|  |  |
| --- | --- |
| Insert the appropriate Territory or Government official symbol or logo | **ADD THE UKOT NAME**  **Inspection Protocol for**  **FRESH FRUIT AND VEGETABLES FOR**  **HUMAN CONSUMPTION** |
| **BIOSECURITY** | Version XXX |

Inspections are directed at detecting two main categories of pests and diseases: quarantine pests and diseases, and regulated non-quarantine pests and diseases:

* **Quarantine pest**

A quarantine pest is a pest of potential national economic importance to the country at risk and not present there, or present but not widely distributed and being actively controlled.

* **Regulated non-quarantine pest**

A regulated non-quarantine pest is a pest who presence in plants for planting affects the intended use of those plants with an economically unacceptable impact.

Phytosanitary inspection procedures have been developed in accordance with International Standards For Phytosanitary Measures (ISPMs - <https://www.ippc.int/en/core-activities/standards-setting/ispms/>), specifically ISPM Nos. 1, 12, 16, 20, 23 and 31.

**Location and timing of inspection**

* Inspections must be carried out at the port of entry and as soon as possible after the arrival of the produce to minimise spoilage.
* Produce must be accompanied by full relevant documentation: this may include phytosanitary certificates, and fumigation certificates for some types of produce. If any document is lacking the entire consignment is liable to confiscation. No produce will be released until the inspector is satisfied that the consignment is covered by the relevant documentation.
* Produce will be inspected at the convenience of the Biosecurity staff and not necessarily in the presence of the importer.

**Sampling and sampling rate**

* Samples will be taken from each “lot” of produce. A “lot” is defined as the total amount of any one type of produce which are clearly from the same source. For example, identical boxes of apples bought from the same supplier by different importers are all part of the same lot.
* Samples must be taken at random from the lot, as far as possible.
* Sampling rate will vary depending on the risk level of the produce, and the risk level will depend on:
  + Quarantine or regulated non-quarantine pests which can be hosted or carried by the produce
  + Country of origin
  + History of interceptions with the produce
  + Any pre-border treatment
* Sampling rates for each risk level (high, medium and low) can be any one of the following:
  + 1 box in 10
  + 600 units (pieces of fruit, vegetables or tubers) from the entire lot
  + Taken using the tables in ISPM No. 31 Methodologies for Sampling of Consignments.
  + Taken using tables adapted from ISPM No. 31 for smaller consignments, such as those developed by *Biosecurity St Helena* and annexed to this protocol.
* All units (pieces of fruit, vegetables or tubers) in a sample are inspected.

**Inspecting for pests and pathogens**

* Items selected for inspection will be examined on an inspection table against a white surface under 600 lux lighting. In addition to the inspection sample, a cursory visual inspection will be made of each lot by opening a number of cartons of the remaining lot to verify the impression gained from the sample. If the cursory inspection raises any questions as to the potential presence of suspected quarantine pests or quality status of the lot, the inspector may increase the sample rate of that produce category, on a temporary or permanent basis.

*Stone, pome, citrus, grape, and other tropical fruit*

* Fruit are inspected externally for any signs of infestation by quarantine pests, such as holes of entry or exit of larvae, frass, or symptoms of disease. Any such signs must be followed up by cutting the fruit to identify the pest or disease concerned. The inspector may make any inspection by means of looking, palpating, cutting, smelling or tasting, as he or she sees necessary. In some cases, it may be necessary to cut open the seed within the fruit, for example, when looking for mango seed weevil.
* Note that produce which has been fumigated is also subject to inspection as the inspection checks the effectiveness of the treatment.

*Other fruit, and vegetables*

* Other fruit and vegetables are inspected externally for any signs of infestation by quarantine pests, such as holes of entry or exit of larvae, frass, or symptoms of disease. Any such signs must be followed up by cutting the fruit or vegetable to identify the pest or disease concerned.
* Coconut can carry disease which affects all palms, but these are only a risk if the coconut is allowed to germinate and grow. To ensure that imported coconut is not allowed to grow all nuts must be decorticated.

*Ware potatoes*

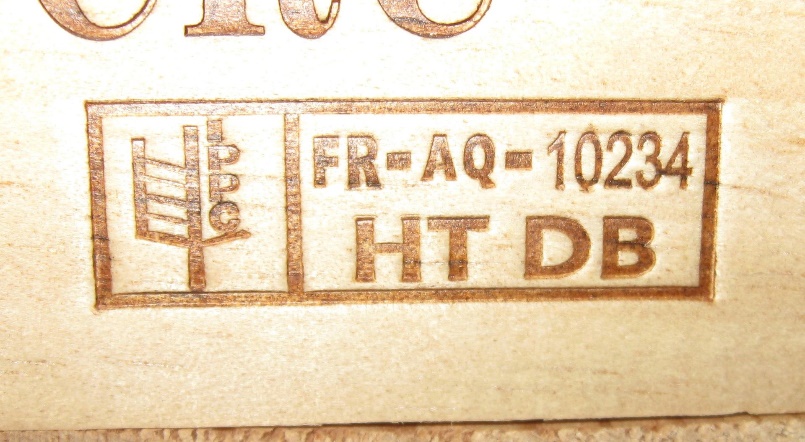
* All tubers in the sample must be inspected externally for signs of quarantine insect pests and mites. A sub-sample will also be cut at the heel end for signs of brown rot and ring rot to evaluate the risk of these diseases, and also checked for pathogens under the skin.

**Inspecting for quality**

* Quality concerns the state of the produce and whether it is considered fit for the purpose for which it is intended. (Examples would be rotten onions or green potatoes.)
* Where more than 10% of inspected fruit, vegetables or tubers in a lot is found to be affected at levels greater than 25% of fruit/tuber surface affected (but is otherwise free from quarantine pests) the entire lot will be referred to HM Customs for advice and if necessary further action from Environmental Health. Environmental Health will then be responsible for certifying the lot as “unfit for human consumption” or otherwise.

**Pallets and packaging**

* All cartons, boxes and other containers in the sample must be examined, inside and out, for signs of quarantine pests and hitchhikers such as wasps, caterpillars, ants, beetles or other insects.
* In compliance with ISPM No. 15 Regulation of Wood Packaging Material in International Trade pallets and wooden boxes used in the shipping of fresh produce must be made from de-barked wood and stamped with the IPPC symbol.



ISPM 15 Stamp on a shipping crate © Rhinokitty

**Action in the event of detecting a pest or disease**

* A single piece of fruit, tuber or vegetable found to contain a quarantine insect pest or mite (specimens alive or dead) renders the entire lot liable to confiscation. The produce can be subject to 100% inspection, removing all infested items, at a nominal charge to the importer. The alternative is destruction of the entire lot. [Delete or modify as appropriate to your Territory]
* In the event of intercepting live immature life stages such as maggots and caterpillars (worms), which are difficult to identify to species level, the precautionary approach should be adopted and the entire lot is liable to confiscation. If possible, the intercepted specimens should be held in captivity and reared to the adult stage to confirm identification.
* A single fruit, tuber or vegetable found to be infected with a quarantine pathogen renders the entire lot liable to confiscation and destruction. If a disease has been detected in one or some fruit other apparently uninfected fruit, tubers or vegetables may be latent carriers and 100% inspection is not an option.
* Infested produce should be isolated from non-infested produce from the moment of identification and labelled as “infested” until disposal. Isolation can take the form of sealing in black bin-liners (double bagged), placing in a freezer or reefer, or physical removal to another building.

# Annex 1. Sampling rates for high risk produce from *Biosecurity St Helena*.

This sampling rate gives 99% confidence of detecting a 1% infestation. High risk for St Helena is defined as risk of introduction of Tephritid fruit flies.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Number of cartons to be sampled for, e.g. peaches, nectarines, plums, oranges, mandarins (sweet citrus), pumpkin, squash. | | | | | | | | | |
|  |  | | |  | |  | |  | |
| **Number of cartons** | **number of fruit per carton** | | | | | | | | |
| **10** | **11 to 20** | **25 to 35** | | **45 to 55** | | **60 to 70** | | **80 to 100** |
| **5** | all | all | all | | all | | all | | all |
| **10** | all | all | 8 | | 7 | | 6 | | 5 |
| **15** | 12 | 10 | 10 | | 7 | | 6 | | 5 |
| **20** | 18 | 16 | 11 | | 8 | | 6 | | 5 |
| **25** | 20 | 17 | 11 | | 8 | | 6 | | 5 |
| **30** | 23 | 19 | 12 | | 9 | | 7 | | 5 |
| **40** | 27 | 21 | 12 | | 9 | | 7 | | 5 |
| **50** | 30 | 23 | 13 | | 9 | | 7 | | 5 |
| **60** | 32 | 24 | 13 | | 10 | | 7 | | 5 |
| **70** | 34 | 24 | 14 | | 10 | | 7 | | 5 |
| **80** | 35 | 25 | 14 | | 10 | | 7 | | 5 |
| **90** | 36 | 25 | 14 | | 10 | | 7 | | 5 |
| **100** | 37 | 25 | 14 | | 10 | | 7 | | 6 |
| **125** | 38 | 26 | 14 | | 10 | | 7 | | 6 |
| **150** | 39 | 28 | 15 | | 10 | | 7 | | 6 |
| **200** | 40 | 28 | 15 | | 10 | | 7 | | 6 |
| **250** | 42 | 30 | 15 | | 10 | | 7 | | 6 |
| **300** | 42 | 30 | 15 | | 10 | | 7 | | 6 |
| **350** | 43 | 30 | 15 | | 10 | | 7 | | 6 |
| **400** | 43 | 30 | 15 | | 10 | | 7 | | 6 |
| **450** | 44 | 30 | 15 | | 10 | | 7 | | 6 |
| **500** | 44 | 30 | 15 | | 10 | | 7 | | 6 |
|  |  |  |  | |  | |  | |  |

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# Annex 2. Sampling rates for medium risk produce from *Biosecurity St Helena*.

This sampling rate gives a 95% confidence of detecting a 2% infestation.

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| Number of cartons to be sampled for eg apples, pears, carrots, lemons, limes (hard citrus), tomatoes, and peppers | | | | | | | | | |
| **Number of cartons** | **number of fruit per carton** | | | | | | | | |
| **1** | **5 to 10** | **15** | **25** | **35** | **50 to 60** | **70 to 90** | **100 to 140** | **150 to 200** |
| **5** | all | all | 6 | 5 | 5 | 4 | 4 | 4 | 4 |
| **10** | all | all | 6 | 5 | 5 | 4 | 4 | 4 | 4 |
| **15** | 10 | 7 | 6 | 5 | 5 | 4 | 4 | 4 | 4 |
| **20** | 10 | 7 | 6 | 5 | 5 | 4 | 4 | 4 | 4 |
| **25** | 10 | 7 | 6 | 5 | 5 | 4 | 4 | 4 | 4 |
| **30** | 10 | 7 | 7 | 5 | 5 | 4 | 4 | 4 | 4 |
| **35** | 10 | 7 | 7 | 5 | 5 | 4 | 4 | 4 | 4 |
| **40** | 10 | 8 | 7 | 5 | 5 | 4 | 4 | 4 | 4 |
| **45** | 10 | 8 | 7 | 5 | 5 | 4 | 4 | 4 | 4 |
| **50** | 10 | 8 | 8 | 5 | 5 | 4 | 4 | 4 | 4 |
| **60** | 10 | 8 | 8 | 5 | 5 | 4 | 4 | 4 | 4 |
| **70** | 10 | 8 | 8 | 5 | 5 | 4 | 4 | 4 | 4 |
| **80** | 10 | 8 | 8 | 6 | 5 | 4 | 4 | 4 | 4 |
| **90** | 10 | 8 | 8 | 6 | 5 | 4 | 4 | 4 | 4 |
| **100** | 10 | 8 | 8 | 6 | 6 | 4 | 4 | 4 | 4 |
| **125** | 12 | 8 | 8 | 6 | 6 | 4 | 4 | 4 | 4 |
| **150** | 15 | 9 | 8 | 6 | 6 | 4 | 4 | 4 | 4 |
| **200** | 20 | 9 | 8 | 6 | 6 | 4 | 4 | 4 | 4 |

**List of Guidance notes and Import Health Standard Templates available:**

* Guidance notes and Import Health Standard for the importation of FRESH FRUIT AND VEGETABLES FOR HUMAN CONSUMPTION
* Guidance notes and Import Health Standard for the importation of LIVE PLANT MATERIAL
* Guidance notes and Import Health Standard for the importation of VEHICLES, MACHINERY AND TYRES
* Guidance notes and Import Health Standard for the importation of COMPOSTS AND PEAT
* Guidance notes and Import Health Standard for the importation of Rock, stone, sand and pebbles
* Guidance notes and Import Health Standard for the importation of SAWDUST, WOOD CHIPS AND WOOD SHAVINGS
* Guidance notes and Import Health Standard for the importation of SHIPPING CONTAINERS

**List of Inspection Protocol Templates available:**

* Inspection protocol for FRESH FRUIT AND VEGETABLES FOR HUMAN CONSUMPTION
* Inspection protocol for LIVE PLANT MATERIAL
* Inspection protocol for VEHICLES, MACHINERY AND TYRES

These Guidance notes, Import Health Standards and Inspection Protocols were adapted from documents developed by *Biosecurity St Helena*