

UF/IFAS Extension Brevard County

3695 Lake Drive, Cocoa, FL 32926 | 321-633-1702 | 321-633-1890 Fax | brevard.ifas.ufl.edu

HOME REMEDIES FOR INSECT AND DISEASE CONTROL

Use Integrated Pest Management (IPM): **1)** Choose the right plant for the right place **2)** Monitor/Scouting is crucial – weekly during warm months, monthly during the winter **3)** Use a min. of 20X eye loop **4)** Watch for beneficial insects or signs of their presence **5)** Start with the least toxic product first!

Home-made soap & oil spray for **insect** control

MIX: 2 TBSP cooking oil + 2 TBSP baby shampoo in 1 gallon of water.

NOTE: **Water** the plant well the day before you spray.

Shake well before **and during** application.

Do not spray during the heat of the day in full sun.

Thorough coverage of the pest is necessary so spray both sides of the foliage.

Spray every 5-7 days as needed.

(OR you can purchase Insecticidal Soap or Ultra-fine Year Round Pesticidal Oil)

If a **fungus** is also present than **add to the above formula:**

2 TBSP baking soda

NOTE: Shake well before **and during** application.

If the weather is humid or the threat of disease is high, spray every 5-7 days.

Spray both sides of the leaves thoroughly.

Always **test** any spray on a small area of the plant.

Can be used against blackspot & mildew on roses, powdery mildew on summer squash, early blight on tomatoes and alternaria leaf blight on melons, and who knows what else!

Important Note: The use of a pesticide will only control the insects or diseases but will do nothing to correct the condition (stress) that is making the plant susceptible to the pest in the first place. Using foliar applications of liquid seaweed (or kelp) may help create healthy plants and reduce the occurrence of insects & disease. Liquid seaweed has been found to help plants through stresses like flood, drought and cold temperatures. It also helps plants that are producing fruit like vegetable plants and fruit producing trees, shrubs, vines, etc. Liquid seaweed has over 60 trace elements plus growth hormones.

To use liquid seaweed, mix it with water in a hand pump-up bottle and then spray the foliage, both sides with a fine mist, on a regular basis. For vegetable plants, plus citrus and avocado trees, try to spray them once a week. For other woody plants that produce a crop – try to spray it at least every other week but aiming to spray every week would be great since life can get in the way of our schedules! For ornamental plants that are suffering from a minor element nutritional deficiency, insects or diseases, spray the foliage on a weekly basis for at least a couple of months and then maybe once a month for a few months, as long as the plants are pest free and doing well.

Here are some of the stores that carry liquid seaweed or kelp.

Ace Hardware Stores in Titusville; Cocoa (US 1); Merritt Island (SR 3); Cocoa Beach; Melbourne (Wickham Rd north of Pineda Cswy & SR 192); Malabar Rd & Minton Rd.; and Babcock Rd. south of Malabar Rd.

Home Depot (hopefully all of the stores carry the same products)

Rockledge Gardens on US 1

Sun Harbor Nursery on Eau Gallie Blvd out near A1A

Another control for the **fungus** Powdery Mildew

Spray a milk solution (a minimum of a 10% concentration which is 1 C. of milk in 9 C. of water) sprayed twice a week.

The milk was shown to be as effective if not better than conventional fungicides.
(Research conducted in Brazil and published in the journal Crop Protection vol. 18, 1999, pp. 489-92)

Use **aspirin** to fight **fungus** too! Dissolve 3 chewable low dose aspirin in a gallon of water, and spray every two to three weeks. The aspirin will boost the plants defense mechanism which is called SAR (Systemic Acquired Resistance)

(Testing done at the University of Rhode Island showed that tomato and other plants tested also yielded more fruit than those treated with commercial fertilizers.)

For a **root rot fungus** in the soil: (*Pythium, Rhizoctonia, Phytophthora & Fusarium*)

Add some corn meal (right off of the grocery store shelf) to the diseased soil and plant(s). The corn meal will stimulate the good soil micro-organisms which keep the bad microbes under control.

(This research was carried out by the Texas A&M Research Station in Stephenville where they are growing peanuts organically.)

Corn Earworm Control

Mix vegetable oil and some *Btk* (*Bacillus thuringiensis* var. *kurstaki*) together.

Using an eye dropper, apply 5 drops of the oil- *Btk* mix per ear just as the corn silks begin to turn brown.

(This recommendation is backed by research conducted at the University of Massachusetts and Hampshire College.)

Red pepper spray for **repelling insects**

MIX: 2 TBSP Red pepper (ex. McCormick Cayenne Pepper from the spice section of the grocery store.)

6 drops of baby shampoo

In **1 gallon** of water

Let this mixture **sit overnight** and then **stir it thoroughly** to dissolve as much of the pepper as possible. (Before putting this solution in your sprayer it is best to **strain** it so that it doesn't clog the sprayer nozzle.)

Spray this mixture weekly

(Research done at Auburn University in Alabama showed that this solution in **addition to garlic juice sprays helped repel insect pests from cabbage plants. Research has also shown that garlic juice not only repels insects but can even kill many insects.**)

Disease control on orchids:

Single plants with fungus problems can often be treated with **ground cinnamon** rather than a chemical fungicide. The orchid leaves must be damp enough for the cinnamon to stick to the leaves and just sprinkle the cinnamon on the affected area. Allow the leaves to dry for approximately one week and the area will dry out. (Information from the American Orchid Society)

To find out about gardening related classes, seminars, workshops & webinars go to
<http://mybrevardyard.eventbrite.com/>

Website for searching for Bio-rational pesticides for diseases, insects, mollusks, vertebrates and weeds! <https://attra.ncat.org/attra-pub/biorationals/>

Here are some helpful on-line sources for gardening information and products:

- * <http://www.groworganic.com/> this is the website for Peaceful Valley Farm supply which has tons of products and great information!
- * <http://www.gardensalive.com/> sells natural products for home, garden & pets!