

Chilli Thrips and their Management

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INTRODUCTION

Common pests that can seriously harm chilli crops include thrips and mites. To maintain the crop's productivity and quality, it is crucial to control these pests. From the seedling stage through the reproductive stage, they infest the chilli crop. When it comes to mite species, yellow mites are the most destructive to crops. Thrips and mites harm the chilli crop by sucking the sap from the leaves, shoots, buds, and fruits in their adult and nymphal stages. They induce the susceptible plants to exhibit the "leaf curl" symptom.

Mites can seriously harm crops during the blossoming and fruiting stages because they thrive in hot, dry weather. While thrips infestations are most severe in the early stages of crop growth, the damage they cause can reduce both the size and number of fruits produced per plant. Infestations with thrips and mites can result in chilli yield losses of 20% to 50%, and in more severe cases, 60 to 90%. The "Leaf curl virus" that affects chillies is also spread by thrips and mites. If these pests are not eradicated as soon as possible, the entire crop may be destroyed by their infestation.

Thrips of Chilli crop:



Scientific name of thrips: *Scirtothrips dorsalis*

Symptoms

- The leaves curl upward, wrinkle, and then fall off. Buds shrivel up and fall off. Stunted and bronzed plants result.
- Nymphs and adults are small, frail, and straw-colored in color. They cause the leaves to wrinkle and curl up as they suck the sap from the leaf juices.
- Typically, they are found on the underside of leaves.
- Petioles on infected leaves have grown longer.
- They cause "Silvery or bronze appearance" by lacerating the leaf surface.
- Affected flower buds become fragile and eventually fall out.
- Early stages of infestation will result in stunted growth, while severe infestation will stop fruit and blossom production.
- Thrips eat on developing fruit, leaving behind minute scars on the surface that are light brown.



Management

- ✚ Plant resistant strains like G5, K2, and X 235.
- ✚ To offer shade and control the thrips population, intercrop *Sesbania grandiflora* (agathi) with other crops.
- ✚ Avoid planting chilli after sorghum because it is more sensitive to thrips.
- ✚ Avoid growing mixed crops of onions and chillies since thrips attack both of these crops.
- ✚ To check the growth of thrips carbofuran 3G @ 200g/ 40 m² area in the nursery, mist the seedlings with water.
- ✚ The installation of blue and yellow sticky traps can aid in the bulk thrips capture. Neem oil can be sprayed to lessen crop damage.
- ✚ You can somewhat lessen the impact by planting trap crops like marigold and sunflower and removing them once they are fully affected.
- ✚ Before transplanting, dip the plants' roots in monocrotophos 36 WSC @ 0.05% for 20 minutes. In the morning, sprinkle 25 kg/ha of carbaryl 5 D.