

FAQ and General Information

How much Stylet-Oil should I use?

Mix Stylet-Oil in water at the rate of 1 to 2 ounces per gallon of water. Note: 1 fluid ounce equals 2 tablespoons. A rate of 1.5 oz. (3 tablespoons)/gallon of water is recommended for most applications.

May I enter the sprayed area the same day Stylet-Oil was sprayed?

Yes. The restricted entry interval is 4 hours. There is no pre-harvest interval for Stylet-Oil.

Is it safe to use a non-circulatory pump-up sprayer to apply Stylet-Oil flower/garden plants?

Yes. If you are using a pump-up sprayer that does not have a circulation pump or agitator, after mixing the oil + water in the tank, shake the tank to ensure a uniform emulsion before spraying, and then shake the tank every ten minutes for about 10 seconds until the spray tank is empty.

Should I clean a previously used sprayer before using it to apply Stylet-Oil?

Yes. Triple rinse the spray tank and spray clean water through the hose to ensure no chemical residue is in the system. We do not recommend applying Stylet-Oil in a sprayer used to apply herbicides. Use a separate sprayer to apply herbicide materials.

To kill a pest insect with Stylet-Oil, do I need to contact the insect with the oil?

Stylet-Oil needs to contact pest insects to kill them, thus under-leaf application may be necessary if that is the location of the pests at the time of application.

Will Stylet-Oil injure my ladybugs or lacewings?

Avoid direct contact with honeybees, ladybugs or other beneficial non-target insects. Spray during the time of the day when bees or beneficial insects are not actively foraging. Stylet-Oil is safe to beneficial insects but over-spraying or direct contact may kill these insects.



Should I apply Stylet-Oil if beneficial insects are presents?

It depends on the level of infestation. If you see beneficial insects actively feeding on insect pests (such as scale, aphids or whiteflies) you may want to delay spraying oil to give beneficial insects time to reduce the pest population. There is always a time lag between pest populations and beneficial populations but this is how pest pest populations are normally controlled in nature.

Is Stylet-Oil harmful to the environment, Where does the oil go?

The vast majority of Stylet-Oil application is broken down by microbes in the environment into carbon dioxide and water. Approximately 2% of the oil has potential to evaporate and some of the oil will bleed through the leaf cuticle.

Is Stylet-Oil an eradicant against mildew diseases?

Based on years of University and independent research, Stylet-Oil is the best eradicant available against grape and cherry powdery mildew diseases.

What is Stylet-Oil's mode of activity against powdery mildew?

The oil is both an eradicant and protectant against mildew and works on the basis of physical contact. The oil disrupts cell walls of the organism resulting in death within seconds of contact and by interfering with attachment of the organism to its host. 1996 research has shown that the oil prevents mildew development, kills infections both before and after they become visible and prevents sporulation. One of the many benefits of using the oil is that it can be used as an eradicant, protectant and antisporeulant.

Using Stylet-Oil, can a grower control mites while spraying powdery mildew?

Certainly. 1998 research from Cornell Extension Service has shown three pre-bloom Stylet-Oil sprays (1% at 100 gallons per acre) to significantly reduce mid-to-late season mite populations on Concord grapes. Spray for thorough coverage to the point of runoff at 1 to 2% spray concentration for mite control.

Does Stylet-Oil fight Botrytis bunch rot?

Yes. Stylet-Oil has activity against botrytis bunch rot.

Can Stylet-Oil be safely sprayed post bloom on grapes?

During the post-bloom period, growers may resume a traditional sulfur program, spray oil alone, tank mix with DMI / strobilurin fungicides labeled for powdery mildew control or alternate sprays with DMI / strobilurin fungicides labeled for powdery mildew control.

Does Stylet-Oil affect the appearance of the bloom?

Yes. The "bloom" is the whitish-gray surface seen on ripening grape berries (as well as on blueberries and plums) and is caused by light striking microscopic waxy plates arranged at random angles on the berry surface. Stylet-Oil will cause these plates to lay flat so that when light strikes the berry, it does not scatter light but reflects light resulting in a shiny berry. The effect is cosmetic and does not affect the berry, pollination, taste, fermentation or disease control. The bloom will return within two to three weeks of the last oil application.

Is Stylet-Oil compatible with sulfur?

No. There is a 14 day interval between use of Stylet-Oil and sulfur on most crops. On grape the interval is 10 days.

Will Stylet-Oil outperform sulfur early-season during cooler times of the year?

Sulfur needs to volatilize to be active against powdery mildew. Generally, 65° F is recognized as a minimum temperature required for sulfur activity against mildew. Stylet-Oil is not temperature dependent thus works as an eradicant, protectant and antisporeulant 24 hours per per day.

Can Stylet-Oil be sprayed pre-bloom as a sulfur replacement on grape?

Yes. As an early-season sulfur replacement, growers should make three pre-bloom oil applications at 1 to 1.5% spray concentration at 40 to 50 GPA every 10 to 14 days. Begin spraying at budbreak or the 2" to 4" shoot growth stage. The oil has no effect on flower bloom or pollination.

What is the spray interval between a sulfur application and a Stylet-Oil application?

On grapes, do not apply sulfur within 10 days of an oil application. On all other crops, do not apply micronized sulfur within 10 days of an oil application and do not apply oil within 14 days of an application of wettable or dusting sulfur.

Will Stylet-Oil affect wine flavor, taste or quality?

Stylet-Oil is a "Food Grade Quality" mineral oil which is colorless, tasteless and odorless. Extensive testing by University and independent researchers confirm that Stylet-Oil has no effect on wine flavor, taste or quality.

Can growers safely tank mix Stylet-Oil with spread/stickers?

We do not recommend tank mixing Stylet-oil with spreader/stickers or organosilicone surfactants because of the risk to destroy the oil's emulsification system. These chemicals may be sprayed separate from the oil as long as the foliage has dried. It makes no difference whether the oil goes on before or after the spreader/sticker application.

On grapes, can Stylet-Oil be tank mixed with copper fungicides?

Yes. However, do not use copper and oil together with fruit present.

Is it possible to tank mix with emulsifiable concentrate formulations compatible with the oil?

On most crops, there is no problem. Use the recommended label rate of the material to be tank mixed with the oil. Add the oil as the last ingredient to the mix. Be sure to use only product registered for use on crops which Stylet-Oil is registered on.

What other pesticides is Stylet-Oil not compatible with?

Products containing the active ingredient captan and chlorothalonil are not compatible and a 14 day interval is advised. There is a list of materials on the label that are not compatible with Stylet-Oil. If you are not sure of compatibility, contact us.

Is there a simple way to determine the quality of spray coverage while spraying for powdery mildew?

Yes. because the oil kills mildew on contact, growers can use the oil as a "spray marker" to determine the overall quality of coverage.

Can the type of sprayer used to apply the oil affect product performance?

Absolutely. Stylet-Oil works on the basis of physical contact - the better the spray coverage, the better the level of control. Thus, growers should choose spray equipment which maximizes spray coverage for the crop/canopy to be sprayed. A pump-up sprayer (available at numerous retail outlets) can be used to apply Stylet-Oil provided the sprayer is agitated or shaken every 10 minutes to keep the oil in suspension in the spray tank water. Apply the oil-water mixture to the point of runoff. Be certain to thoroughly clean all sprayer hoses and tanks to remove latent herbicide residue before spraying Stylet-Oil, otherwise plant injury may occur.

What are some of the parameters a grower should use to successfully apply Stylet-Oil?

Regardless of the crop being sprayed or the type of equipment used to apply Stylet-Oil, successful application of the oil relies on the following parameters:

- Stylet-Oil performance is directly related to the quality of spray coverage
- Apply the product in a minimum quantity of water (15 - 20 gpa)
- Use a rate of no less than 0.5 gpa
- it is advisable to increase the volume of water and Stylet-Oil as the canopy increases in size;

Can Stylet-Oil be used as a resistance management tool?

Absolutely. In fact we strongly urge growers to use the oil as the first treatment in a powdery mildew control program to eradicate resistant mildew strains before these strains are exposed to chemicals prone to resistance. Cleaning up an orchard or a vineyard before the first DMI or strobilurin chemicals are applied is an excellent resistant management strategy. Stylet-Oil's mode of action works at the physical level - not the biochemical level - thus the oil is an ideal material to alternate with DMI/strobilurin fungicides.

How much impurity is in 30 gallons of Stylet-Oil compared to the same volume of a 92% UR summer oil?

There are 1.2 quarts of impurity in 30 gallons of Stylet-Oil compared to 9.6 quarts of impurity in the same volume of a typical 92% UR summer oil.

Are these impurities active in biological control?

No. Mineral oil impurities are not active in biological control and perform no useful purpose other than to take up space in the container.

Are there any storage conditions which might affect quality of the oil?

Yes.

- Store the oil where water can not enter the container
- Stir the oil prior to use if it has been stored for a period of 1 year or more.
- DO NOT store Stylet-Oil at temperatures below freezing.

If water enters the container during storage, can this effect the oil?

Yes. Water that enters the container has the potential to destroy the oil's emulsifier causing the oil to turn a milky color. Growers should never use Stylet-Oil if the oil has a milky color while still in the container.

When Stylet-Oil is added to water in the spray tank the mixture turns milky color. Is this normal?

Yes. It indicates that the oil's emulsification system is working properly.

When Stylet-Oil is added to water in the spray tank , the mixture should turn a milky color. What should you do if the Stylet-Oil does not emulsify (turn milky color) when added to water?

Call us immediately. What is the minimum spray temperature requirement? Do not spray when freezing temperatures are anticipated within 48 hours of an oil application. On vegetables: do not apply when temperatures are below 50° F.

If applied under 90 degrees and the temperature later rises above, is there danger of injury?

No, not under normal circumstances. The temperature at the time of application is the critical factor, thus spraying should be limited to cooler nighttime or daytime periods. However, spraying stressed plants with oil (at any temperature) may result in phytotoxicity.

What type of personal protective equipment is necessary to spray the oil?

Wear coveralls, chemical resistant gloves, shoes and socks.