



Kollel Beth HaTalmud  
Yehudah Fishman Institute

# Bug Checking Made Easier

## A Quick Guide to Insect-Free Australian Produce

This booklet was provided in conjunction with a special presentation on  
Fruit and Vegetable Inspection at

Kollel Beth HaTalmud  
2 March, 2014

All information in this booklet was kindly provided with permission by Kashrus Australia unless otherwise noted.

# Part One: Infestation and checking of fruits

## A. Introduction

Following is a general guide to the status of commonly used fruits in the eastern states of Australia:

In general, there is minimal infestation of fresh tree fruits or melons in Australia and no checking is therefore required. Exceptions are listed below.

However, in all cases, if worm entry holes are noticed on the fruit or if the fruit is obviously damaged or rotten patches appear on the fruit, then the fruit must be cut in half and the core in particular checked for worm paths and worms. Any parts so infested must be removed.

Some fruits have a scale-like substance on them that can be insect eggs. If such scale is noticed one should check by attempting to remove the scale with a fingernail. If the scale pops off without damaging the fruit underneath, then it is an unacceptable scale and all similar patches of scale need to be removed from the fruit before consumption.

## B. Fruits requiring minimal or no checking

### 1. Dates

American grown dates do not require inspection.

For the more stringent, slice the date lengthwise and open. If webbing or seedy substance is seen, worms may be present. (Star K)

### 2. Figs

It is recommended that one open and do a visual inspection on a few out of the container (even if they have a hechsher). If they have no insects (grubs), one can assume the rest do not. (Star K)

### 3. Flour

Does not require checking unless there is some reason to suspect infestation such as improper or prolonged storage or movement is noticed.

If one insect is found, remove it. If two insects are found, a cursory check of the entire container or bag is recommended. If three insects are found, the entire container or bag must be carefully sifted.

Signs of infestation include webbing and tunnelling. (Star K)

### 4. Nuts

Does not require checking unless there is some reason to suspect infestation such as improper or prolonged storage or movement is noticed.

If one insect is found, remove it. If two insects are found, a cursory check of the entire container or bag is recommended. If three insects are found the entire container or bag must be carefully checked. (Star K)

### 5. Pureed Fruits and Vegetables

Fruits and vegetables that have been totally minced or pureed – such as those used in jams, juices, marmalades and purees do not require inspection for infestation.

## **C. Fruits requiring checking**

### **1. Raspberries and Mulberries**

These have been found to be infested by small insects that can be found in the centre of the berries. These berries therefore require careful washing and visual inspection.

A helpful way to do this, in addition to a visual inspection, is to gently drop them onto a white cloth or paper and check for any dislodged worms, thrips or mites. If any are noticed then the berries must be washed and then checked again. If any infested berries are properly washed three times and infestation is still present then the entire batch should be discarded.

### **2. Pineapples**

Australian pineapples have recently been found to be infested with readily discernable white, yellowish or black wormlike insects which are particularly noticeable in the area under the green heads. Until further notice it is therefore now necessary to check carefully for infestation when cutting up pineapple. Any infestation found can be washed or cut away and the rest of the pineapple may be used after a thorough inspection of the remaining pieces.

### **3. Strawberries**

Australian strawberries are generally free of infestation and only require proper cleaning. This is done by cutting off the green leafy top followed by a thorough rinsing and cleaning of the strawberries in running water.

It is recommended, though not essential, that this be followed by a visual inspection for any remaining thrips and aphids ( which are readily discernable to the naked eye).

If such infestation is found, the strawberries should be washed again under strong running water while gently rubbing the surface of the strawberry to dislodge any remaining infestation. Care should be taken to properly inspect and clean any narrow folds on the strawberry surface. (The green, yellow or brown little mounds, (sometimes referred to as the strawberry's "seeds" but technically known as "achenes") that often have a short black hair-like protrusion at the bottom, that are found dotted over the outside strawberry surface, are a natural part of the strawberry itself and should not be mistaken for infestation.)

# **Part Two: Infestation and checking of Vegetables**

## **A. Introduction**

Following is a general guide to the status of commonly used vegetables in the eastern states of Australia.

Please note that due to drought conditions that have not existed in many parts of Australia until recently, many vegetables normally considered clean of infestation, particularly the leafy vegetables such as lettuce and spinach, have shown a much greater tendency to infestation. Until the effects of the drought have dissipated it is wise to check all vegetables much more thoroughly than usual.

Whenever the cleaning and washing of vegetables is required, such cleaning and washing must be thorough.

It is suggested that the vegetable or fruit requiring such cleaning be first soaked for a few minutes in water to which a little vinegar, salt or food grade detergent has been added as this helps dislodge insects and other infestation. After such soaking, the produce needs to be thoroughly rinsed.

Subsequent visual inspection, as required, must be in good lighting conditions (such as holding the vegetable/fruit directly up to a bright light source or in front of a brightly lit window).

## **B. Vegetables that cannot be checked**

### **1. Artichokes and Brussel Sprouts**

These have been found to be regularly infested and as such they would require checking and thorough cleaning. As this is usually impractical without destroying the vegetable it is recommended that they not be used. Canned artichokes in particular require reliable kosher certification.

### **2. Asparagus**

There is a severe problem of insect infestation in asparagus in Australia. The most common insects are "thrips". They are tiny and approximately 1mm long – their colour ranges from brown to black. At first, these insects look like splinters, but on closer inspection, one can detect that they are insects. As asparagus is difficult to clean once presumed to be infested, Kosher Australia does not permit its use at present.

The OU permits asparagus if the florets (head) at the top are cut off completely and all the triangular buds along the stem are removed with a vegetable peeler.

## **C. Inspecting other vegetables**

### **1. Dill, Parsley and Other Herbs**

While historically these have not exhibited problematic infestation, during drought and hot conditions these vegetables have been found to be increasingly infested. Accordingly, they should be well washed and then visually inspected before use. A good method of proper inspection is to tap them on a sheet of white paper or a white plate and check for dislodged insects. If infestation is still found after three washings then the parsley, dill or

other herbs must be considered as impossible to clean and that batch should therefore be discarded.

#### FLAVOR

If you are only using to flavour soup and no insects are noticed, you may put it in a mesh bag, similar to a stocking, seal it, and submerge it in the soup. After cooking, remove the package and discard. (Star K)

#### DRIED

All dried and dehydrated herbs do not have an insect problem and may be used without checking. (OU, Star K)

### **2. Eggplant**

In Australia, eggplant can be infested with large larvae. The leafy end of the eggplant should be trimmed off. The surface area of the eggplant and particularly the exposed trimmed area at the end should be thoroughly examined for entry holes. Preferably the eggplant should also be cut into quarters prior to this inspection. If there are no signs of entry holes or tunnels or actual infestation, the eggplant may be used. If there are entry holes or tunnels visible, the eggplant must be thinly sliced or diced to find all infestation and remove any larvae or other bugs.

### **3. Bok Choy and Spinach, Australian**

Bok Choy and spinach are normally not subject to undue infestation. They therefore would not normally require mandatory inspection – although a thorough rinse of the leaves is always advised. However, infestation occurs periodically, particularly during very hot periods. This usually depends on the time of year and on the site where grown. Because of this, it is advisable to always check these vegetables by firstly removing the outer two layers of leaves and then by visually checking the removed leaves and the outside of the newly exposed leaves in bright light. If they are found to be free of insects, the vegetable should be rinsed but can then be used without further inspection.

If any insects are found on the outer leaves and/or on the newly exposed areas (the root area in particular should be checked) then all the leaves should be separated, washed and carefully checked to ensure removal of any infestation.

### **4. Broccoli**

Fresh, healthy looking Australian broccoli is usually not subject to infestation and would not normally require mandatory inspection. However it is advisable, particularly in very hot or drought periods, that broccoli be well washed and given a careful external inspection before use. If a batch is found to be obviously infested (three or more insects being found) then it should be discarded as it is virtually impossible to properly clean the heads.

A good method of inspecting for insects is to tap the heads on a large white plater piece of paper and to look for dislodged insects. These insects are often hard to discern as insects and a careful distinction should be made between bits of the head of the broccoli that break off and any insects that may be present. It will usually be found that any insects found in fresh broccoli will show themselves by actually walking around on the plate or paper that they fall onto.

### **5. Cabbage (Including Savoy and Red Cabbage)**

Australian cabbage, Savoy cabbage and Red cabbage have a negligible incidence of infestation and can usually be used after a thorough precautionary rinsing.

This low rate of infestation can, however, vary - particularly in the hotter months and due to drought conditions when insects seek the water found inside the leaves of many vegetables. It is therefore recommended to remove the outer two layers of leaves and check them and the newly exposed outer surface in bright light.

If only one or two insects are found on the leaves or the newly exposed surface, then these insects should be removed and the whole cabbage should then be rinsed with water. It can then be used without any further inspection or cleaning.

If three or more insects are found on the outer leaves or on the newly exposed surface then they should be washed off and the rest of the cabbage should be cut into quarters. Meticulous visual inspection must then be made of these inner quarters. If they are found to be to be fresh, healthy and insect free, then one can assume that there is no internal infestation and the quarters may be used without further inspection - preferably after a precautionary final rinse. If, however, any internal infestation is found (i.e. if even one insect is visible on the inner quarters) then all the leaves must be individually separated, rinsed and checked in bright light.

If whole leaves are required (such as for stuffed cabbage) and one does not want to cut the cabbage in quarters when required, then as each leaf is pulled off, it should be individually washed and checked in suitable bright light.

## **6. Cauliflower**

Australian cauliflower is usually not subject to infestation and usually requires no mandatory inspection. However, particularly during warm and wet weather, infestation can be found that requires the particular cauliflower to be fully inspected.

If in doubt, break off three pieces and inspect them carefully. If no infestation is to be found the rest may be used without further inspection after a precautionary rinse. It is advisable that the cauliflower be broken up for such rinsing. If any infestation is found in the three samples then the entire cauliflower must be broken up and each piece well washed and checked before use.

## **7. Celery**

Celery and chives are not usually subject to major infestation in Australia and can be used after a thorough precautionary rinsing. However, there has been recent infestation found during hot and drought conditions. It is therefore highly recommended that these vegetables should therefore be well washed and inspected before use.

### **Celery Stalks**

Cut off leaves and wash stalks well under a stream of water while rubbing the inner and outer part of the stalk to remove all the dirt. Using a vegetable brush is an easy and effective way to accomplish this task. Pay special attention to the base of each stalk, which has a higher likelihood of infestation. (Star K)

## **8. Endives**

Remove leaves and wash, no visual inspection needed. (OU)

## **9. Scallions and other Tube Vegetables**

Examine three tubes in each bunch as follows:

1. Slit open and examine inside of each tube. Pay special attention to the area closest to the bulb.

2. If no insects are found, the entire bunch may be used.
3. If one insect is found, we recommend checking the entire bunch. (Star K)

## **10. Garlic**

Reports have been received and confirmed concerning recent infestation in some locally available Australian garlic. This infestation generally does not involve the inside of the garlic cloves but the areas between each individual clove. The bugs concerned are small and black but are readily discernable to the naked eye. As a consequence it is highly recommended that all garlic cloves be broken up and the individual cloves be separated and washed in cold running water.

## **11. Lettuce - Iceberg, Cos (Romaine) & Chinese Lettuces**

Generally there is minimal problem of infestation with fresh lettuce in Victoria and such lettuce, particularly iceberg lettuce, generally would not require mandatory inspection – in all circumstances however a thorough washing of the leaves is still highly recommended. However, because infestation has been known to occur from time to time, especially during hot and drought periods, it is also highly recommended to clean and inspect the lettuce more carefully.

The outer two or three layers of leaves of the lettuce should be removed and they and the newly revealed outer surface should be checked in bright light for infestation. If there are no more than two insects found on the outer leaves or on the newly revealed surface and visual inspection reveals the core to be clean, light green and healthy, no further inspection is necessary. The remaining leaves need only be subject to a precautionary rinse.

If, however, three or more insects are found on the outer leaves or on the newly revealed surface, then:

- In the case of Iceberg lettuce the core should be cut in half and the two halves visually inspected over the newly revealed surface. If there is no sign of any insects on the inside, then no further inspection is required. However, if even one insect is found on the inside, then each of the leaves must be individually separated, washed and checked.
- In the case of Cos (Romaine), Chinese or other lettuce where the leaves grow more loosely, the remaining leaves of these lettuces (due to their less compact growing style) need to be separated and individually inspected in bright light to help detect and remove any further infestation.

## **12. Beans, Barley, and Rice**

Do not require checking unless there is some reason to suspect infestation such as improper or prolonged storage or movement is noticed.

If one insect is found, remove it. If two insects are found, a cursory check of the entire container or bag is recommended. If three insects are found the entire container or bag must be carefully checked. (Star K)



## **D. Vegetables presumed to be Insect Free**

The following vegetables are always considered as free from infestation and do not require mandatory checking.

Fresh, Australian grown:

Butternut Pumpkin  
Carrots  
Cucumber  
Capsicum (green, yellow, red)  
Long White Radish  
Mini Squash  
Onions  
Potatoes  
Pumpkin  
Swedes  
Sweet Potatoes  
Tomatoes  
Turnips  
Zucchini

A superficial visual check and rinsing is nevertheless always a good idea. Look particularly for any worm holes or worm tracks in cut up produce. The presence of such worm holes or tracks would then require these vegetables to be inspected for any infestation and such infestation should be removed by washing or cutting away the infested area.

### **1. Frozen Vegetables**

Items that are presumed to be regularly infested (e.g. asparagus, artichokes, brussel sprouts, dill, parsley, and eggplant) are not acceptable when supplied frozen, as we cannot rely upon the extent of insect screening performed by the manufacturer. Only kosher certified produce is recommended.

Australian grown items that are presumed to always be insect free and requiring no inspection, are acceptable when supplied frozen and also require no further checking. However frozen par cooked vegetables, or frozen vegetables with added sauces, oils, flavourings, or additives are not acceptable without kosher certification.

Frozen spinach is considered sufficiently infestation free so as not to require further inspection.