Cyclamen mite

Phytonemus pallidus

Damage:

Cyclamen mites are one of the most difficult pests to control, causing severe leaf distortion and dramatically lower yields. First symptoms are seen on newly emerged leaves. Early in the season the incidence in the field can be random, particularly if plants were infected from the nursery. As the infestation progresses, patches of infected plants can be observed.

Identification:

Remove the youngest still-folded leaf from the crown of plants with damage. Spread open the leaf and look with a good hand lens or a microscope at the midvein for exceptionally tiny shiny white oval-shaped mites and their eggs. You may need a microscope. Leaves that have emerged and are distorted will no longer have mites on them.

Spread:

Cyclamen mites have many hosts, including common weeds and ornamentals. However, the mites are not highly mobile; they can travel slowly by crawling during the night, or longer distances on pollinators, equipment, and workers. The biggest problem in an annual production system is when transplants come with mites. A few infected transplants can be the source of infestation for a whole block, and in warm weather the life cycle is only 2 weeks.

Control:

Plant production	Start with high health strawberry transplants. Use an annual production system.
Pre-flower	If there is reason to suspect that mites are coming with nursery stock, apply a drench miticide at planting. Heat treatment of transplants can eliminate cyclamen mites from the crown, but must be done carefully so as to not damage plants. Scout plants carefully for distorted growth, and remove and destroy infested plants as soon as you see them.
Flowering and fruiting	Continue scouting carefully, looking for new infestations that could come from the nearby environment. Rogue infested plants as you see them. When using miticides, apply at night when drying times are longer and mites are not as deep in the crown. Use high volumes of water and a wetting agent to get product into the crown. Repeat application to catch egg hatch.