

A Practical Guide to Inspecting Fruits and Vegetables

Reviewed by Horav Yisroel Belsky

This list is based on the present situation of insect infestation in produce grown in the United States. Each country has its own environmental conditions which may result in variant checking procedures. Unless explicitly mentioned, questions regarding all other countries must be addressed to the local kashrus organizations there.

Two of the most frequently found insects in vegetables are thrips and aphids. Thrips are the size of a “1” in a dollar bill serial number, have a linear shape, and are black or grayish in color. Aphids are the size of a pin head, have a round shape, and are light green. Mites and worms are also quite common.

1. Fresh Vegetables

Alfalfa

No checking is necessary.

Infestation Level: מיעוט שאינו מצוי

Artichoke

Type of Insects: Aphids, thrips, and some larger insects

Location of Insects: Deep between the leaves

Inspection Method:

Artichoke Leaves: Best to avoid.

Heart of the artichoke: Spread apart the artichoke leaves; carefully examine around and between the leaves. If there's no sign of insect infestation, wash thoroughly.

Solid artichoke bottom: No inspection. Rinse prior to using.

Infestation Level: מיעוט המצוי

Asparagus

Type of Insects: Thrips

Location of Insects: Under triangular parts along the stem and in the tips

Inspection Method:

Green asparagus: Shave down the tips, remove the triangle parts along the side of the asparagus, and wash thoroughly.

White asparagus: Wash thoroughly before using.

Infestation Level: מיעוט המצוי

Beet

No checking is necessary.

Infestation Level: מיעוט שאינו מצוי

Broccoli

Type of Insects: Aphids, thrips or broccoli worms. The insects are the same color as the vegetable and may thus be camouflaged. The insects may appear brownish after par boiling.

Location of Insects: Lodged in the floret head, or at the base of area connecting the floret to the stem

Inspection Method:

Fresh broccoli, stems: Wash thoroughly.

Fresh broccoli, whole: Parboil or microwave 1 – 2 minutes; break apart broccoli into desired size. **Segregate each head individually.** Examine for infestation. If a section of broccoli head shows infestation, the entire head must be discarded. Look carefully at the branched area of each floret, in the crevice formed by two branches forking out from a single trunk like a Y. Spread apart each floret head and look through the florets, into the branch area. If 1 or 2 insects are found, examine the remaining sections of head; if 3 insects are found, the entire head should be discarded.

Alternatively, one should break apart broccoli and agitate it vigorously in water. One should then sift the water with a white cloth. If insects are not found, it may be used.

Infestation Level: מיעוט המצוי

Brussel Sprout

Type of Insects: Various Insects

Location of Insects: On surface of leaves.

Inspection Method:

Break apart and examine each leaf.

Leaves should be washed as well.

Infestation Level: מיעוט המצוי

Cabbage

Type of Insects: Thrips and Cabbageworms

Location of Insects: Most often in the first six leaves

Inspection Method:

Green Cabbage: Detach loose leaves and discard. Core the cabbage and split head in half. Peel 3 layers; carefully check these 6 leaves under direct light; check **both** sides. If no insects are found, they and the remaining leaves of the head may be used without further checking. *It is recommended to wash the remaining leaves before use.* If 3 or more insects are found, the remaining leaves must be examined and washed before use.

Even if one intends to discard the first few layers, they should still be inspected, as this can determine the status of the rest of the cabbage.

Red Cabbage: Detach loose leaves and discard. Core and split the cabbage in half. No inspection is necessary. It is nonetheless preferable, a quick inspection should be made, during which one should look for white spots.

Making Stuffed Cabbage:

There are two methods to remove any insects and yet ensure that the leaves stay whole.

Method one: Freeze cabbage for at least 48 hours. Thaw in lukewarm water or spray with strong stream of water. Insects will glide off.

Method Two: Parboil cabbage for a

few minutes. Separate whole leaves. Wash with a strong stream of water.

Sauerkraut: It is rare to discover insects in sauerkraut.

Infestation Level:

Green Cabbage: מיעוט המצוי
Red Cabbage: מיעוט שאינו מצוי

Carrot

Type of Insects: Pale white worms

Location of Insects: Near tip and along surface.

Inspection Method:

Worms cause blackened areas to appear on surface. One should cut away these blackened areas. Preferably, one should peel the carrot prior to eating. If carrot's surface appears completely clean; no peeling is necessary.

Infestation Level: מיעוט שאינו מצוי

Cauliflower

Type of Insects: Thrips or small orange insects

Location of Insects: Inside or between small thin white branches

Inspection Method:

Segregate into sections. Insects can be easily spotted due to their darkened appearance. A light box can be helpful.

Infestation Level: מיעוט המצוי

Celery

Type of Insects: Thrips, flies, or worms

Location of Insects: On inside and outside of stalk, especially close to base

Inspection Method:

Remove all leaves because they may contain insects. Firmly wash lower portion. Examine for insects. A vegetable brush can be helpful to clean vegetable.

Infestation Level: מיעוט המצוי

Cucumber

No checking is necessary.

Infestation Level: מיעוט שאינו מצוי

Endive

Type of Insects: Thrips

Location of Insects: On leaf

Inspection Method:

Remove leaves and wash. No visual inspection needed

Infestation Level: מיעוט המצוי

Eggplant

No checking is necessary.

Infestation Level: מיעוט שאינו מצוי

Herbs – Smooth Leaf (e.g. cilantro, flat leaf parsley, mint)

Type of Insects: Aphids or thrips

Location of Insects: On surface of leaves or stem

Inspection Method:

Soak in **cold** water. Add several drops of concentrated non-scented liquid detergent or vegetable wash. Agitate herbs in the water allowing their flat leaf surface to be washed, removing all foreign matter and soap from leaf surface. Alternatively, a vegetable brush may be used on both sides of leaf.

For Mass Production: Soak leaves in a rectangular glass basin. Place water over a light box. Examine water for bugs.

For Placement in Soup: To avoid checking and still use herb to enhance soup flavor, insert it into a vegetable cloth bag and then place in soup.

Infestation Level: מיעוט המצוי

Herbs – Standard (e.g. basil, dill, etc.)

Type of Insects: Aphids or thrips

Location of Insects: Attached firmly to the leaves; can appear as specks of dirt

Inspection Method:

Soak in **cold** water. Add several drops of concentrated non-scented liquid detergent or vegetable wash. Agitate herbs in soapy water. Due to the unique structure of these herbs, insects can roll up in a ball and nestle themselves on the branch, staying there even after washing. Therefore, each branch must be carefully examined under light.

For Placement in Soup: To avoid checking and still use herb to enhance soup flavor, insert it into a vegetable cloth bag and then place in soup.

Infestation Level: מיעוט המצוי

Herbs – Wavy and Specialty (e.g. oregano, rosemary, sage, thyme)

Type of Insects: Aphids or thrips

Location of Insects: In the crevices of the herb

Inspection Method:

Soak herbs in **cold** water. Add several drops of concentrated non-scented liquid detergent or vegetable wash. Agitate herbs in the soapy water. Use

a heavy stream of water, and wash off soap and other foreign matter from the herbs. Look under bright light to check for insects.

If one or two insects are found, rewash the herbs.

For Placement in Soup: To avoid checking and still use herb to enhance soup flavor, insert it into a vegetable cloth bag and then place in soup.

Infestation Level: מיעוט המצוי

Dehydrated Herbs

All dehydrated herbs may be used without checking.

Infestation Level: מיעוט שאינו מצוי

Iceberg Lettuce

Type of Insects: Aphids or thrips

Location of Insects: In the folds and crevices of the first four layers

Inspection Method:

Detach loose leaves and discard. Core lettuce, split head in half, and peel 4 layers off the head. Carefully check these leaves by holding the leaf opposite a direct light. A light box may be very helpful. Since lettuce is translucent, all insects will be very noticeable. Check **both** sides of each leaf. If no insects are found, the head may be used without further checking. It is recommended to *wash the remaining leaves before use*. If *three or more insects* are found, the remaining leaves must be washed before use.

Infestation Level: מיעוט המצוי

Open Leaf Lettuce (e.g. green/red leaf, Boston, chicory, bok choy, romaine, etc.)

Type of Insects: Aphids or thrips

Location of Insects: Found even in the inner leaves due to its open growth

Inspection Method:

Cut off lettuce base, soak lettuce in **cold** water, add several drops of concentrated non-scented liquid detergent or vegetable wash. Use a heavy stream of water to remove all foreign matter and soap from leaf surface or use a vegetable brush on both sides of the leaf. Check 3 – 5 handfuls from different areas under direct light. Using a light box is strongly recommended when examining open leaf lettuce.

Infestation Level: מיעוט המצוי

Kohlrabi

Type of Insects: Worms

Location of Insects: Inside

Inspection Method:

Worm tunnel can be easily noticed upon cutting or peeling vegetable.

No checking is necessary.

Infestation Level: מיעוט שאינו מצוי

Leek

Type of Insects: Light-green or brown thrips

Location of Insects: See Scallions

Inspection Method:

See Scallions

Infestation Level: מיעוט שאינו מצוי

Mushrooms

Type of Insects: Small white worms or small red insects

Location of Insects: Imbedded in under part or in inner sections of mushroom

Inspection Method:

Shitake and Button: Wash thoroughly.

Oyster: Break apart in several places – especially the base, and examine inner sections. If insects are found, discard mushroom.

Portobello: Remove stem, examine detached cap, and bang gently over light box or well-lit white surface. Remove entire brown fan-like underpart with spoon. Wash thoroughly.

Infestation Level:

Shitake and Button: מיעוט שאינו מצוי
Oyster and Portobello: מיעוט המצוי

Onion

Type of Insects: Thrips

Location of Insects: Primarily at tips

2. Fresh Berries

Blackberry

Type of Insects: Thrips or mites

Location of Insects: On surface of berry, nestled in crevices

Inspection Method:

Drop pint of berries into white cloth or light box. If insects are found, repeat process twice. If three or more insects are found, do not use the pint of berries.

Infestation Level: מיעוט המצוי

Blueberry

Type of Insects: Generally insect-free

Location of Insects: Generally insect-free

Inspection Method:

Cut off both tips, and peel off inedible and loose skin. During the summer months, peel off an extra layer.

Infestation Level: Depends on season. Summer months are usually more infested.

Pea

Type of Insects: Off white worm

Location of Insects: Inside

Inspection Method:

No checking is necessary.

Infestation Level: מיעוט שאינו מצוי

Pepper

No checking is necessary.

Infestation Level: מיעוט שאינו מצוי

Potato

No checking is necessary.

Infestation Level: מיעוט שאינו מצוי

Radish

Type of Insects: White worm

Location of Insects: Inside

Inspection Method:

No checking is necessary.

Infestation Level: מיעוט שאינו מצוי

Scallion and Leek

Type of Insects: Light-green and brown thrips

Location of Insects: Mostly in upper area of bulb. Also, between layers on lower part or on outside and inside of shoots

Inspection Method:

Only a sample checking is required.

Inspection Method:

Cultivated: Place in a strainer or colander and wash thoroughly under running water.

Wild blueberries: Often contains blueberry maggots (i.e. whitish worms with black heads). Soak in **cold** water. Add several drops of concentrated non-scented liquid detergent or vegetable wash. Agitate berries in the soapy water. Use a heavy stream of water, and wash off soap and other foreign matter from the berries. Look under bright light to check for insects.

Infestation Level:

Cultivated Blueberries: מיעוט שאינו מצוי
Wild: מיעוט המצוי

Examine 2 -3 scallions per bunch. Cut scallion root lengthwise. Examine between thin layers where they merge from the bulb. When examining leak; clean out sand and earth particles. If no insects are found, the remaining scallions and leak may be consumed after a thorough washing.

Infestation Level:

Borderline between מיעוט שאינו מצוי and מיעוט המצוי

Spinach and Arugula

Type of Insects: Thrips and worms

Location of Insects: In curls and inside of leaf

Inspection Method:

Soak in **cold** water. Add several drops of concentrated non-scented liquid detergent or vegetable wash, and soak leaves in water to wash their surface. Use a heavy stream of water to remove all foreign matter and soap from surface of the leaf or use a vegetable brush on both sides of leaf. Check 3 -5 handfuls of leaves from different areas of bin under direct light.

Infestation Level:

Baby Spinach: מיעוט שאינו מצוי
Curly Spinach: מיעוט המצוי

Squash

No checking is necessary.

Infestation Level: מיעוט שאינו מצוי

Tomatoes

No checking is necessary.

Infestation Level: מיעוט שאינו מצוי

Cherry

Type of Insects: Black fly and caterpillars

Inspection Method:

Perform a sample checking. Examine surface.

Infestation Level: מיעוט שאינו מצוי

Raspberry

Type of Insects: Thrips and mites

Location of Insects: On surface of berry and in open cavity

Inspection Method:

Gently drop raspberries into a white cloth or light box to dislodge the insects that are on the surface and in the cavity of the berry. If insects are

found, repeat this process 2 more times. If 3 more insects are found, this pint of berries may not be used.

Alternatively: Washing in a soapy solution will ruin taste of raspberry. One can wash a few, and examine the water for insects. If no insects are found, the rest of the raspberries may be used without inspection.

Infestation Level: מוחזק בתולעים

Strawberry

Type of Insects: Aphids, thrips, and mites

Location of Insects: Under green leaf or

on surface of berry

Inspection Method:

Common (short-stem)

strawberries: Carefully remove green leaf without making a hole in the top. Run fingers over the entire surface of each individual strawberry while holding it under a stream of water.

Alternatively, before cutting off top leaves place in cold water while adding a few drops of non-scented concentrated liquid detergent or vegetable wash. Allow to soak for about a minute. Carefully wash off entire surface, and gently dry each berry. No inspection needed.

Long-stem: Carefully inspect each individual berry under a bright light. Using a make-up brush, gently remove insects and all other extraneous matter.

Alternatively, before cutting off top leaves place in cold water while adding a few drops of non-scented concentrated liquid detergent or vegetable wash. Allow to soak for about a minute. Carefully wash off entire surface, and gently dry each berry. Several strawberries should be inspected to verify that washing has been effective.

Infestation Level: מיעוט המצוי

3. Frozen Vegetables and Berries

Asparagus

Type of Insects: Thrips

Location of Insects: See "Fresh"

Inspection Method:

Not recommended

Broccoli (spears or florets only)

Type of Insects: Aphids, thrips, or worms

Location of Insects: See "Fresh"

Inspection Method:

Allow to thaw completely. Then proceed with the same examination as fresh.

Frozen broccoli is difficult to check. It is therefore best to avoid an uncertified product.

Infestation Level: מיעוט המצוי

Cauliflower

Type of Insects: Thrips or small orange insects

Location of Insects: See "Fresh"

Inspection Method:

Same as Fresh

Infestation Level: מיעוט המצוי

Strawberries

Type of Insects: Aphids, thrips, or mites

Location of Insects: See "Fresh"

Inspection Method:

Rinse prior to using

Infestation Level: מיעוט שאינו מצוי

4. Fruit

All Fruits

Type of Insects: Worms

Location of Insects: See "Fresh"

Inspection Method:

Not recommended

Infestation Level: מיעוט שאינו מצוי

5. Beans, Grain and Nuts

Beans

Type of Insects: Worms

Location of Insects: Can be in the middle of the bean.

Inspection Method:

Soak for approximately ½ hour. Remove wormy beans that float to top of water.

Imported beans: lima beans are fine. Avoid red ones.

Infestation Level: מיעוט שאינו מצוי

Grain

Type of Insects: Mites and various other insects

Location of Insects: On surface

Inspection Method:

No inspection required in USA.

Infestation Level: מיעוט שאינו מצוי in USA

Nuts

Type of Insects: White worms and Mites

Location of Insects: Generally on surface

Inspection Method:

No inspection required. It is nonetheless advisable to quickly scan the nuts for insects.

Infestation Level: מיעוט שאינו מצוי