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Getting Serious About Aphids

Show aphids what the door is for!

This month I have had several urgent calls about aphids lots of aphids. On hanging baskets, on bedding plants, on vegetable transplants... high numbers in every case. This is about the worst possible time to have an infestation - plant are blooming, orders are going out, no one has any time to stop and treat, and re-entry times make tight schedules worse. Calibrachoa seems to be frequently involved, but a wide variety of other plants are too. Aphid populations are exploding, brought on by the sudden warm weather and houses full of well-fed greenery. Baskets are especially troublesome - some deciding to forgo preventive treatments are finding unpleasant surprises.

Three or four main kinds of aphids are involved. Green peach and potato aphids are common on callies, but I find them on other hosts like pansy, fuchsia and dahlia. Bean aphids seem to prefer nasturtium and foxglove aphids are on salvia, calibrachoa, and (in the past) zonal geranium. Melon aphids have been common in past years but so far have been less common. You may find any of these on other hosts too - they are by no means restricted to these plants. Bean aphids are black and usually very easy to spot; the other kinds are often





Green peach aphids on calibrachoa. Aphids under flowers are easily missed.

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The white cast skins on leaves are tell-tale signs aphids are present.

pale green and blend in well with foliage though we often see pinkish variants of green peach and potato aphids on calibrachoa. Usually the infestations are first detected when aphids are easily noticed on flowers or buds, or the cast skins and sticky honeydew are apparent on terminal growth. Foxglove aphids often cause dramatic distortion.

In recent situations the aphid population are beyond the capacity of biological controls. Growers all ask for something with low risk of injury especially to flowers, that leaves only minor residue, and most of all that is highly and quickly effective.

Neonicotinoid insecticides (Discus/Marathon and generics, Flagship, TriStar and to some extent Safari) are among the most effective aphid controls we have, used either preventively as a drench (Discus/Marathon/generics, Flagship, Safari) or curatively as a spray (all). Note NY restrictions on these products. They leave little residue and provide very quick knock-down, especially as a spray (suggest caution with TriStar on verbena, which has caused some temporary flower distortion on Aztecs). A bit of wetting agent or low rate of M-Pede added may help with some hard-to-wet plants or waxy aphids. Some growers have been asking about alternatives, in which case I would suggest Aria, Avid (high label rate), Endeavor, Kontos, M-Pede, or a horticultural oil (Suf-

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fOil-X, Triact, Purespray, etc.) as sprays (several other products are also labeled but less likely to have quick knockdown; pyrethroids often work quickly except where melon and green peach aphids are 'tolerant' or resistant). Kontos and Mainspring can also be applied as a drench. Note plant safety cautions with Kontos, M-Pede, and the oils. Aria can cause some injury to pansy/viola; Shasta daisy and some ferns are sensitive to Avid. Endeavor may leave light residue at the high (5 oz) label rate. Be sure to test any new product under your conditions on a range of plants to assess crop safety. Foliar sprays will probably be most quick to act but you'll need thorough coverage with them, especially with strictly contact materials (M-Pede, oils). Others have some systemic or 'local systemic' activity to help where plant canopies are dense and good coverage is difficult at best.

In one recent case large hanging baskets with calibrachoa starting to bloom were heavily infested with green peach aphids. I compared a *drench* with Mainspring (12 oz/100 gal) to a *foliar spray* of Aria at the high (60g/100 gal) rate on several plants. The Mainspring drench was carefully applied to wet the media over root zone (plants were fairly well-watered when treatments were applied), then lightly watered in following application to move the material deeper. Aria was applied thoroughly to wet. Within two hours many aphids



Bean aphids can be a particularly serious pest where nasturtiums are grown edible flowers

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were dead in the Aria treatment. After two days there was about 95 - 98% control in both treatments and no plant injury observed in either case. Much of the aphid residue (dead aphids, cast skins, honeydew) could be washed off with a light water spray, making the plants presentable for sale. Mainspring has a 4-hr REI, Aria has a 12-hr REI and both have fairly minimal PPE requirements.

Continue to watch for signs that aphids are present on plants - don't forget to spotcheck the hanging baskets (out of sight, out of mind?). With any luck aphids won't spoil your day!



Even a few aphids on flowers can make plants unmarketable