

Gypsy moth in decline?

Last year we had a number of gypsy moth larvae dead or dying from something. We have seen this happening on our clients properties, even before we had a chance to treat them. This has been an observation of local communities in our area. It looks like a disease may be killing them. Also, last year we did not see much feeding damage from the gypsy moth compared to previous years. Are they in decline? What should we expect for the 1998 season?

—NEW JERSEY

Your observation regarding larval mortality is correct. They may be dying because of the fungal or viral infection. A fungal agent called *Entomophaga maimaiga* has been found in many states including New Jersey, Delaware, Michigan, Virginia, Pennsylvania and Ohio. This fungus causes a disease on gypsy moth larvae - killing them. As a result, even 4th and 5th instar generations may be found dead on tree trunks. Diseased and sick larvae look sluggish, and when touched or poked, the cell content comes out, which reportedly causes an itching irritation when in contact with the skin.

A typical gypsy moth outbreak would last for two to four years. But in recent years, because of these natural biological control agents, as well as concentrated treatment programs using commercial *Bacillus thuringiensis* (B.t.) products and traditional and/or alternative insecticide programs, their popu-

lations are in decline. Reports from United States Department of Agriculture Forest Service indicate that the gypsy moth defoliation was the lowest on record since 1968. They also report that the defoliation has declined more than 85% from 1995 to a low of 202,472 acres scattered across 11 states. They noted that most dramatic decline occurred in Virginia - from 850,000 acres in 1995 to 0 in 1996.

Scientists also feel that the *E. maimaiga* fungus is rapidly spreading from state to state along with gypsy moth. They suggest that the increase in defoliation in newly infested areas may be because the fungus has not kept pace with the advancing front of gypsy moth.

The question always remains "speculative" as far as what to expect in 1998 and the future. Transmission of fungal pathogens to insects and subsequent population control require long periods of moist weather so gypsy moth population 'crashes' are hard to predict. In the Northeast, decline generally occurs after gypsy moth are in an area for a few years. However, gypsy moth activity may gradually move westward with time and environmental conditions may not be conducive to control by natural agents. Therefore, any efforts made to manage them should be continued with an open mind in regards to outbreaks or resistance to biological agents. Where feasible, mechanical removal and discarding of egg

mass and pupae should be maintained.

Thanks to mother nature help to keep the gypsy moth population to a level where we can maintain the remaining moths known, practical means of plant health care practices.

Ground ivy invasion

We have had a problem managing ground ivy. It creeps into lawns from adjacent areas. We have been using 3-way mixtures of 2,4-D, Dicamba and MCP. Results are variable. Is there anything else we can use to get rid of these weeds?

—WEST VIRGINIA

Ground ivy can present a serious problem if not managed properly. The plants produce new growth wherever their stems come in contact with the ground. The 3-way mixture of 2,4-D, Dicamba and MCP should work reasonably well. However, sometimes this perennial weed may be difficult to manage with a few applications. Ground ivy is considered to be 'intermediate' in susceptibility to the above herbicide mixture in some situations. That may explain why you are getting variable results.

Consider using products such as Turflon-II or Confront. Repeat applications may be necessary.

Read and follow label specifications for best results. **LM**



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