land snail	Banana
Nematode	*Bitylenchus iphilus*	Stunt nematode	Banana
Nematode	*Bitylenchus maximus*	Stunt nematode	Banana
Nematode	*Helicotylenchus dihystera*	Common spiral nematode	Banana, plantain
Nematode	*Helicotylenchus erythrinae*	Spiral nematode	banana
Nematode	*Helicotylenchus multicinctus*	Banana spiral nematode	Banana, plantain
Nematode	*Helicotylenchus pseudorobustus*	Spiral nematode	banana
Nematode	*Helicotylenchus spp.*	Spiral nematodes	banana
Nematode	*Hemicriconemoides mangifera*	Ring nematode	Banana, plantain
Nematode	*Hoplolaimus para robustus* (Stekhoven & Teunissen) Sher.	Lance nematode	Banana, plantain

Pest Type	Scientific name	Common name(s)	Host[4]
Nematode	*Longidorus laevicapitatus*	Needle nematode	Banana, plantain
Nematode	*Macroposthonia peruensis*	Ring nematode	Banana, plantain
Nematode	*Meloidogyne incognita* (Kofoid & White) Chitwood	Root knot nematode	Banana, plantain
Nematode	*Meloidogyne javanica*	Sugarcane eelworm	banana
Nematode	*Peltamigratus luci*	-	Banana, plantain
Nematode	*Pratylenchus coffeae*	Banana root nematode	Banana, plantain
Nematode	*Pratylenchus goodeyi*	Root lesion nematode	banana
Nematode	*Radopholus similis*	Burrowing nematode	Banana, plantain
Nematode	*Rotylenchulus reniformis*	Reniform nematode	banana
Nematode	*Xiphinema americanum*	Dagger nematode	Banana, plantain
Nematode	*Xiphinema macrostyln.*	Dagger nematode	Banana, plantain
Nematode	*Xiphinema vulgare*	Dagger nematode	Banana, plantain
Virus	Banana Streak Virus	Banana stripe virus	Banana, plantain
Virus	Cucumber mosaic virus	cucumber mosaic	Banana

CASSAVA (*Manihot esculentum*)

Pest Type	Scientific name	Common name(s)
Bacterium	*Erwinia carotovora subsp. carotovora* (Jones)	Bacterial root rot of sweet potato
Bacterium	*Erwinia chrysanthemi*	Bacterial soft rot
Bacterium	*Ralstonia solanacearum*	Bacterial wilt
Bacterium	*Thanatephorus cucumeris(*Frank*)*	Leaf spot, sharp eyespot etc.
Bacterium	*Xanthomonas axonopodis (campestris)* pv. *manihotis*	Cassava bacterial blight
Bacterium	*Xanthomonas campestris pv. citri*	Leaf scorch
Fungus	*Alternaria* spp.	Alternaria leaf spot, Leaf & stem blight
Fungus	*Asterina manihotis*	leaf mold
Fungus	*Athelia rolfsii*	sclerotium rot
Fungus	*Ceratocystis fimbriata*	Black rot
Fungus	*Cercospora caribaea*	White leaf spot of cassava
Fungus	*Cercospora henningsii* Allesch	Brown Leaf spot
Fungus	*Corticium rolfsii (*Sacc.)	Sclerotium rot
Fungus	*Diaporthe manihotis*	Cassava leaf spot
Fungus	*Elsinoë brasiliensis*	superelongation disease of cassava
Fungus	*Fusarium oxysporum*	basal rot
Fungus	*Fusarium solani*	Fusarium root and stem rot
Fungus	*Glomerella cingulata* (Stonem.) Spauld & Schrenk	Anthracnose
Fungus	*Lasiodiplodia theobromae*	diplodia pod rot of cocoa
Fungus	*Leptospharea illudens* Drake	Leptospharea leaf spot
Fungus	*Macrophomina phaseolina*	charcoal rot of bean/tobacco
Fungus	*Mycosphaerella henningsii*	Brown leaf spot of cassava
Fungus	*Passalora manihotis* (*Cercospora caribaea*)	white leaf spot of cassava
Fungus	*Rhizoctonia solani* (*Thanatephorus cucumeris*)	Collar rot of bean
Fungus	*Rosellinia bunodes* (Berk)	Black root rot
Insect	*Aleurodicus dispersus*	Spiralling whitefly
Insect	*Aonidomytilus (Lepidosaphes) albus* Cockerell	Tapioca (cassava) scale
Insect	*Atherigona orientalis* (Schiner)	Pepper fruit fly

Pest Type	Scientific name	Common name(s)
Insect	*Bemisia tabaci* (B biotype)	Silverleaf whitefly
Insect	*Bemisia tabaci* (Gennadius)	Tobacco whitefly
Insect	*Ceroplastes cirripediformis* (Comstock)	Barnacle scale
Insect	*Clavaspis herculeana* (Cockerell & Hadden)	Herculeana scale
Insect	*Coccus viridis* (Green)	Soft green scale
Insect	*Coelosternus* sp.	Cassava stem weevils
Insect	*Corcyra cephalonica*	rice meal moth
Insect	*Corynethrips stenopterus* Williams	Cassava thrips
Insect	Cory*thuca gossypi*i (Fabricius)	Cotton lacebug, bean lacebug
Insect	*Crypticerya genistae*	White scale
Insect	*Diaprepes abbreviatus* (L.)	Citrus root weevil
Insect	*Dysmicoccus brevipes* (Cockerell)	Pineapple mealybug
Insect	*Ecyrus hirtipes* Gahan	Longhorn borer beetle
Insect	*Edessa meditabunda* (Fabricius)	Green and brown stink bug
Insect	*Erinnyis alope*	papaya hornworm
Insect	*Erinnyis ello* (L)	Cassava hornworm
Insect	*Feltia subterranea* (Fabricius)	Granulate cutworm
Insect	*Ferrisia virgata* (White)	Striped mealybug
Insect	*Frankliniella melanommata* Williams	Common thrip
Insect	*Heliothrips haemorrhoidalis*	black tea thrips
Insect	*Lagocheirus araneiformis* (Linnaeus)	Long horn beetle
Insect	*Latrophobia braziliensis* (Rubs)	Cassava leaf-gall midge
Insect	*Leptopharsa illudens* Drake	Cassava lacewing bug
Insect	*Lonchaea chalybea* Wied	Lonchaeid fly
Insect	*Maconellicoccus hirsutus* (Green)	Pink hibiscus mealybug
Insect	*Metamasius hemipterus* (L.)	West Indian cane weevil
Insect	*Neosilba pendula (Silba chalybea)*	*Cassava shoot fly*
Insect	*Neosilba perezi*	Cassava shoot fly
Insect	*Nezara viridula* (L.)	Green stink bug
Insect	*Nipaecoccus nipae* (Maskell)	Spiked mealybug
Insect	*Omphisa anastomosalis*	Sweet Potato stem borer
Insect	*Paracoccus marginatus* (Williams and Granara de Willink)	Papaya mealybug
Insect	*Phenacoccus gossypii*	mexican mealybug
Insect	*Phenacoccus madeirensis* (Green)	Cassava mealybug, Madeira mealybug
Insect	*Phenacoccus manihoti* Matile-Ferrero	Cassava mealybug
Insect	*Pinnaspis strachani* (Cockerell)	Lesser snow scale
Insect	*Planococcus citri* (Risso)	Citrus mealybug
Insect	*Pseudaulacaspis pentagona* (Targ.) *albus* Ckll.	Mulberry scale
Insect	*Pseudococcus elisae*	banana mealybug
Insect	*Pseudococcus jackbeardsleyi*	Jack Beardsley mealybug
Insect	*Pseudococcus longispinus* (Targioni Tozzetti)	Long-tailed mealybug
Insect	*Saissetia coffeae (hemisphaerica)* (Targ)	Hemispherical scale
Insect	*Saissetia coffeae* (Olivier)	Hemispherical scale
Insect	*Saissetia miranda (Cockerell)*	Mexican black scale
Insect	*Scirtothrips dorsalis*	chilli thrips
Insect	*Silba chalybea*	Cassava shoot fly
Insect	*Spodoptera eridania*	southern armyworm

Pest Type	Scientific name	Common name(s)
Insect	*Stegobium paniceum*	drugstore beetle
Insect	*Systena s-littera*	Potato beetle
Insect	*Thrips tabaci* (Gennadius)	Potato thrips, onion thrips
Insect	*Tribolium castaneum*	red flour beetle
Insect	*Vatiga illudens* (Drake)	Cassava lace-wing bug
Mite	-	*Cassava Mites (?)*
Mite	*Mononychellus caribbeanae*	Cassava green mite
Mite	*Mononychellus tanajoa* (Bonda)	Cassava green mite
Mite	*Tetranychus marianae*	Tropical red spider mite
Mite	*Tetranychus sp.*	Spider Mites
Mite	*Tetranychus urticae (telerius)* (Koch)	Red spider mite
Nematode	*Helicotylenchus dihystera*	Common spiral nematode
Nematode	*Helicotylenchus multicinctus*	Banana spiral nematode
Nematode	*Hemicriconemoides mangiferae* (Siddiqi)	Sheathoid nematode
Nematode	*Meloidogyne incognita*	Root knot nematode
Nematode	*Rotylenchulus reniformis* (Linford & Oliviera)	Reniform nematode
Oomycete	*Phytophthora palmivora* (Buttler)	Coconut budrot
Oomycete	*Phytophthora* sp.	Root rot
Weed	*Acanthospermum hispidum* (Candolle)	Bristly starbur
Weed	*Ageratum conyzoides* (L.)	Billy goat weed
Weed	*Commelina benghalensis* (L.)	Wandering jew
Weed	*Datura stramonium* (L.)	Jimsonweed
Weed	*Emilia sonchifolia* (L.)	Red tasselflower
Weed	*Momordica charantia* (L.)	Bitter gourd
Weed	*Senna obtusifolia* (L)	Sicklepod
Weed	*Solanum torvum* (Schwartz))	Turkey berry
Weed	*Stachytarpheta jamaicensis* (L)	Jamaica vervain
Weed	*Synedrella nodiflora* (synedrella)	Nodeweed, Cinderella weed

CORN (*Zea mays*)

Pest Type	Scientific name	Common name(s)
Bacterium	*Xanthomonas albilineans* (Ashby)	Leaf scald of sugarcane
Bacterium	*Xanthomonas axonopodis pv. vasculorum* (Cobb)	Sugarcane gumming disease
Bird	-	Birds
Fungus	*Athelia rolfsii*	sclerotium rot
Fungus	*Bipolaris sacchari*	eye spot
Fungus	*Cercospora zeae maydis*	sigatoka
Fungus	*Cochliobolus heterostrophus*	southern leaf spot
Fungus	*Cochliobolus lunatus*	head mould of grasses, rice and sorghum
Fungus	*Colletotrichum graminicola*	Anthracnose
Fungus	*Corticium rolfsii*	Collar rot
Fungus	*Fusarium oxysporum*	basal rot
Fungus	*Gibberella fujikuroi* (Sawada)	Fig endosepsis
Fungus	*Gibberella zeae*	Cobweb disease
Fungus	*Glomerella cingulata*	anthracnose
Fungus	*Helminthosporium turcicum*	Northern corn leaf blight

Pest Type	Scientific name	Common name(s)
Fungus	*Lasiodiplodia theobromae*	diplodia pod rot of cocoa
Fungus	*Macrophomina phaseolina*	charcoal rot of bean/tobacco
Fungus	*Mycosphaerella cruenta*	leaf spot of cowpea
Fungus	*Phomopsis vexans*	Phomopsis blight
Fungus	*Puccinia polysora* Underw.	Rust
Fungus	*Puccinia purpurea* (Cooke)	Rust of grasses, sorghum
Fungus	*Puccinia sorghi*	Common rust
Fungus	*Sphacelotheca reiliana*	head smut of maize
Fungus	*Thanatephorus cucumeris* (Frank)	Damping off, root rot, sheath blight
Fungus	*Trichometasphaeria turcica* Lutrell	Leaf spot
Fungus	*Ustilago maydis* (P.C.) Corda	Corn smut
Insect	-	Aphids
Insect	-	Corn earworm
Insect	-	Cutworms
Insect	-	Flea beetles
Insect	-	Lacebug
Insect	-	Stalk borer
Insect	-	Wireworms
Insect	*Agromyza parviconis* Loew	Corn blotch leafminer
Insect	*Agrotis* spp.	Cutworms
Insect	*Alphitobius diaperinus* (Panzer)	Litter beetle
Insect	*Alphitobius laevigatus* (Fabricius)	Black fungus beetle
Insect	*Amphicerus cornutus* (Pallas)	Powder post bostrichid
Insect	*Aphis gossypii*	cotton aphid
Insect	*Aphis spiraecola*	Spirea aphid, green citrus aphid
Insect	*Bemisia tabaci*	tobacco whitefly
Insect	*Blissus leucopterus*	chinch bug
Insect	*Ceroplastes floridensis*	soft scale
Insect	*Coccus hesperidum*	brown soft scale
Insect	*Corcyra cephalonica*	rice meal moth
Insect	*Diaprepes abbreviatus*	citrus weevil
Insect	*Diatraea lineolata*	neotropical corn stalk borer
Insect	*Diatraea saccharalis*	Sugarcane stem & cob borer, sugarcane stalk borer
Insect	*Dysmicoccus brevipes*	pineapple mealybug
Insect	*Edessa meditabunda*	green and brown stink bug
Insect	*Elasmopalpus lignosellus*	lesser corn stalk borer
Insect	*Erinnyis ello*	cassava hornworm (USA)
Insect	*Euphoria sepulcralis* (F)	Flower beetle
Insect	*Euschistus crenator*	Brown Stink bug
Insect	*Euxesta* sp.	Ortalid fly
Insect	*Euxesta stigmatias*	Cornsilk Fly
Insect	*Ferrisia virgata* (Cockerell)	Striped mealybug
Insect	*Helicoverpa zea* (Boddie)	Corn earworm, American cotton bollworm
Insect	*Heliothis virescens* (Fabricius)	Tobacco budworm
Insect	*Heliothrips haemorrhoidalis*	black tea thrips
Insect	*Insignorthezia insignis*	greenhouse orthezia
Insect	*Lerema accius* (J.E. Smith)	Clouded skipper/corn leaf-tier

Pest Type	Scientific name	Common name(s)
Insect	*Liorhyssus hyalinus* (Fabricius)	Hyaline grass bug
Insect	*Liriomyza sativae*	Vegetable leaf miner
Insect	*Liriomyza trifolii*	American serpentine leafminer
Insect	*Maconellicoccus hirsutus* (Green)	Pink hibiscus mealybug
Insect	*Manduca sexta*	tobacco hornworm (USA)
Insect	*Metamasius hemipterus* (Linneaus)	West Indian cane weevil
Insect	*Mocis latipes*	Grass looper
Insect	*Mythimna unipuncta*	rice armyworm
Insect	*Myzus persicae*	green peach aphid
Insect	*Nezara viridula* (Linneaus)	Green stink bug, green stink bug
Insect	*Opogona sacchari*	banana moth
Insect	*Oxycarenus hyalinipennis*	cotton, seed bug
Insect	*Peregrinus maidis* (Ashmead)	Corn delphacid (planthopper)
Insect	*Phenacoccus madeirensis*	Madeira mealybug
Insect	*Phyllophaga smithi*	white grub
Insect	*Planococcus citri*	citrus mealybug
Insect	*Protaetia fusca*	mango flower beetle
Insect	*Protoparce sextus jamaicensis*	Tobacco hornworm (pest?)
Insect	*Pseudaulacaspis pentagona*	mulberry scale
Insect	*Pseudococcus jackbeardsleyi*	Jack Beardsley mealybug
Insect	*Pseudococcus longispinus*	long-tailed mealybug
Insect	*Pulvinaria psidii*	green shield scale
Insect	*Rhopalosiphum maidis* (Fitch)	Green corn aphid, corn leaf aphid
Insect	*Scapteriscus vicinus* (Scudder)	West Indian mole cricket
Insect	*Schistocerca americana*	South American locust
Insect	*Scirtothrips dorsalis*	chilli thrips
Insect	*Sipha flava*	yellow sugarcane aphid
Insect	*Sitophilus zeamais*	Greater rice weevil
Insect	*Spodoptera eridania*	Southern armyworm
Insect	*Spodoptera frugiperda* (Smith)	Fall armyworm
Insect	*Spodoptera latifascia*	Lateral lined armyworm
Insect	*Spodoptera ornithogalli*	Leafworm
Insect	*Spoladea recurvalis* (Fabricius)	Hawaiian beet webworm
Insect	*Stegobium paniceum*	drugstore beetle
Insect	*Thrips tabaci*	onion thrips
Insect	*Trialeurodes vaporariorum*	whitefly, greenhouse
Insect	*Tribolium castaneum*	red flour beetle
Insect	*Trichoplusia ni*	cabbage looper
Insect	*Xyleborus ferrugineus*	black twig borer
Mammal	-	Rodents
Mammal	*Mus musculus*	House Mouse
Mammal	*Rattus rattus*	Black Rat
Mite	*Tetranychidae*	Mites
Nematode	*Helicotylenchus dihystera*	Common spiral nematode
Nematode	*Helicotylenchus multicinctus*	Banana spiral nematode
Nematode	*Helicotylenchus pseudorobustus*	Spiral nematode
Nematode	*Hemicriconemoides mangiferae* (Siddiqi)	Sheathoid nematode

Pest Type	Scientific name	Common name(s)
Nematode	*Meloidogyne incognita* (Kofoid & White) Chitwood	root-knot nematode
Nematode	*Radopholus similis*	Burrowing nematode
Nematode	*Rotylenchulus reniformis* (Linford & Oliviera)	Reniform nematode
Nematode	*Xiphinema vulgare* (Tarjan)	Dagger nematode
Oomycete	*Peronosclerospora sorghii*	Mildew
Oomycete	*Phytophthora cinnamomi*	Phytophthora dieback
Oomycete	*Phytophthora infestans*	Phytophthora blight
Oomycete	*Pythium debaryanum*	damping-off
Oomycete	*Scleropthora macrospora*	Downy mildew
Virus	-	Stripe disease
Virus	Sugarcane mosaic virus	Mosaic of abaca
Weed	*Cleome rutidosperma*	Consumption weed
Weed	*Datura stramonium*	Jimsonweed
Weed	*Emilia sonchifolia*	Consumption weed
Weed	*Mimosa pudica* (L)	Sensitive plant
Weed	*Momordica charantia* (L)	Bitter gourd
Weed	*Panicum maximum* (Jacq.)	Guinea grass
Weed	*Parthenium hysterophorus*	Parthenium weed
Weed	*Passiflora foetida* (L)	Red fruit passionflower
Weed	*Senna obtusifolia* (L)	Sicklepod
Weed	*Stachytarpheta jamaicensis* (L)	Jamaica vervain
Weed	*Synedrella nodiflora*	Cinderella weed

CRUCIFERS (*Brassica* spp. – Broccoli, Cauliflower, Cabbage, Pak Choi) & LETTUCE (*Lactuca sativa*)

Pest Type	Scientific name	Common name(s)	Host[5]
Bacterium	*Erwinia carotovora*	Bacterial soft rot	All
Bacterium	*Erwinia carotovora subsp. carotovora*	Bacterial root rot of sweet potato	*Brassica* spp.
Bacterium	*Pectobacterium caratovorum*	bacterial soft rot	*Brassica* spp.
Bacterium	*Pseudomonas marginalis* pv. *marginalis*	lettuce marginal leaf blight	*Brassica* spp.
Bacterium	*Pseudomonas syringae* pv. *syringae*	bacterial canker	*Brassica* spp.
Bacterium	*Xanthomonas campestris* (Pammel) Dowson	Black rot	All
Bacterium	*Xanthomonas campestris pv. campestris*	Black rot	All
Fungus	*Alternaria brassicae* (Schw.) Wiltshire	Grey leaf spot, dark leaf spot of cabbage	All
Fungus	*Alternaria brassicicola*	dark leaf spot of cabbage	*Brassica* spp.
Fungus	*Alternaria dauci*	leaf blight of carrot	All
Fungus	*Athelia rolfsii*	sclerotium rot	*Brassica* spp.
Fungus	*Cercospora beticola*	Cercospora leaf spot	Lettuce
Fungus	*Cercospora brassicae* (Fautr. & Rous) Hohnel	Leaf spot	All
Fungus	*Cercospora* sp.	*Cercospora* leaf spot	Lettuce
Fungus	*Colletotrichum dematium*	leaf spot	*Brassica* spp.

[5] As declared by BMCs

Pest Type	Scientific name	Common name(s)	Host[5]
Fungus	*Corticium rolfsii (*Sacc.)	Sclerotium rot, collar rot	*Brassica* spp.
Fungus	*Corticium salmonicolor*	Damping off	*Brassica* spp.
Fungus	*Erysiphe cruciferarum*	powdery mildew of crucifers	*Brassica* spp.
Fungus	*Fusarium oxysporum*	basal rot	*Brassica* spp.
Fungus	*Fusarium oxysporum* f.sp. *conglutinans*	Fusarium wilt	Cabbage
Fungus	*Macrophomina phaseolina*	charcoal rot of bean/tobacco	*Brassica* spp.
Fungus	*Rhizoctonia solani* (*Thanatephorus cucumeris*)	root rot, damping off	*Brassica* spp.
Fungus	*Rhizoctonia* spp.	Damping off	Lettuce, cabbage
Fungus	*Sclerotinia sclerotiarum*	White mold	Cabbage
Fungus	*Septoria* sp.	*Septoria* leaf spot (?)	Lettuce
Fungus	*Thanatephorus cucumeris (*Frank*)*	Leaf spot, sharp eyespot etc.	*Brassica* spp.
Insect	-	Cabbage worms	All
Insect	-	Cutworms	All
Insect	-	Root Maggots	All
Insect	-	Flea Beetle	All
Insect	-	Aphids	All
Insect	*Agrotis ipsilon* Hufnagel	cutworm	All
Insect	*Aleurodicus dispersus*	Spiralling whitefly	All
Insect	*Aphis (Doralis) fabae* Scop.	Black aphid	All
Insect	*Aphis craccivora (?)*	Groundnut aphid	*Brassica* spp.
Insect	*Aphis gossypii*	Cotton aphid	All
Insect	*Aphis spiraecola*	Green citrus aphid	Lettuce
Insect	*Ascia monuste* (L.)	Cabbage white butterfly	All
Insect	*Aspidiotus destructor*	coconut scale	*Brassica* spp.
Insect	*Bemisia tabaci* (Gennadius*)*	Tobacco White fly, silverleaf whitefly, sweet potato whitefly	All
Insect	*Dysmicoccus brevipes*	pineapple mealybug	*Brassica* spp.
Insect	*Ferrisia virgata*	striped mealybug	*Brassica* spp.
Insect	*Frankliniella schultzei*	Cotton thrips	Lettuce
Insect	*Helicoverpa zea* (Boddie*)*	American cotton bollworm	*Brassica* spp.
Insect	*Hellula phidilealis* (Wlk.)	Cabbage budworm	All
Insect	*Liriomyza pusilla*	Leafminer	All
Insect	*Liriomyza sativae*	vegetable leaf miner	All
Insect	*Liriomyza trifolii*	American serpentine leafminer	*Brassica* spp.
Insect	*Maconellicoccus hirsutus*	pink hibiscus mealybug	*Brassica* spp.
Insect	*Mythimna unipuncta*	rice armyworm	*Brassica* spp.
Insect	*Myzus persicae*	green peach aphid	*Brassica* spp.
Insect	*Nezara viridula* (L.)	Green stink bug	All
Insect	*Oxycarenus hyalinipennis*	cotton, seed bug	*Brassica* spp.
Insect	*Phylophaga spp.*	White grubs	*Brassica* spp.
Insect	*Pieris brassicae* (Linnaeus)	Cabbage cutworm	*Brassica* spp.
Insect	*Planococcus citri*	citrus mealybug	*Brassica* spp.
Insect	*Plutella xylostella (maculipennis)* (L.)	Diamondback moth	All
Insect	*Pseudococcus longispinus* Targioni Tozzetti	Longtailed mealybug	*Brassica* spp.
Insect	*Scapteriscus vicinus* Scudder	Mole cricket	All
Insect	*Spodoptera eridania*	southern armyworm	*Brassica* spp.
Insect	*Spodoptera frugiperda* (J.E.Smith)	Fall armyworm	All

Pest Type	Scientific name	Common name(s)	Host[5]
Insect	*Spodoptera ornithogolli* (Guenee)	Yellow striped army worm	*Brassica* spp.
Insect	*Thrips palmi*	Melon thrips	Lettuce
Insect	*Thrips tabaci (*Linderman)	Potato thrips, onion thrips	All
Insect	*Trichoplusia (phytometra) ni* (Hubner)	Cabbage looper	All
Mite	*Polyphagotarsonemus latus (Banks)*	Broad mite	*Brassica* spp.
Nematode	*Helicotylenchus dihystera*	Banana spiral nematode	Lettuce
Nematode	*Helicotylenchus pseudorobustus*	Spiral nematode	Lettuce
Nematode	*Meloidogyne incognita*	Root knot nematode	All
Nematode	*Meloidogyne* spp.	Root knot nematodes	Lettuce
Nematode	*Rotylenchulus reniformis*	Reniform nematode	All
Nematode	*Xiphimena vulgare* (Tarjan)	Dagger nematode	Lettuce
Oomycete	*Albugo candida*	white rust of crucifers	*Brassica* spp.
Oomycete	*Peronospora parasitica*	Downy mildew	*Brassica* spp.
Oomycete	*Pythium debaryanum*	Damping-off	*Brassica* spp.
Virus	*Cucumber mosaic virus*	Cucumber mosaic	Lettuce

CUCURBITS (*Cucumis melo* – Muskmelon, Canteloupe, Honeydew; *Cucumis sativus* – Cucumber; *Cucurbita spp.* – Pumpkin, Squash, Zucchini; *Citrullus lanatus* – Watermelon)

Pest Type	Scientific name	Common name(s)	Host[6]
Bacterium	*Acidovorax avenae subsp. citrulli*	Bacterial fruit blotch	*Citrullus lanatus*
Bacterium	*Erwinia carotovora subsp. carotovora*	Bacterial root rot of sweet potato	*Cucumis melo*
Bacterium	*Erwinia sp.*	Erwinia soft rot	Pumpkin
Bacterium	*Glomerella cingulata* (Jones)	Anthracnose	*Cucumis melo*
Fungus	*Acremonium sp.*	Fruit spots, vine spots, leaf blotch	Pumpkin
Fungus	*Alternaria cucumerina*	Leaf spot	Watermelon
Fungus	*Alternaria dauci*	Leaf blight of carrot	Cucumber
Fungus	*Alternaria sp.*	Chlorosis, Wilting	Pumpkin
Fungus	*Athelia rolsii*	root rot	*Cucumis* spp., *Cucurbita* spp.
Fungus	*Botryodiplodia (Lasiodiplodia) theobromae* Pat.	Brown pod rot of cocoa	Pumpkin
Fungus	*Cercospora citrullina*	leaf spot	*Cucumis* spp., *Cucurbita* spp.
Fungus	*Cercospora cucurbitae* Ell. & Ev. [Mycosphaerella melonis (Pass.)]	Leaf spot	Pumpkin
Fungus	*Chaonephora sp.*	Chaonephora fruit rot	Pumpkin
Fungus	*Cladosporium cucumerinum*	scab of cucurbits	*Cucumis* spp., *Cucurbita* spp.
Fungus	*Colletotrichum lagenarium* (Pass.) Ell. & Halst.	Anthracnose	Pumpkin
Fungus	*Colletotrichum orbiculare*	Anthracnose of cucurbits	Cucumber
Fungus	*Colletotrichum* spp	Anthracnose	*Citrullus lanatus*

[6] As declared by BMCs

Pest Type	Scientific name	Common name(s)	Host[6]
Fungus	*Corynespora cassiicola*	Corynespora leaf spot/blight	Pumpkin
Fungus	*Didymella bryoniae*	gummy stem blight of cucurbits	*Cucumis* spp., *Cucurbita* spp.
Fungus	*Erysiphe cichrocearum*	Powdery mildew of cucurbits	All
Fungus	*Fusarium oxysporum*	Fusarium wilt, basal rot	All
Fungus	*Fusarium oxysporum f.sp. melonis* (L&C Snyder & Hanson)	Fusarium wilt	All
Fungus	*Fusarium oxysporum* Schlecht	Fruit spots, vine spots, leaf blotch, root rot	Pumpkin
Fungus	*Fusarium pallidoroseum* (Cooke) Sacc.	Fruit spots, vine spots, leaf blotch, root rot	Pumpkin
Fungus	*Fusarium* sp	fruit rot	*Cucumis* spp., *Cucurbita* spp.
Fungus	*Gloeosporium cucurbitarum* Berk. & Br.	Anthracnose	Pumpkin
Fungus	*Glomerella cingulata*	anthracnose	*Cucumis* spp., *Cucurbita* spp.
Fungus	*Macrophomina phaseolina*	charcoal rot of bean, ashy stem blight	All
Fungus	*Mycosphaerella melonis*	Gummy stem blight	*Citrullus lanatus*
Fungus	*Myrothecium roridum*	fruit rot	*Cucumis* spp., *Cucurbita* spp.
Fungus	*Oidium* sp.	powdery mildew	*Cucumis* spp., *Cucurbita* spp.
Fungus	*Phomopsis cucurbitae* McKeen	Phomopsis black rot, cucumber black rot, melon soft rot	Pumpkin
Fungus	*Phomopsis sclerotioides* van Kesteren	Black rot of cucumber	Pumpkin
Fungus	*Podosphaera xanthii*	Powdery mildew	Watermelon
Fungus	*Rhagadolobium cucurbitacearum* (Rehm.) Theiss & Syd.	Leaf spot	Pumpkin
Fungus	*Rhizoctonia solani (Thanatephorus cucumeris)*	damping off, crater rot	*Cucumis* spp., *Cucurbita* spp.
Fungus	*Sphaerotheca fuliginea*	Powdery mildew	All
Insect	-	Aphids	Cucumber
Insect	-	Cucumber pinworm	Cucumber
Insect	-	Thrips	Cucumber
Insect	*Acalymma vittatum*	Cucumber stripe beetle	*Cucumis* spp., *Cucurbita* spp.
Insect	*Aleurodicus dispersus*	Spiral whitefly	All
Insect	*Anasa scorbutica* (F.)	Squash bug	All
Insect	*Anasa spp. (?)*	Squash bug	Cantaloupe
Insect	*Aonidiella orientalis*	oriental yellow scale	All
Insect	*Aphis (Doryalis) fabae* Scop.	Black bean aphid	All, except *C. melo*
Insect	*Aphis gossypii* Glover	Melon aphid	All
Insect	*Aphis spiraecola*	Green citrus aphid	Watermelon, cucumber
Insect	*Aspidiotus destructor*	coconut scale	All
Insect	*Atherigona orientalis* (Schiner)	Pepper fruit fly	*Cucumis melo*
Insect	*Bemisia tabaci*	tobacco whitefly	All
Insect	*Coccus hesperidum*	brown soft scale	All
Insect	*Diabrotica balteata*	Spotted/Banded cucumber beetle	Pumpkin
Insect	*Diabrotica innuba* (F.)	Cucumber beetle, corn root worm	All, except *C. melo*

Pest Type	Scientific name	Common name(s)	Host[6]
Insect	*Diabrotica pallipes* Oliver/ *themai* Baly	Striped cucumber beetle / leaf beetle	Pumpkin
Insect	*Diabrotica separate*	Root Worm	All
Insect	*Diabrotica* spp.	Cucumber beetle	*Citrullus lanatus*
Insect	*Diaphania (Margaronia) hyalinata* (L.)	Melonworm	All
Insect	*Diaphania (Margaronia) nitidalis* (Cram)	Pickleworm	All, except *C. melo*
Insect	*Diaphania indica* Saunders	Pumpkin caterpillar	Pumpkin
Insect	*Diaphania nitidalis* (Stoll)	Cucumber worm	All
Insect	*Diaphania sp.*	Caterpillar	Pumpkin
Insect	*Dysmicoccus brevipes*	pineapple mealybug	All
Insect	*Empoasca kraemeri* Ross and Moore	Bean leafhopper	Cucumber
Insect	*Ferrisia virgata*	Guava mealybug	Pumpkin
Insect	*Frankliniella occidentalis*	Californian thrips	Melon
Insect	*Frankliniella schultzei*	Cotton thrips	*Cucumis* spp., *Cucurbita* spp.
Insect	*Helicoverpa zea* (Boddie)	American cotton bollworm	*Cucumis melo*
Insect	*Leptoglossus gonagra*	Coreid bug	All
Insect	*Liriomyza sativae* (Blanchard)	Vegetable leaf miner	All
Insect	*Liriomyza sp.?*	Leafminer	All
Insect	*Liriomyza trifolii*	American serpentine leafminer	*Cucumis* spp., *Cucurbita* spp.
Insect	*Maconellicoccus hirsutus*	pink hibiscus mealybug	All
Insect	*Myzus persicae*	green peach aphid	All
Insect	*Nezara viridula* (L.)	green stink bug	All, except *C. melo*
Insect	*Phthia picta*	Coreid bug (agromyzid fly)	All
Insect	*Pinnaspis strachani*	Lesser snow scale	Pumpkin
Insect	*Planococcus citri*	citrus mealybug	All
Insect	*Polyphagotarsonemus latus*	Broad mite	Pumpkin, cucumber
Insect	*Pseudaonidia trilobitiformis*	Green (Armoured/Trilobite/ Gingging Scale)	Pumpkin
Insect	*Pseudococcus jackbeardsleyi*	Jack Beardsley mealybug	All
Insect	*Pseudococcus sp*.	Mealy bug	Pumpkin
Insect	*Pycnoderes incurvus* Distant (*P. quadrimaculatus* Guer.	Black bug	Pumpkin
Insect	*Pycnoderes sp. (?)*	Plant bugs	Pumpkin
Insect	*Rhopalosiphum* (*Myzus) persicae* Sulzer	Cabbage aphid	Pumpkin
Insect	*Scapteriscus vicinus* Scudder	West Indian mole cricket	All, except *C. melo*
Insect	*Spodoptera eridania*	Southern armyworm	All
Insect	*Spodoptera frugiperda*	Fall armyworm	All
Insect	*Spodoptera ornithogalli* (Guernee)	Yellow striped army worm	All
Insect	*Spoladea recurvalis*	Hawaiian beet webworm	All
Insect	*Tetranychus cinnabarinus* Boisd. (T. telarius L.)(*T. bimiculatus* Harvey)	Carmin spider mite / Tropical red spider mite	Pumpkin
Insect	*Thrips palmi* (Karny)	Melon thrips	All
Insect	*Thrips tabaci* (Linderman)	Onion thrip	All
Insect	*Thysanoptera* spp	Thrips	*Citrullus lanatus*
Insect	*Trialeurodes vaporariorum*	whitefly, greenhouse	*Cucumis* spp., *Cucurbita* spp.

Pest Type	Scientific name	Common name(s)	Host[6]
Insect	*Trichoplusia ni*	cabbage looper	*Cucumis* spp., *Cucurbita* spp.
Mite	*Tetranychus urticae (telarius)* (Koch)	Red spider mite	All, except *C. melo*
Nematode	*Aphelenchus* sp.	-	Pumpkin
Nematode	*Ditylenchus* sp.	Stem and bulb nematodes	Pumpkin
Nematode	*Helicotylenchus dihystera*	Common spiral nematode	Cucumber
Nematode	*Helicotylenchus sp.*	Spiral nematodes	Pumpkin
Nematode	*Meloidogyne arenaria* (Neal) Chitwood	Peanut root knot nematode	Pumpkin
Nematode	*Meloidogyne incognita* (Kofoid & White) Chitwood	Root knot nematode	All
Nematode	*Paratylenchus* sp.	Pin nematode	All
Nematode	*Pratylenchus* sp.	Root lesion nematode	All
Nematode	*Rotylenchulus reniformis* Linford & Oliveira	Reniform/Spiral nematodes	All, except *C. melo*
Nematode	*Tylenchorhynchus sp.*	Stunt nematodes	Pumpkin
Nematode	*Tylenchus sp*	Stem and bulb nematode	Pumpkin
Nematode	*Xiphinema sp.*	Dagger nematode	Pumpkin
Nematode	*Xiphinema vulgare* Tarjan	Dagger nematode	All
Oomycete	*Phytophthora cactorum*	Phytophthora fruit rot	Pumpkin
Oomycete	*Pseudoperonospora cubensis* (Berk. & Curt.) Wei	Downy mildew	All
Oomycete	*Pythium sp.*	Pythium fruit rot	Pumpkin
Virus	*CMV*	Cucumber Mosaic Virus	All
Virus	Cucumber mosaic cucumovirus	Cucumber mosaic virus	All
Virus	Cucumber mosaic virus	cucumber mosaic	*Cucumis* spp., *Cucurbita* spp.
Virus	Squash mosaic virus	Squash mosaic	Pumpkin
Virus	Watermelon mosaic virus	Watermelon mosaic	Pumpkin

LEGUMES (Peas, Beans) (*Phaseolus* spp., *Vigna* spp., *Cajanus cajan*, *Lens culinaris*)

Pest Type	Scientific name	Common name(s)	Host[7]
Bacterium	*Pseudomonas phaseolicola*	halo blight	Peas, beans
Bacterium	*Pseudomonas savastanoi* pv. *phaseolicola*	halo blight (of beans)	Peas, beans
Bacterium	*Pseudomonas syringae*	bacterial blast	Peas, beans
Bacterium	*Pseudomonas syringae* pv. *syringae*	brown spot blight	Peas, beans
Bacterium	*Xanthomonas axonopodis pv. phaseoli*	Bacterial blight of bean	Peas, Beans
Bacterium	*Xanthomonas phaseoli*	common blight	Peas, beans
Bacterium	*Xanthomonas vesicatoria*	Bacterial leaf blight of tomato and pepper	Peas
Fungus	*Alternaria brassicae*	dark spot of crucifers	Peas, beans
Fungus	*Athelia rolfsii*	collar rot	Peas, beans
Fungus	*Cercospora cajani* P. Henn.	Pigeon pea leaf spot	
Fungus	*Cercospora canescens*	leaf spot	Peas, beans
Fungus	*Colletotrichum capsici*	leaf spot of peppers	Peas, beans

[7] As declared by BMCs

Pest Type	Scientific name	Common name(s)	Host[7]
Fungus	*Colletotrichum lindemuthianum*	Bean anthracnose, black spot disease	Peas, beans
Fungus	*Colletotrichum truncatum*	soyabean anthracnose	Peas, beans
Fungus	*Corticium solani* (Prild. & Delacr.) Bourd & Galz.	Root rot	beans
Fungus	*Erysiphe polygoni*	White bean	Peas, beans
Fungus	*Fusarium oxysporum* f.sp. *vasinfectum* (Atk.) Synd. & Hans	Fusarium wilt	Peas
Fungus	*Fusarium oxysporum* Schlect	Fusarium wilt	beans
Fungus	*Fusarium solani* (Mart.)(Sacc.)	Root rot, wilt	Peas, beans
Fungus	*Fusarium solani* f. sp. *phaseoli*	Dry rot	Peas, beans
Fungus	*Fusarium udum*	pigeon pea wilt	Peas, beans
Fungus	*Gibberella zeae*	Cobweb disease	Beans
Fungus	*Glomerella cingulata* (Stonem.) Spauld & Schrenk	Anthracnose, Dieback	Peas, beans
Fungus	*Lasiodiplodia theobromae*	diplodia pod rot of cocoa	Peas, beans
Fungus	*Macrophomina phaseolina* (Tassi) Goid.	Root rot of bean, ashy stem blight	Peas, beans
Fungus	*Mycosphaerella cruenta*	leaf spot of cowpea	Peas, beans
Fungus	*Mycovellosiella cajani*	Leafspot of pigeon pea	Peas
Fungus	*Oidium* sp.	powdery mildew	Peas, beans
Fungus	*Phaseoisariopsis griseola*	Angular spot	Peas, beans
Fungus	*Phoma herbarum* Westend	Leaf spot	beans
Fungus	*Phoma insidiosa* Tassi	Dieback	peas
Fungus	*Phyllosticta phaseolina*	Leaf spot	Peas, beans
Fungus	*Physalospora cajanae*	Collar rot	
Fungus	*Pseudocercosporella albida*	White spot	Peas, beans
Fungus	*Rhizoctonia solani (Thanatephorus cucumeris)*	collar rot, stem blight	Peas, beans
Fungus	*Uredo cajani*	Rust of pigeon pea	Peas, beans
Fungus	*Uromyces appendiculatus*	bean rust	Peas, beans
Fungus	*Uromyces dolicholi*	Rust of pigeon pea	Peas
Insect	-	aphids	Peas, beans
Insect	-	Pigeon pea pod borers (unidentified)	Peas
Insect	-	Pigeon pea weevil (unidentified)	Peas
Insect	*Acrosternum* sp.	Green stink bugs	Peas, beans
Insect	*Agromyza inaequalis* Malloch	Bean leafminer	Peas, beans
Insect	*Agromyza nitida*	Leafminer	beans
Insect	*Aleurodicus dispersus*	whitefly	Peas, beans
Insect	*Anasa scarbutica* (F.)	Squash bug	Peas
Insect	*Ancylostomia stercorea*	pod borer	Peas, beans
Insect	*Anticarsia gemmatalis* (Hubn.)	Velvetbean caterpillar	Peas, beans
Insect	*Aphis craccivora* (Koch)	Cowpea aphid	Peas, beans
Insect	*Aphis gossypii*	cotton aphid	Peas, beans
Insect	*Aphis spiraecola*	Green citrus aphid	Peas, Beans
Insect	*Aspidiella sacchari*	Brown sugarcane scale	Beans
Insect	*Aspidiotus destructor*	coconut scale	Peas, beans
Insect	*Asterolecanium pustulans*	Scale	peas
Insect	*Bemisia tabaci*	tobacco whitefly	Peas, beans

Pest Type	Scientific name	Common name(s)	Host[7]
Insect	*Callosobruchus chinensis*	Chinese bruchid	Peas
Insect	*Chrysomelidae spp. (?)*	Leaf beetles	Beans
Insect	*Coccus hesperidum* L.	Brown soft scale	Peas
Insect	*Corcyra cephalonica*	rice meal moth	Peas, beans
Insect	*Corythuca gossypii* (F.)	Cotton lace bug, bean lace bug	Peas, beans
Insect	*Crypticerya genistae* Hempel	White scale	Peas
Insect	*Diaprepes abbreviatus*	citrus weevil	Peas, beans
Insect	*Diaprepes famelicus*	root borer, sugarcane	Peas, beans
Insect	*Duplaspidiotus subtessaratus*	Scale	peas
Insect	*Dysmicoccus brevipes*	Pineapple mealybug	Peas
Insect	*Dysmicoccus neobrevipes*	grey pineapple mealybug	Peas, beans
Insect	*Edessa bifida* Say	Stink bug	Peas
Insect	*Edessa meditabunda* (F.)	Green and brown stink bug	Peas, beans
Insect	*Elasmopalpus lignosellus*	lesser corn stalk borer	Peas, beans
Insect	*Elastopalpus* spp.	Por borers	Peas
Insect	*Empoasca fabae* (Harris)	Potato leafhopper	Peas, beans
Insect	*Empoasca krameri*	Leaf hopper	Peas, beans
Insect	*Empoasca spp*	Leafhoppers	Peas
Insect	*Enchenopa ignidorsum* Wlk.	Orange and black treehopper	Peas
Insect	*Epargyreus zestos (Astraptes anaphus)*	Skipper Caterpillar	Peas
Insect	*Etiella zinckenella*	pea pod borer	Peas, beans
Insect	*Euschistus crenator*	Bug	
Insect	*Ferrisia virgata*	striped mealybug	Peas, beans
Insect	*Frankliniella insularis* (Frank)	Blossom (flower) thrips	Peas, beans
Insect	*Frankliniella schultzei*	cotton thrips	Peas, beans
Insect	*Fundella (pellucens) cistipennis* (Dyar)	Caribbean (white) pod borer	Peas
Insect	*Hedylepta (Lamprosema) indicata* (F.)	Bean leaf webworm moth, soybean leaf folder	Peas, beans
Insect	*Helicoverpa armigera* Hubner	Pigeon pea pod borer	Peas
Insect	*Helicoverpa* spp.	Pigeon pea pod borers	Peas
Insect	*Helicoverpa virescens*	Noctuid moth	Peas
Insect	*Helicoverpa zea*	American cotton bollworm, Corn earworm	Peas, beans
Insect	*Heliothis virescens*	tobacco budworm, pod borer	Peas, beans
Insect	*Heliothis zea*	Corn earworm	peas
Insect	*Hesperiidae (?)*	Black head Skipper	Beans
Insect	*Hesperiidae (?)*	Yellow head Skipper	Beans
Insect	*Howardia biclavis*	Mining scale	peas
Insect	*Humenia (Zinckenia) fascialis* (Cram.)	Beet webworm	Peas, beans
Insect	*Hypercompe (Ecpantheria) icasia* Cramer	Moth	Peas, beans
Insect	*Icerya monsterattensis*	Scale insect	Peas
Insect	*Icerya purchasi*	cottony cushion scale	Peas, beans
Insect	*Liriomyza sativae*	vegetable leaf miner	Peas, beans
Insect	*Liriomyza* sp.	Leafminers	Peas, beans
Insect	*Liriomyza trifolii*	American serpentine leafminer	Peas, beans
Insect	*Litostylus diadema* Schoenh	Broad nose weevil	Peas
Insect	*Maconellicoccus hirsutus*	pink hibiscus mealybug	Peas, beans

Pest Type	Scientific name	Common name(s)	Host[7]
Insect	*Maruca sp. (?)*	Pod borers	Peas
Insect	*Maruca vitrata*	Legume pod borer	Peas, beans
Insect	*Megalurothrips sjostedti*	Bean flower thrips	Peas, beans
Insect	*Melanacanthus scutellaris (?)*	bean bug	Beans
Insect	*Mythimna unipuncta*	rice armyworm	Peas, beans
Insect	*Myzus persicae*	green peach aphid	Peas, beans
Insect	*Nezara viridula* (L.)	Green stink bug	Peas, beans
Insect	*Nipaecoccus nipae*	spiked mealybug	Peas, beans
Insect	*Ormenoides* spp.	Treehopper	Peas
Insect	*Paracoccus marginatus*	papaya mealybug	Peas, beans
Insect	*Parasaissetia nigra*	pomegranate scale	Peas, beans
Insect	*Pantomorus cervinus (Naupactus simplex)* Boheman	Fuller rose beetle	Peas
Insect	*Phenacoccus madeirensis*	Madeira mealybug	Peas, beans
Insect	*Phyllophaga smithi*	white grub	Peas, beans
Insect	*Phyobius pomacea* Gyllenhal	Green weevil	Peas
Insect	*Piezodorus guildinii* (Westwood)	Red banded stinkbug	Peas
Insect	*Pinnaspis strachani*	lesser snow scale	Peas, beans
Insect	*Planchonia stentae (?)*	South African pit scale	Peas
Insect	*Planococcus citri*	citrus mealybug	Peas, beans
Insect	*Pseudaulacaspis pentagona*	mulberry scale	Peas, beans
Insect	*Pseudauleaspis cockerelli* (Cooley)	False oleander scale	Peas
Insect	*Pseudococcus elisae*	banana mealybug	Peas, beans
Insect	*Pseudococcus jackbeardsleyi*	Jack Beardsley mealybug	Peas, beans
Insect	*Pulvinaria psidii*	green shield scale	Peas, beans
Insect	*Riptortus serripes (?)*	bean bug	Beans
Insect	*Rotylenchulus reniformis*	Reniform nematode	Beans
Insect	*Saissetia coffeae*	hemispherical scale, helmet scale	Peas, beans
Insect	*Saissetia oleae*	olive scale, black scale	Peas, beans
Insect	*Spodoptera eridania*	southern armyworm	Peas, beans
Insect	*Spodoptera frugiperda*	Corn leafworm/fall armyworm	beans
Insect	*Spodoptera latifascia*	Lateral lined armyworm	Peas, beans
Insect	*Spodoptera ornithogalli*	Yellow striped armyworm	Beans
Insect	*Spoladea recurvalis*	Hawaiian beet webworm	Peas, beans
Insect	*Systena blanda (?)*	Striped flea beetle	Beans
Insect	*Tenuirostritermes tenuirostris* (Desneux)	Termites/woodlice	Peas
Insect	*Thrips palmi*	melon thrips	Peas, beans
Insect	*Thrips tabaci*	onion thrips	Peas, beans
Insect	*Thyanta* spp.	Stink bugs	Peas
Insect	*Trialeurodes vaporarium* (Westwood)	Whitefly	Peas
Insect	*Tribolium castaneum*	red flour beetle	Peas, beans
Insect	*Trichoplusia ni*	cabbage looper	Peas, beans
Insect	*Trichoplusia* sp.	Semi-looper	peas
Insect	*Unaspis citri*	Citrus snow scale	Peas
Insect	*Urbanus (Goniurus) proteus* (L.)	Long-tailed skipper	Peas, beans
Mite	*Tetranychus* spp	spider mites	Peas, beans
Nematode	*Helicotylanchus multicinatus*	Banana spiral nematode	Peas, beans

Pest Type	Scientific name	Common name(s)	Host[7]
Nematode	*Helicotylenchus dihystera*	Common spiral nematode	Peas
Nematode	*Helicotylenchus multicinctus*	Banana spiral nematode	Beans
Nematode	*Helicotylenchus pseudorobustus*	Spiral nematode	Beans
Nematode	*Meloidogyne incognita*	root-knot nematode	Peas, beans
Nematode	*Radopholus similis*	Burrowing nematode	Peas, beans
Nematode	*Rotylenchulus reniformis*	Reniform nematode	Peas
Nematode	*Xiphinema vulgare*	Dagger nematode	Peas, beans
Oomycete	*Pythium spp.*	Damping off	Peas, beans
Phytoplasma	*Candidatus Phytoplasma 16SrIX*	Witch broom	Pigeon peas
Virus	Common Bean Mosaic Virus	CBMV	Peas, beans
Virus	Cowpea Mosaic Virus	Vineyard Mosaic Virus	Peas
Virus	Cucumber mosaic virus	cucumber mosaic	Peas, beans
Virus	Golden Mosaic Virus	GMV	Peas, beans
Virus	Tomato yellow leaf curl virus	Leaf curl	Beans
Virus	Yellow Mosaic Virus	YMV	Peas, beans
Weed	*Cassia obtusifolia*	Sicklepod	Beans
Weed	*Datura stramonium*	Jimsonweed	Beans
Weed	*Emilia sonchifolia*	Consumption weed	Beans

ONIONS/SCALLIONS (*Allium spp.*)

Pest Type	Scientific name	Common name(s)	Host[8]
Bacterium	*Enterobacter cloacae*	bulb rot	Onion
Bacterium	*Erwinia carotovora subsp. atroseptica*	(potato blackleg disease)	Onion
Bacterium	*Erwinia* sp.	Bacterial wilt	onion
Bacterium	*Pectobacterium carotovorum*	bulb rot	Onion
Bacterium	*Pseudomonas alliicola*	neck and outer scale rot	Onion
Bacterium	*Pseudomonas marginalis*	(kansas lettuce disease)	Onion
Bacterium	*Pseudomonas marginalis* pv. *marginalis*	marginal leaf blight	Onion
Bacterium	*Pseudomonas syringae*	bacterial blast	Onion
Bacterium	*Xanthomonas axonopodis* pv. a*llii* (Rou Magnac *et al.)*	Leaf blight (blast) of onion	
Fungus	*Alternaria dauci*	Leaf blight of carrot	Chive
Fungus	*Alternaria porri*	Purple blotch	Onion
Fungus	*Alternaria tennuissima*	Nailhead spot	Onion
Fungus	*Aspergillus niger*	rot and seedling blight	Onion
Fungus	*Athelia rolfsii*	Sclerotium rot	Onion
Fungus	*Botrytis cinerea*	Grey mould rot	onion
Fungus	*Chalara elegans*	Black root rot	Onion
Fungus	*Colletotrichum dematium*	Leaf spot	Onion
Fungus	*Corticium rolfsii (*Sacc.)	Sclerotium rot	Onion
Fungus	*Fusarium oxysporum*	Basal rot	Onion
Fungus	*Fusarium oxysporum* f.sp. *cepae*	Basal rot	Onion

[8] As declared by BMCs

Pest Type	Scientific name	Common name(s)	Host[8]
Fungus	*Fusarium solani*	Basal rot	Onion
Fungus	*Glomerella cingulata*	Anthracnose	Onion
Fungus	*Macrophomina phaseolina*	Charcoal rot of bean/tobacco	Onion
Fungus	*Penicillium digitatum*	Green mould	Onion
Fungus	*Penicillium italicum*	Blue mould	Onion
Oomycete	*Peronospora destructor*	Downy mildew of onion	Onion
Fungus	*Pleospora herbarum*	Leaf blight of onion	Onion
Fungus	*Sclerotium cepivorum*	White rot	Onion
Fungus	*Stemphyllium vesicarium*	Onion leaf blight	Onion
Fungus	*Urocystis magica*	Onion smut	Onion
Insect	-	Thrips	Onion
Insect	*Agromyza sp.*	Leaf miner flies	All
Insect	*Aphis craccivora*	Groundnut Aphid	Onion
Insect	*Aphis gossypii* (Glover)	Cotton aphid	Onion
Insect	*Aphis spiraecola*	Green citrus aphid	Chive
Insect	*Atherigona orientalis* (Schiner)	Pepper fruit fly	Onion
Insect	*Carpophilus obsoletus*	Corn sap beetle	Onion
Insect	*Carpophilus sp. (?)*	Sap beetle	Onion
Insect	*Feltia subterranea* (Fabricius)	Granulate cutworm	Onion
Insect	*Frankliniella occidentalis*	Californian thrips	Onion
Insect	*Frankliniella schultzei*	Cotton thrips	Onion
Insect	*Liriomyza huidobrens*	Leaf miner	Onion
Insect	*Liriomyza sativae* (Blanchard)	Vegetable leaf miner	Onion, chive
Insect	*Liriomyza sp.*	Leaf miner flies	All
Insect	*Liriomyza trifolii*	American serpentine leafminer	Onion
Insect	*Oxycarenus hyalinipennis*	Cotton seed bug	Onion
Insect	*Scirtothrips dorsalis*	Chilli thrips	Onion
Insect	*Spodoptera eridania*	Southern armyworm	Chive
Insect	*Spodoptera exigua*	Beet army worm	Onion
Insect	*Spodoptera frugiperda* (J.E.Smith)	Fall armyworm	All
Insect	*Spodoptera ornithogalli*	Black cutworm	Onion
Insect	*Spodoptera sunia (Guen.)*	Armyworm	All
Insect	*Stegobium paniceum*	drugstore beetle	Onion
Insect	*Thrips palmi* (Karny)	Melon thrips	Onion
Insect	*Thrips tabaci* (Linderman)	Onion thrips	All
Insect	*Trichoplusia ni*	cabbage looper	Onion
Mite	*Tetranychus sp.*	Red spider mites	All
Mollusc	*Achatina fulica*	Giant African Snail	Onion
Nematode	*Criconemoides sp*.	Ring nematode	Onion
Nematode	*Ditylenchus sp*.	Stem and bulb nematode	Onion
Nematode	*Helicotylenchus dihystera*	Common spiral nematode	Chive
Nematode	*Helicotylenchus pseudorobustus*	(spiral nematode)	Onion
Nematode	*Helicotylenchus sp*	Spiral nematode	Onion
Nematode	*Longidorus*	(longidorids)	Onion
Nematode	*Meloidogyne exigua*	(coffee root-knot nematode)	Onion
Nematode	*Meloidogyne spp.*	Root knot nematode	Onion
Nematode	*Paratrichodorus minor*	(stubby root nematode)	Onion

Pest Type	Scientific name	Common name(s)	Host[8]
Nematode	*Pratylenchus brachyurus*	(root-lesion nematode)	Onion
Nematode	*Pratylenchus penetrans*	(nematode, northern root lesion)	Onion
Nematode	*Pratylenchus sp*	Root lesion nemtode	Onion
Nematode	*Pratylenchus zeae*	(root lesion nematode)	Onion
Nematode	*Rotylenchulus reniformis*	Reniform nematode	Onion
Nematode	*Rotylenchulus sp*	Reniform nematode	Onion
Nematode	*Trichodorus*	(stubby root nematodes)	Onion
Nematode	*Tylenchorhynchus sp*.	Stunt nematode	Onion
Nematode	*Tylenchus* spp.	-	Onion
Oomycete	*Phytophthora cinnamomi*	Phytophthora dieback	Onion
Weed	*Cynodon dactylon*	(Bermuda grass)	Onion
Weed	*Cyperus rotundus*	(purple nutsedge)	Onion
Weed	*Eleusine indica*	(Goose grass)	Onion
Weed	*Emex australis*	(Doublegee)	Onion
Weed	*Emilia sonchifolia*	(red tasselflower)	Onion
Weed	*Euphorbia heterophylla*	(wild poinsettia)	Onion
Weed	*Euphorbia hirta*	(garden spurge)	Onion
Weed	*Parthenium hysterophorus*	(Parthenium weed)	Onion
Weed	*Portluca oleracea*	(Purslane)	Onion
Weed	*Plasmodiophora brassicae*	(cabbage club root)	Onion
Weed	*Sida acuta*	(sida)	Onion
Weed	*Solanum nigrum*	(black nightshade)	Onion
Weed	*Sonchus oleraceus*	(common sowthistle)	Onion

PINEAPPLE (*Ananas comosus*)

Pest Type	Scientific name	Common name(s)
Bacterium	*Ceratocystis paradoxa* (Dade)	black rot of pineapple
Bacterium	*Erwinia caratovora* (L.R. Jones) Holland	Bacterial soft rot
Bacterium	*Pectobacterium carotovorum* (Jones) Waldee	Stem rot
Fungus	*Athelia rolfsii*	sclerotium rot
Fungus	*Botryodiplodia theobromae* Pat.	Basal rot
Fungus	*Ceratocystis paradoxa* (Dade) Moreau	Black or Base rot of pineapple
Fungus	*Colletotrichum* sp.	Anthracnose
Fungus	*Corticium rolfsii (Sacc.)*	Sclerotium rot
Fungus	*Fuligo septica*	Slime mould
Fungus	*Fusarium oxysporum*	basal rot
Fungus	*Lasiodiplodia theobromae*	diplodia pod rot of cocoa
Fungus	*Phomopsis sp*.	Basal rot
Oomycete	*Phytophthora nicotianae* var. *parasitica*	Heart rot
Insect	-	Thrips
Insect	-	Pineapple mealybug
Insect	-	Scale insects
Insect	-	Fruit flies
Insect	-	White grub
Insect	-	Termites

Pest Type	Scientific name	Common name(s)
Insect	-	Pineapple weevil
Insect	*Aleurocanthus woglumi* Ashby	Blackfly
Insect	*Cholus spinipes* (F.)	Pineapple weevil
Insect	*Cholus zonatus* Swed.	Curculionid weevil
Insect	*Coccus viridis*	soft green scale
Insect	*Diaspis boisduvali* Ckll.	Boisduval (pineapple) scale
Insect	*Diaspis bromeliae* Kern.	Pineapple scale
Insect	*Dysmicoccus brevipes* (Cockerell)	pineapple mealybug
Insect	*Dysmicoccus neobrevipes*	grey pineapple mealybug
Insect	*Exophthalmus* sp.	Fiddler beetle
Insect	*Ferrisia virgata* (Cockerell)	Striped mealybug
Insect	*Maconellicoccus hirsutus*	pink hibiscus mealybug
Insect	*Metamasius hemipterus* (Olivier)	West Indian cane weevil
Insect	*Metamasius ritchei* Mshll.	Pineapple weevil
Insect	*Opogona sacchari*	banana moth
Insect	*Paracoccus marginatus* (Williams and Granara de Willink)	papaya mealybug
Insect	*Parasaissetia nigra*	pomegranate scale
Insect	*Phenacoccus madeirensis*	Madeira (cassava) mealybug
Insect	*Planococcus citri*	Citrus mealybug
Insect	*Protaetia fusca*	mango flower beetle
Insect	*Pseudococcus jackbeardsleyi* Gimpel and Miller	Jack Beardsley mealybug
Insect	*Pseudococcus longispinus*	Long-tailed mealybug
Insect	*Saccharicoccus sacchari*	grey sugarcane mealybug
Insect	*Solenopsis geminata* Fab.	Fire ant
Insect	*Solenopsis invicta* Buren	Red imported fireant
Insect	*Unaspis citri*	Citrus snow scale
Mite	*Tetranychus* spp.	Red Spider Mite
Nematode	*Aphelenchoides sp*.	Nematode
Nematode	*Aphelenchus sp*.	Nematode
Nematode	*Cacopaurus sp.*	Nematode
Nematode	*Criconemoides sp*.	Ring nematode
Nematode	*Ditylenchus sp*.	Nematode
Nematode	*Helicotylenchus erythrinae* (Zimm.)	Golden Spiral nematode
Nematode	*Helicotylenchus multicinctus* (Cobb)	Golden Spiral nematode
Nematode	*Helicotylenchus nannus* Steiner	Spiral nematode
Nematode	*Helicotylenchus* sp.	Spiral Nematodes
Nematode	*Hoplolaimus sp*.	Nematode
Nematode	*Longidorus sp.*	Nematode
Nematode	*Meloidogyne incognita*	root-knot nematode
Nematode	*Meloidogyne sp.*	Root-knot nematode
Nematode	*Pratylenchus* sp.	Nematode
Nematode	*Radopholus similis*	burrowing nematode
Nematode	*Rotylenchulus reniformis* Linford & Olivera	Reniform nematode
Nematode	*Scutellonema sp*.	Nematode
Nematode	*Tylenchorhynchus acutus* Allen	Stunt nematode
Nematode	*Tylenchus sp.*	Nematode
Nematode	*Xiphinema sp*.	Nematode

Pest Type	Scientific name	Common name(s)
Oomycete	*Phytophthora cinnamomi*	Phytophthora dieback
Oomycete	*Phytophthora nicotianae* de Haan var. *parasitica* (Dastur) Waterh.	Basal rot
Oomycete	*Phytophthora palmivora* (Buttler)	Coconut budrot
Oomycete	*Phytophthora* spp.	Root rot
Oomycete	*Pythium* spp.	Root rot

SOLANACEOUS PRODUCTS (Tomato – *Lycopersicon esculentum*, Pepper – *Capsicum* spp., Eggplant – *Solanum melongena*)

Pest Type	Scientific name	Common name(s)	Host[9]
Bacterium	*Clavibacter michiganensis*	Bacterial wilt	tomato
Bacterium	*Clavibacter michiganensis subsp. michiganensis*	Bacterial canker of tomato	Pepper, tomato
Bacterium	*Endobacteriaceae* sp.	Wilt, dieback of stem, leaf spot	Hot pepper
Bacterium	*Erwinia carotovora subsp. carotovora*	Bacterial root rot of sweet potato	Pepper
Bacterium	*Harobacterium* sp.	Wilt, dieback of stem, leaf spot	
Bacterium	*Pseudomonas solanacearum*	Bacterial wilt	Tomato, pepper
Bacterium	*Pseudomonas syringae* pv. *tomato*	Bacterial speck disease	All
Bacterium	*Ralstonia solanacearum*	Bacterial wilt	All
Bacterium	*Senna obtusifolia*	Sicklepod	Pepper
Bacterium	*Thanatephorus cucumeris (*Frank*)*	Leaf spot, sharp eyespot etc.	Pepper, tomato
Bacterium	*Xanthomonas campestris* pv. *vesicatoria* (Doidge) *Dowson*	Bacterial spot disease of tomato and Pepper	Pepper, tomato
Bacterium	*Xanthomonas vesicatoria*	Bacterial spot, bacterial leaf blight	All
Bacterium	*Xanthomonas vesicatoria, X. euvesicatoria*	bacterial spot of tomato and pepper	All
Fungus	-	Anthracnose	All
Fungus	*Alternaria alternata Fr. Keissler*	Alternaria leaf spot (blight), fruit rot	All
Fungus	*Alternaria capsici-annui*	leaf spot	All
Fungus	*Alternaria dauci*	leaf blight of carrot	All
Fungus	*Alternaria porri*	Purple blotch	Pepper
Fungus	*Alternaria solani* (Ell. & Martin) Sorauer	Early blight, fruit rot	Pepper, tomato
Fungus	*Alternaria tenuissima*	Nail head spot	tomato
Fungus	*Athelia rolfsii*	sclerotium rot	All
Fungus	*Botryodiplodia theobromae* Pat.	Root rot	eggplant
Fungus	*Cercospora capsici* (unamunoi) Heald & Wolf	Frog-eye leafspot of pepper	Hot pepper
Fungus	*Cercospora nicotianae*	Leaf spot	tomato
Fungus	*Cladosporium fulvum*	Tomato leaf mould, olive mould	tomato
Fungus	*Clypeolella solani* Theiss.	Sooty mould	Hot pepper
Fungus	*Colletotrichum capsici* (Syd.) Butl. & Bisby	Leaf spot of peppers	All
Fungus	*Colletotrichum dematium*	leaf spot	All

[9] As declared by BMCs

Pest Type	Scientific name	Common name(s)	Host[9]
Fungus	*Colletotrichum gloeosporioides* Penz	Anthracnose	Pepper
Fungus	*Colletotrichum graminicola*	Anthracnose	Tomato
Fungus	*Colletotrichum lycopersici*	Anthracnose	Tomato
Fungus	*Colletotrichum nigrum* Ell. & Halst.	Anthracnose of tomato	Hot pepper
Fungus	*Colletotrichum phomoides*	Anthracnose of tomato	tomato
Fungus	*Corticium rolfsii (*Sacc.)	Seedling blight	Tomato, pepper
Fungus	*Corticium rolfsii* Curzi	Stem and root rot	Hot pepper
Fungus	*Corticium solani*	Bottom rot	tomato
Fungus	*Corynespora cassiicola*	Target leaf spot of tomato	tomato
Fungus	*Curvularia verruculosa* Tandow & Bilgrami	Leaf spot of grasses	Hot pepper
Fungus	*Diaporthe vexans* (Sacc. & Syd.) Harter	Phomopsis blight	eggplant
Fungus	*Drechslera rostrata* (Dreschsl.) Richardson & Fraser	Leaf spot of grasses	Hot pepper
Fungus	*Fulvia fulva* (Cooke) Ciferri	Tomato leaf mould	Tomato
Fungus	*Fusarium oxysporum*	Fusarium wilt, basal rot	All
Fungus	*Fusarium oxysporum* f.sp. *lycopersici* (Saccardo) Snyder & Hansen	Fusarium wilt	Tomato
Fungus	*Fusarium oxysporum* f.sp. *vasinfectum (Schlechtend)*	Vascular cotton wilt	Pepper
Fungus	*Fusarium oxysporum* Schlecht	Fruit spots, vine spots, leaf blotch, root rot	Hot pepper, tomato
Fungus	*Fusarium semitectum* Berk. & Rav.	Tomato root rot, fungal gummosis	tomato
Fungus	*Fusarium solani* (Mart.) Sacc.	Root rot, dry rot of potato	Eggplant, hot pepper
Fungus	*Glomerella cingulata* (Stoneman*)*	Anthracnose	All
Fungus	*Lasiodiplodia theobromae*	diplodia pod rot of cocoa	All
Fungus	*Leveillula taurica*	Powdery mildew	Tomato, pepper
Fungus	*Macrophomina phaseolina*	charcoal rot of bean/tobacco	All
Fungus	*Macrophomina phaseolina* (Tassi) Goid	Root rot	eggplant
Fungus	*Macrophomina* sp.	Charcoal rot	Hot pepper
Fungus	*Odium* sp.	powdery mildew	All
Fungus	*Passalora fulva*	tomato leaf mould	All
Fungus	*Penicillium digitatum*	Green mould	All
Fungus	*Penicillium italicum*	Blue mould	All
Fungus	*Phoma destructive*	Leaf and Fruit spot	tomato
Fungus	*Phoma exigua* Desm.	Fungal blight	tomato
Fungus	*Phomopsis* (Diaportha*) capsici* (Magnaghi) Sacc.	Phomopsis black rot, cucumber black rot, melon soft rot	Hot pepper
Fungus	*Phomopsis caprici*	Fungal fruit rot	tomato
Fungus	*Phomopsis fusiformis*	Fruit rot	tomato
Fungus	*Puccinia psidii*	Guava rust	Pepper
Fungus	*Rhizoctonia solani*	Collar & root rot, damping off	All
Fungus	*Sclerotium rolfsii*	Seedling blight	Pepper
Fungus	*Sclerotium rolfsii*	Collar rot	tomato
Fungus	*Septoria lycopersici*	Leaf spot	tomato
Fungus	*Stemphylium solani*	Grey leaf spot	All
Fungus	*Verticillium* spp.	Verticillium Wilt	All

Pest Type	Scientific name	Common name(s)	Host[9]
Insect	-	Aphids	All
Insect	-	Cutworms	All
Insect	-	Flea Beetles	All
Insect	-	Gray beetle	All
Insect	-	Pepper weevil	All
Insect	-	Thrips	All
Insect	-	Whiteflies	All
Insect	*Agrius cingulatus*	Pink-spotted hawkmoth	Pepper
Insect	*Agromyza inaequalis*	Bean leaf miner	Hot pepper
Insect	*Agrotis ipsilon* Hufnagel	Cutworm	Eggplant
Insect	*Aleurodicus dispersus*	Spiralling whitefly	All
Insect	*Aleurothrixus floccosus*	woolly whitefly	All
Insect	*Aleurotrachellus trachoides (Back)*	Sweet pepper whitefly	All
Insect	*Anasa scarbutica* (F.)	Squash bug	Lettuce
Insect	*Anastrepha obliqua*	West Indian Fruit Fly	Tomato
Insect	*Anoplodera virens* (L.)	Longhorned beetle	Pepper
Insect	*Aphis craccivora* (Koch)	Groundnut aphid	Tomato
Insect	*Aphis gossypii* Glover	Melon aphid, cotton aphid	All
Insect	*Aphis* sp.	Aphids	All
Insect	*Aphis spiraecola*	Green citrus aphid	All
Insect	*Arvelius albopunctatus* De Geer	White speckled/tomato stink bug	Eggplant, tomato
Insect	*Aspidiotus destructor* (Signoret)	Coconut scale	All
Insect	*Asterolecanium pustulans*	Akee fringed scale	All
Insect	*Atherigona orientalis* (Schiner)	Pepper fruit fly	Pepper
Insect	*Bemisia tabaci*	Tobacco whitefly	Pepper, tomato
Insect	*Bemisia tabaci* (B biotype)	Silverleaf whitefly	Pepper, tomato
Insect	*Bemisia tabaci (*Gennadius*)*	Tobacco whitefly	Pepper, tomato
Insect	*Bisaltes bimaculatus* (Auriv)	Beetle	All
Insect	*Calacarus capsici*	Pepper purple mite	Hot pepper
Insect	*Ceroplastes rubens* Maskell.	Red wax scale	Hot pepper
Insect	*Chrysodeixis chalcites (?)*	Golden twin-spot moth	tomato
Insect	*Chrysodeixis includens (?)*	Soybean looper moth	tomato
Insect	*Chrysomphalus dictyospermi*	dictyospermum scale	All
Insect	*Coccus hesperidum*	Brown soft scale	All
Insect	*Conotrachelus spp*.	Weevil	Hot pepper
Insect	*Contarinia lycopersici* Felt.	Tomato flower midge, gall midge	All
Insect	*Corecoris fuscus*	Leaf-footed bug	Pepper
Insect	*Corythaica cyathicollis (planaris)* (Vhl.)	Eggplant lacewing bug	All
Insect	*Corythaica passiflorae*	Eggplant Lace	Eggplant
Insect	*Corythaica planartis*	Eggplant lacewing bug	eggplant
Insect	*Corythuca gossypii* (Fabricius)	Cotton lacebug	Pepper
Insect	*Cyclocephala spp.*	Beetle	Hot pepper
Insect	*Cyrtopeltis tenuis* Reuter	Tomato mirid	All
Insect	*Diabrotica balteata*	Spotted/Banded cucumber beetle	Hot pepper
Insect	*Diaphania sp.*	Caterpillar	Hot pepper
Insect	*Diaprepes abbreviatus (*Linnaeus*)*	Citrus weevil	Pepper
Insect	*Dysmicoccus brevipes*	pineapple mealybug	All

Pest Type	Scientific name	Common name(s)	Host[9]
Insect	*Dysmicoccus neobrevipes*	grey pineapple mealybug	All
insect	*Edessa bifida* Say	Leaf footed bug	Tomato
Insect	*Edessa meditabunda* (Fabricius)	Green and brown stink bug	All
Insect	*Edessa* sp.	Plant bug	eggplant
Insect	*Empoasca fabae* (Harris)	Potato leafhopper	All
Insect	*Epitrix fasciata*	Leaf Beetles, banded epitrix	Tomato, eggplant
Insect	*Epitrix hirtipennis* (Melscheimer)	Tobacco flea beetle	All
Insect	*Epitrix parvula (fasciata)*	Flea beetle	eggplant
Insect	*Epitrix* sp.	Flea beetles	All
Insect	*Euscepes postfasciatus*	West Indian sweet potato weevil	Hot pepper
Insect	*Euschistus bifibulus*	Brown Stink bug	Pepper
Insect	*Epitrix fasciata Blatchy*	Eggplant flea beetle	Eggplant
Insect	*Expitrix spp*.	Flea beetles	Hot pepper
Insect	*Faustinus cubae* Anths.	Cuban pepper weevil	All
Insect	*Feltia subterranea* (Fabricius)	Granulate cutworm	Pepper, tomato
Insect	*Ferrisia virgata* (Cockerell)	Striped mealybug	All
Insect	*Frankliniella cephalica* (Crawford)	Avocado blossom thrips, flower thrips	Pepper
Insect	*Frankliniella kelliae* Sakimura	thrips	Pepper
Insect	*Frankliniella occidentalis*	Western flower thrips	Pepper
Insect	*Frankliniella schultzei*	Cotton thrips	Pepper, tomato
Insect	*Gargaphia solani* Heidemann	Eggplant lace bug	Eggplant
Insect	*Gnorimoschema capsicum*	Flower bud pepper moth	Pepper
Insect	*Helicoverpa zea* (Boddie)	American cotton bollworm	All
Insect	*Heliothis armigera*	Cotton bollworm	tomato
Insect	*Heliothis virescens* (Fabricius)	Tobacco budworm	Pepper, tomato
Insect	*Heliothis zea* Boddie (*Heliothis armigera* auct. Nec. Hubner)	Cotton bollworm / Cotton earworm / Tomato fruit worm	All
Insect	*Hemiberlesia lataniae*	Latania scale	All
Insect	*Herpetogramma bipunctalis (?)*	Southern Beet Webworm Moth	Pepper
Insect	*Hortensia simili* (Wlk.)	Leafhopper	Tomato
Insect	*Insignorthezia insignis*	Greenhouse orthezia	All
Insect	*Keiferia lycopersicella*	Tomato pin worm	tomato
Insect	*Leptoglossus cinctus*	Leaf footed bug	All
Insect	*Leptoglossus* spp.	Leaf footed bug	Eggplant, tomato
Insect	*Liorhyssus hyalinus* (Fabricius)	Hyaline grass bug	Tomato
Insect	*Liriomyza pusilla* (Meig.)	Leafminer	All
Insect	*Liriomyza sativae* (Blanchard)	Vegetable leaf miner	All
Insect	*Liriomyza* spp.	Leaf miner flies	Tomato
Insect	*Liriomyza trifolii*	American serpentine leafminer	All
Insect	*Maconellicoccus hirsutus* (Green)	Pink hibiscus mealybug	Pepper, Tomato
Insect	*Manduca* (*Protaparce*) *sexta* (Linnaeus)	Tobacco horn worm	All
Insect	*Manduca sextus jamaicensis*	Hornworm	tomato
Insect	*Megaselia scalaris*	Leafminer, Phoridae	eggplant
Insect	*Miridae (Bryocorinae)* sp. *(?)*	Plant bug	Pepper
Insect	*Mythimna unipuncta*	rice armyworm	All
Insect	*Myzus persicae* (Sulz.)	Green peach aphid	All

Pest Type	Scientific name	Common name(s)	Host[9]
Insect	*Naupactus* spp.		Hot pepper
Insect	*Nezara viridula* (Linneaus)	Green stink bug	All
Insect	*Nipaecoccus viridis*	spherical mealybug	All
Insect	*Orthezia insignis*	Greenhouse orthezia	All
Insect	*Oxycarenus hyalinipennis*	cotton, seed bug	All
Insect	*Paracoccus marginatus* (Williams and Granara de Willink)	Papaya mealybug	All
Insect	*Phenacoccus madeirensis* (Green)	Cassava mealybug	All
Insect	*Phthia picta* (Drury)	Black bug	All
Insect	*Phthorimaea capsicus*	Tuber moth	All
Insect	*Phthorimaea operculella* (Zell.)	Potato tuber moth, leafminer	All
Insect	*Phythia picta* Drury	Tomato sucker	Tomato
Insect	*Pinnaspis strachani*	lesser snow scale	All
Insect	*Planococcus citri*	citrus mealybug	All
Insect	*Planococcus spp.*	Mealy bug	Hot pepper
Insect	*Platymota spp.*	Mealy bug	Hot pepper
Insect	*Polyphagotarsonemus latus*	Broad mite	All
Insect	*Prodiplosis longifila* Gagne	Gall midge, Bud midge	Hot pepper
Insect	*Pseudaulacaspis pentagona* (Targ.)	Mulberry scale	All
Insect	*Pseudococcus elisae*	banana mealybug	All
Insect	*Pseudococcus jackbeardsleyi*	Jack Beardsley mealybug	All
Insect	*Pseudococcus longispinus*	long-tailed mealybug	All
Insect	*Pseudococcus maritimus* (Ehrh.)	Grape mealybug	All
Insect	*Pulvinaria spp. (?)*	Scale insects	Pepper
Insect	*Pulvinaria urbicola* (Cockerell)	Urbicola soft scale	Pepper
Insect	*Rhectocraspeda periusalis (?)*	Eggplant caterpillar	Eggplant
Insect	*Rhopalosiphum (Myzus) persicae* Sulzer	Cabbage aphid	Hot pepper
Insect	*Saissetia coffeae*	Brown coffee scale	Eggplant, hot pepper
Insect	*Saissetia spp.*	Scale insect	Hot pepper
Insect	*Scapteriscus* sp.	Mole cricket	Tomato
Insect	*Scapteriscus vicinus* Scudder	Mole cricket	All
Insect	*Scirtothrips coccolobae* Collins & Edwards	Seagrape thrips	Pepper
Insect	*Scirtothrips dorsalis*	chilli thrips	All
Insect	*Spartocera batatas F.*	Giant sweet potato bug	Tomato
Insect	*Spodoptera (Prodenia) sunia*	Costa Rican armyworm	Hot pepper
Insect	*Spodoptera eridania*	Southern armyworm	All
Insect	*Spodoptera frudiperda* Smith	Fall armyworm	All
Insect	*Spodoptera latifascia*	Lateral lined armyworm	Pepper, tomato
Insect	*Spodoptera ornithogalli* (Guernee)	Yellow striped armyworm	All
Insect	*Spodoptera* sp.	Armyworm	tomato
Insect	*Spoladea recurvalis*	Hawaiian beet webworm	All
Insect	*Stegobium paniceum*	drugstore beetle	All
Insect	*Symmetrischema capsicum*	Pepper bud moth	pepper
Insect	*Systena s-littera*	Flea beetle	Tomato
Insect	*Thrips palmi* (Karny)	Melon thrips	All
Insect	*Thrips tabaci* (Linderman)	Potato thrips, onion thrips	All
Insect	*Thyanta antiguensis*	Pentatomid bug	tomato

Pest Type	Scientific name	Common name(s)	Host[9]
Insect	*Trialeurodes vaporariorum*	whitefly, greenhouse	All
Insect	*Trichoplusia ni*	cabbage looper	All
Insect	*Unaspis citri*	Citrus snow scale	Pepper
Mite	*Aculops lycopersici*	Tomato russet mite	tomato
Mite	*Aculus lycopersici*	Russet mite	tomato
Mite	*Polyphagotarsonemus latus (Banks)*	Broad mite	Pepper
Mite	*Steneotarsonemus pallidus*	Cyclamen mite	tomato
Mite	*Tetranychus evansi*	Red Spider Mites	Tomato
Mite	*Tetranychus marianae*	Spider mite	All
Mite	*Tetranychus* sp.	Spider mite	Eggplant, tomato
Mite	*Vasates lycopersici*	Tomato russet mite	All
Mollusc	*Veronicella occidentalis*	Slug	tomato
Nematode	*Aphelenchus* sp.	Fungivorous nematodes	Hot pepper
Nematode	*Helicotylenchus dihystera*	Common spiral nematode	All
Nematode	*Helicotylenchus multicinctus*	Banana spiral nematode	All
Nematode	*Helicotylenchus pseudorobustus*	Spiral nematode	Eggplant, tomato
Nematode	*Helicotylenchus sp.*	Spiral nematodes	Hot pepper
Nematode	*Hemicycliophora shepherdi*	-	All
Nematode	*Meloidogyne arenaria* (Neal) Chitwood	Peanut root knot nematode	Tomato, Hot pepper
Nematode	*Meloidogyne hapla*	Root knot nematode	tomato
Nematode	*Meloidogyne incognita* (Kofoid & White) Chitwood	Root knot nematode	All
Nematode	*Meloidogyne javanica*	Root knot nematode	tomato
Nematode	*Meloidogyne* sp	Root knot nematodes	Tomato, eggplant
Nematode	*Pratylenchus sp.*	Root lesion nematode	Tomato, hot pepper
Nematode	*Radopholus similis* (Cobb)	Burrowing nematode	Tomato
Nematode	*Rotylenchulus reniformis* Linford & Oliveira	Reniform/Spiral nematode	All
Nematode	*Scutellonema bradys*	Yam dry rot nematode	Tomato
Nematode	*Trichodorus spp.*	Stubby root nematodes	Hot pepper
Nematode	*Tylenchorhynchus sp.*	Stunt nematode	Tomato, hot pepper
Nematode	*Tylenchus sp.*	Nematode	tomato
Nematode	*Xiphinema americanum*	Root gall nematode	Eggplant
Nematode	*Xiphinema sp.*	Dagger nematode	Hot pepper
Nematode	*Xiphinema vulgare*	Dagger nematode	All
Oomycete	*Albugo ipomoeae-panduratae*	White rust of sweet potato	Pepper
Oomycete	*Phytophthora infestans*	Phytophthora blight	All
Oomycete	*Phytophthora nicotianae*	black shank	All
Oomycete	*Phytophthora* sp.	Phytophthora Blight, foot rot	All
Oomycete	*Pythium butleri*	Damping off	tomato
Oomycete	*Pythium debaryanum*	damping-off	All
Virus	-	Unidentified	Pepper
Virus	-	Mosaic Virus	All
Virus	Cucumber Mosaic Virus	CMV	All
Virus	*Corythaicha cyathicollis*	Cucumber mosaic cucumovirus	Eggplant
Virus	*Cucumber Mosaic Virus*	Cucumber mosaic	All
Virus	Pepper vein banding virus	Pepper vein banding virus	Hot pepper

Pest Type	Scientific name	Common name(s)	Host[9]
Virus	Potato leafroll virus	-	Pepper, tomato
Virus	Potato Virus Y	Potato Mottle	Tomato, hot pepper
Virus	Sweet potato leaf curl virus	Potato leaf curl	Tomato
Virus	TMV	-	All
Virus	Tobacco Etch Virus	Tobacco streak	Pepper
Virus	Tobacco Mosaic Virus	Tobacco Mosaic	Tomato, hot pepper
Virus	Tomato leaf curl begomovirus	-	All
Virus	Tomato Spotted Wilt Virus	Tomato spotted wilt	tomato
Virus	Tomato Yellow Leaf Curl Virus	Leaf curl (TYLCV)	tomato
Weed	*Emilia sonchifolia*	Consumption weed	Tomato
Weed	*Parthenium hysterophorus*	Parthenium weed	Tomato
Weed	*Synedrella nodiflora*	Cinderella weed	Tomato

SPICES (Ginger – *Zinziber officinale*, Turmeric – *Curcuma longa*)

Pest Type	Scientific name	Common name(s)	Host
Bacterium	*Pseudomonas sp*	Rhizome rot	ginger
Bacterium	*Ralstonia solanacearum*	Bacterial wilt of potato	Ginger, turmeric
Fungus	*Colletotrichum capsici*	Rot	ginger
Fungus	*Corticium rolfsii* (Curzi)	Sclerotium rot	turmeric
Fungus	*Fusarium moniliforme*	Rhizome/root rot	ginger
Fungus	*Fusarium oxysporum*	basal rot, root rot or wilt	Ginger, turmeric
Fungus	*Fusarium solani*	Wilt of rhizome	ginger
Fungus	*Macrophomina phaseolina* (Tassi) Goi	Charcoal rot of bean/tobacco	Ginger, turmeric
Fungus	*Nectria haematococca* (Wollenw.) Gerlach	Dry rot of potato	turmeric
Fungus	*Phyllosticta* sp. (?)	Pale leaf spot of ginger	ginger
Fungus	*Phyllosticta zinziberi* (T.S. Ramakr)	Leaf spot	ginger
Fungus	*Rhizoctonia solani* (*Thanatephorus cucumeris*)	Dry root, wilt of rhizome & root	ginger
Fungus	*Rosellinia bunodes*	Black root rot)	ginger
Fungus	*Rosellinia necatrix*	Black root rot	ginger
Fungus	*Verticillium sp*	Drying of rhizome	ginger
Insect	*Aspidiella hartii* (Targ.)	Yam scale	Ginger, turmeric
Insect	*Aulacaspis tubercularis*	Scale	ginger
Insect	*Carneocephala reticulate*	Hopper	ginger
Insect	*Corcyra cephalonica*	rice meal moth	Ginger, turmeric
Insect	*Dysmicoccus brevipes*	pineapple mealybug	Ginger, turmeric
Insect	*Lasioderma serricorne* (Fabricius)	Cigarette beetle	turmeric
Insect	*Nipaecoccus nipae*	spiked mealybug	Ginger, turmeric
Insect	*Paleopus costicollis*	Weevil	ginger
Insect	*Pseudaonidia trilobitiformis*	Scale insect	ginger
Insect	*Pseudococcus jackbeardsleyi*	Jack Beardsley mealybug	Ginger, turmeric
Insect	*Stegobium paniceum* (Linnaeus)	Drugstore beetle	Ginger, turmeric
Mite	*Tetranychus* spp.	Spider mite	ginger
Mollusc	*Veronicella laevis*	Slug	ginger
Nematode	*Helicotylenchus multicinctus*	Spiral nematode	ginger
Nematode	*Helicotylenchus nannus*	Spiral nematode	ginger
Nematode	*Helicotylenchus sp*	Spiral nematode	ginger

Nematode	*Meloidogyne* spp.	Root-knot nematode	Ginger, turmeric
Nematode	*Pratylenchus coffeae*	Banana root nematode	turmeric
Nematode	*Pratylenchus sp*	Lesion nematode	ginger
Nematode	*Radopholus similis*	Burrowing nematode	Ginger, turmeric
Nematode	*Retylenchus reniformis*	Reniform/Spiral nematodes	Ginger, turmeric
Nematode	*Rotylenchus sp*	Reniform nematode	ginger
Nematode	*Xiphinema* sp.	Dagger nematodes	ginger
Oomycete	*Pythium* sp	Root/rhizome rot	ginger

SWEET POTATO (*Ipomea batatas*)

Pest Type	Scientific name	Common name(s)
Bacterium	*Erwinia carotovora subsp. carotovora* (Jones)	Bacterial root rot of sweet potato
Bacterium	*Erwinia chrysanthemi*	Bacterial soft rot
Bacterium	*Pseudomonas* sp. (E.F. Smith)	Canker, leaf and stem spots, blight, soft rot, galls
Bacterium	*Ralstonia solanacearum*	Bacterial wilt
Fungus	*Alternaria* spp.	Alternaria leaf spot & Leaf and stem blight
Fungus	*Aspergillus niger* (Van Tieghem)	Black mold (rot), crown rot, vine canker
Fungus	*Athelia rolfsii*	Sclerotium rot
Fungus	*Botryodiplodia theobromae* (Pat.)	Diplodia stem rot
Fungus	*Ceratocystis fimbriata* Ellis and Halstead	Black rot
Fungus	*Cercospora ipomoeae Wint.*	Angular leaf spot
Fungus	*Coleosporium ipomoeae*	Sweet potato rust
Fungus	*Corticium rolfsii (*Sacc.)	Sclerotium rot, collar rot
Fungus	*Fusarium oxysporum*	Basal rot
Fungus	*Fusarium solani* (Mart.) Sacc	Fusarium root and stem rot
Fungus	*Lasiodiplodia theobromae*	Diplodia pod rot of cocoa
Fungus	*Macrophomina phaseolina*	Charcoal rot of bean/tobacco, ashy stem blight
Fungus	*Macrophomina* sp.	Charcoal rot
Fungus	*Phoma glomerata* (Corda) Wollenw. & Hoch.	Blight of grapewine
Fungus	*Phyllosticta batatas* (Thuemen) Cooke	Leaf spot of sweet potato
Fungus	*Plenodomus destruens* Harter	Foot rot
Fungus	*Rhizopus stolonifer* (Ehrenb.) Vuill.	Tuber rot
Fungus	*Rigidoporus microporus*	Root rot disease
Fungus	*Sclerotium rolfsii* (Sacc.)	Southern blight
Insect	-	Weevils
Insect	-	Whiteflies
Insect	*Acrospila tripunctata* (F.) *[=Pilocrocis tripunctata]*	Sweet potato leafroller
Insect	*Agrius cingulatus* (Fabricius)	Pink-spotted hawkmoth, sweet potato hornworm
Insect	*Aleurodicus dispersus*	Spiralling whitefly
Insect	*Aleurotrachelus trachoides*	Whitefly
Insect	*Aleurotrachylus* sp.	Whitefly
Insect	*Anasa scorbutica* (Fabricius)	Squash bug
Insect	*Aphis gossypii* (Glover)	Cotton aphid, melon aphid, betelvine aphid, green aphid, cucurbit aphid
Insect	*Aphis spiraecola*	Spirea aphid
Insect	*Araecerus fasciculatus*	Cocoa weevil

Pest Type	Scientific name	Common name(s)
Insect	*Atta* sp.	Leaf-cutter ant
Insect	*Bemisia tabaci* (Gennadius)	Tobacco whitefly, cotton whitefly, cassava whitefly, sweet potato whitefly, silver leaf whitefly
Insect	*Brachmia convolvuii* Wa Isingham	Sweet potato leafroller
Insect	*Candotella jamaicensis*	Leaf beetle
Insect	*Ceratoma ruficornis* (Olivier)	Leaf beetle
Insect	*Cerconota anonella*	Soursop moth
Insect	*Ceroplastes cirripediformis* (Comstock)	Barnacle scale
Insect	*Chaetanaphothrips orchidii* (Moulton)	orchid thrips, anthurium thrips; orchid thrips; banana red rust thrips; banana rust thrips; citrus rust thrips
Insect	*Chaetocnema confinis* Crotch	Sweet potato flea beetle
Insect	*Charidotella jamaicensis*	Leaf beetle
Insect	*Charidotella sexpunctata* (Fabricius) *[=Metriona/Charidotella bicolor]*	Southern golden tortoise bug
Insect	*Chelymorpha multipunctate*	Tortoise beetle
Insect	*Chirida signifera* (Herbst)	Beetle
Insect	*Coptocycla judaica* (Fabricius)	Mottled tortoise beetle
Insect	*Corecoris fuscus* (Thunberg)	leaf-footed bug
Insect	*Cylas formicarius* (Fabricius)	Sweet potato weevil
Insect	*Cylas formicarius elegantulus*	Sweet potato beetle
Insect	*Cylas formicarius elegantulus* (Summers)	sweet potato weevil
Insect	*Deloyala fuliginosa* (Oliver 1790)	Tortoise beetle
Insect	*Deloyala guttata* (Olivier)	Golden (tortoise) beetle
Insect	*Dendrothripoides innoxius*	Sweet potato thrips
Insect	*Diaprepes abbreviatus* (Linnaeus)	Citrus weevil
Insect	*Draeculacephala* spp.	Vampire leafhoppers
Insect	*Dysmicoccus brevipes* (Cockerell)	Pineapple mealybug)
Insect	*Empoasca fabae* (Harris)	Leafhopper
Insect	*Epitrix cucumeris (?)*	Black flea beetle
Insect	*Epitrix hirtipennis* (Melscheimer)	Tobacco flea beetle
Insect	*Epitrix parvula* (Fabricius)	tobacco flea beetle
Insect	*Euschistus servus* (Say)	Brown stink bug
Insect	*Euscepes batatae* (Waterhouse)	West Indian sweet potato weevil
Insect	*Euscepes porcellus* (Boheman)	West Indian sweet potato weevil
Insect	*Euscepes postfasciatus* (Fairmaire)	West Indian Sweet potato weevil, scarabee weevil
Insect	*Ferrisia virgata* (Cockerell)	Striped mealybug
Insect	*Frankliniella insularis* (Franklin)	Blossom thrips, flower thrips, Cuban flower thrips, West Indian bean-flower thrips
Insect	*Frankliniella occidentalis* Pergaude	Western flower thrips
Insect	*Frankliniella melanommatus* (Williams)	Flower thrips
Insect	*Heliothis virescens* (Fabricius)	Tobacco budworm
Insect	*Herpetogramma hipponalis* Walker	Green leaf roller
Insect	*Lerema accius* (J.E. Smith)	Clouded skipper, corn leaf-tier
Insect	*Ligyrus cuniculus* (Fabricius)	Rough black hard-back (PR)
Insect	*Liorhyssus hyalinus* (Fabricius)	Hyaline grass, bug
Insect	*Liriomyza sativae*	vegetable leaf miner
Insect	*Macrosiphum euphorbiae* (Thomas)	potato aphid, tomato aphid

Pest Type	Scientific name	Common name(s)
Insect	*Megastes grandalis*	Sweet potato moth
Insect	*Metriona bicolor*	Tortoise beetle
Insect	*Metriona flavolineata* (Latreille)	Golden-striped tortoise beetle
Insect	*Microthyris anormalis*	Sweet potato leaf roller
Insect	*Microthyris prolongalis (?)*	Sweet Potato Leaf folder/webworm
Insect	*Mormidea ypsilon*	Stink bug
Insect	*Myzus persicae* (Sulzer)	Green peach aphid, peach curl aphid, cabbage aphid, tobacco aphid, potato aphid, green sesame aphid
Insect	*Naupactus [= Graphognathus]* spp.	White-fringed beetles
Insect	*Nemorimyza maculosa*	Chrysanthemum leaf miner
Insect	*Nezara viridula* (Linnaeus)	Green stink bug
Insect	*Nipaecoccus nipae* (Maskell)	Spiked mealybug/coconut mealybug
Insect	*Omphisa anastomosalis*	Sweet Potato stem borer
Insect	*Palaeopus costicollis* (Marshall)	Yam weevil
Insect	*Peregrinus maidis* (Ashmead)	Cord delphacid
Insect	*Phyllobius pomaceus* Gyllenhal	Green weevil
Insect	*Phyllophaga smithi*	White grub
Insect	*Phyllophaga spp.*	White grubs
Insect	*Pilocrocis tripunctata* (Fabricius)	Sweet potato leaf roller
Insect	*Planococcus citri*	Citrus mealybug
Insect	*Pseudococcus jackbeardsleyi*	Jack Beardsley mealybug
Insect	*Ptericoptus sp.*	Long horned beetle
Insect	*Rhopalosiphum maidis*	Green corn aphid
Insect	*Rhyssomatus nigerrimus* (Fahraeus)	Curculionid beetle
Insect	*Scapteriscus* sp.	Mole crickets
Insect	*Schistocerca americana* (Drury)	American bird grasshopper
Insect	*Schistocerca* spp.	Grasshoppers
Insect	*Scirtothrips dorsalis*	Chilli thrips
Insect	*Spartocera batatas* F.	Giant sweet potato bug
Insect	*Spartocera fusca (?)*	Sweet potato stink bug
Insect	*Spodoptera dolichos*	Larger cotton cutworm
Insect	*Spodoptera eridania* (Stoll)	southern army worm
Insect	*Spodoptera frugiperda* (Smith)	Fall armyworm
Insect	*Spodoptera latifascia*	Lateral lined armyworm
Insect	*Systena s-littera*	Flea beetle
Insect	*Tenebrio molitor* (L.)	Darkling beetle
Insect	*Thyanta* spp.	Pentatomid stinkbugs
Insect	*Trialeurodes vaporariorum*	Whitefly, greenhouse
Insect	*Tribolium castaneum*	Red flour beetle
Insect	*Trichoplusia ni*	Cabbage looper
Insect	T*ypohorus nigritus viridicyaneus* (Fabricius)	Black sweet potato beetle
Mite	*Aculops lycopersici*	Tomato russet mite
Mite	*Aculus lycopersici*	Tomato russet mite
Mite	*Aleurotrachelus trachoides*	Pepper whitefly
Mite	*Brevipalpus phoenicis* (Geijskes)	Red and black flat mite, false spider mite
Mite	*Eriophyes gastrotrichus* Nalepa	Gall mite
Mite	*Tetranychus cinnabarinus* (Boisd)	Carmine spider mite

Pest Type	Scientific name	Common name(s)
Mite	*Tetranychus marianae*	Spider mite
Mite	*Tetranychus* spp.	Spider mites
Mite	*Tetranychus telarius* (Linnaeus)	red spider mite
Nematode	*Aphelenchoides besseyi*	Rice leaf nematode
Nematode	*Aphelenchus sp* (Bastian)	Fungivorous nematodes
Nematode	*Cacopaurus sp* (Thorne)	Sessile nematodes
Nematode	*Criconemoides sp* (Taylor)	Ring nematodes
Nematode	*Helicotylenchus dihystera*	Common spiral nematode
Nematode	*Helicotylenchus multicinctus*	Banana spiral nematode
Nematode	*Helicotylenchus nanus* (Steiner)	Spiral nematodes
Nematode	*Meloidogyne incognita*	Root-knot eelworm
Nematode	*Meloidogyne* sp. (Goeldi)	Root knot nematodes
Nematode	*Paratylenchus* sp. (Micoletzky)	Pin nematodes
Nematode	*Pratylenchus* sp. (Filipjev)	Lesion nematodes
Nematode	*Radopholus* sp. (Cobb) Thorne	Borrowing nematodes
Nematode	*Rotylenchus reniformis* (Linford & Oliveira)	Reniform nematode
Nematode	*Xiphinema vulgare* (Tarjan)	Dagger nematode
Nematode	*Tylenchorynchus acutus* (Allen)	Stylet-stunt nematode
Nematode	*Tylenchorynchus* sp (Cobb)	Stunt nematodes
Nematode	*Xiphinema* sp. (Cobb)	Dagger nematodes
Oomycete	*Albugo ipomoeae* (Schwein.) Swingle	Common white blister
Oomycete	*Albugo ipomoeae-panduratae*	White rust
Virus	Caulimomosaic virus	-
Virus	Cucumber mosaic virus	Cucumber mosaic
Virus	LSU-2	-
Virus	SPCSV	-
Virus	SPFMV	-
Virus	SPVG	-
Virus	Sweet potato feathery mottle virus	-
Virus	Virus complex	-
Weed	*Emilia sonchifolia*	Consumption weed
Weed	*Synedrella nodiflora*	Cinderella weed

TARO [Dasheen] (*Colocasia esculenta*) AND EDDO (*Colocasia antiquorum*)

Pest Type	Scientific name	Common name(s)	Host
Bacterium	*Erwinia caratovora (L.R. Jones) Holland*	Bacterial soft rot	Taro, eddo
Bacterium	*Xanthomonas campestris*	Black rot	Taro, eddo
Fungus	*Calonectria rigidiuscula* (Berk. & Br.) Sacc.	Die-back	Taro
Fungus	*Ceratocystis autographa* Bakshi	Die-back	Taro
Fungus	*Ceratocystis fimbriata* Ell. & Halst.	Mango blight, black rot of sweet potato, cacao wilt	Taro
Fungus	*Colletotrichum gloeosporioides* Penz	Anthracnose	Taro, eddo
Fungus	*Cylindrocladium camelliae* Venkataramani & Venkata Ram	Tea root rot	Taro
Fungus	*Cytospora* sp.	Die-back	Taro
Fungus	*Fusarium oxysporum*	Basal rot	Taro
Fungus	*Fusarium* sp.	Fusarium wilt	Taro
Fungus	*Glomerella cingulata* (Stonem.) Spauld. & Schrenk.	Anthracnose, brown blight, leaf spot	Taro
Fungus	*Guignardia citricarpa* Kiely	Citrus black spot	Taro
Fungus	*Hendersonia* sp.	Die-back	Taro
Fungus	*Lasiodiplodia theobromae*	diplodia pod rot of cocoa	Taro
Fungus	*Meliola amomiicola* Stev	Sooty mould	Taro
Fungus	*Meliola helleri* Earl	Sooty mould	Taro
Fungus	*Phomopsis* sp.	Phomopsis black rot, cucumber black rot, melon soft rot	Taro
Fungus	*Phyllosticta colocasiicola*	Slothole leaf spot	Taro
Fungus	*Pseudocercospora colocasiae*	Dasheen Leaf spot	Taro
Fungus	*Puccinia psidii* Wint.	Guava rust	Taro
Fungus	*Rhizoctonia solani (Thanatephorus cucumeris)*	various, depending on host	Taro
Fungus	*Rhizoctonia* sp.	Damping off, root rot	Taro
Fungus	*Sporidesmium tropicale* Ellis	Leaf blight	Taro
Fungus	*Valsa eugeniae* Nutman & Roberts	Die-back	Taro
Insect	-	Aphids	Eddo
Insect	*Aleurodicus dispersus*	Spiralling whitefly	Taro
Insect	*Aphis craccivora (Koch)*	Cowpea aphid	Taro, eddo
Insect	*Aphis gossypii* Glover	Melon aphid, cotton aphid	Taro, eddo
Insect	*Aspidiotus destructor*	Coconut scale	Taro
Insect	*Bemisia tabaci* (Gennadius)	Tobacco whitefly, sweet potato whitefly	Taro, eddo
Insect	*Corythuca gossypii* (F.)	Cotton (bean) lacebug	Taro, eddo
Insect	*Cylas formicarius*	Sweet potato weevil	Taro
Insect	*Dysmicoccus brevipes* Cockerell	Pineapple mealybug	Taro
Insect	*Ferrisia virgata* Cockerell	Striped mealybug	Taro
Insect	*Junonia genoveva* Stoll	Tropical (Caribbean) buckeye caterpillar	Eddo
Insect	*Ligyrus ebenus*	Dasheen beetle	Taro
Insect	*Ligyrus ebenus* (Degeer)	Black sugarcane chafer	Taro, eddo
Insect	*Myzus persicae* Sulzer	Green peach aphid	Taro
Insect	*Parasaissetia nigra* Nietner	Pomegranate scale	Taro
Insect	*Pentalonia nigronervosa* Coquerel	Banana aphid	Taro
Insect	*Phyllophyga* spp.	Eddo grub	Eddo
Insect	*Pinnaspis strachani* Cooley	Lesser snow scale	Taro

Pest Type	Scientific name	Common name(s)	Host
Insect	*Planococcus citri*	Citrus mealybug	Taro
Insect	*Pseudococcus longispinus* Targioni Tozzetti	Long-tailed mealybug	Taro
Insect	*Scirtothrips dorsalis*	Chilli thrips	Taro
Insect	*Sitophilus zeamais* Motschulsky	Greater grain weevil	Taro
Insect	*Tetraleurodes* sp.?	Whitefly	Taro
Insect	*Tetraleurodes ursorum* (Ckll.)	Bearberry whitefly	Taro, eddo
Insect	*Vinsonia stellifera* (Westwood)	Star scale	Taro, eddo
Mite	*Tetranychus* spp.	Spider mite	Taro, eddo
Mollusc	*Veronicella sloanei* (Cuvier)	Pancake slug	Taro, eddo
Nematode	-	Nematodes (unidentified)	Eddo
Nematode	*Helicotylenchus dihystera*	Common spiral nematode	Taro
Nematode	*Helicotylenchus multicinctus* (Cobb & Golden)	Spiral nematode	Taro, eddo
Nematode	*Helicotylenchus* spp.	Spiral nematodes	Taro, eddo
Nematode	*Meloidogyne* spp.	Root knot nematode	Taro, eddo
Nematode	*Pratylenchus* coffeae	Banana root nematode	Taro
Nematode	*Rotylenchulus reniformis* Linford & Oliveira	Reniform/Spiral nematodes	Taro
Nematode	*Tetranychus* sp.	Spider mites	Taro, eddo
Oomycete	*Phytophthora cinamomi* Rands	Root rot of avocado	Taro
Oomycete	*Phytophthora colocasiae*	Taro blight	Taro
Oomycete	*Phytophthora* spp.	Corm and root rots	Eddo
Oomycete	*Pythium debaryanum*	Damping-off	Taro
Oomycete	*Pythium myriotylum*	Root and Stem Rot	Taro
Oomycete	*Pythium* spp.	Corm and root rots	Eddo
Virus	Cucumber mosaic virus	Cucumber mosaic	Taro
Virus	*Dasheen mosaic potyvirus*	Dasheen Mosaic Virus	Taro
Virus	*Poty virus*	-	Taro, eddo
Virus (?)	*?*	Chlorotic streak (virus?)	Taro
Weed	*Emilia sonchifolia*	Consumption weed	Taro
Weed	*Synedrella nodiflora*	Cinderella weed	Taro

WHITE (IRISH) POTATO (*Solanum tuberosum*)

Pest Type	Scientific name	Common name(s)
Bacterium	*Erwinia carotovora* subsp. *atroseptica*	Black leg
Bacterium	*Pseudomonas solanacearum*	Bacterial wilt
Bacterium	*Pseudomonas syringae*	Bacterial blast
Bacterium	*Ralstonia solanacearum*	Bacterial wilt
Bacterium	*Streptomyces scabies*	Common Scab
Fungus	*Alternaria solani*	Early blight
Fungus	*Athelia rolfsii*	collar rot
Fungus	*Colletotrichum coccodes*	leaf spot
Fungus	*Corticum solani*	Black scurf/stem canker
Fungus	*Didymella bryoniae*	Gummy stem blight
Fungus	*Didymella lycopersici*	canker of tomato
Fungus	*Erwinia caratovora*	Soft rot/black leg
Fungus	*Fusarium avenaceum*	Leaf necrosis
Fungus	*Fusarium coeruleum*	Dry rot

Pest Type	Scientific name	Common name(s)
Fungus	*Fusarium oxysporum*	Wilt
Fungus	*Fusarium solani*	Stem rot, foot rot, tuber rot
Fungus	*Helminthosporium solani*	Silver scurf
Fungus	*Leveillula taurica*	Powdery mildew
Fungus	*Rhizoctona* sp.	Blight
Fungus	*Rhizoctonia solani*	Collar rot, root rot, damping off, wire stem
Fungus	*Rosellinia bunodes*	Black root rot
Fungus	*Spondylcladium atrovirens*	Silver scurf
Insect	*Anila infecta*	Cut worm
Insect	*Aphis craccivora* Koch	Ground/cowpea aphid
Insect	*Aphis gossypii*	Cotton aphid
Insect	*Aphis spiraecola*	Green citrus aphid
Insect	*Araecerus fasciculatus*	cocoa weevil
Insect	*Bemisia tabaci*	Tobacco whitefly
Insect	*Diabrotica balteata*	Banded cucumber beetle
Insect	*Diaprepes abbreviatus*	citrus weevil
Insect	*Dysmicoccus brevipes*	pineapple mealybug
Insect	*Edessa meditabunda*	green and brown stink bug
Insect	*Empasca fabae* (Harris)	Potato leaf hopper
Insect	*Epitrix hirtipennis*	Tobacco flea beetle
Insect	*Feltia subterranea*	Granulate cutworm
Insect	*Insignorthezia insignis*	greenhouse orthezia
Insect	*Keiferia lycopersicella*	Tomato pinworm
Insect	*Ligyrus tumulosus*	White grub
Insect	*Liriomyza sativae*	Vegetable leaf miner
Insect	*Liriomyza trifolii*	American serpentine leafminer
Insect	*Macrosiphum euphorbiae*	Potato aphid
Insect	*Manduca sexta*	Tobacco hornworm (USA)
Insect	*Myzus persicae*	Green peach aphid
Insect	*Nipaecoccus nipae*	Spiked mealybug
Insect	*Orthezia insignis*	Greenhouse orthezia
Insect	*Phenacoccus madeirensis*	Madeira mealybug
Insect	*Phyllophaga smithi*	White grub
Insect	*Planococcus citri*	Citrus mealybug
Insect	*Polyphagotarsonemus latus*	Broad mite
Insect	*Prodenia* (Spodoptera) *ornithogalli*	Caterpillar
Insect	*Pseudococcus jackbeardsleyi*	Jack Beardsley mealybug
Insect	*Pseudococcus longispinus*	Long-tailed mealybug
Insect	*Rhopalosiphum maidis*	Green corn aphid
Insect	*Spodoptera eridania*	Southern armyworm
Insect	*Spodoptera frugiperda*	Fall armyworm
Insect	*Spodotera ornithogalli* (Guenee)	Yellow-striped armyworm
Insect	*Thrips palmi*	Melon thrips
Insect	*Thrips tabaci*	Onion thrips
Insect	*Trialeurodes vaporariorum*	Whitefly, greenhouse
Insect	*Trichoplusia ni*	Cabbage looper
Insect	*Xylomiges* (*Spodoptera) sunia*	Caterpillar

Pest Type	Scientific name	Common name(s)
Nematode	*Helicotylenchus dihystera*	Common spiral nematode
Nematode	*Helicotylenchus pseudorobustus*	Spiral nematode
Nematode	*Longidorus*	Longidorids
Nematode	*Meloidogyne arenaria*	Peanut root-knot nematode
Nematode	*Meloidogyne incognita*	Root-knot nematode
Nematode	*Meloidogyne javanica*	Sugarcane eelworm
Nematode	*Pratylenchus coffeae*	Banana root nematode
Nematode	*Rotylenchulus reniformis*	Reniform nematode
Oomycete	*Phytophthora infestans*	Late Blight of potato
Virus	Cucumber mosaic virus	Cucumber mosaic
Virus	Potato virus X	Rugose mosaic
Virus	Potato virus Y	Potato mottle
Weed	*Datura stramonium*	Jimsonweed
Weed	*Emilia sonchifolia*	Consumption weed
Weed	*Parthenium hysterophorus*	Parthenium weed

YAM (*Dioscorea alata*)

Pest Type	Scientific name	Common name(s)
Bacterium	-	Tuber wet rot
Bacterium	*Rhizobium radiobacter*	Crown gall
Fungus	-	Anthracnose
Fungus	*Athelia rolfsii*	Sclerotium rot
Fungus	*Ceratocystis paradoxa*	Fruit rot
Fungus	*Cercospora bataticola*	Sigatoka
Fungus	*Cercospora carbonacea*	Leaf spot
Fungus	*Cercospora dioscoreae*	Sigatoka
Fungus	*Cercospora* spp.	Leaf spot
Fungus	*Chalara elegans*	Black root rot
Fungus	*Colletotrichum capsici* (Syd.) Butler & Bisby	Leaf spot
Fungus	*Colletotrichum gloeosporioides* Penz.	Anthracnose
Fungus	*Corticium/Sclerotium rolfsii*	Sclerotium rot
Fungus	*Fusarium oxysporum*	Basal rot
Fungus	*Fusarium oxysporum* Schlect.	Root & collar rot
Fungus	*Fusarium solani*	Dry rot
Fungus	*Glomerella cingulata*	Anthracnose
Fungus	*Glomerella cingulata* (Stonem.) Spauld. & Schrenk.	Angular leaf spot
Fungus	*Lasiodiplodia theobromae*	Diplodia pod rot of cocoa
Fungus	*Nectria haematococca*	Dry rot of potato
Fungus	*Phyllosticta batatas*	Leaf blight
Fungus	*Rhizoctonia solani*	Collar & root rot, damping off, wire stem
Insect	-	Termites
Insect	-	Yam beetle or weevil
Insect	-	Defoliating caterpillars
Insect	*Aleurotrachelus trachoides*	White fly
Insect	*Aphis gossypii*	Cotton aphid
Insect	*Araecerus fasciculatus*	Cocoa weevil

Pest Type	Scientific name	Common name(s)
Insect	*Aspidiella (Aspidiotus) hartii* (CkII)	Yam scale
Insect	*Aspidiotus destructor* (Sign.)	Coconut scale
Insect	*Carpophilus dimidiatus*	Stored yam weevil
Insect	*Coccus hesperidum*	Brown soft scale
Insect	*Diaprepes abbreviatus*	Citrus weevil
Insect	*Ferrisia virgata*	Striped mealybug
Insect	*Hortensia similis*	Common green sugarcane leafhopper
Insect	*Lasioderma serricorne*	Cigarette beetle
Insect	*Ligyrus cuniculus*	Rough black hard-back (PR)
Insect	*Opogona sacchari*	Banana moth
Insect	*Palaeopus costicollis*	Yam weevil
Insect	*Phyllophaga smithi*	White grub
Insect	*Pinnaspis strachani*	Lesser snow scale
Insect	*Planococcus citri*	Citrus mealybug
Insect	*Spodoptera eridania*	Southern armyworm
Insect	*Tribolium castaneum*	Red flour beetle
Insect	*Xyleborus ferrugineus*	Black twig borer
Nematode	-	Root-knot nematodes
Nematode	*Helicotylenchus dihystera*	Common spiral nematode
Nematode	*Helicotylenchus erythrinae*	Spiral nematode
Nematode	*Helicotylenchus multicinctus*	Banana spiral nematode
Nematode	*Helicotylenchus nannus/dihystera*	Spiral nematode
Nematode	*Hoplolaimus pararobustus*	Lance nematode
Nematode	*Longidorus*	Longidorids
Nematode	*Meloidogyne incognita*	Root-knot nematode
Nematode	*Meloidogyne javanica*	Sugarcane eelworm
Nematode	*Pratylenchus coffeae*	Banana root nematode
Nematode	*Pratylenchus sp*	Root lesion nematode
Nematode	*Radopholus similis*	Burrowing nematode
Nematode	*Rotylenchulus reniformis*	Reniform nematode
Nematode	*Scutellonema bradys*	Yam dry rot nematode
Nematode	*Scutellonema* sp.	Nematodes
Nematode	*Tylenchorhynchus acutus*	Stunt nematode
Oomycete	*Albugo ipomea pandurate*	White rust
Virus	Cucumber Mosaic Virus	Cucumber Mosaic
Virus	Yam mild mosaic virus	-
Virus	Yam Mosaic Virus	Yam Mosaic
Weed	*Synedrella nodiflora*	Cinderella weed

GENERALIST PESTS

Pest Type	Scientific name	Common name(s)
Bird	*Ave* spp.	Birds
Insect	*Maconellicoccus hirsutus*	Pink Hibiscus Mealybug
Insect	*Paracoccus marginatus*	Papaya Mealybug
Insect	*Solenopsis invicta*	Red Imported Fireant
Mammal	*Rattus* sp.	Rats

Pest Type	Scientific name	Common name(s)
Mollusc	*Leidyula floridana*	Leatherleaf slug
Mollusc	*Lissachatina fulica*	Giant African Snail
Mollusc	*Sarasinula marginata*	Leatherleaf slug
Mollusc	*Succinea* sp.	Amber snail
Mollusc	*Vaginulus* spp.	Slugs
Mollusc	*Zachrysia provisoria*	Cuban Garden Slug
Weed	*Achyranthes aspera* L.	Devil's horsewhip / fowl toe
Weed	*Amaranthus dubius* Mart.	Bhaji / Wild spinach/ Calaloo
Weed	*Cyanthula prostrata* (L)	Pasture weed
Weed	*Emilia fosbergii* Nicholson	Cupid's paint brush / Rabbit meat (feed)
Weed	*Parthenium hysterophorus* L.	Broomweed/ white top
Weed	*Synedrella nodiflora* (L.) Gaertn.	Porter bush
Weed	*Tridax procumbens* L.	White head
Weed	*Vernonia cinerea* (L.)	Pink weed
Weed	*Senna obtusifolia* (L.) Irwin & Barneby	Money bush
Weed	*Senna occidentalis* (L.) Link	Wild coffee/ Piss-a-bed
Weed	*Cleome aculeata L.*	Spider weed, bee plant
Weed	*Cleome rutidosperma* DC.	Feefee
Weed	*Cleome viscose* L.	Ground dove feeden (feed)
Weed	*Commelina diffusa* Burm.	French weed/ Water grass
Weed	*Comelina elegans* HBK.	French weed/ Water grass
Weed	*Merremia umbellate* (L.) H. Hall.	Hog vine
Weed	*Momordica charantia* L.	Karaila/ Corrilla
Weed	*Cyperus rotundus L.*	Nut grass
Weed	*Acalypha arvensis* Poepp. & Endl.	Field copperleaf
Weed	*Chamaesyce hirta* (L.) Millsp.	Milk weed
Weed	*Chamaesyce hypericifolia* (L.) Millsp.	Spurge
Weed	*Chamaesyce thymifolia* (L.) Millsp.	Gulf sandmat
Weed	*Euphorbia eterophylla* L.	Milk weed
Weed	*Phyllanthus amarus* Schum. & Thonn	Seed under leaf
Weed	*Phyllanthus urinaria* L.	Seed under leaf
Weed	*Ricinus communis L.*	Castor oil plant
Weed	*Crotalaria retusa L.*	Wild sweet pea/ Yellow shac-shak
Weed	*Desmodium incanum* (J. Gmelin) Schinz & Thell	Bud grass
Weed	*Leontis nepetifolia* (L.) R. Br.	Ball head
Weed	*Spigellia anthelmia* L.	Worm grass/ Pink weed
Weed	*Malvastrum coromandelianum* (L.)	Threelobe false mallow
Weed	*Sida acuta* Burm. f.	Broomweed
Weed	*Clidemia hirta* (L.) D. Don	Soapbush, Koster's curse
Weed	*Mimosa pudica L.*	Sensitive plant, shameplant
Weed	*Boerhavia coccinea* Mill.	Pig feed
Weed	*Boerhavia erecta* L.	Pigfeed
Weed	*Oxalis barrelieri* L.	Lavender sorrel
Weed	*Oxalis debilis* HBK	Pink wood sorrel
Weed	*Peperomia pellucid* (L.) Kunth	Shine/ Silver bush
Weed	*Cenchrus echinatus* L	Bur grass
Weed	*Panicum maximum* Jacq.	Guinea grass

Pest Type	Scientific name	Common name(s)
Weed	*Setaria barbata* (Lam.) Kunth	Corn grass
Weed	*Portulaca oleracea L.*	Pussley/ Purslane
Weed	*Spermacoce assurgens* R. & P.	Woodland false buttonweed
Weed	*Spermacoce latifolia* Aubl.	Oval leaf false buttonweed
Weed	*Spermacoce prostrata* Abul.	Prostrate false buttonweed
Weed	*Spermacoce verticilata* L.	Shrubby false buttonweed
Weed	*Cardiospermum microcarpum* Kunth	Heartseed
Weed	*Physalis angulata L.*	Hog weed /cow pops
Weed	*Solanum torvum* Sw.	Turkey berry, susumber, pea eggplant
Weed	*Laportea aestuans* (L.) Chew	Stinging nettle / horse nettle
Weed	*Lantana camara L.*	Common lantana
Weed	*Phenax sonneratii* (Poir.) Wedd	Asian ghostweed
Weed	*Priva lappulacea* (L.) Pers.	Velvet bur
Weed	*Stachytarpheta jamaicensis* (L.) Vahl	Blue top
Weed	*Kallstroemia maxima* (L.) Torr. & Gray	Big caltrop

Appendix VI-c. List of Regulated Pests in the Region by Commodity: Plant Products

BANANA/PLANTAIN (*Musa* spp.)

Pest Type	Scientific name	Common name(s)	Host
Bacterium	*Mycosphaerella eumusae* (Crous & Mourichon	Mycosphaerella leaf spot disease of bananas	Banana
	Mycosphaerella fijiensis	Black Sigatoka Race 4	Banana
	Ralstonia solanacearum (E.F. smith)	Moko disease or bacterial wilt	Banana
	Ralstonia solanacearum race 2 *(Smith)*	Moko Disease	All
	Xanthomonas campestris pv. *musacearum* (Dagnachew and Bradbury) Dye	Banana xathomonas wilt (BXW)	
Fungus	*Fusarium oxysporum* f.sp. *cubense (Foc)*	Fusarium wilt of bananas and plantains-Tropical Race 4	All
Insect	*Asynonychus godmanni* (Boheman)	Fuller's rose weevil	
	Batrocera dorsalis (Hendel)	Oriental Fruit fly	
	Castnia licoides (Costniomera licus) (Drury)	Giant moth borer (banana stem borer)	
	Chaetanaphothrips signipennis (Bagnall)	Banana Thrips	
	Colapsis hypochlora (Lefevre)	Fruit scarring beetle	
	Elixothrips brevisetis (Bangnall)	Banana rind thrips	Banana
	Pentalonia nigronervosa	Banana aphid	
	Rhynchophorus palmarum	Palm weevil	
	Spodoptera litura (Fabricius)	Cluster caterpillar	Banana
	Thrips hawaiiensis (Morgan, 1913)	Hawaiian flower thrips	All
Mite	*Tetranychus cinnabarinus* (Boisduval)	Carmine spider mite	Banana
Mollusc	*Veronicella cubensis* (Pfeiffer)	Two-striped slug	Banana
Nematode	*Helicotylenchus multicinctus* (Cobb)	Banana spiral nematode	All

Pest Type	Scientific name	Common name(s)	Host
	Radopholus citrophilus Huettel, Dickson and Kaplan, 1984	Burrowing nematode	Banana
Virus	Banana Bract Mosaic Virus	-	
	Banana bunchy top nanovirus (BBTV)	Banana Bunchy top	All
	Banana Bunchy Top Virus	-	
	Banana Dieback Virus	Dieback	All
	Banana mild mosaic *(flexiviridae)*	Banana mild mosaic	All
	Banana Mosaic Virus	-	
	Banana Streak Virus	-	
	Banana virus X	Banana virus X	All
Virus	Banana bunchy top virus	Bananas bunchy top virus	Banana

CASSAVA (*Manihot esculentum*)

Pest Type	Scientific name	Common name(s)
Bacterium	*Xanthomonas axonopodis pv.manihotis*	Bacterial Blight
Insect	*Acromyrmex octospinosus* (Reich)	Leaf cutting ant
	Anastrepha striata (Schiner*)*	Guava fruit fly
	Atta cephalotes (Linnaeus)	Bachac/Umbrella ant
	Atta sexdens (Linnaeus)	Acoushi ant
	Diabrotica balteata (leconte)	Banded cucumber beetle
	Paracoccus marginatus Williams & Granara de Willink, 1992	Papaya Mealy bug
	Phenacoccus manihoti (Matile-Ferrero)	Cassava mealybug
	Sitophilus oryzae (Linnaeus)	Rice weevil
	Spodoptera litura (Fabricius)	Cluster caterpillar
	Trialeurodes abutilonea Haldeman	Bandedwinged whitefly
Mite	*Tetranychus cinnabarinus* (Boisduval)	Carmine spider mite
	Tetranychus desertorum Banks	Desert spider mite
Mollusc	*Veronicella cubensis* (Pfeiffer)	Two-striped slug
Phytomonad	*Phytomonas* spp.	
Viroid	Cassava New Alphaflexivirus (CsNAV)	Cassava Frogskin disease (CFSD)
	Cassava Polero-Like virus (CsPLV)	Cassava Frogskin disease (CFSD)
	Cassava Torrado-Like Virus (CsTLV)	Cassava Frogskin disease (CFSD)
Virus	African cassava mosaic virus (Begomovirus)	African cassava mosaic virus
	Cassava African Mosaic Virus	Cassava African mosaic virus
	Cassava Brown Streak Virus	Cassava brown streak virus
	Cassava Common Mosaic Virus	Cassava common mosaic virus
	Cassava Latent virus	Cassava latent virus
	Cassava mosaic geminiviruses	Cassava mosaic geminiviruses
	East African cassava mosaic Camerun geminivirus	
	East African cassava mosaic geminivirus	
	East African cassava mosaic Malawi geminivirus	

Pest Type	Scientific name	Common name(s)
	East African cassava mosaic Zanzibar geminivirus	
	Indian cassava mosaic geminivirus	

CORN (*Zea mays*)

Pest Type	Scientific name	Common name(s)
Bacterium	*Pantoea stewartii subsp. stewartii* (Smith) Mergaert *et al.*	Bacterial wilt of maize
Insect	*Atta sexdens* (Linnaeus)	Acoushi ant
	Frankliniella williamsi Hood	Corn thrips
	Leptoglossus zonatus (Dollas)	Leaf footed bug
	Melanaphis sacchari	Sugar cane aphid
	Ostrinia nubilalis	European corn borer
	Oxycarerus hyalipennis (Costa)	Cotton seed bug
	Papaipema nebris	Stalk borer
	Perkinsiella saccharicida	Sugar cane delphacid
	Thrips hawaiiensis (Morgan, 1913)	Hawaiian flower thrips
	*Conoderus falli (*Lane)	Potato wireworm
	Conoderus rudis (Brown)	Wireworm
	Caulophilus oryzae (Gyllenhal, 1838)	Broadnosed grain weevil
	Chaetocnema confinis Crotch, 1873	Sweet potato flea beetle
	Frankliniella williamsi Hood	Corn thrips
	Oryzaephilus surinamensis (Linnaeus)	Saw toothed grain beetle
	Sitophilus oryzae (Linnaeus)	Rice weevil
	Spodoptera litura (Fabricius)	Cluster caterpillar
	Tenebrio molitor Linnaeus	Yellow mealworm
	Thrips hawaiiensis (Morgan, 1913)	Hawaiian flower thrips
	Tribolium castaneum Herbst	Red flour beetle
	Trogoderma granarium Everts	Khapra beetle

CRUCIFERS (*Brassica* spp. – Broccoli, Cauliflower, Cabbage, Pak Choi; *Lactuca sativa* – Lettuce)

Pest Type	Scientific name	Common name(s)	Host
Fungus	*Albuga candida*	White rust of crucifers	*Brassica* spp.
	Fusarium oxysporum f. sp. *conglutinans*	Cabbage fusarium wilt	*Brassica* spp.
Insect	*Agriotes lineatus*	wireworm	*Brassica* spp.
	Anasa tristis (De Geer)	Squash bug	All
	Aulacorthum solani (Kaltenbach)	Foxglove aphid	
	Contarinia maculipennis Felt	Blossom midge	*Brassica* spp.
	Diabrotica balteata (leconte)	Banded cucumber beetle	
	Duponchelia fovealis (Zeller)	Moth	
	Frankliniella occidentalis (Pergorde)	Western flower thrips	
	Hyadaphis erysimi (Kaltenbach)	Turnip aphid	

Pest Type	Scientific name	Common name(s)	Host
	Listroderes costirostris obliquus (Schonherrr)	Vegetable weevil	
	Nasonovia ribis-nigri	Lettuce aphid	Lettuce
	Phyllotreta striolata (Fabricius, 1803)	Striped flea beetle	
	Pieris rapae Linnaeus	Imported cabbage worm	*Brassica* spp.
	Solenopsis geminata (Fabricius)	Fire ant	
	Thrips tabaci Lindeman, 1889	Onion thrips	Cabbage
	Trialeurodes abutilonea Haldeman	Bandedwinged whitefly	Lettuce
	Trialeurodes vaporariorum Westwood 1856	Greenhouse whitefly	*Brassica* spp.
Mollusc	*Lissachatina fulica* (Bowdich)	Giant African Snail	All
	Vaginula plebeia Fischer	Brown slug	Lettuce
	Veronicella cubensis (Pfeiffer)	Two-striped slug	Cabbage

CUCURBITS (*Cucumis melo* – Muskmelon, Canteloupe, Honeydew; *Cucumis sativus* – Cucumber; *Cucurbita spp.* – Pumpkin, Squash, Zucchini; *Citrullus lanatus* – Watermelon)

Pest Type	Scientific name	Common name(s)	Host
Insect	*Acromyrmex octospinosus* (Reich)	Leaf cutting ant	
	Anastrepha grandis (Macquart)	Cucurbit fruit fly	All
	Asynonychus godmanni (Boheman)	Fuller's rose weevil	
	Atta cephalotes (Linnaeus)	Bachac/Umbrella ant	
	Atta sexdens (Linnaeus)	Acoushi ant	
	Aulacorthum solani (Kaltenbach)	Foxglove aphid	
	Bactrocera cucurbitae (Coquillett)	Melon fly	All
	Batrocera dorsalis (Hendel)	Oriental Fruit fly	
	Ceratitis capitata	Medfly	*Cucurbita* spp., *Citrullus* spp.
	Conoderus rudis (Brown)	Wireworm	All
	Diabrotica balteata (leconte)	Banded cucumber beetle	
	Frankliniella occidentalis (Pergorde)	Western flower thrips	
	Leptoglossus zonatus (Dollas)	Leaf footed bug	
	Solenopsis invicta (Buren, 1972)	Red imported fire ant	
	Spoladea recurvali (Fabricius)	Hawaiian beet webworm	All
	Thrips tabaci Lindeman, 1889	Onion thrips	All
	Trialeurodes vaporariorum Westwood 1856	Greenhouse whitefly	*Cucumis* spp., *Cucurbita* spp.
Mite	*Tetranychus cinnabarinus* (Boisduval)	Carmine spider mite	All
Mollusc	*Veronicella cubensis* (Pfeiffer)	Two-striped slug	All
Nematode	*Belonolaimus longicaudatus*	Sting nematode	
Virus	Cucumber Mosaic Virus (CMV)	Cucumber Mosaic Virus	All

LEGUMES (Peas, Beans) (*Phaseolus* spp., *Vigna* spp., *Cajanus cajan*, *Lens culinaris*)

Pest Type	Scientific name	Common name(s)	Host
Bacterium	*Pseudomonas syringae pv. tabaci* (Wolf and Foster) Young *et. al.*	Wild fire	Peas
Insect	*Asynonychus godmanni* (Boheman)	Fuller's rose weevil	
	Atta cephalotes (Linnaeus)	Bachac/Umbrella ant	
	Atta sexdens (Linnaeus)	Acoushi ant	
	Aulacorthum solani (Kaltenbach)	Foxglove aphid	
	Bactrocera cucurbitae (Coquillett)	Melon fly	
	Colapsis hypochlora (Lefevre)	Fruit scarring beetle	
	Diabrotica balteata (leconte)	Banded cucumber beetle	
	Melanagromyza obtuse (?)	Pigeon pea pod fly	
	Oxycarerus hyalipennis (Costa)	Cotton seed bug	
	Paratachardina lobata (Kondo & Gulllan)	Lobate lac scale	
	Prodiplosis longifila Gagné	Citrus gall midge	Beans
	Spodoptera litura (Fabricius)	Cluster caterpillar	Peas, beans
	Spoladea recurvali (Fabricius)	Hawaiian beet webworm	Beans
	Trialeurodes abutilonea Haldeman	Banded-winged whitefly	Beans
	Tribolium castaneum Herbst	Red flour beetle	Peas, beans
Mite	*Tetranychus cinnabarinus* (Boisduval)	Carmine spider mite	Beans
Mollusc	*Vaginula plebeia* Fischer	Brown slug	Beans

ONIONS/SCALLIONS (*Allium spp.*)

Pest Type	Scientific name	Common name(s)	Host
Bacterium	*Burkholderia cepacia* (Burkholder)	Sour skin of onion	Onion
Fungus	*Botryotinia squamosa* Viennot-Bourgin	Leaf blight, neck rot	Onion
	Botrytis aclada Fresenius	Grey mold of onion, neck rot	All
	Colletotrichum circinans (Berk.) Voglino	Onion smudge, anthracnose	All
	Puccinia allii Rud., Linnaea	Rust, onion rust	All
	Sclerotium cepivorum Berk.	White rot, bulb rot	All
	Thrips tabaci Lindeman, 1889	Onion thrips	All
	Urocystis cepulae (Frost)	Onion smut	Onion
Insect	*Agriotes lineatus*	wireworm	
	Delia antiqua (Meiger)	Onion Fly	
	Frankliniella occidentalis (Pergorde)	Western flower thrips	
	Listroderes costirostris obliquus (Schonherrr)	Vegetable weevil	
Mite	*Steneotarsonemus furcatus* DeLeon	Taro tarsonemid mite	
Virus	Onion Dwarf Yellow Virus	ODYV	

PINEAPPLE (*Ananas comosus*)

Pest Type	Scientific name	Common name(s)
Insect	*Geococcus coffeae* Green	Coffee root mealybug
Mite	*Steneotarsonemus ananas* (Tryon)	Pineapple tarsonemid, pineapple fruit mite, leathery pocket mite

SOLANACEOUS PRODUCTS (Tomato – *Lycopersicon esculentum*, Pepper – *Capsicum* spp., Eggplant – *Solanum melongena*)

Pest Type	Scientific name	Common name(s)	Host
Bacterium	*Clavibacter michiganensis subsp. michiganensis* (Smith) Davis *et al.*	Bacterial canker of tomato	Tomato
	Clavibacter michiganensis subsp. sepedonicus (Spieckermann & Kotthoff) Davis *et al.*	bacterial ring rot of potato	Tomato, Solanum sp.
	Erwinia carotovora pv. *atroseptica* (van Hall, 1902) Dye, 1962	Black leg	Euphorbia sp., Solanum sp.
Insect	*Agriotes lineatus*	wireworm	tomato
	Anastrepha suspensa (Loew)	Caribbean Fruit fly	Pepper, tomato
	Anthonomus eugenii (Cono)	Pepper weevil	All
	Aulacorthum solani (Kaltenbach)	Foxglove aphid	
	Bactrocera cucurbitae (Coquillett)	Melon fly	
	Bactrocera invadens (Drew *et al.*, 2005)	New polyphagous fruit fly species (Central Africa) Asian fruit fly	Tomato
	Bactrocera latifrons (Hendel)	Malaysian fruit fly	*Capsicum* spp.
	Bactrocera tryoni (Froggatt)	Queensland Fruit Fly	Pepper, tomato
	Batrocera carambolae (Drew & Hancock)	Carambola Fruit fly	
	Batrocera dorsalis (Hendel)	Oriental Fruit fly	*Capsicum* spp.
	Ceratitis capitata (Weidermann)	Mediterranean fruit fly	*Capsicum* spp.
	Chaetocnema confinis Crotch, 1873	Sweet potato flea beetle	Tomato
	*Conoderus falli (*Lane)	Potato wireworm	tomato
	Conoderus rudis (Brown)	Wireworm	
	Contarinia maculipennis Felt	Blossom midge	All
	Diabrotica balteata (leconte*)*	Banded cucumber beetle	
	Duponchelia fovealis (Zeller)	Moth	
	Faustinus cubae (Boheman)	Stem borer (Hot Pepper)	*Capsicum* spp.
	Frankliniella bispinosa (Morgan)	Florida flower thrips	
	Frankliniella occidentalis (Pergorde)	Western flower thrips	
	Keiferia lycopersicella (Walsingham)	Tomato pin worm	All
Insect	*Leptoglossus zonatus* (Dollas)	Leaf footed bug	Tomato, eggplant
	Listroderes costirostris obliquus (Schonherrr)	Vegetable weevil	
	Neoleucinodes elegantalis (Guenée) 1854	tomato fruit borer, eggplant moth (stem borer), cocona fruit borer	

Pest Type	Scientific name	Common name(s)	Host
	Ostrinia nubilalis	European corn borer	
	Othreis fullonia Linnaeus [*Preferred SN: *Eudocima fullonia* (Clerck, 1764)]	Pacific fruit-piercing moth	Pepper, tomato
	Paracoccus marginatus Williams & Granara de Willink, 1992	Papaya Mealy bug	Eggplant
	Phenacoccus manihoti	Cassava mealybug	
	Phthorimaea operculella (Zeller 1873)	Potato tuber moth	Eggplant, tomato
	Prodiplosis longifila Gagné	Citrus gall midge	Tomato, pepper
	Scapteriscus vicinus	Mole Cricket	tomato
	Solenopsis geminata (Fabricius)	Fire ant	tomato
	Spodoptera litura (Fabricius)	Cluster caterpillar	Tomato, pepper
	Spoladea recurvali (Fabricius)	Hawaiian beet webworm	Eggplant
	Thaumatotibia leucotreta (Meyrick)	False codling moth	
	Trialeurodes abutilonea Haldeman	Bandedwinged whitefly	*Capsicum* spp.
	Trialeurodes vaporariorum Westwood 1856	Greenhouse whitefly	Eggplant
	Tuta absoluta	South American tomato pinworm, Tomato leafminer, tomato stemborer	All
	Zonosemata electa	Pepper maggot	All
Mite	*Tetranychus cinnabarinus* (Boisduval)	Carmine spider mite	Tomato
Mollusc	*Veronicella cubensis* (Pfeiffer)	Two-striped slug	Pepper, eggplant
Nematode	*Globodera pallida* (Wollenweber) Behrens	White tip nematode Golden nematode- (G.p)	Eggplant
Phytomonad	*Phytomonas* spp.		Tomato
Virus	Gemini Virus Complex	Tomato Yellow Leaf Curl	Pepper, tomato
	Potato Virus Y		
	Tomato Brown Rugose Fruit Virus	Tomato Brown Rugose Fruit Virus	All
	Tomato Brown Rugose Virus		Tomato
Virus	Tomato bushy stunt tombusvirus (TBSV)	tomato bushy stunt virus	
	Tomato ringspot nepovirus	tomato ringspot virus	

SPICES (Ginger – *Zinziber officinale*, Turmeric – *Curcuma longa*)

Pest Type	Scientific name	Common name(s)	Host
Insect	*Elytroteinus subtruncatus (Fairmaire)*	Ginger weevil	Ginger
	Pentalonia nigronervosa	Banana aphid	

SWEET POTATO (*Ipomea batatas*)

Pest Type	Scientific name	Common name(s)
Fungus	*Cercospora batatae* Zimm.	Sweet potato leaf spot
	Elsinoe batatas (Saw.) Viegas & Jenkins	Leaf and stem scab
Insect	*Acromyrmex octospinosus* (Reich)	Leaf cutting ant
	Atta cephalotes (Linnaeus)	Bachac/Umbrella ant
	Atta sexdens (Linnaeus)	Acoushi ant
	Bedellia orchilella Walsingham	Sweet potato leafminer
	Cassida bivittata	Striped sweet potato beetle
	Chaetocnema confinis Crotch, 1873	Sweet potato flea beetle
	Conoderus rudis (Brown)	Wireworm
	Cylas formicarius (Fabricuis)	Sweet potato weevil
	Diabrotica balteata (leconte)	Banded cucumber beetle
	Megastes grandalis (Guence)	Sweet potato moth
	Omphisa anastomosalis Guenée	Sweet potato vine borer
	Phenacoccus manihoti	Cassava mealybug
	Solenopsis invicta (Buren, 1972)	Red imported fire ant
	Strigoderma arboricola	Spring rose beetle
	Typophorus nigritus	Black sweet potato beetle
Mite	*Tetranychus cinnabarinus* (Boisduval)	Carmine spider mite
	Tetranychus tumidus Banks	Tumid spider mite
Mollusc	*Veronicella cubensis* (Pfeiffer)	Two-striped slug
Phytoplasma	Sweet potato witches broom (little leaf)	Sweet potato witches broom (little leaf)

TARO [Dasheen] (*Colocasia esculenta*) AND EDDO (*Colocasia antiquorum*)

Pest Type	Scientific name	Common name(s)	Host
Insect	*Crenidorsum aroidephagus* (Martin & Aguiar)	Anthurium whitefly	
	Pentalonia nigronervosa	Banana aphid	
	*Tarophagus proserpina (*Kirkaldy, 1907*)*	Taro leafhopper	Taro
Mite	*Tetranychus tumidus* Banks	Tumid spider mite	All
Mollusc	*Veronicella cubensis* (Pfeiffer)	Two-striped slug	Taro

WHITE (IRISH) POTATO (*Solanum tuberosum*)

Pest Type	Scientific name	Common name(s)
Bacterium	*Ralstonia solanacearum* Race 3 (Smith) Yabuuchi *et al.*	potato brown rot
Fungus	*Phoma exigua var. foveata* (Foister) Boerema	potato gangrene
	Phytophthora infestans	Potato Late Blight
	Synchytrium endobioticum (Schilb.) Percival	potato wart
	Synchytrium endobioticum (Schilbersky) Percival	Potato wart disease
Insect	*Conoderus falli (*Lane)	Potato wireworm

	Conoderus rudis (Brown)	Wireworm
	Contarinia maculipennis Felt	Blossom midge
	Keiferia lycopersicella (Walsingham)	Tomato pin worm
	Phthorimaea operculella (Zeller, 1873)	Potato tuber worm
	Prodiplosis longifila Gagné	Citrus gall midge
Mollusc	*Vaginula plebeia* Fischer	Brown slug
Nematode	*Globodera pallida* (Wollenweber) Behrens	White tip nematode Golden nematode
	*Globodera rostochiensis (*Wollenweber) Behrens	Golden nematode
Virus	Potato Virus Y	
	Tomato bushy stunt tombusvirus (TBSV)	tomato bushy stunt virus
	Tomato ringspot nepovirus	tomato ringspot virus

YAM (*Dioscorea alata*)

Pest Type	Scientific name	Common name(s)
Insect	*Acromyrmex octospinosus* (Reich)	Leaf cutting ant
	Blastobasis sp.	Yam moth
	Elixothrips brevisetis (Bangnall)	Banana rind thrips
	Planococcus dioscoreae (Williams)	Yam Mealybug
Mollusc	*Veronicella cubensis* (Pfeiffer)	Two-striped slug
Virus	Yam Mosaic Mirus (Potyvirus)	Yam mosaic virus

REGULATED PESTS NOT SPECIFICALLY ASSIGNED TO A COMMODITY

Pest Type	Scientific name	Common name(s)
Agent	Hibiscus leaf curl agent	-
	Okra mosaic agents	-
	Okra yellow leaf curl agent	-
Bacterium	*Acidovorax anthurii* (*Pseudomonas* sp.)	Anthurium Leaf Spot
	Acidovrax anthurii (Ralstonia sp.)	Anthurium Leaf Spot
	Agrobacterium tumefaciens	Crown gall
	Blood Disease Bacterium	-
	Burkholderia cepacia complex (Burkholder)	BCC
	Candidatus liberibacter africanus	African citrus greening disease
	Candidatus Liberibacter solanacearum (Liefting *et al.*)	Zebra Chip disease
	Clavibacter michiganensis subsp. *sependonicus* (Spieckermann & Kotthoff) Dye & Kemp	Potato ring rot
	Dickeya solani (van der Wolf *et al.*)	Black leg disease of potato
	Erwinia papayae (Gardan *et al.*)	Bacterial crown rot (canker) of papaya
	Liberobacter asiaticus; L. africanus	Citrus Greening (Huanglongbing)
	Pectobacterium chrysanthemi (Burkholder *et al.*)	Bacterial wilt of chrysanthemum & other ornamentals
	Ralstonia solanacearum Race 2 (Smith)	Moko Disease
	Ralstonia solanacearum Race 3 (E.F. Smith)	Brown rot of potato

Pest Type	Scientific name	Common name(s)
	Xanthomonas axonopodis pv. *citri* (Hasse) Vauterin *et al.*)	Citrus Canker
	Xanthomonas axonopodis pv. *manihotis*	Bacterial Blight
	Xanthomonas campestris pv. *dieffenbachiae*	Anthurium Wilt
	Xanthomonas campestris pv. *manihotis* (Berthet & Bondar)	Cassava bacterial blight
	Xylella fastidiosa (Wells *et al.*)	Pierce's disease of grapevines
Flagellate Protozoan	*Phytomonas staheli* McGhee & McGhee	Cedros Wilt (Hartrot) of Coconut
Fungus	*Armillaria mellea* (Vahl) P. Kummer	Honey fungus
	Botryotinia fuckeliana	Gray mold disease
	Colletotrichum circinans	Onion smudge
Fungus	*Colletotrichum kahawae* subsp. *kahawae* (JM Waller and Bridge)	Coffee berry disease
	Erythricium salmonicolor Berkeley & Broome	Pink disease
	Eutypa lata (Pers.) Tul. & C. Tul.	Eutypa dieback
	Fusarium oxysporum f. sp. *canariensis*	Fusarium wilt of the Canary Island date palm
	Fusarium oxysporum f. sp. *cubense* Tropical Race 4 (E.F. Smith)	Panama Disease- Foc TR4
	Fusarium oxysporum f. sp. *radicis-cucumerinum*, Vakal	Root and stem rot of cucumber
	Ganoderma sp.	White rot fungus
	Guignardia citricarpa (Kiely) / *Phyllosticta citricarpa* (McAlpine)	Citrus black spot disease
	Guignardia musae Racib./*Phyllosticta musarum* (Cooke)	Freckle disease of banana
	Haplobasidium musa, Ellis	Malayan leaf spot
	Hemileia vastatrix	Coffee Leaf Rust
	Moniliophthora perniciosa	Witches' broom disease
	Moniliophtora roreri (Cif.) H.C. Evans, Stalpers, Samson & Benny	Monilia Pod Rot of Cocoa
	Mycosphaerella fijiensis	Black Sigatoka
	Mycosphaerella musae (Crous & Mourichon)	Speckle disease of banana
	Oncobasidum theobromae, P.H.B. Talbot and Keane	Vascular streak dieback
	Phyllachora torrendiella (Batista)	Tar spot of coconut
	Polymyxa graminis (Ledingham)	Vector of barley yellow mosaic virus
	Puccinia gladioli (Castagne)	Rust fungus of gladioli
	Puccinia horiana (P. Hennings)	White rust of chrysanthemum
	Sclerotium cepivorum	Allium root rot
	Sphaerodothis acrocomiola (Montagne)	Powdery scab of potato
	Spongospora subterranea f. sp. *subterranea* (Wallroth)	Powdery scab
	Synchytrium endobioticum (Schilbersky) Percival	Black Wart of Potato
	Tilletia indica Mitra	Karnal bunt of wheat

Pest Type	Scientific name	Common name(s)
	Urocystis cepulae (Frost) syn. *Urocystis magica*	Onion smut
Fungus	*Uromyces gladioli* (Henn.)	*Uromyces gladioli* (Henn.)
	Uromyces nyikensis (Sydow)	*Uromyces nyikensis* (Sydow)
	Uromyces transversalis (Thumen, Winter)	*Uromyces transversalis* (Thumen, Winter)
Insect	*Acromyrmex octospinus* (Reiche)	Leaf-cutting ant
	Aethina tumida (Murray)	Small Hive Beetle (SHB)
	Agrilus planipennis (Fairmaire)	Emerald ash borer
	Agriotes lineatus	wireworm
	Alabama argillacea	Cotton leafworm
	Aleurocanthus woglumi	Citrus Black fly
	Aleurodicus destructor (Mackie)	Coconut Whitefly
	Aleurodicus cocois	Coconut Whitefly
	Aleurodicus dispersus	Spiralling Whitefly
	Anastrepha fraterculus Weiderman	South American Fruit fly
	Anastrepha grandis (Macquart)	Cucurbit fruit fly
	*Anastrepha ludens(*Lowe)	Mexican fruit fly
	Anastrepha obliqua (Macquart)	West Indian Fruit fly
	Anastrepha serpentina (Wiederman)	Sapodilla fruit fly
	*Anastrepha striata (*Schiner)	Guava fruit fly
	Anastrepha suspensa (Loew)	Caribbean Fruit fly
	Anoplophora glabripennis (Motschulsky)	Asian Longhorned Beetle
	Anoplophora spp.	Longhorned beetles
	Anthonomus eugenii (Cano)	Pepper weevil
	Anthonomus grandis (Bohemana)	Cotton boll weevil
	Aphis gossypii	Cotton aphid
	Apis mellifera scutella (Lepeletier)	Africanized Honeybee
	Apis mellifera scutellata (Lepeletier) hybrids	Africanized Honeybee
	Araecerus fasciculatus (DeGeer)	Coffee bean weevil
Insect	*Atta cephalotes* (Linnaeus)	Bachac/Umbrella ant
	Atta insularis (Guérin)	Leaf-cutting ant
	Atta sexdens (Linnaeus)	Acoushi ant
	Aulacaspis tubercularis	Mango scale
	Bactrocera carambolae (Dew & Hanlock)	Carambola fruit fly
	Bactrocera cucurbitae (Coquillett)	Melon fly
	Bactrocera dorsalis (Dacus dorsalis) Hendel	Oriental Fruit fly
	Bactrocera invadens (Drew *et al*.)	Fruit fly (polyphagous)
	Bactrocera tryoni (Froggatt)	Queensland fruitfly
	Bactrocera zonata (Saunders)	Peach fruit fly
	Bemisia tabaci	Sweet potato/cotton whitefly

Pest Type	Scientific name	Common name(s)
	Bephratelloides cubensis	Soursop seed borer/wasp
	Bephratelloides pomorum	Soursop seed borer/wasp
	Bephratelloides spp.	Soursop seed borer / wasp
	Ceratitis capitata (Weiderman)	Mediterranean fruit fly
	Ceratitis cosyra (Walker)	Mango Fruit fly
	Ceratitis spp.	Fruit fly
	Cerconata anonella	Soursop fruit borer (moth)
	Ceroplastes rubens (Maskell)	Red wax scale
	Chaetanaphothrips signipennis	Banana Thrips
	Chilo partellus (Charles Swinhoe)	Spotted stem borer
	Colaspis hypochlora (Lefevre)	Banana fruit scarring beetle
	*Conoderus falli (*Lane)	Potato wireworm
	Conotrachelus perseae (Barber)	Avocado weevil
	Cryptophlebia leucotreta (Mryrick)	
	Cydia pomonella (Linnaeus)	
	Cylas formicarius	Sweet Potato Weevil
Insect	*Dacus ciliatus* (Loew)	
	Davara caricae (Dyar)	
	Delia platura (Meigen)	Seedcorn maggot
	Diaphania nitidalis	Pickle worm
	Dysdercus spp.	Cotton Stainers
	Eldana saccharina (Walker)	
	Halyomorpha halys (Stal)	Brown marmorated stink bug
	Heilipus lauri (Boheman)	
	Heilipus lauri (Woodruff)	Avocado Seed Weevil
	Helicoverpa amigera	Old World Boll Worm
	Helicoverpa zea	Cotton bollworm
	Heliothis virescens	Tobacco budworm
	Helipus lauri; Conotrachelus spp.	Avocado seed Weevil
	Hellula phidilealis (Pyralidae)	Cabbage bud moth
	Hellula phidilealis (Walker)	
	Hercinothrips bicinctus (Bagnell)	
	Homalodisca vitripennis	
	Hypothenemus hampei	Coffee Berry Borer
	Hypsipyla grandella (Zeller)	Mahogany Shoot Borer
	Ips subelongatus	
	Lachnosterna spp.	White grubs
	Leptinotarsa decimlineata (Say)	
	Locusta migratoria (Linnaeus)	
	Lymantria dispar asiatica	

Pest Type	Scientific name	Common name(s)
	Maconellicoccus hirsutus	Pink Hibiscus Mealybug
	Mahasena corbetti	
	Megastes grandis (Guenee)	Sweet Potato Moth Borer
	Minthea rugicollis (Walker)	Powder Post Beetle
Insect	*Mycosphaerellla fijiensis*	Black Sigatoka Fungus
	Myzus persicae	Green peach aphid
	Nacoleia octasema (Meynek)	
	Nasonovia ribisnigri (Mosley)	
	Naupactus leucoloma (Boheman)	
	Neoclytus acuminatus (Fabricius)	
	Nezara viridula	Green stink bug
	Oxycarenus hyalinipennis (Costa)	
	Paracoccus marginatus	Papaya mealybug
	Pectinophora gossypiella (Saunders)	Pink bollworm
	Polyphagotarsonemus latus (Banks)	Broad Mite
	Prodiplosis longifila (Gagné)	Citrus Gall Midge
	Rhychophorus bilineatus (Montrouzier)	
	Rhynchophorus ferrugineus (Olivier)	
	Rhynchophorus palmarum (Linnaeus)	
	Scapteriscus vicinus	Mole Cricket
	Scirtothrips dorsalis (Hood)	
	Solenopsis invicta (Buren)	Red Imported Fire Ant
	Spodoptera exigua	Lesser cotton leafworm
	Spodoptera spp	Other leafworms
	Stenoma catenifer (Walsh.)	Avocado Seed Moth
	Sternochetus frigidus (Fabricius)	
	Sternochetus mangiferae (Fabricius)	Mango Seed Weevil
	Thrips florum (Schmutz)	
	Thrips palmi	Oriental/Palm/Melon Thrips
	Tomicus piniperda (Linnaeus)	
	Toxotrypana curvicauda (Gerstaecker)	Papaya fruit fly
	Toxotrypana spp.	Fruit fly
Insect	*Trichoplusia ni*	Cabbage semi-looper
	Trioza erytreae (Del Guercio)	
	Trogoderma granarium (Everts)	Khapra Beetle
	Tuta absoluta (Meyrick)	Tomato Leafminer
	Xyleborus dispar (Fabricius)	
	Xylosandrus crassiusculus (Motschulsky)	
Mite	*Acarapis woodi* (Rennie)	Honeybee Trachael Mite
	Aceria mangiferae (Sayed)	
	Aceria tulipae (Keifer)	
	Brevipalpus californicus (Barber)	

Pest Type	Scientific name	Common name(s)
	Brevipalpus chilensis (Baker)	
	Brevipalpus lewisi (McGregor)	
	Eriophyes litchi (Keifer)	
	Rhizoglyphus echinopus (Fumouze & Robin)	
	Steneotarsonemus spinki (Smiley)	
	Tetranychus evansi (Baker and Pritchard)	
	Tetranychus spp.	Spider mites
	Tropilaelaps clareae (Delfinado & Baker)	
	Varroa destructor (Anderson & Trueman)	Varroa Mite
	Varroa jacobsoni (Oudemans)	Varroa Mite
Mollusc	*Lissachatina fulica* (Bowdich)	Giant African Snail
	Megalobulimus oblongus	Giant South American Snail
	Ovachlamys fulgens	Jumping Snail
	Veronicella cubensis	Cuban Slug
	Veronicella leydigi (Simroth)	Black slug
	Veronicella sloanei	Sloan's Slug
Nematode	*Aphelenchoides besseyi* Christie	White tip nematode
	Aphelenchoides ritze mabosi	Leaf nematode
Nematode	*Belonalaimus longicaudatus* (Rau)	Sting Nematode
	Bursaphelenchus cocophilus (Cobb, 1919) Goodey	Red Ring Nematode
	Ditylenchus dipsaci (Kuhn)	Stem and Bulb Nematode
	Ditylenchus destructor Thorne	potato rot nematode
	Ditylenchus dipsaci (Kuhn)	Stem and Bulb Nematode
	Globodera pallida (Stone) Behrens	pale cyst nematode
	Globodera rostochiensis (Globodera pallida)	Potato Cyst Nematode/Golden Nematode of Potato
	Globodera rostochiensis (Wollenweber) Behrens	golden nematode
	Heterodera rostochiensis (Wollenweber)	
	Melodogyne incognita (Kofold & White)	Root rot nematode
	Meloidogyne chitwoodi Golden, O'Bannon, Santo & Finley	Columbia root-knot nematode
	Radopholus citrophilus Cobb	Burrowing Nematode of Citrus
	Radopholus similis	Burrowing Nematode/Banana Root Nematode
	Radopholus similis (Cobb 1893) Thorne	Burrowing Nematode/Banana Root Nematode
	Trichodorus spp. Cobb	stubby root nematodes
	Xiphinema spp. Cobb	dagger nematodes
Oomycete	*Phytophthora cryptogea*	
	Phytophthora infestans	Potato Late Blight
	Phytophthora megakarya	
	Pythium irregular	
Phytomonad	*Phytomonas* spp.	

Pest Type	Scientific name	Common name(s)
	Phytomonas staheli (McGhee & McGhee)	Cedros Wilt (Hartrot) of Coconut
Phytoplasma	Cassava Frog Skin Disease	
	Coconut lethal yellowing	Lethal yellowing disease of palms
	Lethal Yellowing Disease	Lethal Yellowing Disease
Proteobacterium	*Liberobacter asiaticus*, *africanus*	Huanglongbing/Citrus Dieback/Citrus Greening
Viroid	ASBVd viroid	Avocado Sunblotch Disease
	Avocado Sun blotch viroid (ASBVd)	
	Avocado Sunblotch Disease	ASBVD viroid
Viroid	Citrus cachexia viroid	CCaV
	Citrus exocortis viroid	CEVd
	Coconut cadang-cadang viroid	Cocadviroid (CCCVd)
	Coconut tinangaja viroid	CTiv
Virus	African Cassava Mosaic Virus	ACMV
	Banana Bract Mosaic	BBMV
	Banana Bunchy Top Virus	BBTV
	Banana Die-Back Virus	
	Cassava Brown Streak Virus	
	Citrus Leprosis Virus	Citrus Leprosis Virus
	Citrus tristeza closterovirus	Citrus tristeza Virus
	Cocoa swollen shoot virus	
	Coconut foliar decay virus	
	Coffee Ring Spot virus	
	Papaya (Distortion) Ringspot Virus	PRSV
	Yam Mosaic Virus	YMV
Virus (Closterovirus)	Citrus Tristeza Virus	Citrus Quick Decline Virus
Virus (Geminivirus)	African Cassava Mosaic Virus	ACMV
Virus (Geminivirus)	Gemini Virus Complex	Tomato Yellow leaf Curl Virus
Virus (Potyvirus)	Papaya Distortion Ringspot Virus	PRSV
Weed	*Aeginetia* spp.	Aeginetia
	Berberis spp.	barberry
	Commelina benghalensis	Benghal dayflower, tropical spiderwort
	Cuscuta spp.	dodder
	Echinochloa colonum	Junglerice
	Echinochola crus- gali	Barnyard grass
	Eichhornia crassipes (Mart.)	Water Hyacinth
Weed	*Gossypium* spp.	Wild cotton
	Mahoberberis spp.	barberry
	Mahonia spp.	barberry

Pest Type	Scientific name	Common name(s)
	Orobanche spp.	Broomrape
	Pueraria montana var. *lobata*	Kudzu
	Rhamnus spp.	buckthorn
	Rhus radicans	Poison ivy
	Rhus vernix	Poison sumac
	*Rottboelliae cochinchinensis (*Lour.) Clayton	Corn Grass
	Salvinia spp.	
	Solanum viarum	Tropical soda apple
	Solidago spp	Goldenrod
	Striga asiatica (L.) Kuntze	Witchweed
	Striga spp.	Witchweed
	Xanthium pensylvanicum	Common cocklebur
	Xanthium spinosum	Spiny cocklebur

APPENDIX VII. COMMODITY DISEASE LIST FOR BMCS: ANIMAL PRODUCTS

OIE Listed Diseases and other Diseases of importance to International Trade, 2021

SOURCE: OIE Terrestrial Animal Health Code (2021)

ANIMAL(S)	DISEASES
MULTIPLE SPECIES	- Anthrax - Infection with Aujeszky's disease - Infection with Bluetongue Virus - Brucellosis Infection with *B. abortus; B. melitensis* - Infection with *Echinococcus granulosus* - Infection with *Echinococcus multilocularis* - Infection with Epizootic Hemorrhagic Disease Virus - Infection with Foot and Mouth Disease Virus - Heartwater - Japanese Encephalitis - Infection with *Mycobacterium tuberculosis* complex - New world screwworm (*Cochliomyia hominivorax*) and Old world screwworm (*Chrysomya bezziana*) - Paratuberculosis - Infection with Rabies virus - Infection with Rift Valley fever virus - Infection with Rinderpest - Infection with *Trichinella* spp - Infection with *Trypanosoma brucei*, *T. congolese*, *T. simiae* and *T. vivax* - Tularemia - West Nile Fever
BEES	- Infestation of honeybees with *Acarapis woodi* - Infestation of honeybees with *Paenibacillus* larvae (American foulbrood) - Infection of honeybees with *Melissococcus plutonius* (European foulbrood) - Infestation with *Aethina tumida* (Small hive beetle) - Infestation with honeybees with *Tropilaelaps* spp. - Infestation of honeybees with *Varroa* spp. (Varroosis)

ANIMAL(S)	DISEASES
POULTRY	- Avian chlamydiosis - Avian infectious bronchitis - Avian infectious laryngotracheitis - Infection with high pathogenicity avian influenza virus - Infection with *Mycoplasma gallisepticum* (Avian mycoplasmosis) - Duck virus hepatitis - Fowl typhoid and pullorum disease - Infectious bursal disease (Gumboro disease) - Infection with Newcastle disease virus
BOVINE ***(Beef and Dairy)***	- Bovine anaplasmosis - Bovine babesiosis - Bovine genital campylobacteriosis - Bovine spongiform encephalopathy - Infection with *Mycoplasma mycoides* subsp. *mycoides* SC (Contagious bovine pleuropneumonia) - Enzootic bovine leukosis - Haemorrhagic septicaemia (*Pasteurella multocida* serotypes 6:b and 6:e) - Infectious bovine rhinotracheitis / infectious pustular vulvovaginitis - Infection with lumpy skin disease virus - Theileriosis - Trichomonosis
GOATS AND SHEEP	- Caprine arthritis/encephalitis - Contagious agalactia - Contagious caprine pleuropneumonia - Infection with *Chlamydia abortus* (Enzootic abortion of ewes, ovine chlamydiosis) - Maedi-visna - Ovine epididymitis (*Brucella ovis*) - Infection with peste des petits ruminants virus - Scrapie - Sheep pox and goat pox

NB: *OIE Member Countries and Territories are obligated to report occurrences of the disease to the OIE according to the OIE Terrestrial Animal Health Code*

APPENDIX VIII. IMPORT/EXPORT REQUIREMENTS FOR BMCS: PLANT PRODUCTS

COUNTRY KEY *(based on ISO Alpha 2 country codes):* Anguilla (AI), Antigua and Barbuda (AG), Bahamas (BS), Barbados (BB), Belize (BZ), British Virgin Islands (VG), Cayman Islands (KY), Commonwealth of Dominica (DM), Grenada (GD), Guyana (GY), Haiti (HT), Jamaica (JM), Montserrat (MS), Saint Kitts and Nevis (KN), Saint Lucia (LC), Saint Vincent and the Grenadines (VC), Suriname (SR), Trinidad and Tobago (TT), Turks and Caicos (TC).

Abbreviations used in commodity import/export requirements: PC = Phytosanitary Certificate; IP = Import Permit; PRA = Pest Risk Analysis; NPPO = National Plant Protection Organisation; EU = European Union.

BANANA/PLANTAIN (*Musa* spp.)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG	PC is issued after inspection & in accordance with conditions of importing country	AG, LC, VC
Entry prohibited from countries/places of production with Moko &/or *Foc* TR4 disease	AG	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG, VC
Fruit must come from plants grown in areas/production sites and harvested from plants that are (certified) free of *Ralstonia solanacearum* (Moko disease)	BB	A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC, VC
Prohibited entry	AI, LC, VC	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
Surface disinfection & disinfestation through dip with appropriate broad-spectrum fungicide and insecticide	AG	***Traceability-production, processing and distribution***: 1. Notification must be given by existing pack house facilities to the NPPO/ Plant Protection Unit	LC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Fruit to be immersed in an insecticidal solution *(2 tsp. liquid soap/ 1 gallon water OR 13 fl.oz. bleach/1 gallon water [1:9 bleach:water])* for 3 minutes OR importing NPPO-approved equivalent	BB	in the Ministry of Agriculture to ascertain pack house requirements. 2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of pack houses. 3. Commodities must be in sterile packaging and properly labelled.	
Soil, leaf material & extraneous organic matter prohibited	AG, BB		
IP (single use, one per consignment, valid for 60 days from date of issue) to be obtained before commodity leaves exporting country	AG		
PC required (issued no more than 72 hours before export) stating all pest control treatments have been applied	AG, BB	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC
Certification of freedom from pests of plant quarantine significance	AG, BB		
Produce & packaging must be free of soil & extraneous materials	AG, BB		
All packages must bear an importer registration number	BB	Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
IP number must be stated on the PC	AG, BB		
Fruit must originate from fields subject to pest control practices approved by the importing NPPO	BB	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC
Postharvest management must be identical to phytosanitary standards established for export to the EU	BB		
All consignments must arrive unaltered and unbroken	BB	Consignment must be free from pests	LC
Re-export of consignments (from another country) is not permitted without the express permission of the importing country	BB	Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC
Required additional declaration on PC: *"Fruits of Musa spp. were harvested from plants in areas officially designated free from Ralstonia*	BB		

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
solanacearum and these fruits were prepared in accordance with the conditions outlined in the import requirements as stated in Import Permit # xxxx and the attached addendum"			
Musa sp. permitted entry only upon packaging by Jamaica Producers Group Ltd. in St. Mary, Jamaica & accompanied by an export certificate from the Jamaica Banana Board	KY	Banana fruit must be washed and treated with postharvest fungicides	JM
Green bananas must be treated with a fungicide	KY	Banana consignments must be accompanied by a permit stating that the fruit are from Global-GAP certified farms	JM
Entry prohibited to protect local industry from quarantine pest entry	GY		
Banana fruit absolutely prohibited importation from all countries & places except the USA, Dominica & the Leeward Islands	MS	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT
Conditions unclear for plantains based on how conditions are stated in the 1st & 2nd schedules of the regulations to Plant Protection Act Cap 9.02 *(revised ed. Jan. 1, 2002)*	MS		
Plantains must be certified grown and stored in an area free from the Mediterranean Fruit Fly (*Ceratitis capitata*)	JM		
None declared	BZ, VG, DM, GD, KN, SR, TC, TT		

CASSAVA (*Manihot esculentum*)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG, LC	PC is issued after inspection & in accordance with conditions of importing country	AG, LC
Surface disinfection & disinfestation required	AG	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Soil, leaf material & extraneous organic matter prohibited	AG, BB	A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC
IP (single use, one per consignment, valid for 60 days from date of issue) to be obtained before commodity leaves exporting country	AG, LC	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
IP invalid without certified attached list of commodities covered by it.	BB	***Traceability-production, processing and distribution***: 1. Notification must be given by existing packhouse facilities to the NPPO/ Plant Protection Unit in the Ministry of Agriculture to ascertain pack house requirements. 2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of pack houses. 3. Commodities must be in sterile packaging and properly labelled.	LC
PC required (issued no more than 72 hours before export), stating all pest control treatments applied as well as number of IP issued for the consignment	AG, BB, LC		
Certification of freedom from soil & pests of plant quarantine significance	AG		
Inspection upon arrival and presentation of IP (or certified copy) and PC	AG, BB	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC
All packages in consignment to bear the *importer registration number*	BB	Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
Washed, disinfected & free of soil	KY	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC
Prohibited from Australia, the Bahamas, Bermuda, Guyana & all other countries except the British Isles, Canada, the British West Indies & the USA	MS	Consignment must be free from pests	LC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Consignment to be accompanied by a certificate of origin from the NPPO stating that the commodity was not grown in a country from which entry is prohibited	MS	Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC
None declared	BZ, VG, DM, GD, MS, KN, SR, TC, VC, TT	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, VC, TT, JM

CORN (*Zea mays*)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG, LC	PC is issued after inspection & in accordance with conditions of importing country	AG
Surface disinfection & disinfestation required	AG		
Soil, leaf material & extraneous organic matter prohibited	AG, BB		
IP (single use, one per consignment, valid for 60 days from date of issue) to be obtained before commodity leaves exporting country	AG, LC	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG
PC required (issued no more than 72 hours before export), stating all pest control treatments applied as well as number of IP issued for the consignment	AG, BB, LC		
Certification of freedom from soil & pests of plant quarantine significance	AG	Commodity not exported	VC
All ear leaves to be removed from the corn	BB	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, LC, TT, JM
Inspection upon arrival and presentation of IP (or certified copy) and PC	AG, BB		
Prohibited from Australia, the Bahamas, Bermuda, Guyana & all other countries except the British Isles, Canada, the British West Indies & the USA	MS		

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Consignment to be accompanied by a certificate of origin from the NPPO stating that the commodity was not grown in a country from which entry is prohibited	MS		
Prohibited entry	VC		
None declared	BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT		

CRUCIFERS (*Brassica* spp. – Broccoli, Cauliflower, Cabbage, Pak Choi; *Lactuca sativa* – Lettuce)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG, LC	PC is issued after inspection & in accordance with conditions of importing country	AG, LC, VC
Surface disinfection & disinfestation required	AG	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG, VC
Soil & extraneous organic matter prohibited	AG, VC		
IP (single use, one per consignment, valid for 60 days from date of issue) to be obtained before commodity leaves exporting country	AG, LC, VC	A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC, VC
PC required (issued no more than 72 hours before export)	AG, LC	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
Certification of freedom from soil & pests of plant quarantine significance	AG	***Traceability-production, processing and distribution***: 1. Notification must be given by existing pack house facilities to the NPPO/ Plant Protection Unit in the Ministry of Agriculture to ascertain pack house requirements.	LC
Prohibited from Australia, the Bahamas, Bermuda, Guyana & all other countries	MS		

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
except the British Isles, Canada, the British West Indies & the USA		2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of pack houses. 3. Commodities must be in sterile packaging and properly labelled.	
Consignment to be accompanied by a certificate of origin from the NPPO stating that the commodity was not grown in a country from which entry is prohibited	MS	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC
		Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
Inspection required	VC	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC
None declared	BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT	Consignment must be free from pests	LC
		Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC
		None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT, JM

CUCURBITS (*Cucumis melo* – Muskmelon, Canteloupe, Honeydew; *Cucumis sativus* – Cucumber; *Cucurbita spp.* – Pumpkin, Squash, Zucchini; *Citrullus lanatus* – Watermelon)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG, LC	PC is issued after inspection & in accordance with conditions of importing country	AG, LC, VC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Soil, insects, leaf material & extraneous organic matter prohibited	AG, BB, LC, VC	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG
IP (single use, one per consignment, valid for 60 days from date of issue) must be obtained before commodity leaves exporting country	AG, LC, VC	Pumpkin must be washed, disinfected and free from soil	JM
PC required (issued no more than 72 hours before export), stating all pest control treatments applied as well as number of IP issued for the consignment	AG, BB, LC	A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC, VC
Surface disinfection & disinfestation using appropriate measure.	AG	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
Certification of freedom from soil & pests of plant quarantine significance	AG, BB	***Traceability-production, processing and distribution***: 1. Notification must be given by existing pack house facilities to the NPPO/ Plant Protection Unit in the Ministry of Agriculture to ascertain pack house requirements. 2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of packhouses. 3. Commodities must be in sterile packaging and properly labelled.	LC
Inspection upon arrival and presentation of IP (or certified copy) and PC	AG, BB		
All packages in consignment to bear the *importer registration number*	BB		
Pumpkins to be washed and disinfected	KY	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Prohibited from Australia, the Bahamas, Bermuda, Guyana & all other countries except the British Isles, Canada, the British West Indies & the USA	MS	Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
Consignment to be accompanied by a certificate of origin from the NPPO stating that the commodity was not grown in a country from which entry is prohibited	MS	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC, VC
Inspection required upon arrival	VC	Consignment must be free from pests	LC, VC
Commodity must be certified grown and stored in an area free from the Mediterranean Fruit Fly (*Ceratitis capitata*)	JM	Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC
None declared	BZ, VG, DM, GD, MS, KN, SR, TC, TT	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT

LEGUMES (Peas, Beans) (*Phaseolus* spp., *Vigna* spp., *Cajanus cajan*, *Lens culinaris*)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG, LC	PC is issued after inspection & in accordance with conditions of importing country	AG, LC, VC
IP (single use, one per consignment, valid for 60 days from date of issue) must be obtained before commodity leaves exporting country	AG, LC, VC	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG
PC required (issued no more than 72 hours before export), stating all pest control treatments applied as well as number of IP issued for the consignment	AG, BB	A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC, VC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Surface disinfection & disinfestation using appropriate measure	AG	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
Soil, leaf material, live insects & extraneous organic matter prohibited	AG, BB, VC	***Traceability-production, processing and distribution***: 1. Notification must be given by existing pack house facilities to the NPPO/ Plant Protection Unit in the Ministry of Agriculture to ascertain pack house requirements. 2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of pack houses. 3. Commodities must be in sterile packaging and properly labelled.	LC
Certification of freedom from soil & pests of plant quarantine significance	AG		
All packages in consignment to bear the *importer registration number*	AG, BB	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC
Fungicide treatment	KY	Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
Prohibited from Australia, the Bahamas, Bermuda, Guyana & all other countries except the British Isles, Canada, the British West Indies & the USA	MS	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC, VC
Consignment to be accompanied by a certificate of origin from the NPPO stating that the commodity was not grown in a country from which entry is prohibited	MS	Consignment must be free from pests	LC, VC
Seeds for consumption only are permitted (pods not permitted)	LC	Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Inspection required upon arrival	VC	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT, JM
Certification of freedom from *Xanthomonas campestris* pv. *phaseoli* OR a certificate of analysis attesting to freedom from this pathogen *in lieu* of this declaration	JM		
None declared	BZ, VG, DM, GD, MS, KN, SR, TC, TT		

ONIONS/SCALLIONS (*Allium spp.*)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG, LC	PC is issued after inspection & in accordance with conditions of importing country	AG, LC
IP (single use, one per consignment, valid for 60 days from date of issue) must be obtained before commodity leaves exporting country	AG, LC, VC	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG
PC required (issued no more than 72 hours before export), stating all pest control treatments applied as well as number of IP issued for the consignment	AG, BB, LC	Onion must be cured and free from soil	JM
Surface disinfection & disinfestation using appropriate measure	AG	A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC
Certification of freedom from soil, extraneous organic matter & pests of plant quarantine significance	AG	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
Inspection upon arrival and presentation of IP (or certified copy) and PC	AG, BB	***Traceability-production, processing and distribution***: 1. Notification must be given by existing pack house facilities to the NPPO/ Plant Protection Unit in the	LC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Onions to be fully cured	BB	Ministry of Agriculture to ascertain pack house requirements. 2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of pack houses. 3. Commodities must be in sterile packaging and properly labelled.	
Roots of scallions to be removed	BB		
Commodity to be free of onion fly (*Delia antiqua*) and onion smut (*Urocystis* sp.)	BB, JM	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC
Scallions to be free from leafminers and other live insects	BB	Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
Chives & escallions to be fumigated	KY	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC
No prohibitions stated in regulations	MS	Consignment must be free from pests	LC
Commodity to be free from pests, soil & debris	VC	Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC
Inspections required upon arrival	VC		
None declared	BZ, VG, DM, GD, MS, KN, SR, TC, TT	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT

PINEAPPLE (*Ananas comosus*)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG	PC is issued after inspection & in accordance with conditions of importing country	AG, LC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Soil & extraneous organic matter prohibited	AG	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG
IP (single use, one per consignment, valid for 60 days from date of issue) must be obtained before commodity leaves exporting country	AG	Commodity is not exported	VC
PC required (issued no more than 72 hours before export)	AG	A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC
Surface disinfection & disinfestation using appropriate measure	AG	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
Certification of freedom from soil & pests of plant quarantine significance	AG	***Traceability-production, processing and distribution***: 1. Notification must be given by existing pack house facilities to the NPPO/ Plant Protection Unit in the Ministry of Agriculture to ascertain pack house requirements. 2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of pack houses. 3. Commodities must be in sterile packaging and properly labelled.	LC
Farms, farmers, persons & businesses exporting must be approved, certified & registered with the importing country's NPPO in order to export to that country	BB		
Exporting farms must have an active pest management programme in place & subject to routine plant health surveillance checks from the exporting NPPO or relevant agency authorized by the NPPO	BB		
Registry of farms, persons, and businesses engaged with the supply of the commodity must be maintained by the NPPO of the exporting country	BB	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
SEE BELOW FOR ADDITIONAL PHYTOSANITARY REQUIREMENTS, POSTHARVEST HANDLING, PACKAGING & CERTIFICATION	BB		
Remove crowns & fruit stalks	KY	Consignment must be free from pests	LC
Prohibited from Australia, the Bahamas, Bermuda, Guyana & all other countries except the British Isles, Canada, the British West Indies & the USA	MS	Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
Consignment to be accompanied by a certificate of origin from the NPPO stating that the commodity was not grown in a country from which entry is prohibited	MS	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC
Prohibited from all countries, except where special bilateral arrangements between NPPOs exist (IP & PC would then be required for each consignment)	LC	Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC
Prohibited entry	VC	Must be brushed and free from soil and fruit stalk and crown removed	JM
None declared	BZ, VG, DM, GD, MS, KN, SR, TC, TT	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT

IMPORT REQUIREMENTS: BARBADOS (Additional Phytosanitary Requirements, Postharvest Handling, Packaging & Certification)

1. **Registration to Supply and Export**
   a. Farmers/farms producing pineapples for export to Barbados must be registered with *Name of Country* National Plant Protection Organisation (NPPO) before being permitted to supply the fruit for export to Barbados.
   b. Similarly, exporters (persons/businesses) and the packing facility utilized by them in the exporting of pineapples to Barbados must be approved, registered and certified with *Name of Country* NPPO before to suppling the fruit to Barbados.

c. Farms supplying pineapples for export to Barbados must have an active pest management programme in place and should be subjected to routine plant health surveillance checks from the NPPO or relevant plant health/protection department as authorised by the NPPO.

d. The registry of farms/person/businesses supplying pineapples for export to Barbados must be maintained by *Name of Country* NPPO.

2. Additional Phytosanitary Requirements

All pineapples for export to Barbados must originate from farms that are registered by *Name of Country* NPPO. Additionally, packing houses undertaking postharvest processes should be inspected and sanctioned by the aforementioned agency.

Pineapples selected for export to Barbados must be:

a. Clean, free from the presence of plant pests and any associated tissue damage.

- Clean – refers to pineapples being practically free from soil, chemical contaminants and other extraneous material and substances.
- Plant Pests/Associated tissue damage - refers to signs of live regulated pests or invasive species at any stage of development present in or on the fruit or packaging. The interception of dead pests at a rate of greater that five (5) individuals per consignment will be deemed notifiable.

3. Postharvest Handling - Disinfection/Treatment

a. Proper fruit selection, cleaning and trimming are required when preparing pineapples for export to Barbados.

b. Leaves at the base of the pineapple should be removed. This area should be examined for signs of deterioration. Fruits showing signs of rotting should not be selected for export.

c. Leaves at the crown of the pineapple which display damage caused by plant pests should be removed or trimmed.

d. Pineapples for export to Barbados should be washed by immersion in a soap solution (2 tablespoons per gallon or 30ml to 3.8 litres) for a period of three (3) minutes.

e. The surface of the pineapples should be thoroughly scrubbed with a soft brush to remove debris and live insects. Areas around the base and just below the whorl of the crown, should be given careful attention.

f. An approved postharvest fungicide should be added to the washing solution to reduce any incidence of tissue deterioration in the fruit.

g. The washing water should be potable water or properly chlorinated (150-200 ppm free chlorine) and maintained at a pH of 6.5 to 7.0 is recommended).

h. Only fruits inspected and certified by the *Name of Country* NPPO are to be approved for export.

4. Packaging

a. Packaging for pineapples should be of corrugated boxes (cartons) which are fully capable of withstanding the stresses of handling and transport while resisting contamination by foreign substances and restricting access to pests.

i. The weight of a packed carton should not exceed 14-18kg (approx. 30-40lbs)**.**

ii. A label stating the following should be affixed to of each carton:

- Name and address of the Exporter
- Farmer's registration number
- Name of the product
- Country of Origin
- Number of fruit per box
- Gross weight/ Net weight

iii. Plant material (e.g. wood shavings etc.) must not be used as packaging materials. Packaging materials such as paper shavings, sleeves, bubble wrap and other similar materials are permitted.

5. Certification

a. A Phytosanitary certificate (issued by an authorized personnel of *Name of Country* NPPO) must be issued for each consignment of pineapples approved for export to Barbados. The particular Import Permit number related to the importer/consignment must be stated on the certificate.

b. The following Additional Declaration shall be stated on the Phytosanitary Certificate to verify compliance with the import requirements as specified by the Plant Quarantine Division of the Ministry of Agriculture and Food Security: *"**The pineapples (Ananas comosus) in this consignment were prepared in accordance with the conditions outlined in the import requirements as stated in Import Permit #. . . . . and the accompanying Import Protocol**".*

SOLANACEOUS PRODUCTS (Tomato – *Lycopersicon esculentum*, Pepper – *Capsicum* spp., Eggplant – *Solanum melongena*)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG, LC	PC is issued after inspection & in accordance with conditions of importing country	AG, LC, VC
IP (single use, one per consignment, valid for 60 days from date of issue) must be obtained before commodity leaves exporting country	AG, LC, VC	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG
PC required (issued no more than 72 hours before export)	AG, LC	Commodity to be free from pests, soil & debris	VC
Surface disinfection & disinfestation using appropriate measures	AG	A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC
Certification of freedom from soil & pests of plant quarantine significance	AG, VC	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
Tomatoes to originate in areas/production sites officially designated free of *Tuta absoluta* & stated as an additional declaration on the PC	BB	***Traceability-production, processing and distribution***: 1. Notification must be given by existing pack house facilities to the NPPO/ Plant Protection Unit in the Ministry of Agriculture to ascertain pack house requirements. 2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of pack houses. 3. Commodities must be in sterile packaging and properly labelled.	LC
All soil, leaves, stems & other extraneous materials must be removed from **tomato** fruits	BB, LC	Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
PC required stating all pest control treatments applied to **tomatoes** as well as number of IP issued for the consignment	BB		

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
All packages in **tomato** consignment to bear the *importer registration number*	BB	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC
All **peppers** to be fumigated	KY	Consignment must be free from pests	LC
Prohibited from Australia, the Bahamas, Bermuda, Guyana & all other countries except the British Isles, Canada, the British West Indies & the USA	MS	Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC
Consignment to be accompanied by a certificate of origin from the NPPO stating that the commodity was not grown in a country from which entry is prohibited	MS	Hot pepper to be fumigated with Methyl Bromide (Cayman Is.)	JM
Eggplants prohibited from all countries east of 60º longitude, Pacific Islands, Mexico, and Central & South America	LC	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC
Inspection required upon arrival	VC	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT
Commodity must be certified grown and stored in an area free from the Mediterranean Fruit Fly (*Ceratitis capitata*)	JM		
None declared	BZ, VG, DM, GD, MS, KN, SR, TC, TT		

SPICES (Ginger – *Zinziber officinale*, Turmeric – *Curcuma longa*)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG, LC	PC is issued after inspection & in accordance with conditions of importing country	AG, LC, VC
IP (single use, one per consignment, valid for 60 days from date of issue) must be obtained before commodity leaves exporting country	AG, LC, VC	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG
PC required (issued no more than 72 hours before export), stating all pest control treatments applied to tomatoes as well as number of IP issued for the consignment	AG, BB, LC	Commodity to be free from soil & debris	VC
Surface disinfection & disinfestation using appropriate measures	AG, VC	A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC, VC
Certification of freedom from soil & pests of plant quarantine significance	AG	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
Material to be fully dried and cured, free of bark, extraneous material, properly sealed & commercially packaged	BB	***Traceability-production, processing and distribution***: 1. Notification must be given by existing pack house facilities to the NPPO/ Plant Protection Unit in the Ministry of Agriculture to ascertain pack house requirements. 2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of pack houses. 3. Commodities must be in sterile packaging and properly labelled.	LC
Inspection upon arrival and presentation of IP (or certified copy) and PC	AG, BB	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Commodities to be washed, disinfected & free of soil	KY	Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
Prohibited from Australia, the Bahamas, Bermuda, Guyana & all other countries except the British Isles, Canada, the British West Indies & the USA	MS	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC
		Consignment must be free from pests	LC
Consignment to be accompanied by a certificate of origin from the NPPO stating that the commodity was not grown in a country from which entry is prohibited	MS	Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC
Inspection required upon arrival	VC	Spices to be washed, disinfected and free from soil	JM
None declared	BZ, VG, DM, GD, MS, KN, SR, TC, TT	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT

SWEET POTATO (*Ipomea batatas*)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG	PC is issued after inspection & in accordance with conditions of importing country	AG, LC
IP (single use, one per consignment, valid for 60 days from date of issue) must be obtained before commodity leaves exporting country	AG, BB	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG
PC required (issued no more than 72 hours before export)	AG	A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Surface disinfection & disinfestation using appropriate measures	AG	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
Certification of freedom from soil & pests of plant quarantine significance	AG	***Traceability-production, processing and distribution***: 1. Notification must be given by existing pack house facilities to the NPPO/ Plant Protection Unit in the Ministry of Agriculture to ascertain pack house requirements. 2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of pack houses. 3. Commodities must be in sterile packaging and properly labelled.	LC
Tubers to be free of soil, leaves, stems & other extraneous materials	BB		
Tubers permitted from areas officially declared free from yam weevil (*Palaeopus costicollis*), sweet potato weevil (*Cylas formicarius)* and West Indian Sweet Potato Weevil (*Euscepes postfasciatus*)	BB		
Exporting countries where *Palaeopus costicollis*, *Cylas formicarius* & *Euscepes postfasciatus* are present & NOT under official control, tubers must be irradiated at the recommended dose that achieves elimination of these pests, and this stated as an additional declaration on the PC	BB	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC
		Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
Inspection upon arrival and presentation of IP (or certified copy) and PC	AG, BB	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC
Washed, disinfected & free of soil	KY	Consignment must be free from pests	LC
Prohibited from Australia, the Bahamas, Bermuda, Guyana & all other countries except the British Isles, Canada, the British West Indies & the USA	MS	Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC
Prohibited from all countries	LC, VC	Commodity not exported, hence no available requirements	VC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Consignment to be accompanied by a certificate of origin from the NPPO stating that the commodity was not grown in a country from which entry is prohibited	MS	Commodity to be washed, disinfected & free from soil (Cayman Is.)	JM
None declared	BZ, VG, DM, GD, MS, KN, SR, TC, TT	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT

TARO [Dasheen] (*Colocasia esculenta*) AND EDDO (*Colocasia antiquorum*)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG, LC	PC is issued after inspection & in accordance with conditions of importing country	AG, LC, VC
IP (single use, one per consignment, valid for 60 days from date of issue) must be obtained before commodity leaves exporting country	AG, LC, VC	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG
PC required (issued no more than 72 hours before export), stating all pest control treatments applied to tomatoes as well as number of IP issued for the consignment	AG, BB, LC	Commodity must be free from debris	VC
		A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC, VC
Surface disinfection & disinfestation using appropriate measures	AG	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
Certification of freedom from soil & pests of plant quarantine significance	AG, BB, VC	***Traceability-production, processing and distribution***: 1. Notification must be given by existing pack house facilities to the NPPO/ Plant Protection Unit in the Ministry of Agriculture to ascertain pack house requirements.	LC
Corms must be fully stripped of extraneous materials	BB, VC		
Consignment is to be free of live plant pests	BB		

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
All packages in tomato consignment to bear the *importer registration number*	BB	2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of pack houses. 3. Commodities must be in sterile packaging and properly labelled.	
Washed, disinfected & free of soil	KY	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC
Prohibited from Australia, the Bahamas, Bermuda, Guyana & all other countries except the British Isles, Canada, the British West Indies & the USA	MS	Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
Consignment to be accompanied by a certificate of origin from the NPPO stating that the commodity was not grown in a country from which entry is prohibited	MS	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC, VC
Additional declarations (unspecified) required	LC	Consignment must be free from pests	LC, VC
All plant parts (other than tubers for consumption) are prohibited	LC	Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC
Inspection required upon arrival	VC	Taro to be washed, disinfected, treated and free from soil (Cayman Is.)	JM
None declared	BZ, VG, DM, GD, MS, KN, SR, TC, TT	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT, JM

WHITE (IRISH) POTATO (*Solanum tuberosum*)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG, LC	Phytosanitary certificate is issued after inspection & in accordance with conditions of importing country	AG, LC
Import Permit (single use, one per consignment, valid for 60 days from date of issue) must be obtained before commodity leaves exporting country	AG, LC, VC	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG
PC required (issued no more than 72 hours before export), stating all pest control treatments applied to tomatoes as well as number of IP issued for the consignment	AG, BB, LC	Commodity not exported so no export requirements available	VC
Surface disinfection & disinfestation using appropriate measures	AG	A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC
Certification of freedom from soil & pests of plant quarantine significance	AG, BB, KY, VC	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
Potatoes must contain not more than 1% by weight of soil	JM	Commodity to be washed, packed and shipped within 30 days of harvest, free from soil and sprouts (Cayman Is.)	JM
Must be harvested from areas/regions officially verified free of *Globodera rostochiensis* (golden nematode), *G. pallida* (potato cyst nematode), and *Synchytrium endobioticum* (potato wart disease)	BB	***Traceability-production, processing and distribution***: 1. Notification must be given by existing pack house facilities to the NPPO/ Plant Protection Unit in the Ministry of Agriculture to ascertain pack house requirements.	LC
Prohibited from all countries from which *Globodera rostochiensis* & *G. curculionidae* tuber borers have been recorded UNLESS originating in pest free places	LC		

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
of production no less than a specified distance from the infested area.		2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of pack houses. 3. Commodities must be in sterile packaging and properly labelled.	
Certification of freedom from infection by wart disease (*Synchitrium endobioticum*) and ring rot disease (*Corynebacterium sependonicum*)	JM		
Additional declaration on PC that commodity was grown in an area "Certified free from the bacterium, *Dickeya solani*, or from areas that the disease is not known to exist".	KY	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC
Must not exhibit signs of sprouting	BB, KY	Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
The shipment must be properly sealed and commercially packaged	BB		
Where a re-export PC is issued, the country of origin of the produce must be stated	BB	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC
Inspection upon arrival and presentation of IP (or certified copy) and PC	BB		
Commodity may be disinfected or fumigated before being landed	BB	Consignment must be free from pests	LC
Washed, packed & shipped within 30 days of harvest		Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC
No prohibitions declared	MS		
Commodity to be inspected upon arrival	VC		
None declared	BZ, VG, DM, GD, MS, KN, SR, TC, TT	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT

YAM (*Dioscorea alata*)

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
PRA required for first entry	AG, LC	PC is issued after inspection & in accordance with conditions of importing country	AG, LC, VC
IP (single use, one per consignment, valid for 60 days from date of issue) must be obtained before commodity leaves exporting country	AG, LC, VC	Commodity would be surface disinfected &/or disinfested by the exporter & process overseen by a plant quarantine inspector	AG
PC required (issued no more than 72 hours before export), stating all pest control treatments applied to tomatoes as well as number of IP issued for the consignment	AG, BB, LC	Commodity must be free from soil & debris	VC
Surface disinfection & disinfestation using appropriate measures	AG	A valid IP with stipulations must be issued from the importing country to meet entry requirements.	LC
Certification of freedom from soil, extraneous organic matter & pests of plant quarantine significance	AG, BB	Use of Pesticides must conform to the regulations of the NPPO and collaborating agencies	LC
In countries where they exist, tubers must be grown in areas/production sites (1) officially designated free from the yam weevil (*Palaeopus costicollis*) and yam beetle (*Heteroligus meles*), (2) under official control and (3) fumigated with methyl bromide at the recommended rates	BB	***Traceability-production, processing and distribution***: 1. Notification must be given by existing pack house facilities to the NPPO/ Plant Protection Unit in the Ministry of Agriculture to ascertain pack house requirements. 2. The NPPO/ Plant Protection Unit in the Ministry of Agriculture must be contacted for the modification or construction of pack houses. 3. Commodities must be in sterile packaging and properly labelled.	LC
All packages in tomato consignment to bear the *importer registration number*	BB		
Inspection upon arrival and presentation of IP (or certified copy) and PC	BB	***Labelling:*** The consignment must be labelled and legible and the detailed information must coincide with the information on the import documents	LC

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Washed, disinfected & free of soil	KY	Consignee must be in compliance with the market guidelines for pre-harvest, harvest and post-harvest techniques	LC
Prohibited from Australia, the Bahamas, Bermuda, Guyana & all other countries except the British Isles, Canada, the British West Indies & the USA	MS	Commodity must be free from soil and in compliance with the stipulations of the importing country.	LC
Consignment to be accompanied by a certificate of origin from the NPPO stating that the commodity was not grown in a country from which entry is prohibited	MS	Consignments must be examined by a designated Plant Quarantine Officer; appointments for inspection must be made at least 48 hours prior to packing.	LC
Commodity to be free from pests, soil & debris	VC	Consignment to be washed, disinfected, trimmed, treated with post-harvest fungicide, and free from soil (Cayman Is.)	JM
Inspection required upon arrival	VC	Consignment must be free from pests	LC, VC
None declared	BZ, VG, DM, GD, MS, KN, SR, TC, TT	None declared	AI, BB, BZ, VG, KY, DM, GD, MS, KN, SR, TC, TT

NON-COMMODITY SPECIFIC IMPORT/EXPORT REQUIREMENTS

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
IP application to be made (for all regulated articles) [prior to purchase & permit issued prior to import].	BS, GY, HT, KN	None declared	BS, KN
Some commodities may be subject to PRA [**NB.** *For KN only, the importer may be required to provide a pest list, pest free status certificate from nursery, chemical treatment certificate, etc.*]	BS, KY, KN	Following postharvest processing, inspectors must certify that commodities are free from pests of economic importance (by cutting fruit to inspect for internal feeders, etc.); if such pests are detected, consignment is destroyed &	GY

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
		place of production rejected from the export programme	
PC required (issued up to 7 days prior to shipment)	BS, KY, HT, KN	***Monitoring***: NPPO conducts annual visits to verify that growers are complying with requirements & follow (quarantine) pest control guidelines as necessary. Non-compliant production areas & packinghouses lose eligibility to export	GY
PC to accompany each consignment stating that the consignment was grown, packed & inspected in keeping with the systems approach & found free of quarantine pests	GY		
All commodities must be clean, of good quality, and found to be free from quarantine pests, soil & foreign matter	BS, KY, KN	***Oversight:*** NPPO retains all forms & documents related to export programme activities in the place of production & packinghouses for at least one (1) year. These are provided for review upon request by trading partners.	GY
Undocumented and/or excessive quantities of (not covered by IP, PC, & invoice) commodities are confiscated & destroyed	BS	***Packing facility basic requirements:*** 1. Building must be separate from dwelling house 2. Building must be of sound structure and have a concrete floor for easy of sanitization and washing. 3. Building must have adequate lighting, drainage, ventilation and storage space for packing material and chemicals. 4. Adequate sanitary facility, running water for cleaning and washing of hands and produce. 5. Pack house facilities must have necessary equipment for sorting, packing, drying, packaging (tables, dipping baths for chemical treatments and sinks with running water). 6. The facility must have adequate space for incoming and outgoing traffic. 7. The pack house must be located in an area that does not compromise the integrity of the facility.	LC
Further phytosanitary action may be demanded for infected, diseased, infested or contaminated consignments	BS, KN		
Upon arrival at a designated port, all regulated articles are to be declared, shipping documents verified, and inspection conducted prior to release [**NB.** *For KN only, the Quarantine Unit should be notified 48 hours before the arrival of consignments*]	BS, KY, KN		
Consignments must be packed in cartons or containers marked to show the official registration number of the place of production.	GY		
Entry may be refused if entry conditions not observed	BS		

IMPORT REQUIREMENTS	APPLICABLE BMC	EXPORT REQUIREMENTS	APPLICABLE BMC
Registration of traders with the NPPO in country of export	KY		
Commodities to be packed in new, unused, standard-sized carton boxes or bags	KY	***Packinghouse requirements:*** (1) packinghouses must prevent pest entry with a double-door entry system designed to exclude pests of concern; (2) commodities must be packed in new, clean boxes, crates or other packing materials; (3) packinghouse operations must be monitored by the NPPO	GY
All boxes must be securely sealed with good quality tape & stamped with the Jamaica MoA stamp	KY		
Invoice, physical address of the importer & a patent or license for consignments are required for entry	HT		
Agricultural commodities in bags prohibited entry	MS	All exports of fresh agricultural produce & regulated articles must be inspected and certified by the NPPO for compliance with national standards and requirements of trading partners	JM
Packages, containers & coverings reasonable suspected to have contained any part of the cotton plant (seed, lint, etc.) or other malvaceous plant or parts OR (2) articles which have formed part of the cargo of a ship – another part of the cargo of which – has been found to be infected or is reasonably suspected to be infected with the cotton boll weevil (*Anthonoman grandis* Boheman) are absolutely prohibited from all countries and places	MS	IP of country of export required & PC is issued by the NPPO	HT, JM
		All packing houses must be certified by the NPPO	JM

GENERAL IMPORTATION/EXPORTATION REQUIREMENTS: NEVIS

IMPORTATION PROCEDURES

This document is served as a guide for the importation of Agricultural Produce into Nevis

Background Information

To avoid delay in the clearance of Agricultural products, the Quarantine Division may put certain restriction on what is imported in the country. Failure to assume any of these may result in the confiscation of or deterioration in the quality of the consignment.

Function of the import permit

- To prevent any quarantine pest to enter, spread or established that can cause have an economic impact to agriculture and the environment
- To allow the best quality of agriculture produce is imported or exported in the island
- Import permit are considered to be non-tariff barriers to trade when used as a way to discriminate against another country's goods in order to protect a domestic industry from foreign competition
- If an importer has not obtained an import permit, the goods cannot be imported into St. Kitts and Nevis.

These functions are supported by St. Christopher and Nevis Chapter 14.09 PLANT PROTECTION ACT (2002) section 4 1-3

Import requirements: an import permit is required for importation of the following quarantine products

1. Live plants (ornamental and fruit trees)
2. Turf sod/bracket
3. Seeds
4. Fresh Produce (fruits and Vegetables)
5. Fresh cut flowers
6. Untreated wood material (bamboo sticks)
7. Pesticides (insecticide, rodenticide, herbicide and etc.)
8. Tobacco leave (Fronto/ Grabba Leaf)

Eligible Applicants:

General public, importers and custom brokers can apply for an import permit. New importers of fresh produce with intent to sell retail is required to provide a business or retail license.

Application process

All applicants are required to come at the Department of Agriculture Main office at the Quarantine Division to fill out an import permit form. The main office is located at Prospect Estate, Nevis.

Application Requirements

Consignor information include

- Name of importer
- Address of importer
- Address of exporter

Consignors are required to bring a duplicate copy of all invoices before ordering of consignments. The submission of import permits should be one (1) week in advance before clients purchase their orders.

All consignors are required to obtain an import permit from the Department of Agriculture, before placing an order. A small fee of $5 XCD OR $2 USD is charged for this permit. A fee of $50 XCD for pesticide registration and license.

Product information:

- Origin of product
- Type of plant material
- Point of entry of the consignment
- Type of plant material
- Point of entry of the consignment

Once approved all permit to import plant material is valid for 4 weeks while a pesticide permits are valid for 6 months.

Pest Risk analysis

In the event that an agriculture produce is imported for the first time in the island or from a country that Nevis has no record of doing trade with a Pest Risk Analysis must be carried out.

Consignor information include

- Name of exporter
- Address of exporter
- Pest List from exporting country
- Any certification of exporter (importing of tissue culture, etc.)

Application of pesticide

In the case a consignor wants to import a pesticide that is not registered on the pesticide board he/she must apply for a pesticide registration form. This form is free of cost. Once approve consignor is now required to apply for pesticide license of importation and pay the required fee of the licenses.

Importation of seeds

- All seeds must be well sealed
- Proper labelling of package (NB labels must be in English)

Steps in apply for import permit

- All must wait for approval from a quarantine officer before the importation process can begin
- Importers are required to obtain a phytosanitary certificated from the importing country (excepting for importing of seeds and pesticides) once the import permit is approved.
- Consignor must state when the consignment will be arriving in the country.
- The invoice of the shipment and import permit must be presented to Customs where the necessary checks will be made to ascertain conformation to stamped order.

- A quarantine officer must inspect the consignment on arrival in order recommend to Customs its release if it conforms to quarantine requirements

Inspection Procedures

1. The exporter must comply to all the country's protocol before exporting All materials (fruits, vegetables, seeds and plants) must be FREE from soil, pest (including weeds) or diseases that might harm agriculture and the environment in Nevis.
2. ABSOULTLY NO plants containing Balled and Bur lapped (B/B) nor pot in pot should not be imported.
3. Snail bait must be present inside the container and inside of the pots with plants.
4. Grass sod must be bare-rooted. They must be toughly washed
5. In the event of live plant consignment exporter must fumigate the container with the consignment inside. Methyl Bromide is prohibited to be used as a fumigant.
6. Consignor are required to make an appointment with quarantine officer 24hour before the consignment has arrived
7. Consignor must present a phytosanitary certificate before any inspection can take place.
8. All consignments must be shipped within seven days of the insurance of the phytosanitary certificate
9. Any spoilage and mould on fruits most be incinerated on the request of the quarantine officer presences.
10. Any mould on tobacco leaves must incinerated on the request of the quarantine officer presences.
11. It is an offence to tamper with an import certificate issued by the Department of Agriculture. No member of the public should write anything additional on the certificate after it has been issued.
12. It is the importers responsibility to source and pay for a private individual to fumigate the under advisement of the Quarantine officer.
13. Importer will bare all cost to re-ship any consignment that the quarantine officer found not to be safe to enter the country.
14. Any banned goods (see banned goods list) that are found of quarantine importance, the quarantine officer will instruct the importer either to re-export or to destroy the plants. Any illegal plants found the quarantine officer will notify Customs Enforcement or the Police Department.

EXPORTING PROCEDURES

(1) PHYTOSANITARY CERTIFICATION

- A Phytosanitary (phyto = plant, sanitary = health) Certificate is a document that provides essential information to the importing country's plant protection service.

- The certificate informs the country of destination that the agricultural commodity has been officially inspected and is considered to be free from quarantine pests, and practically free from other harmful pests.
- The certificate further assures that the commodity conforms to the current phytosanitary regulations of the importing country.

(2) IMPORTANCE OF EXPORT CERTIFICATION

- Certifying that the commodity/ product has been checked.
- Keeps track of what is leaving the country and in what quantities.
- Provide the exporting country with information on what products have export potential
- Safeguards the interest of the consumer.
- Facilitates trade among countries.
- Protects export markets

(3) CONDITIONS FOR PHYTOSANITARY CERTIFICATES

- Products are to be washed and free from soil.
- Products are to be free from pest and diseases.
- Products should be free of any injuries or bruises

(4) PROCEDURES FOR OBTAINING PHYTOSANITARY CERTIFICATES

- products should be brought to the Department of Agriculture for inspection.
- Inspection is carried out by the department's technician.
- Payment of 5EC dollars OR 2US dollars is made for the Phytosanitary Certificate.
- Phytosanitary Certificate is issued to the client. It can also be issued at the airport upon advance request.

SPECIAL NOTE:

It is an offence to tamper with any phytosanitary certificate issued by the Department of Agriculture. No member of the public should modify any information on the certificate after it has been issued

APPENDIX IX. IMPORT/EXPORT REQUIREMENTS FOR BMCS: ANIMAL PRODUCTS (UPDATED)

COMMODITY REQUIREMENTS DECLARED BY BMCS

COUNTRY KEY *(based on ISO Alpha 2 country codes):* Anguilla (AI), Antigua and Barbuda (AG), Bahamas (BS), Barbados (BB), Belize (BZ), British Virgin Islands (VG), Cayman Islands (KY), Commonwealth of Dominica (DM), Grenada (GD), Guyana (GY), Haiti (HT), Jamaica (JM), Montserrat (MS), Saint Kitts and Nevis (KN), Saint Lucia (LC), Saint Vincent and the Grenadines (VC), Suriname (SR), Trinidad and Tobago (TT), Turks and Caicos (TC).

NB *Cayman does not export any of the listed products. The Department of Agriculture only regulates the importation of Meat and Meat Products.*

EGGS

IMPORT REQUIREMENTS	BMC	EXPORT REQUIREMENTS	BMC
None declared	AG, KY, GD, TC	None declared	AG, KY, GD, TC

SHEEP AND GOAT MEAT

IMPORT REQUIREMENTS	BMC	EXPORT REQUIREMENTS	BMC
The carcass or portion of the carcass thereof, whether fresh, frozen, chilled, pasteurized, cured or pickled, originated from animals slaughtered while in good health and free from contagious and infectious diseases;	AG, GD, KY, VC, TC	None declared	AG, KY, GD, VC
The meat or meat products have been inspected and passed for food under the laws of the country of origin;	AG, KY, GD, VC		
The meat or meat products was wholesome and unadulterated at the time of inspection	AG, KY, GD, VC		
Eligible Countries of Export: 1. Eligible Countries of Export: Australia, Canada, CARICOM States, Costa Rica, Honduras, New Zealand, and United States of America *(cattle, sheep, goat and swine)* 2. United Kingdom *(swine and cattle)* 3. Nicaragua *(boneless meat products only)* 4. All countries/territories: i. Thoroughly cooked boneless meat in hermetically sealed metal cans from any country with the exception of- (a) the Republic of Ireland; and (b) the United Kingdom or any other country of the European Union	AG, KY		

IMPORT REQUIREMENTS	BMC	EXPORT REQUIREMENTS	BMC
Government Meat Inspection Certificate/International Health Certificate must accompany commodity	AG, KY, GD, VC, TC		
Statement from the Ministry of Agriculture exporting country stating that the area is free of Foot and mouth disease. Additionally, no outbreaks of FMD has occurred with 15 miles of any port used for the transshipment of products	AG, GD, VC, TC		
Goods have not come in contact with meat from the UK	AG, GD		
Import Permit must be issued	AG, GD, KY, VC, TC		

DAIRY PRODUCTS

IMPORT REQUIREMENTS	BMC	EXPORT REQUIREMENTS	BMC
None declared	AG, KY, GD, VC	None declared	AG, KY, GD, VC, TC
Import permit must be issued	TC		
International Health Certificate must accompany commodity	TC		
The milk or milk from which the dairy products is made from must have originated for a country/zone recognized by OIE as FMD free with or without vaccination or from a country/zone recognized by OIE as free from goat and sheep pox, rinderpest, peste des petits ruminants, contagious caprine pleuropneumonia, ovine brucellosis, maedi-visna, contagious agalactia, bovine brucellosis and bovine TB	TC		
The milk or milk from which the dairy products is made from must have been subjected to pasteurization at 72°C for a minimum of 15 seconds or an equivalent treatment in terms of phosphatase destruction or UHT treatment of 135°C for a minimum of 1 second	TC		
The milk or milk from which the dairy products is made from must have been processed or manufactured and packaged in a plant under hygienic and sanitary standards approved by the Veterinary Authority	TC		

BEEF

IMPORT REQUIREMENTS	BMC	EXPORT REQUIREMENTS	BMC
The carcass or portion of the carcass thereof, whether fresh, frozen, chilled, pasteurized, cured or pickled, originated from animals slaughtered while in good health and free from contagious and infectious diseases;	AG, KY, GD, VC, TC	None declared	AG, KY, GD
The meat or meat products have been inspected and passed for food under the laws of the country of origin;	AG, KY, GD, VC, TC		

IMPORT REQUIREMENTS	BMC	EXPORT REQUIREMENTS	BMC
The meat or meat products was wholesome and unadulterated at the time of inspection	AG, KY, GD, VC, TC		
Eligible Countries of Export: 1. Eligible Countries of Export: Australia, Canada, CARICOM States, Costa Rica, Honduras, New Zealand, and United States of America *(cattle, sheep, goat and swine)* 2. United Kingdom *(swine and cattle)* 3. Nicaragua *(boneless meat products only)* 4. All countries/territories: i. Thoroughly cooked boneless meat in hermetically sealed metal cans from any country with the exception of- (a) the Republic of Ireland; and (b) the United Kingdom or any other country of the European Union	KY		
Government Meat Inspection Certificate/International Health Certificate must accompany commodity	AG, KY, GD, VC, TC		
Statement from the Ministry of Agriculture exporting country stating that the area is free of Foot and mouth disease. Additionally, no outbreaks of FMD has occurred with 15 miles of any port used for the trans-shipment of products	AG, GD, VC, TC		
Goods have not come in contact with meat from the UK	AG, GD, VC, TC		
Import Permit must be issued	AG, GD, KY, VC, TC		

HONEY

IMPORT REQUIREMENTS	BMC	EXPORT REQUIREMENTS	BMC
None declared	AG, KY, VC, TC	This said product (honey) has been extracted from Apiaries that are NOT known to carry any diseases or are in any way contaminated. The product has been extracted in its natural form.	GD
		None declared	AG, KY, VC, TC

APPENDIX X. BMC COMMENTS RECEIVED ON DRAFT GUIDELINES WITH CONSULTANTS' RESPONSES

PLANT PRODUCTS		
COUNTRY	COMMENTS *(summarized)*	CONSULTANT'S RESPONSE
Antigua and Barbuda	Antigua and Barbuda is satisfied with the documents and have no further comments at this time.	None
Barbados	Generally we found the documents technically sound and well drafted. However there were some minor comments that need to be addressed. They are good reference documents as they stand right now and would be of added value when completed.	None
	In the Yams and Spices docs there is a recommendation of the use of Benomyl as a post-harvest treatment. This pesticide has been on the banned or highly restricted list for years and it is felt that it should be removed as a treatment and alternative(s) proposed such as Azoxystrobin (Amistar) or Prompt (Propiconazole) or any others that may be appropriate.	All references to, and recommendation for, use of Benomyl have been removed from this section of the draft guidelines.
	Sweet potato doc - the West Indian sweet potato weevil (*Euscepes postfasciatus*) must be included in Table 1-Pest Groups associated with tuber since it a major pest of sweet potato and it was mentioned as one of the pests that could be treated through irradiation.	*Euscepes postfasciatus* has been added to Table 1 as requested. It had not been included in the first instance because none of the responding BMCs had it listed as a regulated pest.
Guyana	The guidelines were reviewed and found consistent with existing national and international requirements for trade.	None
	<u>Draft Guideline to Facilitate intra-Regional Trade of Cassava in the Caribbean.</u> Page 6; line 2, Editorial, a. *imposition* should be changed to *implementation* since it suggests the use of unfair or unwelcomed measures.	Change made

PLANT PRODUCTS		
COUNTRY	COMMENTS *(summarized)*	CONSULTANT'S RESPONSE
	b. *Phytosanitary Integrity* Measures should also be taken to secure the phytosanitary integrity of the consignment.	.."and to secure the phytosanitary integrity of the consignment" has been added to end the last sentence of the paragraph.
	Draft Guideline to Facilitate intra-Regional Trade of Corn in the Caribbean. Should include quality control specifications which must be met in order to know whether the commodity has met standards specifications for trade. Grading system: Example: Physical, broken corn and foreign matter, heat damaged kernels, Moisture content, total damaged kernels, stress sacks, weed seeds, insect damage.	Issues relating to quality are not included in the scope of the guideline document. It is therefore suggested that a quality standard be developed to cover such issues specific to corn.
	Draft Guideline to Facilitate intra-Regional Trade of Legumes in the Caribbean. General Procedures (page 16), Production: Add bullet- Certification of farms This guideline was reviewed and found consistent with existing national and international requirements for legumes trade.	The addition has been made (actually page 15, and not 16 as stated, of draft 1).
	Draft Guideline to Facilitate intra-Regional Trade of Pineapples in the Caribbean. Page 10. Line 3- citrus pink disease or pink disease of pineapple.	"(pink disease of pineapple)" has been inserted after "citrus pink disease" (actually page 9, and not 10 as stated, of draft 1).
	Draft Guideline to Facilitate intra-Regional Trade of Ginger and Turmeric in the Caribbean. Page 10, Identity – Preferred Scientific Name- Curcuma (editorial); Other Scientific Names- Amomum curcuma Jacq. (editorial)	Amendment made (page 9, not 10, of draft 1)

PLANT PRODUCTS		
COUNTRY	COMMENTS *(summarized)*	CONSULTANT'S RESPONSE
	Page 12-Production- bullet 2- …weed management, *selection of quality planting materials, time of planting, avoid excess use of fertilizers*). Page 15-Pre-Harvesting- ….and heavy metals. *Time of planting is very important*. Page 15-Harvesting- …. Transferred to a drying shed. *Turmeric will be ready to harvest in 8-9 months when the leaves turn yellow and gradually dry up.* *Page 16 – Curing- ….air-drying at 22-26°C (71.5- 79°F) and a relative …..*	Phrases have been added as suggested (page 11, not 12, of draft 1). The sentence has been added (page 14, not 15, of draft 1). Paragraph on turmeric has been amended to include this recommendation (page 14, not 15) Insertion of the temperature in Fahrenheit made (page 15, not 16, of draft 1).
	Draft Guideline to Facilitate intra-Regional Trade of Sweet Potato in the Caribbean. Page 15, Cleaning- line 2- to minimize surface skin damage.	Amendment made.
	Draft Guideline to Facilitate intra-Regional Trade of Taro and Eddo in the Caribbean. None	None
	Draft Guideline to Facilitate intra-Regional Trade of Yam in the Caribbean. None	None
Jamaica	In general, no objection to the guidelines, namely corn, legumes, spices, taro and eddo, yam, cassava, pineapple and sweet potato.	None
	GENERAL COMMENTS In text reference: Recommendation for the following ISPMs: 5, 7, 12, 23, 31, 15, 20 are referenced at the beginning of the guides.	Reference to these ISPMs has now also been included as the penultimate paragraph in the "Outline of Requirements' section of each of the documents.
	Label: Recommendation for all guidelines to include name and address of exporter and importer for traceability purposes.	Amendment has been made to all draft documents.

PLANT PRODUCTS		
COUNTRY	COMMENTS *(summarized)*	CONSULTANT'S RESPONSE
	Treatment: For some commodities the information provided is generic (fumigation, cold, heat treatment, etc.). It is recommended that the treatment used on commodity in trade are more specific for example in the case of yam and the use of methyl bromide as a fumigant.	The guidelines do not seek to be prescriptive and seek to leave room for approved treatments that are mutually agreed upon. Additionally, very few countries in the region still permit the use of methyl bromide for any purpose.
	Phytosanitary Re-export: A section referring to re-export should be included for all guide documents under phytosanitary certification. Example, if a consignment of fresh taro is opened, split up or has its packaging changed prior to its arrival in the importing member state, a phytosanitary certificate for re-export is required from the transiting country, in accordance with ISPM 12. Original Phytosanitary certificates must accompany each consignment.	The issue of phytosanitary certification has been detailed in some of the guidelines; guidelines lacking this detail have been updated accordingly.
	General Procedure (Production): Small farmers to be included in the guideline; currently the guideline only refers to commercial farmers which could infer an exclusion of small farmers.	The word 'commercial' has been removed from this section.
	Treatment and Packing Houses: Recognition that in some Member States the treatment and the packing house is the same.	An insertion has been made to reflect this.
	Phytosanitary Measures: The document should separately capture the need for importing member states to recognize equivalence. As such we recommend a heading titled Equivalence in all guide documents and the relevant information (already in the guide) is placed and provide specific examples where needed.	The issue of equivalence has been mentioned in this section for consideration by trading partners. Since this document is a guideline and not intended to be too prescriptive, details of equivalence have not been included. Examples may be included when specific instances of application of this concept have been applied and declared by BMCs.
	Packaging: Recommendation for a dedicated section on packaging in reference to coir, coconut, paper, etc. is included.	Import/export requirements from BMCs who responded did not provide information on packaging currently used and/or accepted. A reference has now been included on general types of commercialy available packaging.

PLANT PRODUCTS		
COUNTRY	COMMENTS *(summarized)*	CONSULTANT'S RESPONSE
	Pesticide Residue: Jamaica recommends that emphasis is placed on pesticide residue consideration in general. However for commodities such as yams, which use post-harvest chemicals, we recommend that the exporting country give consideration to approved pesticides in importing countries.	The concern of pesticides residues is addressed generally in the Sanitary (Food Safety) section of the document. There could be some input sought from the CGPC in this regard if a decision is made to develop a protocol or standard that provides this guidance.
	Postharvest diseases and pests following the pathway should be detailed. For example known postharvest disease of pineapples should be mentioned in text or at least annexed and provide practical guidance for NPPO.	The pests of quarantine significance (regulated pests) as declared by BMCs are listed in Table 1 of the draft guidelines and options for phytosanitary measures mentioned. Specific protocols may be developed using the information provided in the draft guidelines since the draft guidelines are not intended to be prescriptive.
	It is recognized that the pest list associated with the respective commodities is not static and therefore in the short-mefium term, consideration should be given to onboarding the pest list for these commodities on the CAHFSA website and provide a link to the same in the guidelines. This will allow for a more efficient updating of the list and maintain the relevance of the documents.	This could be done once the guidelines have been approved and adopted.
	Recommending that a section for document control to be included; which gives clear approved document, recall documents etc.	The 'publication history' included on page 3 of the draft guideline documents has been included for this purpose.
	Yam Guideline *Re: Identity* Comment: The restriction to only *Dioscorea alata* L. - Recommendation: Expand to all species in the *Dioscorea* genus. Jamaica would specifically want to include *Dioscorea cayenensis* (Yellow yam).	The sole reference to *Dioscorea alata* has been removed and the text changed to include *D. rotundata* and *D. cayenensis*.

PLANT PRODUCTS		
COUNTRY	COMMENTS *(summarized)*	CONSULTANT'S RESPONSE
	Comment: Yam weevil is also a pest of *Dioscorea* - Recommendation: Include insects, i.e. yam weevil (*Paleopus costicollis*) as a pest group associated with yam.	The list of regulated pests as well as Tables 1 and 3 and Appendix 2 have been updated to include this pest (the yam weevil).
	Re: Post-Harvest Handling & Cleaning Comment: The removal of soil is important to be mentioned in this section. Recommendation: Removal of dirt/mud as much as is practicable from tubers intended for export	The section on 'Cleaning' has been updated to reflect this.
	Re: Fumigation treatment Comment: The guideline was generic and not specific to yam Recommendation: Examples of the use of methyl bromide as a fumigant, dose range should be included.	The guideline is not intented to be a prescriptive document. Additionally, methyl bromide is not currently available for use by the majority of BMCs.
	Re: Packing and packaging Comment: No mention of packaging material required Recommendation: Specific reference to the use of packaging material, i.e., coir, coconut trash and the phytosanitary requirement for the same.	The document is not intended to be prescriptive and the specific packaging is to be agreed between trading partners. Additionally, no information was included in the import/export requirements provided by BMCs.
	Re: System Approach Comment: The guideline is generic without providing possible equivalent measures that could be accepted by countries. Recommendation: Recommend more specific guide is given looking at confidence level, IPM, cultural techniques, etc.	A general protocol developed on this topic would be a helpful guide to cover the range of commodities of interest.
	Re: Pallet Security Comment: No reference to the use of certified pallets in accordance to ISPM 15. Recommendation: In general for all standards, ISPM 15 should be referenced in the pallet section.	This amendment has been made with the reference added in the 'Outline of Requirements' section now included in the second draft of the guidelines.

PLANT PRODUCTS		
COUNTRY	COMMENTS *(summarized)*	CONSULTANT'S RESPONSE
	Re: Inland Transport (not present in the guideline) Comment: No section dealing with inland transportation. Recommendations: 1) Tubers must be placed in bins which are clean and free of biological and chemical contaminants 2) vehicle must be cleaned and free of odours.	A sub-section has been included in Post-harvest handling and treatments' section of the document to treat with this comment.
	<u>Spices (Ginger & Turmeric) Guideline</u> *Re: Table 2* Comment: No explanation for TBD Recommendation: Clarification required.	TBD (to be determined) was included here to cater for any BMCs – upon revision of the draft guideline – recommendation for pest(s) to be included. If there are none, then this should be changed to read 'None' or 'Not Applicable'.
	Re: General Procedures – Production Comment: The region has several small farmers that meets export requirements. Recommendation: Recommend the term commercial is removed.	The term 'commercial' has been removed.
	Re: Phytosanitary Measure Comment: Yam weevil is reported as a pest of quarantine importance for ginger Recommendation: The yam weevil (*Paleopus costicollis*) is considered a pest of quarantine importance. While not known to cause economic damage at the field level, it can be a troublesome storage pest. Financial losses can be incurred if rejections occur due to interception on ginger exports.	Agreed. To address this concern, the Phytosanitary measures included in Table 3 for weevils has been updated to read '…cleaning (including the removal of all soil).'
	Re: Cleaning Comment: Reference to be made to soil for all tubers, rhizomes, etc. because soil is prohibited. Recommendation: recommendation for a suggested percentage or use of the term practically free to be used in the guidelines in reference to commodities that may have soil associated.	The first sentence in this section has been rephrased to read 'All rhizomes should be cleaned and be practically free from soil prior to packaging to maintain the highest quality product.
	Re: Transport of ginger	

PLANT PRODUCTS		
COUNTRY	COMMENTS *(summarized)*	CONSULTANT'S RESPONSE
	Comment: No specific mention to how ginger should be transported noting the risk to rhizome damage during transport. Recommendation: Transport harvested ginger in field crates from the field to the packing house. Sacks or bags are suitable for transport as the level of breakage in sacks is substantially higher than in the field crates, sequentially causing the level of rejection during grading to increase.	Amendments have been made to the section on 'Handling and Sorting' to include this recommendation.
	<u>Pineapple Guideline</u> *Re: Table 3: Phytosanitary Measure* Comment: Phytosanitary measures being proposed are generic & same for most commodities. Information from the Caribbean pineapple production and post-harvest manual can either be in text reference or summarized to provide better guidance to NPPO. Recommendation: The systems approach to be used could be detailed to include: natural enemies, insecticides, etc.	The manual has been included in the references and also mentioned in the text in the introduction to the Phytosanitary Measures section of the guideline.
	Re: List of pests found on pineapple in the Caribbean region Comment: For pests included without scientific name, no notation is provided Recommendation: Explanation is required regarding pest with scientific name or be removed from the listing pending verification of scientific name	The scientific names of the pests included were not provided by the BMC that submitted that information since there has been no official pest identification to determine the genus and species of same.
St Kitts and Nevis	We have reviewed the documents, they are excellent products from the Region. We have no comments at this time.	None

ANIMAL PRODUCTS		
COUNTRY	**COMMENTS**	**CONSULTANT'S RESPONSE**
Trinidad and Tobago	The OIE and Codex documents are already widely available. Therefore proposed guidelines for Intra-regional Trade should include at least some elements related to this region in particular – for example under "PROCESS" it may be a consideration to include named agencies through which the import applications are to be submitted i.e. for e.g. between named competent authorities in each member state and not just 'by an importer'. This would set some standards from the initiation of the process. It may therefore be necessary to appropriately list out the steps of the import application process including the relevant agencies that have roles in it in these draft texts.	In light of the difficulties in receiving country specific information about this matter, the OIE and CODEX guidelines were mainly used. There is usefulness in expanding the "PROCESS" part of the guidelines. The details as suggested may not be readily available due to the difficulty in acquiring information. However, the areas of "PROCESS" in the Egg, Dairy, Beef, Sheep and Goat Guidelines have been updated to reflect this concern as far as is possible with the limited information provided.
	The Dairy product guide is limited to 'dairy cattle' and Beef product guide to 'beef cattle' – it may be a consideration to include region related production/products e.g. dairy goats or buffalypso meat for example.	In light of the absence of a validation workshop, Dairy and beef were interpreted in the strict sense of the words. However, in the future there may be scope for the development of these guidelines.
	I cannot find a definition of what Fresh Eggs are in the "Fresh Eggs guidelines to facilitate intra-regional trade in the Caribbean". Apologies if I missed it. Does this document cover table AND hatching eggs?	CAHFSA provided guidance as to what the term "eggs" was to include, which was "Fresh eggs only". I interpreted that to mean eggs for human consumption, especially since all the commodities are for human consumption and not growth or other purposes. The Guideline has been updated to reflect that definition.
	Re "Honey Guidelines to facilitate intra-regional trade in the Caribbean" – in a number of member states, many if not all Honey and matters related to Bees do not reside within the legislative purview of the Veterinary Authority. It may be prudent to seek legal	Kindly note that the comment from T&T points to an allied concern that has been expressed by stakeholders over the years. viz. Perhaps the time has come to move responsibility for apiculture under CVOs (or

	guidance on this discrepancy prior to requesting the CVOs to comment on this particular draft.	PPOs) in all territories. This issue lies beyond the scope of this project. Please see further information about the background work done in preparation of the Honey Guidelines*.
ADDITIONAL COMMENTS FROM THE FOOD SAFETY CONSULTANT ON THE HONEY GUIDELINE	The national and regional management of beekeeping and the trade in apiary products does not fall consistently under either NPPOs, CVOs or Human Health. Directives on beekeeping extension, hive surveillance and trade may just as easily arise from legislation on forestry or food/agroprocessing. The team's approach to obtaining the trade information included: • the collection of honey import/export legislation where available. • Consulting with experts. In the absence of a readily available list of national focal points, the team has relied on personal networks. • Consulting the national country reports on beekeeping presented by the BMCs which participated in the Caribbean Beekeeping Congress, which is held every 2-3 years. The 14th Congress was held online during 2020.	

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Step-by-Step guide to exporting dairy products https://www.agriculture.gov.au/export/controlled-goods/dairy/step-by-step

WTO International: Dairy Agreement https://www.wto.org/english/res_e/booksp_e/analytic_index_e/dairy_01_e.htm

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Australian Guidelines for Egg Exportation

Codex Alimentarius Code of Hygienic Practice for Eggs and Egg Products (CAC/RCP 15-1976)

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APPENDIX XII. DRAFT CAHFSA PROCEDURE FOR PREPARATION OF REGIONAL SPS STANDARDS AND TECHNICAL REGULATIONS

CAH-ADM-001

Rev. no.	Rev. Description	Date	Checked by	Approved by
0	For comments			
1	Issued for use			

0.0 INTRODUCTION

Standards are recommendations. Interested companies and organisations apply them on a voluntary basis. These standards users decide for themselves which standards are relevant for them and if the benefits are larger than the expected costs of their introduction into the company's or organisation's practice.

Technical regulations are legally binding documents. They must be applied by all parties, be they big or small, regardless of the introduction costs. This implementation obligation can certainly be a substantial threat to the existence of micro, small and medium-sized companies

1.0 PURPOSE

The purpose of this procedure is to describe the method to be followed in the preparation of Regional SPS standards and technical regulations.

2.0 SCOPE

This procedure shall apply to all SPS standards and technical regulations to be developed by the Caribbean Agricultural Health and Food Safety Agency and should be observed by all Technical Advisory Committees that are involved in the development of standards.

3.0 ACTIONS

Preparation of regional SPS standards shall be undertaken upon the authorization of the Board of Directors of CAHFSA and shall be complete as follows

3.1 Step 1 Proposal for work on a new standard or technical guideline

The need for this standard may come from the Agricultural COTED, the Technical Advisory Committees or may arise out of representations from national organizations or existing National Agricultural Health and Food Safety Committees or Agencies. This is your zero time

3.2 Step 2 Development of Specification.

A specification for the draft standard should be prepared, giving directions to the drafting team on preparing the document. The specification should describe the scope of the standard and provide guidance on the composition of the draft document, highlighting critical content for inclusion in the standard. This step is done by the person or organization requesting the standard and is usually submitted to CAHFSA with the initial request.

3.3 Step 3 Preparation of the draft document

If the project is approved, it shall be referred to the appropriate Technical Advisory Committee (TAC) for the drafting of the document. If no appropriate TAC exists a new committee shall be formed, or the project shall be assigned to a CAHFSA staff. Drafting can take 2 weeks to 1 month depending on the scope of the standard and whether it is being drafted by one person or a drafting group working together

3.4 Step 4 Member States comments

The TAC shall submit the prepared draft to CAHFSA. With the approval of the Board of Directors, the draft document shall be made available for general public comment through the use of CROSQ existing machinery as well as through National Agricultural Health and Safety Committees or Agencies where they exist. In addition, copies shall be forwarded to the SPS Enquiry Points and to those known to be interested in the subject. Member states are normally 2-3 months to provide comments on a draft

Comments from MS will be compiled by CAHFSA and submitted to the TAC for consideration and adoption where appropriate. The TAC shall consider all the comments received and recommends a final document to the CAHFSA Board of Directors. Comments can be compiled within a week and sent to the relevant TAC. A response is required within 2 weeks and another week to incorporate the response. So, this entire section can be done in 1 month

3.5 Step 5 Adoption This depends on when the Board meets relative to when the document was completed. The Board meets in May and October of each year. So, there is no real timeframe for board approval. If a document is not ready for one Board meeting, it awaits the next.

The Board of Directors shall recommend the document to the COTED (Agriculture) for adoption as a regional standard. The same thing applies to COTED adoption. COTED meets in October of each year. If a draft document does not reach one COTED meeting, it must wait until October of the next year.

3.6 The decision to integrate this standard into a technical regulation, by means of reference to the standard shall be left up to the respective Member State

3.7 Amendments to, and revision of standards shall require the same procedure as is applied to the preparation of the original standard.

PROCEDURE FOR ADOPTION/ADAPTATION OF SPS STANDARDS

SPS protocols, standards, guidelines, methods and approaches recommended for adoption/adaptation at the regional level by TAC from time to time shall first be reviewed by CAHFSA, the regional organization set up by CARICOM as the regulatory and standard setting organization for SPS Standards before being forwarded to the COTED.