



Horticultural Oils

An alternative to chemicals

★What is Horticultural Oil?

There are two kinds of oil used for pest control. For a century, various oils have been used to control unwanted insects, fungi and mites on fruit trees and woody ornamentals. These oils, known as **dormant oils**, are heavier oils, and are applied during the winter (dormant) season only. Today's newer horticultural oils are lighter and more highly refined. They may be made from petroleum products or plants. Often called ultra-fine, or **summer oils**, they can be applied to actively growing plants and plants in full leaf throughout the growing season.

★How do they work?

Horticultural oils work in several ways. They block the insect's breathing holes, causing it to suffocate. Oil interferes with the cell metabolism in soft-bodied insects like aphids, scale, lace bug wooly adelged, mealybug, whitefly, and some caterpillars. Oils can disrupt the feeding patterns of certain disease carrying insects and can even kill overwintering insect eggs and fungal spores.

★What are the benefits?

Horticultural oils are very safe to use and pose minimal safety threats to the applicator and the environment when used according to label directions. Insects rarely develop resistance to oils. Oils tend to evaporate quickly leaving little toxic residue. Oils are inexpensive, easy to mix and need no special spray equipment. They are ideal for homeowners!



*** Are there any drawbacks?**

Horticultural oils have no residual effects, so the target pest must be present in order to be controlled and coverage must be thorough. Some plants are sensitive to oils. Plants should not be treated when wilting or under drought stress, or under excessive heat and humidity conditions. Horticultural oils are nonselective; therefore, beneficial insects may be killed along with pests. Horticultural oils are toxic to fish.

Tips for using Horticultural Oils:

- *Know your pest before you treat- Consult your local extension office when in doubt.**
- *Read the label-Are you using dormant or summer oil? Are you mixing at the proper rate?**
- *Thorough coverage is a must!**
- *Apply when temperatures are between 40-90° F, or as stated on the label.**
- *Don't treat moisture or drought stressed plants-you may burn leaf margins.**
- *Don't treat when the relative humidity is high (90%) or above. Oils will not dry properly.**
- *Allow two weeks between sprays during summer months.**
- *Avoid dormant oils in the fall before true dormancy has occurred.**

Plants that may be sensitive to oil include:

- *Beech**
- *Black Walnut**
- *Maples**
- *Hickory**
- *Smoke Tree**
- *Douglas Fir**
- *Japanese Holly**
- *Cryptomeria**
- *Azalea**
- *Redbud**
- *Blue Spruce**
- *Others as listed on the label**

Treating bedding plants in flower may result in spotting of flowers.

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