Take control of your moss problem

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Extension Spotlight

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As moss establishes roots in a roof, it begins to degrade the roof and can lift up shingles. Constant moisture, which is what moss is drawn to and needs to survive, can lead to bacteria and mold growth.

During our wet cool, winter in Oregon we have one plant that flourishes, especially in shady areas, and that's moss.

Moss is a non-vascular flowerless plant from the taxonomic division Bryophyta that spreads by vegetative growth and by shooting out spores. Mosses do not have phloem tissue like vascular plants that carries food and nutrients from the photosynthetic surfaces back to the roots and other parts of the plant. That is partly why you don't see large free-standing mosses.

Mosses move metabolites and other nutrients between cells and within cells primarily by osmosis and diffusion. Understanding this will help you to realize that using most herbicides that are translocated through the phloem tissue of plants will not work on moss.

So, knowing a little about mosses will help us to understand how to control this difficult invader in some areas of our landscape and on our roofs and sidewalks.

Keep in mind these flowerless plants thrive on moisture and shade and generally do not grow or spread well in sunny, dry sites. This is the reason why the best cultural control that will help you to control moss in your landscape and on buildings is to allow sunlight to reach lawns, sidewalks and roofs of houses for much of the day to dry out surfaces.

If moss has invaded your lawn over the years, it is important to remember that moss does not kill the grass in your lawn. Poor growing conditions such as shade, poor drainage, poor fertility or compacted soil lead to the weakened state. These conditions, not the moss, cause the grass to die out.

To reduce moss from a lawn, first focus on improving those cultural conditions for growing grass. Most of the moss will disappear if you do the following:

- Trim trees for more direct sunlight to the lawn
- lime your soil to get the pH back to a range of 6-7. If your soil is currently acidic with a pH below 6 you will need to add lime annually for a few years before retesting your soil.
- Dethatching or plugging your turf will improve drainage of your site which helps the vigor of the lawn.
- Fertilize your lawn a few times a year will improve both the vigor and density of the turf to keep out moss.

Another way to control moss is to use chemical products like iron sulfate and ammonium sulfate. These products are to be mixed with water and sprayed on the lawn or roof to contact the moss. They should be used near the end of winter during a dry spell so persistent rain will not wash them off before they burn the moss.

Be advised that the iron products can stain concrete surfaces. These products should be used in combination with the cultural steps to improve the lawn mentioned above when using in the landscape.

After burning the moss to a yellow color in a lawn, it is important to use a dethatching rake or dethatching machine again to remove the dead moss. You can compost the dead moss but be advised that the moss may contain spores that could start new moss where you use the compost. I have never had an issue with this when using the compost in a sunny location.

Another formulation of moss control product is ammoniated soap of fatty acids. You will see this listed on the label of the product under the active ingredient. This formulation is softer on plants so is a good choice when using moss control around shrubs and flower beds. It is also a non-staining product that can be used on cement surfaces.

Remember that waiting to near the end of our rainy season is a good time for controlling moss in your lawn, gardens, sidewalks and roofs. This keeps harmful products from being washed down our gutters into the street and out to our waterways.

Make control applications on lawns with granular products when surfaces are still moist following a rain, but there is no heavy rain in the forecast for at least a week. Spray applications of moss control products on lawn or hard surfaces need to be made when the surface is dry and going to be dry for a week.

You can also keep cement surfaces clean using a power washer but that can cause pitting of the cement so be careful.

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