

## Cyclamen mites in strawberries:

For various reasons, this year we are seeing considerable damage from cyclamen mites in strawberry. This tiny mite is pinkish orange in color and has a shiny look to it. It is so small that you can barely see it with a 10X magnifying lens. When abundant, though, it can cause serious injury to plants and fruit. The mites like to live and feed on newly emerging leaves, which become stunted, crinkled, and malformed. Because of the damage, plants take on a characteristic flat appearance (see a picture of cyclamen mite injury on the web at

<http://www.hort.cornell.edu/department/faculty/pritts/BerryDoc/strawberry/leavesandstems/Cyclamenmite2.htm> or consult the Strawberry Production Guide(NRAES-88)). Look along the midveins of these young leaves to find the mites and eggs. The mites will also feed on flowers causing misshapened fruit and they will feed on the tips of new runners causing stunting. Older, declining strawberry beds tend to show the most serious damage from cyclamen mites, although transplants from nurseries can be the original source of the infestation. Cyclamen mites, if left unchecked can significantly reduce plant productivity.

Cyclamen mites can be very difficult to control because of they are hard to reach in the crowns and they have high reductive potential. There are two times to apply control measures: just prior to bloom or after bed renovation. After bed renovation is a particularly good time to apply miticides because the mites are more exposed. Use high spray volumes (200 gallons per acre) and pressure (100 pounds per square inch). Thionex (endosulfan) is labeled for cyclamen mites in strawberries, however it is under EPA review and may be lost due to regulatory issues. A new miticide, Portal (fenpyroximate, EPA # 71711-19, 12 hr REI, 1 DTH) has recently been approved for use against cyclamen mites in strawberry in NY, although you need to have the 2(ee) supplemental label in hand. Portal stops feeding activity and egg-laying, and mites die within a few days. Predatory mites may reduce cyclamen mite populations below damaging levels, however this is not always the case. If you see a lot of plant damage then the predatory mites are not present at sufficient densities to be effective. I am unaware of recent research on the use of insectary-reared predatory mites to manage cyclamen mites in the Northeast, although this is something worth pursuing in the future.

There are some cultural practices that may help reduce problems with cyclamen mites. First, maintain vigorous plant growth. Second, try to avoid over use of pesticides that are harmful to predatory mites. Third and probably most important, establish new plantings with mite-free nursery stock. Isolate these new plantings from infested old plantings; the mites can be easily transported on equipment, clothing, or older plants.