

Benton County Master Gardener Problem Diagnosis Scenario #33
(Cabbageworm-Cabbage Moth/Butterfly)

<p>Problem My broccoli, cabbage and brussels sprouts are routinely spoiled by holes in the leaves and later in the summer by more serious damage to the edible center parts. I like to supply the family with fresh greens and freeze some of the crop for winter use. How can I improve the picking quality?</p>
<p>Description (June) Gardener uses raised beds for growing a wide range of vegetables and fruit and has done so for several years. Client is not strictly organic but does not want to use chemicals that might harm bees, birds, or beneficial insects. Client uses artificial fertilizers and some compost, worked into the ground in spring. Uses transplants for all brassica plantings.</p>
<p>Questions and Answers</p> <p>Question: Which of your brassicas seem the have the worst damage? Answer: Not much difference, but the cabbage does seem to have the most damage on mature leaves.</p> <p>Question: Do you apply any pesticides to your veggies? Answer: No.</p> <p>Question: When you check out a damaged leaf, what do you see? Answer: Holes between the leaf ribs mostly, green/brown slimy stuff in patches on the underside, and sometimes a caterpillar or two.</p> <p>Question: What color and size are these? Answer: Green and hairy--and they can be pretty big, maybe an inch.</p> <p>Question: Have you seen other insects? Answer: Yes, I've seen some white butterflies with dark spots on their wings.</p>
<p>Reference(s) https://pnwhandbooks.org/insect/vegetable/vegetable-pests/common-vegetable/vegetable-crop-imported-cabbageworm</p> <p>https://pnwhandbooks.org/insect/vegetable/vegetable-pests/hosts-pests/broccoli-brussels-sprout-cabbage-cauliflower-imported-cabbageworm</p>
<p>Diagnosis Cabbage Moth or Cabbage White Butterfly: The damage is probably being caused by the larvae (caterpillars) of the imported cabbageworm</p>
<p>Recommendations</p> <p>Cultural:</p> <ul style="list-style-type: none">• Prevent the cabbage butterfly from laying eggs by using row covers from transplanting onwards.• Routinely pick off young caterpillars every few days and crush eggs that are found.• Apply the brassica formula of <i>Bt (bacillus thuringiensis)</i> when larvae are first noticed, and continue as directed through the season.• Clean up debris round beds after harvest to reduce overwintering activity.• Consider using resistant cabbage varieties to reduce (but not eradicate) the problem. <p>Biological:</p> <ul style="list-style-type: none">• Parasitic wasps and tachinid fly larvae• Natural enemies: ground beetles, the spined soldier bug, spiders, lacewing larvae, syrphid fly larvae <p>Chemical: Several chemical controls available, see PNW handbook ref. (Carbaryl, malathion, pyrethrins.)</p>

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