

THE CYCLAMEN MITE

by

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Although microscopic in size, the cyclamen mite, Tarsonemus pallidus Banks, may be responsible for annual loss of thousands of dollars to greenhouse, florist and garden crops. Many attempts have been made to control the cyclamen mite with various fumigants, sprays, and dusts in greenhouses. Some of the materials used have given a fair percentage of kill, but eradication of the mites has not been accomplished, and these measures can not be considered satisfactory.

Hot Water Bath Gives Complete Control:

The only method so far developed, which gives complete control of the mites, is the hot water bath. The equipment used at present for treating bulbs is satisfactory and fortunately a number of growers are now outfitted with these tanks. Tanks should be equipped with a good thermometer and a propeller, pump, or paddle to insure an even temperature throughout the bath. Screen or mesh trays should be used for handling the plants.

The method of treatment with hot water is to lower the plants or potted plants into the water and leave them there for 15 minutes at 110° F. Remove the plants and shade them with newspaper for one or two days to avoid injury. A longer immersion is required to kill mites occurring below the soil surface or between the crown and leaf bases of such plants as strawberry - approximately 25 minutes. Plants arranged loosely on trays allow better penetration of the heated water. When tender plants are to be treated, such as begonias, snapdragons, etc., less leaf injury results if they are exposed 20 minutes to 108° F.

Sanitation:

Under greenhouse conditions, sanitation is particularly desirable to keep the cyclamen mite under control.

Sterilization of benches which are to be used immediately after the removal of infested material, with hot water, steam, or an oil emulsion, is a good procedure. Workers should carefully disinfect their hands after handling infested plants with a nicotine solution or gasoline.

Host Plants:

Following is a list of the host plants attacked by the cyclamen mite. It is probable that there are other host plants, and absence from this list does not preclude the possibility that a plant is attacked:

Pigweed	Snapdragon	Begonia	Redpepper
Marguerite	Chrysanthemum	Grassula	Cyclamen
Dahlia	Larkspur	Strawberry	Fuchsia
Gerbera	Snapweed	Lantana	Woodsorrel
Cybidium	Rhododendron	Orchid	Delphinium
Heliotrope	Daisy	Gloxinia	African violet
Petunia	Sweetpea	Geranium (Ivyleaf)	Japanese creeper
Verbenas	Blackberry	Forget-me-not	