Where Do Aphids Go In Winter ?

Brian Milligan,
35 Tannock Street, North Balwyn Vic. 3104

Fortunately for us they all die of cold, especially in frosty weather. But if that's so, how can aphids return in spring? Because the crafty devils make sure they lay a good supply of eggs in nooks and crannies before they die, that's why. These eggs, which unlike their parents, are unaffected by the cold, remain dormant until the warmer days of spring arrive. I came across this information, written by the late Crosbie Morrison, in an old gardening book (*ca.* 1945) recently.

When the eggs hatch, all the young aphids are wingless and female. After a few days they begin to bear live young, with no intervention or assistance from male aphids (there *are* none at this stage!). The rate of reproduction is incredible - it has been calculated that if all survived, the progeny of a single aphis after ten generations would weigh more than the entire population of China! Now, there's an interesting piece of trivia for you to talk about at your next dinner party!

Fortunately for us and other inhabitants of the world, aphids have many enemies, as well as being susceptible to pneumonia. Birds and a variety of other insects eat them. Ladybirds, in particular, are particularly fond of aphids and can eat 30-40 per *hour*! I once speculated that, because aphids breed so prolifically, ladybird predation couldn't provide much control. That was before I found out what greedy little beggars they are. Maybe it's worth buying a batch (flock?) of ladybirds in spring after all.

Aphids are sapsuckers. The aphid drills a hole in the soft new foliage with her beak and then sucks the sap, which is freely available at that stage. She has greater difficulty as the growth ages, because it's harder for her to drill a hole, and there is also less sap in older growth. Many break their beaks and then die of starvation.

As the cooler days of autumn approach, there is a change in the life cycle. Both male and female aphids are born at this time. They are born with wings, presumably to provide greater mobility for their sexual adventures.
These females lay eggs, not live aphids, and so the species is ready to survive another icy winter.

Orchids (and roses) are regularly infested by aphids (except in winter), which soon reach plague proportions unless control measures are implemented. Some growers squirt aphids off the foliage when watering. But this fails to dislodge them all and the remainder soon breed replacements. It is often argued that 'they don't eat much', but this isn't strictly true - they probably suck sufficient sap to retard the development of the new growths.

More important, however, is the possibility that they can transfer virus from one plant to another - the new virus recently found in native dendrobiums is believed to be transmitted by aphids. Maybe the aphids are wingless during spring and summer, but they can certainly fly about in autumn. Also, if you hang your dendrobiums from vertical wire mesh like I do, the aphids can fall from one plant to a lower one regardless of the season.

Therefore I spray my plants with an insecticide as soon as aphids appear. Almost any insecticide is effective. For small outbreaks I use one of the many pressure pack sprays available at plant nurseries, taking care to hold the can at least 300 mm from the plants (to avoid frost burn). For larger outbreaks I use Orthine, a wettable powder, applied as an aqueous solution; unfortunately it is not available from retail nurseries. Today, many orchid growers use Pirimor - designed specifically to win the war against aphids.