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DIY Pest Control in School Gardens

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When your harvest is under serious threat these DIY Pest Control options can be used safely on edible crops, but also consider why an outbreak may have occurred:

Is it the correct planting season?

Is the garden too wet or too shaded?

Is the garden getting sufficient water?

Are a diverse range of nutrients readily available to your plants?

For help in identifying pest and disease issues, contact your local independent nursery, consult knowledgeable colleagues, check websites including:

https://www.annettemcfarlane.com/pestID.htm

https://www.annettemcfarlane.com/diseaseID.htm

Bicarbonate of Soda Spray - Black spot and mildew disease

- 1 teaspoon bicarbonate of soda
- 1 litre of water
- 1 teaspoon DIY Oil Spray concentrate or a commercial oil spray (preferably vegetable oil based) Combine the ingredients and spray weekly to minimise black spot and mildew diseases. This spray works by changing the pH of the leaf surface. Take steps to also improve air circulation around plants; avoid wetting the foliage and thin out overcrowded growth. Remove and dispose of any diseased leaves as soon as they appear. Avoid excess applications of high nitrogen fertilisers.

Clove Oil - Possum repellent

- 6 drops Clove Oil
- 1 litre water

Combine in a spray bottle and shake contents. Spray on plants or around the area that you want to protect from the possums (eg outside of garden beds or on fence perimeters). It can also be sprayed on to plants. Repeat every week. Whole cloves can also be sprinkled around the perimeter of gardens you wish to protect and combined with the oil of cloves spray for ongoing possum issues.

Milk Spray - Powdery mildew - especially cucumber, melon, pumpkin and zucchini plants

- 1 part full cream milk
- 9 parts of water

Spray regularly over the leaves, paying particular attention to soft new growth. Remove badly affected older leaves.

Powdery mildew appears as grey or white powdery spots on the new foliage. It causes puckering of the foliage and in severe infestations, a burnt appearance and leaf fall. This disease occurs most frequently when night temperatures drop and relative humidity remains high. Avoid the over-use of high nitrogen fertilisers as they tend to make leaf growth soft and more susceptible to disease.

Molasses Spray – Caterpillars, soft-bodied insects, nematodes, cut worm caterpillars, possums

- 1 tablespoon black strap molasses (available from health food stores and supermarkets)
- 1 litre warm water
- 1 teaspoon liquid hand soap or 5 grams of pure soap flakes dissolved in hot water Combine and spray regularly over the leaves of all plants attacked by caterpillars and other chewing pests. Caterpillars cease eating sprayed foliage. The molasses then works by osmosis to force water into

the body of the caterpillar causing it to die a day or two after application. Black strap molasses is the most concentrated, nutrient dense form of molasses as it is the residue of the third and final stage of the sugar extraction process.

Double strength solutions may be used as a soil drench to guard against root knot nematodes and cut worm caterpillars (apply as late in the day as possible when cut worm caterpillars move to the soil surface). Regular spraying may help to repel possums. Do not store molasses spray as it will ferment and expand in your spray bottle. For an alternative possum spray see Clove Oil.

<u>Oil Spray</u> – Mites, scale, aphids, soft-bodied insects, citrus leaf miner, pests on brassica crops – never use on lettuce or other soft foliage or hairy plants.

- 500ml of vegetable oil
- ½ cup of liquid soap (any type suitable for use on your skin)

Blend thoroughly and seal in a clean, clearly labelled jar. Store in a cool area for later use. Dilute one tablespoon of the concentrate into one litre of water before spraying. Oil based mixtures suffocate mites, scale and other soft bodied insects. They help to repel leaf miner moths and some gardeners even find them effective against small grasshoppers. Avoid use during very hot weather.

Rodent Bait - Mice and rats

Combine equal parts Bicarbonate of Soda and plain flour

Place in containers accessible to rodents, but safe from children, cats, dogs etc. The mix must stay dry to be effective. There are also commercial organic rodent baits available from retailers.

<u>Soap Spray</u> – Mites, aphids and soft-bodied. Suitable for use on all plants including lettuce and other soft leaf edibles.

- Pure bar soap (Preservene or Velvet soap) or Lux Soap Flakes
- Warm water

Grate bar soap (if using) or combine soap flakes with water to make a soapy mix to the strength you might use to wash clothing. Spray directly on to insects. Repeat sprays are necessary. Soap sprays break down the waxy external skeleton of insects.

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