

# **BORER SURVEY REPORT, PART II**

*Betty Wood, NJ*

The many letters sent to me by our members contain a wide variety of reports of experiences, suggestions, hypotheses, and distress. I will try to extract from them information that may be interesting and useful for *Bulletin* readers.

## **Concerning the moth:**

Virginia Dolmyer in Illinois "dug up an occupied rhizome" (what a beautiful term!) "planted it in a deep glass bowl with plenty of soil, put on a ventilated lid, and waited for results. The borer went through his larval and pupate stages and emerged as a moth in September." So if you want to see the iris borer moth, follow her example.

Mildred Midjaas in Illinois points out that to rid ourselves of the borer we must find a way to break its life cycle. She destroys vegetable debris in ditches and at the edges of her property, not just in the garden, "to not give the iris moth a place to lay her eggs." This seemed to be effective. "I never, in all my years of growing, saw an iris borer in my iris beds."

Lee Eberhardt in Ohio writes, "I am of the opinion that the answer is a biological attractant and trap that lures the moths and gets rid of them before they deposit their eggs."

In Part I of this report I suggested trapping the moth in light traps, but I do not know whether the borer moth is attracted to light as many moths are.

## **Concerning borer eggs:**

By careful observation of the time of appearance of initial borer damage in leaves, Virginia Dolmyer in Illinois has concluded that the eggs hatch over a period of weeks.

Several years ago when I was cleaning up dead foliage, an iris borer moth fluttered up from a rotted rhizome. I squashed her and then found several tiny white eggs on the rhizome. They were a little smaller than the head of a pin and shaped like a round pillow, thinner in the center with radial grooves, like the illustration of iris borer eggs

in "The Gardener's Bug Book" by Cynthia Westcott, but more beautiful. Why are these not observed more often? I have looked for them carefully and not found them again.

A member from Oklahoma reports borers on first-year plants only. She feels sure that the eggs must have been on these plants when they arrived in the mail and were not destroyed by her "usual benlate and clorax soaks before planting."

### **Concerning wind:**

Kathryn Wright in Indiana has her garden in a location that is swept by wind and she thinks this may help to keep the borer population down. With no control except pinching and cutting she has only a few borers—this in an area where a number of iris growers, she says, are shifting to day lilies because of the borer problem.

### **Concerning weather:**

Several members wrote that dryness might help to discourage borers. Bee Warburton, in Massachusetts, said she had almost no borers this year, in spite of not spraying, and reported that "on account of dryness, roots had grown so long and tough that we had to get a backhoe to get out the discards."

Dorothy Yoerg in New York, however, found this was her worst year of infestation.

Mary Herd in Texas has been told that the summers there are too hot for the borer. During this exceptionally hot summer some irises were lost because they were "actually cooked" by the heat.

### **Concerning spraying and drenching:**

Virginia Dolmyer in Illinois warns that she got quite sick from inhaling Cygon 2E and recommends a protective face mask. She sprays foliage and ground with Cygon 2E solution, 2 tbsp. per gallon of water, heavily, about the 15th of April. Of course the ground has previously been cleared of weeds and debris! Subsequent sprayings, about ten days apart, with a weaker solution (1 tbsp. per gallon of water) might have to be done three or four times "if the infestation is heavy or has been heavy the previous year." She and several others recommend additional spraying after bloom season, since young borers have been found invading the leaves then.

Steve Stephenson in Virginia finds that Sevin, used "shortly after new growth starts in the spring and at 10-day intervals until bloom time, practically eliminates the borer." He also finds the borers active again after bloom time. He and a neighbor have observed that "the population of borers is greatly reduced and in some cases eliminated in beds where we have used the weed preventer Decthal."

Currier McEwen in Maine first used Cygon 2E in August of the year he discovered borers in his garden. "In September I dug some of those plants to line out for next year's sale. In the rhizomes were a number of large borers, *all dead*. I believe, therefore, as I've said in the Book, that a spray even that late is worth while." He now sprays first when the leaves are about six inches high and finds this effective.

Jim Emmenga of Nebraska uses Cygon 2E "as both a foliar and soil drench. Out of over 700 clumps of iris, I had borers in only one clump. I think I missed this clump with the spray."

Franklin and Lois Johnson in Illinois soak newly arrived irises in a mixture of "insecticide, fungicide, and a booster such as Rapid-Gro. The soil where the new plants are planted is also sprinkled quite thoroughly with this solution. So far we have never had borer damage in rhizomes that have been growing on our property less than two years."

Paul Smith in Pennsylvania uses Diazinon as the "primary spray. Then when I detect borer activity I spray with a Cygon mixture on the affected plants." A chemical engineer (who also grows irises) has advised him to use warm water in the spray mixture and, when using the mixture, to get as close to the plant as possible. "He claims it takes great pressure to penetrate or to stay on the leaves."

### **Shrubbery and neighbors:**

Several members reported worse trouble near shrubbery and near poorly cleaned neighboring gardens, especially when these contained irises. Ironically, the irises were usually the gift of the person reporting the trouble.

### **Concerning the brute force method:**

Several members reported success in catching the borer in the leaf and squashing him (or her) before it reached the rhizome. William Cassell in New York writes, "By cutting the foliage back July 1 to 4, I



force myself to look at each and every fan and, when necessary, I cut close to the ground to get the borer. He's usually about  $\frac{1}{2}$  to  $\frac{5}{8}$  inch long by that time and has not yet gotten to the root."

One is reminded of the ad that appeared in farm magazines a few decades ago for a guaranteed potato-bug killer for only five dollars. The farmer who sent his five dollars received two blocks of wood with the instructions "Place bug between blocks and squeeze until dead."

### Concerning cannibalism:

Paul Smith in Utah found two leaf tunnels with holes here and there to the outside of the leaf, but only one borer, the only one he has ever seen. Paul Smith in Pennsylvania says he has never found more than one borer per plant. William Cassell in New York says, "Like others, I too find only one borer per fan unless I find very little ones,  $\frac{1}{8}$  inch long, earlier in the season."

Lee Eberhard in Ohio has found "two or three borers in the same fan and/or rhizome."

### Concerning immune and susceptible varieties:

Lee Eberhardt in Ohio points out that "old cemetery plantings of diploids go on for years without a borer."

William Cassell in New York has a "neighbor up the street who appears to have no trouble with the old diploid kinds."

Currier McEwen in Maine had no trouble with borers for ten years. Then he moved some native *Iris versicolor* plants into his garden from a mile or two up the road. "They proved to be full of borers which gradually spread to Siberians and Japs."

Elaine Hulbert in Connecticut writes that Greenwich, where she lives, "is full of native and naturalized stands of *I. versicolor* and *I. pseudacorus*, so there is no way to eradicate the borer locally." She finds, contrary to the experience of Currier McEwen, that the "Japanese have not been affected at all, and I have many and have had for years. This may be because of lucky incidence of borer hatch and bloom dates here." She then appends to her letter a "Worst list, in addition to tall bearded" including the following: Louisianas, *I. laevigata*, *I. pseudacorus*, *I. versicolor*, *I. virginica*, *I. tectorum*, *I. wilsonii*, *I. milesii*. On the brighter side, she gives us a list of those "free of or resistant to borers," as follows: *I. cristata*, *I. siberica* and *I. sanguinea*, *I. ensata*, some cultivars of *I. versicolor*, the Pacific Coast natives, all the small-rhizome spurias, including *I. graminea*.

### Concerning garlic:

Alma Samson of Michigan was about to give up growing irises because of the borer problem when she read an article in a farm paper suggesting that garlic bulblets (which grow at the top of the garlic plant), scattered among iris plants, would prevent borers. She scatters two or three per plant, right on the surface of the ground, among plants spread 1½ feet apart. "The first year after trying this I found two borers and since then I have never found another one." She raises about 150 to 175 varieties. She has given garlic bulblets to friends in Michigan, Illinois, and Indiana and reports that "it works for everybody."

### Concerning bad news:

Lee Eberhardt in Ohio reports trouble with "a new type of borer that travels on the ground from clump to clump."

Jim Ennenga in Nebraska is having trouble with a white grub that eats roots, outer tissue, and the entire lower half of many rhizomes.

### Concerning good news:

Karen Glasgow of New Zealand, who visited me in September of 1980, reports that there are no borers in all of New Zealand. Immigrant irisarians are welcome.

## **!!ATTENTION HYBRIDIZERS!!**

### **DENVER '82**

Our convention guest beds have reached capacity.

Please do not send guest plants, of any species, after this notice.

Any and all shipments sent to the Guest Iris Chairman in 1981, will not be received or accommodated.

Your cooperation will be greatly appreciated.

*Mary Ann Cuthbert, Guest Iris Chairman*