Research

By Patrick Alan Coleman

Bug budget boom

Budgets for IPM plans are booming as cost concerns ease and prevention planning takes center stage.

his autumn, *Greenhouse Management* magazine and our sister publication, *Nursery Management* magazine, surveyed North American growers about administering pest management plans, which pests are the most problematic, scouting protocols, pest control budgets and much more. Our survey of more than 100 growers revealed that both the time spent on IPM and the money dedicated to it grew in 2024 relative to previous years. And

while concerns over cost are easing, growers still worry about staffing employees who can take control of IPM management, as planning for prevention, rather than cure, becomes more of an industry norm.

Editor's note: Due to rounding, not all percentages add up to 100. The survey of 101 Greenhouse Management and Nursery Management readers was conducted in September 2024.

BIG GROWERS BUGGED

Half of respondents in 2024 have a growing capacity under cover of more than 50,000 square feet. That's a 10% bump in the biggest growers compared to 2023 survey participants, a majority of whom had capacity of 49,999 square feet or less.



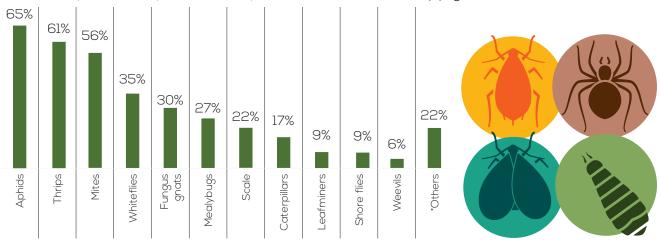
How many square feet is your location's total growing capacity under cover?

Less than 2,500	9%
2,500 to 4,999	7%
5,000 to 9,999	5%
10,000 to 24,999	10%
25,000 to 49,999	8%
50,000 to 99,999	10%
100,000 to 249,999	9%
250,000 to 499,999	15%
500,000 or more	16%

PROBLEMATIC PESTS

For the last three years, aphids have remained the most problematic pest. In 2024, 65% of growers report battling the insects. Meanwhile, thrips (61%), mites (56%), whiteflies (35%) and fungus gnats (30%) round out the top five. There is some unwelcome movement in the standings, however, with scale making a 7% jump among reported pests from 2023 to 2024, while the red-headed flea beetle (RHFB) makes up about half of the 22% of "other" pests growers reported in 2024.

What are your most problematic pests? (Select all that apply.)

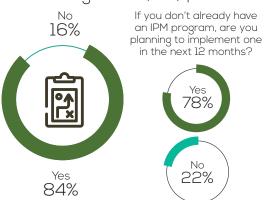


*Other answers include slugs, red-headed flea beetles and ants

GOOD PLAN

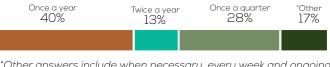
A strong majority (84%) of respondents report having an integrated pest management (IPM) plan. That's 7% more than those who reported having an IPM plan in 2023. The increase makes sense in the context that half of 2023 respondents who didn't have a plan expected to have one in 2024. And the momentum is growing — well over three-quarters of respondents without an IPM plan this year say they will have one in 2025. These plans are likely reflected in how growers are viewing pest management processes. More surveyed growers in 2024 than in 2023 said that their efforts are preventive rather than curative, suggesting an increased focused on proactive prevention.

Do you have an Integrated Pest Management (IPM) plan?



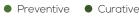
Base: 49

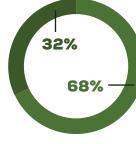
How often do you review your IPM program?



*Other answers include when necessary, every week and ongoing/ never-ending process.

On average, what percentage of your pest management processes are preventive? Curative? The total of both your answers should add up to 100.





Insect Control Report

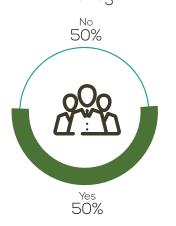
State of the Market: Insect Control Report

TIME, MONEY & LABOR

There was a slight decrease in those growers who report having a dedicated IPM manager, with exactly half of respondents having staffed the position in 2024. But despite the dip in having a dedicated position, the amount of labor hours spent on pest management has increased. In 2023, 53% of respondents said they spent fewer than 100 hours on pest management in a 12-month period. In 2024, a majority of respondents are spending more than 100 hours on the task, with a majority of those (and 37% of all surveyed) spending 250 hours or more on pest management.

Considering that increase in time spent, it makes sense that pest management is taking up more of growers' budgets, too. In 2023, only 36% of respondents budgeted more than \$25,000 per year. This year, 48% of surveyed growers say they budget \$25,000 and above. Some of that result can be attributed to the fact that bigger growers will likely spend more money on pest control. But in the context of other responses, it could also be that pest control is becoming an increased focus for most growers.

Do you have a dedicated IPM manager?

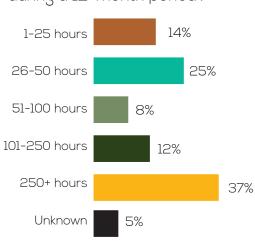


How much do you budget each year for pest management expenses?

Less than \$5,000	29%
\$5,000 to \$9,999	16%
\$10,000 to \$24,999	7%
\$25,000 to \$49,999	8%
\$50,000 to \$99,999	19%
\$100,000 or more	21%



How many labor hours on average are spent on pest management during a 12-month period?

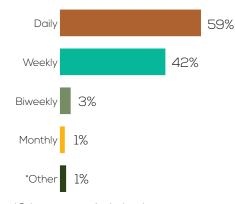




SCOUT'S HONOR

The increase in time spent managing pests is likely reflected in the fact that in 2024, more growers than in previous years said they scout for pests daily (59%) or weekly (42%). More scouting naturally demands more people, and the share of those growers with a scout team of five to 10 crew members grew by 8% compared to 2023.

How often do you scout for pests during active growing seasons? (Select all that apply.)



*Other answers include when a problem is detected.

How many crew members typically scout for pests?

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27%	1
49%	2 to 4
18%	5 to 10
5%	More than 10



CONTROL CONCERNS

In the last year, concern about the price of pest control has decreased significantly, with nearly 10% fewer growers than in 2023 citing it as an issue in 2024. Meanwhile, increased concern over labor has made it the top issue for growers surveyed, with 26% saying finding the people to tackle pest control is their biggest problem.

What is your biggest problem when it comes to pest management?





Price of pest control treatments

19%



labor to

handle pest

control

Loss of profit from pest damage to plants



Too much pest pressure



No good solutions for my pest problems

*Other answers include ensuring chemicals are safe for butterflies and beneficial insects, finding qualified scouts and chemical effectiveness.

Are you comfortable with the amount of rotation with chemical active ingredients and modes of action in your pest control program?

75% YES **45%** YES

25% NO **55%** NO

Do any of your customers have restrictions on what type of pest control products are used during production (i.e. specific chemistries, organic producers/retailers)?

State of the Market: Insect Control Report

Research

BIO BOOM

About two in three survey respondents said they use biocontrol measures, and 88% of those said they use them in conjunction with traditional methods. A third of respondents who reported not using biocontrol measures cite a need for additional education on the process.

When it comes to the type of biocontrol products used, predators are the top method, but pathogens made big strides in 2024, with 11% more growers than in 2023 saying they use them. Considering their widespread use, it makes sense that just 15% plan on implementing the method in the next 12 months.

Patrick Alan Coleman is editor of *Greenhouse Management* magazine. Contact him at **pcoleman@gie.net**

Do you use biocontrol measures?

70% YES



30% NO



Do you plan to adopt biocontrol measures in the next 12 months?

15% YES



24% NO



Base: 28

Do you use biocontrol measures exclusively or in conjunction with traditional pest control methods?

12%

EXCLUSIVELY

88%

IN CONJUNCTION

Base: 51

Which biocontrol products do you use? (Select all that apply.)

Predators	77%
Parasitoids	74%
Pathogens	51%

Base: 49



If you do not use biocontrol measures, explain why.

Need more education/ training	35%
Price	20%
Product performance is not good enough	13%
We are using biocontrol measures	42%

Base: 40