

## Fortify against a non-native butterfly

This gardener has been doing all the right things to attract the wrong insect.

The presumably harmless little white or off-white moths fluttering around her artichokes, cabbages, mustards, nasturtium and kale are proving to be big trouble makers.

Did this gardener know what the little moths do in their spare time?

No, she did not.

Did she know the pretty angelic winged insects have a clandestine past, go after the same host plants that a native butterfly commonly called Checkered Whites eat and appear to be far more ambitious?

No, she did not know that either.

Did she know the source of the green eggs on the bottom of the vegetable leaves? Did she know that the culprits are not really moths at all, but butterflies?

No.

Did she know the cause of the burrows deep inside cabbage heads or what larvae caused hundreds of holes in the leaves of an artichoke?

Nope.

Did she know that *very* hungry larvae with yellow back and side stripes hatch from the eggs and can turn an artichoke leaf into a skeleton leaf in no time at all?

No.

Does she know that adults are identified by the black wing tips and wing spots. These dots distinguish the sexes, the males having one dot and the females, two?

Really?

Does she know that butterflies have knobs on the end of the antennae which aid in their identification and moth antennae look more like feathers and wings that generally fold down?

Well, this gardener vaguely remembers hearing about the knobs on antennae around the fifth grade.

Does she know these butterflies are commonly called Cabbage Whites. They are not native species, but mimic the looks and the behavior of a native species commonly called Checkered whites.

No. She thought they were cabbage moths.

Does she know that Cabbage Whites now out number the native species and that a single female can lay 700 eggs in a lifetime? Does she know it is likely the most common butterfly and probably the most destructive one?

Well, no.

Did she know that in less than 100 years since its introduction into Canada, it was found everywhere in the U.S.?

Hum.

Does she know what to do about them?

Yes!

“You can pull out the fly swatter and smack ‘em,” says George Heaton, Horticulture instructor at Reedley College.

You can also hand pick the butterflies and larvae. Natural control by virus and bacterial diseases and parasites can sometimes be effective. Mass releases of *Trichogramma* have been used with some success.

The use of what gardeners call “BT,” short for *Bacillus thuringiensis* is *very* effective. BT comes in an oil form and is not toxic to the environment. Ask for this at any garden store. Read the instructions on the label on how to apply it. The time to apply it is during cool weather or at least the cool part of the day.

*Pieris rapae* is the only butterfly in the United States officially declared a pest by the U.S. Department of Agriculture.

\* Ron Vargas: The Garden Butterflies of No. America calls the Cabbage White a *Pieris rapae* and claims it is the only butterfly in US officially declared a pest by US Agriculture. The Pests of the Garden and Small Farm calls it an Imported Cabbage Worm butterfly p.71 with the scientific name of *Artogeia rapae*. The pictures, habits and descriptions in both the books match. I believe its the same butterfly. Can you confirm this or at least clarify this for the readers (and myself) before this goes to print? Thanks.

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Call you U.C. Cooperative Extension Office in Madera with your gardening questions at 559-675-7879 Ext.204 to leave a msg, or stop by the office on Mondays from 1:00 - 3:00 p.m. to speak to a Master Gardener in person.