

Common high tunnel pests

Aphids	Several species can infest winter high tunnel crops including Green Peach Aphid and Cabbage Aphid. Scout for aphids on stems and under leaves. Aside from causing stunted growth, aphids can vector viruses.
Whiteflies	A key pest of high tunnel crops. Scout under leaves frequently. Whiteflies have a rapid life-cycle and cause similar damage to aphids (decreased vigor, chlorosis, wilting and introduction of viruses, fungal infections and bacteria). Oils and soaps are good contact controls. Short life-cycle means multiple applications may be necessary.
Thrips	Thrips become active around 60°F and increase activity with temperature. Indoors, thrips can complete up to 8 generations a year and remain active through colder months. Initial signs can resemble mite damage; look for white specks or streaks with accompanying black spots (frass). Many materials kill thrips but control often requires multiple applications.
Spider Mites	Frequent scouting at early growth-stages is important, look for discoloration in leaves. Spider mites prefer high temps and low humidity. Eggs are laid on underside of leaves. Numerous generations, quick life cycle (one to two weeks), populations build rapidly.
Fungus Gnat	Fungus gnats lay eggs in soil and are attracted to algae and fungi. Larvae feed on plant roots and mature gnats can spread disease and impact nutrient uptake and vigor. Monitor using sticky traps at soil level. For best control, target larval stage.

	Active Ingredient(s)	Aphids	Whiteflies	Thrips	Spider Mites	Fungus Gnats	Rate	Notes
Des-X/M-Pede	Potassium salts of fatty acids	x	x		x		2%	
Sil-Matrix	Potassium silicate	x	x		x		0.25 - 1%	
Trilogy/Rango	Neem oil	x	x	x	x		0.5 - 2%	
JMS Stylet	Paraffinic oil	x	x		x		0.5-3%	Spray oil only when temps will remain below 90°F
Ecotec Plus	Rosemary & peppermint oils, geraniol	x	x	x	x		0.15 - 0.45%	
Pest Out	Cottonseed, clove and garlic oils	x	x	x	x		1%	
Bioceres/Mycotrol	<i>Beauveria bassiana</i>	x	x	x			0.4 - 1.1 oz/1000 sq ft	
PFR-97	<i>Isaria fumosorosea</i>	x	x	x	x		0.4 - 0.75 oz/1000 sq ft	Do not apply fungicides within 4 days of application
Grandevo	<i>Chromobacterium subtsugae</i>	x	x	x	x		0.4 - 1.1 oz/1000 sq ft	Use with Nu Film P for best results
Venerate	<i>Burkholderia</i> spp.	x	x	x	x		0.75 - 3 oz/1000 sq ft	
Spear-T	GS-omega/kappa-Hctx-Hv1a	x	x	x	x		1-3%	Not approved for certified organic production
Neemix 4.5	Azadirachtin (4.5%)	x	x	x		x	0.1 - 0.4 oz/1000 sq ft	Tank mix with 1% oil
Azaguard	Azadirachtin (3%)	x	x	x	x	x	0.2 - 0.4 oz/1000 sq ft	Tank mix with 1% oil
Pyganic 5.0	Pyrethrins (5%)	x	x	x	x	x	0.1 - 0.4 oz/1000 sq ft	Spray in low light. Tank mix with 1% oil
Entrust	Spinosad (22.5%)			x			0.1 - 0.25 oz/1000 sq ft	Tank mix with 1% oil