



Bon Bug - Bad Bug

The insect in this picture is a great friend to your gardens and to trees everywhere: it is the larva of the Lady Bird Beetle, aka ladybug. According to an exhibit at the Biodiversity Museum, a Lady Beetle larva can consume 50 to 60 times its own weight in aphids a day -- thousands in a lifetime.

Aphids are *true bugs* - order *Hemiptera*. All bugs have piercing, sucking mouthparts, but they suck different things. Aphids, like their cousins the scale insects, suck sugary juices from plant leaves and stems. We have more than 50 aphid species here, according to the government of Canada and they can do a world of harm to growing plants.

If your garden is anything like mine this spring, it is RIFE with aphids. The growing tips on my wild plum suckers are covered in dark aphids. Pale green aphids are on the Manitoba Maples that overhang my deck. So unless I keep my umbrella up, my table is covered in honeydew, aka aphid pee, dripping from the trees. The sweet pinhead-sized drops then attract ants to the table top, making dining-out less than pleasurable.

Ants love sweets so they really love aphids and have been observed actually *farming* them on Goldenrod and other plants, corralling them, slurping their honeydew and protecting them from predators like the Lady Beetle. The back end of an aphid has two projections that look a lot like ant antennae. The ants stroke these projections and the aphids pee!! (Of course they will pee on their own too.) The ants can then slurp the honeydew right from the source. Yum! The honeydew is sweet because it comes from the aphid's foodsource, tender green leaves

But I digress. Beetle larvae often look VERY different from their adult form and this strange looking creature does not betray its adult appearance in any way but its orange and black colouration. The Lady Beetle lays her orange eggs in tidy rows on a leaf surface -- they look like little steadfast oval soldiers standing at attention. When the tiny larva hatches out, it is all black. As it sheds its exoskeleton in favour of a new one, one size bigger, through several growth spurts (*instars*) the orange markings on its abdominal sections become more pronounced. Eventually, it will go into its third life-stage, pupa. It takes about three weeks for a Lady Bird Beetle to reach maturity.

What species it will pupate into is probably predictable by the placement of the orange patches. Someone out there knows. According to Wikipedia, there are some 6000 described species in the 25 *genera* of the family *Coccinellidae* worldwide. The name derives from the latin *coccineus*, meaning scarlet. But they are not all red or orange and they are not all spotted. 450 species are native to North America; 150 in Canada and 80 in Ontario (three sources used). Lady Beetles are all insect predators -- mostly preying on garden and crop pests with their biting, chewing mouthparts. That said, when their primary food source peters out, they will take a bite out of anything, even us. All Lady beetles will do this, but because they have become so plentiful, we like to blame the Asian ladybug *Harmonia axyridis* (the Harlequin Lady Bird) that was imported in the 1970s to fight aphids. Like our native species, the invaders come in a dizzying variety of colours and spot configurations. The *tell* seems to be large white spots on the *pronotum*, or shoulder armour, usually on either side of the body behind the head.

Ladybugs do not fall prey to many animals because their orange and black colouration usually indicates toxicity, so many birds avoid them. Also, many species produce a nasty alkaloid toxin from their leg joints so they don't actually taste good. And some species play dead!

Enough already. Enjoy the garden, eschew aphids and encourage ladybugs of all kinds. If they invade your home in

the fall, looking for shelter to sleep through the winter, they will have done their work and you can deal with them then.

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