

A GUIDE TO  
GOOD AGRICULTURAL PRACTICES  
(GAP) FOR

# CROP PRODUCTION





A Guide to Good Agricultural Practices (GAP) for

# Crop Production



*This booklet was funded by the  
Ministry of Agriculture and Fisheries, Jamaica;  
June 2012*

Published by the Ministry of Agriculture and Fisheries  
Hope Gardens, Kingston 6  
2012, June

© 2012 by the Ministry of Agriculture and Fisheries  
All rights reserved

No part of this document may be reproduced or transmitted in any form or by any means – electronic or mechanical including photocopying, recording or using any information storage retrieval system-without permission in writing from the publisher.

First edition 2012, June

## ACKNOWLEDGEMENTS

The good agricultural practices (GAP) manual for crops is a set of guidelines aimed at promoting best practices in crop production. Its principal aim is to minimize the risk of contamination of foods by bacteria and other microbial pathogens, pests and chemicals during the primary production activities.

The compilation of this manual is the result of the collective efforts of several people.

Thanks to Dr Richard Harrison, Don McGlashan and Claudette McKenzie for their foresight and vision in seeing the need for farmers to have relevant easy-to-understand information at their fingertips.


Special thanks to Joseph Lindsay, PhD; T. Burton; Winston Simpson and Francine Webb of the Rural Agricultural Development Authority for their technical contribution in preparing the manual.

And for the vital technical given during the early stages of the manual, sincere gratitude is extended to Carol Thomas, the Inter-American Institute for Cooperation on Agriculture's regional agricultural health and food-safety specialist for the Caribbean.

And to Permanent Secretary Donovan Stanberry, whose unstinting encouragement and support spurred the growth of the manual, many thanks.

Thanks also to Tehuti Ra for graphic design and layout and Andrea Hoo Fung for copy-editing of the manual.

Funding for the publication of this manual was provided by the Ministry of Agriculture and Fisheries, Jamaica.



Don McGlashan  
Director General  
Ministry of Agriculture & Fisheries

## **ACRONYMS**

**COLEACP** - Europe-Africa-Caribbean-Pacific Liaison Committee

**FIFO** - First in, first out

**GAPs** - Good Agricultural Practices

**SSOP** - Sanitation Standard Operating Procedures

# Contents

---

|   |    |
|---|----|
| ACKNOWLEDGEMENT                                 |    |
| ACRONYMS  |    |
| INTRODUCTION                                    | 1  |
| OBJECTIVES                                      | 2  |
| SCOPE   | 2  |
| PLANTING MATERIAL                               | 3  |
| SITE SELECTION/MANAGEMENT                       | 3  |
| LAND PREPARATION                                | 4  |
| SOIL MANAGEMENT                                 | 5  |
| WATER MANAGEMENT                                | 5  |
| IRRIGATION/FERTIGATION                          | 5  |
| FERTILIZER USAGE                                | 6  |
| FERTILIZER STORAGE                              | 6  |
| ORGANIC FERTILIZER/MANURE                       | 7  |
| CROP MANAGEMENT                                 | 7  |
| CROP PROTECTION (Pesticides Usage)              | 8  |
| Field Application                               | 8  |
| Pesticide Storage                               | 10 |
| Transportation of Pesticides                    | 11 |
| Disposal of Pesticides (containers and surplus) | 11 |
| Training and Worker Safety                      | 12 |
| Documentation of Pesticide Application          | 13 |
| HARVESTING                                      | 13 |
| POST-HARVEST HANDLING/TREATMENT                 | 14 |
| FIELD SANITATION                                | 15 |
| EQUIPMENT AND MACHINERY                         | 15 |
| TRANSPORTATION                                  | 16 |
| STORAGE   | 17 |
| WASTE DISPOSAL                                  | 18 |
| TRACEABILITY AND RECORD KEEPING                 | 19 |
| EMPLOYEE HEALTH, WELFARE AND SAFETY             | 20 |
| SANITARY FACILITIES                             | 21 |
| BUILDINGS                                       | 22 |
| REFERENCES                                      | 24 |
| GLOSSARY  | 25 |







# Crop Production

## INTRODUCTION

People are becoming increasingly conscious of what they consume and are, therefore, demanding safer, more wholesome foods. Additionally, the proven health benefits of fresh fruits and vegetables to cancer and heart disease prevention have resulted in increased consumption of these commodities. Further, with the expansion of global trade and travel, consumption of these produce has increased due to year-round availability.

However, in recent times, there have been increased reports of food-borne illnesses associated with fruit and vegetable consumption, and this has raised concerns by consumers about the systems used in the production chain in relation to hygiene and the environment.

Food should be produced under conditions that minimize contamination, as food-borne illnesses can be fatal and repeated incidences are likely to be damaging to international trade (exports/ imports), tourism and production, thus leading to loss of income and employment. As such, we all have a responsibility to ensure that food is safe for consumption. With this in



...fresh fruits and vegetables have been proven to provide health benefits to cancer and heart disease patients and this has resulted in increased consumption of these commodities.

# Crop Production

mind, Good Agricultural Practices (GAP) must be employed throughout all the stages of production.

## OBJECTIVES

This document sets out guidelines for Good Agricultural Practices (GAP) from site selection to post-harvest handling. It outlines the steps necessary to assist in reducing and controlling hazards (biological, chemical and physical) associated with crop production, from pre-planting to transportation and storage.

The principles outlined are in no way exhaustive and do not apply to any specific crop. While it might be difficult to adopt all due to the structure of the agricultural sector, they must be regarded as general recommendations to be used in food production and handling.

## SCOPE

The principles in this document apply to the production and handling of fresh horticultural produce – fruits, vegetables, herbs, root crops etc., but are not applicable to manufactured foods. These guidelines are applicable to both local and export markets and cover the production chain from the farm to market – that is, from production through to transportation and storage. The document does not apply to domestic



This document sets out guidelines for Good Agricultural Practices (GAP).



These guidelines are applicable to both local and export markets and cover the production chain from the farm to market.

# Crop Production

handling practices or to the food-service industry.

## PLANTING MATERIAL

- Seeds/planting material must be free from pests and diseases.
- Seed records must be kept to indicate variety, purity, germination, batch number, seed supplier and country of origin.
- All seed treatment (products) applied should be recorded, together with the pests/diseases targeted.
- Seeds must be handled carefully to avoid contamination.
- Planting material must be stored according to the manufacturers' instructions in order to prevent damage or contamination.

## SITE SELECTION/ MANAGEMENT

- Land for crop production should be selected based on previous land usage/history/capability/suitability.
- Test sites for contaminant(s) if land history is unavailable/unknown.
- Check sites for potential biological/chemical/physical hazards.



Seeds/planting material must be free from pest and diseases.



Seeds must be handled carefully to avoid contamination

# Crop Production

- Crop production activities should be located at a suitable distance from livestock operations to avoid animal contamination.
- Fields should not be sited near feedlots or points where animal waste can contaminate them.
- Run-off/contaminated water should not be allowed to enter fields.
- Map out production areas (field/orchard/greenhouse) prior to planting.

## LAND PREPARATION

- Soil must be properly tilled and weathered before planting.
- Avoid overtillage.
- Prepare land using techniques to improve/maintain soil structure and to avoid compaction.
- Avoid mechanical land preparation on slopes above 20 degrees.
- Use equipment appropriate to soil type and moisture content.
- Mechanical land preparation should be done on land where it will improve/maintain soil structure.



Prepare land, using techniques to improve/maintain soil structure and to avoid compaction.



Mechanical land preparation should be done on land where it will improve/maintain soil structure.



# Crop Production

## SOIL MANAGEMENT

- Prepare soil maps prior to planting.
- Soil conservation measures, such as contouring, cover cropping, mulching etc, should be employed to prevent erosion and soil degradation.
- Soil type should be appropriate for the crops being grown.
- Only properly composted/aged manure must be used in fields.
- Manure should be incorporated into the soil before planting.



Pineapple barriers



Contouring planting

## WATER MANAGEMENT

- Put water-conservation methods (dams, tanks) in place before planting.
- Records of water consumption must be kept.
- Use water-saving irrigation methods, e.g. drip, micro-sprinkling.



Gravity drip irrigation system

## IRRIGATION/ FERTIGATION

- Identify water source before planting.
- The irrigation water source should be protected from animals and other sources of contamination.



Sprinkler irrigation system

# Crop Production

- Water used for fertigation/ pesticide application should be free of pathogens/contaminants.
- Water used for foliar treatments (fertilizers, pesticides, etc.) must be of post-harvest quality.
- Water should be tested twice per year for possible contaminants (microbial, chemical, heavy metals).

## FERTILIZER USAGE

- Use the appropriate type and quantity of fertilizer (based on soil analysis).
- All fertilizer applications must be recorded according to field/ orchard map.
- Machinery used for fertilizer application should be kept in good working condition (maintenance schedule/ calibration).
- Methods of fertilizer application (mechanical/fertigation/manual) should be recorded.
- Apply fertilizer 'economically' to avoid spillage and waste.

## FERTILIZER STORAGE

- Store fertilizer in a covered area that is clean, dry and at least



Use the appropriate type and quantity of fertilizer.



Apply fertilizer 'economically' to avoid spillage and waste.



Store fertilizer in a covered area that is clean, dry and at least 10cm off the ground.



# Crop Production

10cm off the ground.

- Fertilizer in storage must be separated from pesticides.
- Fertilizer must not be stored with produce or planting material.

## ORGANIC FERTILIZER/ MANURE

- Human waste (sewage sludge) must **not** be used to fertilize plants.
- Nutrient analysis must be carried out on all organic fertilizers (NPK, macro/micro elements).
- Source/origin of organic fertilizers must be documented.
- Manure/organic fertilizer must be applied in ways to prevent drift/run-off.
- Dates, field application and rates of manure application must be documented.
- Manure must be composted to kill harmful pathogens.

## CROP MANAGEMENT

- Varieties/cultivars should be selected based on market acceptability, disease resistance etc.
- Devise crop-rotation sequence (farm plan).



Manure



Workers tending compost beds.



Manure should be applied to the soil prior to planting food crops (cassava, yam, potato, etc.).

# Crop Production

- Manure should be applied to the soil prior to planting food crops (cassava, yam, potato, etc.).
- Manure should not be applied within 60 days of harvest.
- Manure should not be used to side dress fruit or vegetable crops.

## CROP PROTECTION (Pesticide Usage)

### Field Application

- Pesticide application should be controlled throughout every phase from usage to storage.
- Pesticides should be obtained from approved sources.
- In selecting an area on the farm for handling pesticides, users should take note of the location of water sources to avoid contamination.
- Establish vegetation or other barriers to help limit contact between chemicals and water sources.
- Use environmentally friendly chemicals.
  - Use only chemicals approved for crops being grown.
- Pesticide handlers must wear the appropriate protective gear



Pesticide handlers must be given the appropriate protective gear.



# Crop Production

(equipment and clothing).

- Persons handling/applying pesticides must be properly trained by the appropriate authorities. Training records should be kept on the farm.
- Pesticide applications must be recorded stating pest to be controlled, date of application, quantity used, method of application and pre-harvest intervals.
- Water used for mixing pesticides should be free from contaminants.
- Spray equipment – pumps and nozzles should be calibrated for accuracy and checked frequently for malfunction.
- All equipment should be washed regularly to prevent contamination of produce from unauthorized compounds and to avoid accidental overdose.
- Workers and other persons entering a recently sprayed area should be informed in order to avoid exposure to pesticides. This can be achieved by posting warning signs. (These signs should only be removed after the approved re-entry period has passed).



Pesticide handlers must wear the appropriate protective gear (equipment and clothing).



Persons handling/applying pesticides must be properly trained by the appropriate authorities.



Spray equipment pumps and nozzles should be calibrated for accuracy and checked frequently.

# Crop Production

## Pesticide Storage

- Growers are encouraged to keep pesticide usage at a minimum and to buy only what is needed.
- Pesticides should be stored in clearly labelled containers (preferably in the original containers).
- Do not store pesticides with food, animal feed, seeds, fertilizers, packaging material, water or other material which they could contaminate.
- Pesticides should be stored at room temperature and away from light.
- Inventories must be kept of all pesticides. Follow the 'first in first out' principle.
- Store liquids and solid formulations separately on a shelf below and away from dry substances.
- Pesticide storage facilities should be
  - clearly identified;
  - located away from populated areas (animal/human); and
  - well ventilated and securely closed to prevent unauthorized entry.



Do not store pesticides with food, animal feed, seeds, fertilizers, packaging material, water or other material which they could contaminate.



Pesticides should be stored in clearly labeled containers (preferably in the original containers).



Pesticide storage facilities should be clearly identified.

# Crop Production

- Floors should be made of material that facilitates the cleaning up of spills.
- Emergency exits must be clearly visible and unobstructed.

## Transportation of Pesticides

- Pesticides must never be transported with food for human or animal consumption.
- Pesticides should not be transported in a closed passenger vehicle.
- Containers with pesticides should be securely closed to avoid spillage and prevented from rolling or sliding during transportation.

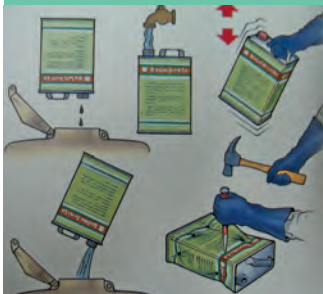
## Disposal of Pesticides (containers and surplus)

- Empty pesticide containers should be triple-rinsed, properly disposed of or returned to the suppliers, where relevant.
- Rinsing water should be used again to dilute pesticide solutions or disposed of as hazardous waste.
- Pesticide containers over five gallons should not be buried on farms. Instead, they should be disposed of only in areas



Transporting pesticides

Pesticides must never be transported with food for human or animal consumption.



Empty pesticide containers (drums, bottles etc) must be drained and rinsed three times and made unusable.



Packages to be buried must be made unusable and reduce in bulk as much as possible. Liquid containers must be triple-rinsed.



# Crop Production

designated by the competent authorities.

- Never dump pesticide containers near wells or water sources.
- Ensure that empty containers are not accessible to children or animals.
- Containers that have been washed should be punctured (making them unfit for further use).
- Empty pesticide containers (bags, boxes etc.) should be destroyed.

## Training and Worker Safety

- Pesticide users must be thoroughly trained in correct pesticides usage and application.
- Pesticide users must be aware of dangers arising from improper use, symptoms of pesticide poisoning and how to administer treatments.
- Pesticide users must be aware of what safety precautions to use when handling pesticides and must wear appropriate protective clothing and safety equipment at all times.
- Pesticide handlers and applicators must be tested twice yearly for pesticide exposure.



Pesticide users must be thoroughly trained in correct pesticides usage and application.



Pesticide users must be aware of what safety precautions to use when handling pesticides and must wear appropriate protective clothing and safety equipment at all times.



# Crop Production

## Documentation of Pesticide Application

- Records should be kept on pesticide usage.
- Records of pesticide application must include date, name of applicator, crop name, location, method of application, type and quantity of pesticide used, pest being controlled and pre-harvest interval.
- A list of pesticides approved for the crops being grown must be kept.



Records should be kept on pesticide usage.

## HARVESTING

- Growers are encouraged to keep pesticide usage at a minimum and to buy only what is needed.
- Storage areas should be thoroughly cleaned before harvesting and storing produce.
- Food products should be harvested following recommended pre-harvest intervals.
- All harvesting containers should be made of non-toxic materials.
- Harvesting containers should not be used for storing non-produce items.



Food products should be harvested following recommended pre-harvest intervals.



All harvesting containers should be made of non-toxic materials.

# Crop Production

- Employees should practise good hygiene/sanitation.
- Smoking and eating should be restricted to designated areas.
- Workers who are ill should not be allowed to handle/harvest produce.
- Pets/farm/wild animals should not be allowed to roam in crop-production areas.
- Workers engaged in harvesting must have access to clean toilet and hand-washing facilities.

## POST-HARVEST HANDLING/TREATMENT

- Water used for post-harvest operations should be of drinking quality (potable).
- Use only approved post-harvest techniques and treatments when storing/packing produce which has been reaped.
- Sanitation standard operating procedures (SSOPs) for post-harvest treatment must be documented.
- Produce-handling facilities and equipment (floors, walls, storage areas, pallets, machinery etc.) must be cleaned and maintained to prevent contamination.



Use only approved post-harvest techniques and treatments when storing/packing produce which has been reaped.



Water used for post-harvest operations should be of drinking quality (potable).



Produce-handling facilities and equipment (floors, walls, storage areas, pallets, machinery etc.) must be cleaned and maintained to prevent contamination.

# Crop Production

- Waste/reject produce must be stored in designated areas.
- Waste disposal areas must be cleaned and disinfected to prevent contamination.
- Cleaning records should be carefully documented.

## FIELD SANITATION

- Equipment/tractors used for harvesting/cultivation should be cleaned prior to entering fields.
- Avoid entering fields that are wet in order to reduce the spread of plant/human pathogens.
- Restrict livestock movements in fields where crops are being grown or harvested.
- Avoid making cull piles in or near fields as this attracts pests.

## EQUIPMENT AND MACHINERY

- All equipment should be maintained in good working condition.
- Equipment requiring calibration should be serviced and calibrated annually or as recommended by manufacturers.



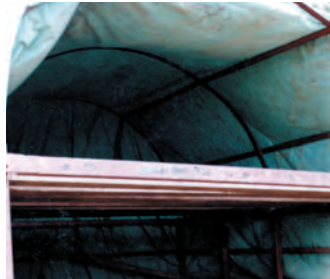
All equipment should be maintained in good working condition.



Machinery/equipment with moving parts should have protective guards.

# Crop Production

- All equipment/machinery should be cleaned after use.
- Machinery/equipment with moving parts should have protective guards.
- Documentation must be kept of (equipment) maintenance schedules. A written preventative maintenance programme should be in place.
- Equipment should be set up to allow easy cleaning, sanitizing, maintenance and inspection.
- Machinery to be used as food-contact areas should have smooth surfaces to prevent damage to products and contamination.
- Machinery/equipment used for handling non-edible material should not be used for food.



Use carriers (trucks, containers etc.) that are suitable for transporting food.



Use refrigerated trucks when possible for transporting products requiring refrigeration.

## TRANSPORTATION

- Vehicles transporting produce must be cleaned and sanitized before loading.
- Use carriers (trucks, containers etc.) that are suitable for transporting food.
- Vehicles used for transporting toxic substances/pesticides or live animals should not be used



Produce should be stacked on pallets.

# Crop Production

for fresh fruits and vegetables (unless properly washed and sanitized).

- Produce should be stacked on pallets.
- Use refrigerated trucks when possible for transporting products requiring refrigeration.
- Always use dividers inside the truck when transporting mixed loads, to prevent cross contamination.
- Containers used for transporting produce from the production area must be clean, free of odours, and should be constructed so as to allow for thorough cleaning.



Containers used for transporting produce from the production area must be clean, free of odours, and should be constructed so as to allow for thorough cleaning.

## STORAGE

- Design storage facilities to allow for proper cleaning and maintenance.
- Storage facilities, pallets, containers and packing crates must be cleaned and sanitized before use.
- Allow space between racks/pallets for inspection purposes (pest and pest droppings).
- Cold-storage facilities must be carefully monitored for



Storage facilities, pallets, containers and packing crates must be cleaned and sanitized before use.



Cold-storage facilities must be carefully monitored for temperature, and logs maintained.



# Crop Production

temperature, and logs maintained.

- Condensation from the refrigeration system must not come into contact with produce.
- Refrigeration rooms must not be stocked above cooling capacity.
- All stored items must be protected against contamination and spoilage.
- Toxic substances (e.g. pesticides) must be stored in locked rooms/cabinets used for that purpose only.
- Storage areas should be properly labelled.
- Adopt the FIFO (first in, first out) system for stock rotation to avoid spoilage during storage.

## WASTE DISPOSAL

- Facilities must be provided for the disposal of spoilt produce.
- The waste-disposal procedure must be documented and communicated to all employees.
- Waste from work/food-handling facilities must be discarded at least once daily.



All stored items must be protected against contamination and spoilage.



Facilities must be provided for the disposal of spoilt produce.



Areas for waste disposal (burial/burning) must be clearly defined.



# Crop Production

- Areas designated for storing waste must be cleaned and disinfected to prevent build-up of pathogens and pests.
- Areas for waste disposal (burial/burning) must be clearly defined.
- Procedures for disposal of pesticides/pesticide containers must be documented and communicated to all employees.
- Adopt the triple-rinse method; puncture the containers before discarding/storing (if possible, return to pesticide distributors).



Farmer registration exercise being conducted by RADA officers.

## TRACEABILITY AND RECORD KEEPING

- All farms, farmers, suppliers (higglers and middlemen), and exporters should be registered by the competent authority.
- Prepare a map of the production area.
- Records of lot numbers must be maintained for all produce leaving the farm.
- All produce leaving the farm must be traceable to the field of origin and harvesting, and packing dates should be documented.



Records of lot numbers must be maintained for all produce leaving the farm.



All produce leaving the farm must be traceable to the field of origin and harvesting, and packing dates should be documented.

# Crop Production

- Where farmer groups are involved, produce must be traceable to the group.

## EMPLOYEE HEALTH, WELFARE AND SAFETY

- Employees must be informed about the terms and conditions of their employment.
- Salaries paid must be reasonable (not exploitative).
- Children must not be employed.
- Working hours should not be detrimental to the physical and mental health of the workers.
- Employees must be properly trained in personal hygiene and sanitation. Training records should be kept on the farm.
- Sanitation and personal-hygiene policies should be documented and accessible to all employees.
- All employees should be properly trained in hand-washing techniques.
- Persons who are ill or suffering from communicable diseases should not be allowed to work in food production/handling areas.
- Persons with open cuts should not be allowed to work in food-



All produce must be traceable to the place/source of origin.



Children must not be employed.



All employees should be properly trained in hand-washing techniques.

# Crop Production

production/handling areas unless the cuts are properly covered to prevent contamination.

## SANITARY FACILITIES

- Clean, well-serviced toilets (one toilet to 10 workers) must be easily accessible during working hours.
- Staff doing field work should be provided with facilities for showering and changing of clothes during fieldwork.
- Hand-washing stations/facilities should exist in the same ratio as toilets. Soap, single-use towels and potable drinking water should also be provided.
- If portable toilets are used, they must be serviced regularly, and the sewage disposed of by qualified service providers. (Cleaning schedules should be in place).
- Drinking water must be provided in sufficient quantity for all employees.
- Lunch rooms/changing rooms and toilets should be located away from food-handling areas.
- Equipment/material used for sanitizing and cleaning should be provided for use in these areas



Clean well-serviced toilets.



Hand-washing stations/facilities should exist in the same ratio as toilets. Soap, single-use towels and potable drinking water should also be provided.



facilities for showering and changing of clothes.

# Crop Production

exclusively.

(Do not use bathroom equipment to clean food-handling areas).

## BUILDINGS

- Employee accommodation (if provided) must be safe, well ventilated and constructed according to national building standards.
- Buildings should be designed to prevent access to pests and environmental contaminants.
- Food-handling facilities must be designed to avoid product contamination throughout the different stages of processing.
- Floors, walls and ceilings should be built with durable material to allow for cleaning/sanitizing.
- Floors must be adequately sloped to allow for proper drainage.
- Buildings should not be located within close proximity to potentially hazardous areas that can cause contamination of food.
- Adequate ventilation must be provided to prevent the build-up of dust, odour, heat and contaminated air.



Buildings should be designed to prevent access to pests and environmental contaminants.



Floors must be adequately sloped to allow for proper drainage.



Adequate ventilation must be provided to prevent the build-up of dust, odour, heat and contaminated air.

# Crop Production

- Produce-handling facilities should be designed to allow for comfortable working positions.
- Drains and sewage systems must be built with proper traps and ventilation.
- Adequate lighting (natural or artificial) should be provided to facilitate hygienic operations.



Drains and sewage systems must be built with proper traps and ventilation.



# Crop Production

## REFERENCES

- EUREPGAP Protocol for Fresh Fruits and Vegetables ver 2001 Rev 02.
- Code of Hygienic Practice for Fresh Fruits and Vegetables. CAC/RCP 53-2003.
- The COLEACP Harmonized Framework 2001.



# Crop Production

## Glossary

**Bacterium (bacteria, pl):** tiny organisms not visible to the eye (see microbial).

**Contaminants:** *substances that make things dirty, polluted or poisonous.*

**Cultivars:** *a variety of plant developed by propagation and given a name.*

**Fertigation:** *the application of fertilizer or other water-soluble substances through irrigation. Efficient and effective, it saves money.*

**Foliar treatment:** *applying herbicide to leaves.*

**Microbial:** *describes a tiny organism (see micro-organism) or life form, especially a bacterium (see definition), which causes disease.*

**Microorganism:** *very tiny one-celled organism such as viruses, fungi, and bacteria*

**Pathogens:** *a disease-causing micro organism such as a bacterium or virus.*

**Pre-harvest:** *refers to all the activities which take place on a farm before the crops are sold.*

**Preventative maintenance programme:** *a plan detailing actions to prevent the breakdown of equipment; for example, replacing worn parts before they fail.*

**Sanitation standard operating procedures (SSOPs):** *a set of procedures designed to ensure that equipment used in food production is adequately cleaned.*

**Toxic substance:** *any chemical or mixture that may be harmful to the environment.*

**Triple-rinse method:** *the most commonly used procedure for cleaning pesticide containers; involves draining, rinsing with a solution, shaking or rolling the container, and draining again – before disposing of the container.*







**MINISTRY OF AGRICULTURE & FISHERIES**

Hope Gardens, Kingston 6, Jamaica

Telephone: 876-927-1731-50 Fax: 876-927-1904

Email: [webmaster@moa.gov.jm](mailto:webmaster@moa.gov.jm)

[www.moa.gov.jm](http://www.moa.gov.jm)

---