

Best Management Practices: *Thrips parvispinus*



First, manage your biggest thrips reservoir—your floors. Do not neglect this!

- Thrips pupate in soil and adults can hang out in soil, gravel, and organic matter under benches for a long time if greenhouse conditions aren't ideal. If your floors are made of anything other than solid concrete and you have recurring thrips issues each year, do everything you can to clean them up between major crop cycles.
- Apply a generous volume of Strip-It Pro to permeable floors after removing as much organic matter/debris as possible. While Strip-It is not labeled as an insecticide, it is a highly acidic cleaning agent and does an excellent job of killing thrips.

Manage the next-biggest reservoir for thrips in your operation—weeds and grass right outside the greenhouse.

- Like in permeable floors, thrips adults will hang out on weeds and grasses (especially when the grasses are flowering). These plants often serve as an initial source for thrips in the greenhouse each year, but they can also serve as refuges for adults fleeing insecticide applications in the greenhouse.
- While mowing and weed-eating around the greenhouse may seem low on the list of priorities during spring, make this a regular activity. You'll be amazed how much this helps lower incoming thrips pressure.

Overall Efficacy

Treatment	Group	L1 Direct	L1 Indirect	L1 Feeding	L2 Direct	L2 Indirect	L2 Feeding	Adult Direct	Adult Indirect	Adult Feeding
Xxpire	4C + 5	X	X	X	X	X		X	X	X
Conserve SC	5	X	X	X	X	X	X	X	X	X
Timectin	6	X	X	X	X		X			X
Piston	13		X			X	X		X	
Kontos	23		X	X			X			
Pedestal	15		X							
Sarisa	28			X			X			X
Acephate	1B			X						X
Hatchi-Hatchi SC	21A			X	X	X				
Mainspring GNL	28			X			X			
Overture	Unclassified								X	X

Build an insecticide plan that incorporates strong rotation between IRAC groups and targets thrips at different stages of their life cycles.

- For your reference, on the attached chart shared in a Spring 2023 webinar by researchers at University of Florida, L1 = larval instar stage 1, L2 = larval instar stage 2. These life stages are always on the plant, and they lack the ability to move very far from the plant they hatch on.
- If you use the attached chart to help build an insecticide rotation, the “group” column in the chart is very helpful. Keep in mind, there are other products with the same active ingredients that likely have similar efficacy to ones named in the chart. (Ex. Piston is the same active ingredient as Pylon.)
- In general, Avid (abamectin), Orthene (acephate), Pylon (chlorfenapyr), Mainspring (cyantraniliprole), Pedestal (novaluron), Conserve (spinosad), XXpire (spinetoram + sulfoxaflor), and Hachi-Hachi (tolfenpyrad) are all chemistries that growers have good success with. However, if any of these have been used heavily in your greenhouses and do not seem to be doing the job anymore, it would be wise to remove the less-effective product from the rotation for a season or two, if possible.
- Try to integrate biopesticides and biorational (“soft” chemistries) into your rotation whenever possible. While many bios do not necessarily provide strong control when pest pressure is high, they can be very effective at keeping numbers low early in the season or after deep-clean cycles occur. Bio’s like Nemasys (or other *Steinernema feltiae* products), for example, do an excellent job of attacking soil-dwelling life stages of thrips, help further disrupt thrips life cycles, and are compatible with traditional chemistries that can be applied as soil drenches (like Mainspring).