

# Eaten alive in London!

*by Victoria Burton*



When I was a university student living in London last year I had a little balcony which I used to grow salad and tomatoes. Being an entomologist I soon became more interested in the insects on my vegetables (and eating them!) than enjoying them myself.

A Large White Butterfly (*Pieris brassicae*) laid clusters of eggs on my cabbages. The caterpillars hatched in a couple of days and grew rapidly, first feeding together then spreading out on the container of plants. I later found a single Small White (*Pieris rapae*) caterpillar which I had missed, as their eggs are laid singly.

When the caterpillars were fully grown most of them moved away from the food plant and climbed up the wall to find a place to pupate. All apart from one which, instead, had wasp larvae emerge from it! These spun yellow cocoons underneath the caterpillar, which died, remaining hunched over the cocoons. I did some research and found out these parasitoid wasps are *Cotesia glomerata*, and they belong to the family Braconidae.





***Cotesia glomerata* larvae emerging from  
a cabbage white butterfly caterpillar**

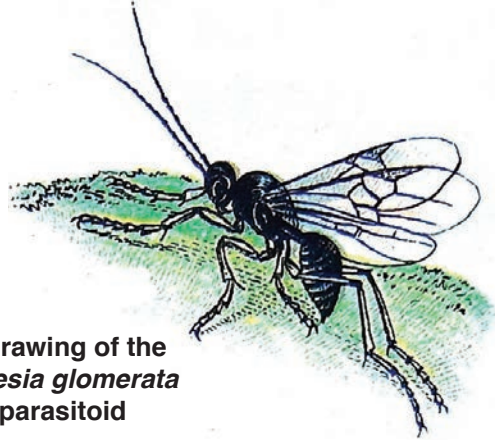
The adult wasps are small (3-7mm long) and black, they lay their eggs into the caterpillars, and these eggs hatch into larvae which eat the caterpillar from inside. [Yuck! - Ed.] When they are ready to emerge they produce chemicals which force the caterpillar to produce silk, which protects the wasps from predators, and from other insects that are parasitoids on them! This protection was not always enough; those in the Small White caterpillar were chopped up and carried off by a *Vespula* wasp along with the caterpillar before they emerged.



**A wasp snacking on  
a Small White  
butterfly caterpillar**



**Adult *Cotesia glomerata* emerges from one of the cocoons on the dead caterpillar**



**A drawing of the *Cotesia glomerata* parasitoid**

### **Some facts about *Cotesia glomerata***

- It was introduced to North America as pest control for cabbage white caterpillars
- *Cotesia glomerata* is called a **parasitoid** rather than a **parasite**, as its host always dies
- It has parasitoids of its own, which are called **hyperparasitoids**
- This little wasp carries a virus which stops the caterpillar's immune system from attacking it
- They eat the caterpillar in a way which keeps it alive the longest

Why not try growing some cabbages in your garden, if you have one, and see what insects you get?