

**Benton County Master Gardener Problem Diagnosis Scenario #19**  
**(Spinach Leaf Miner)**

<p><b>Problem</b>  I have damage on my spinach leaves. What is infecting my spinach, and what do I do to get rid of it?</p>
<p><b>Description (May)</b>  Some of the leaves have curly looking, whitish, or silver-looking tracks meandering on the leaves and then it turns into a big white blotch.</p>
<p><b>Questions and Answers</b></p> <p><b>Question:</b> How many spinach plants do you have and how many of them are infected?  <b>Answer:</b> I have two rows of spinach, and I would say that about one quarter to one third is infected.</p> <p><b>Question:</b> When did you first notice the damage?  <b>Answer:</b> Some of the plants seemed to be effected as seedlings, and now more and more plants are infected as time goes by.</p> <p><b>Question:</b> Have you seen any insects on your spinach plants?  <b>Answer:</b> Just some small fly looking things. They don't appear to be eating anything, just landing on the plants. The white areas don't have any holes that I can see.</p>
<p><b>Reference(s)</b>  <a href="https://pnwhandbooks.org/insect/vegetable/vegetable-pests/hosts-pests/spinach-leafminer">https://pnwhandbooks.org/insect/vegetable/vegetable-pests/hosts-pests/spinach-leafminer</a>  <a href="http://ipm.ucanr.edu/PMG/r732300311.html#REFERENCE">http://ipm.ucanr.edu/PMG/r732300311.html#REFERENCE</a></p>
<p><b>Diagnosis</b>  <b>Spinach Leaf Miner:</b> Adults are small black to gray flies with yellow markings. The body is covered with long stiff bristles. Larvae are a nearly translucent white or yellow color and about 0.25 inch long when mature. Eggs are white, cylindrical, and laid singly or in small groups. Both larvae and adults damage plants. Larval feeding results in slender, winding trails on the leaves, which form large white blotches if mining becomes severe.</p>
<p><b>Recommendations</b></p> <p><b>Cultural:</b> To prevent infections, cover seedlings with row cover if not yet infected. Pick off and destroy infected leaves. Also check plants NOT infected for eggs. Cultivate frequently around plants. Rotate crops. Remove plants that are hosts to leaf miners (pigweed, plantain, chickweed, lamb's quarter).</p> <p><b>Biological:</b> Natural predators such as parasitic wasps and entomopathogenic nematodes. Create plantings to attract parasitic wasps.</p> <p><b>Chemical:</b> To be effective, sprays must be applied to the larval stage. Not recommended as control of adult stage as it also harms beneficial insects and could result in higher numbers of the pests. See PNW Handbook for Chemicals approved for Home use.</p>



Infected Leaf



[Whitney Cranshaw, Colorado State University, Bugwood.org](#)