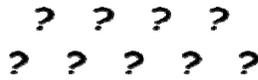


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What do you say to “What do you spray?”: “What do I need to spray for _____?” Fill in this blank with the name of one of the hundreds of insect pests we have here in Mississippi and you’ve got one of the most common questions asked at county extension offices, Co-ops, and retail nurseries. This may seem like a simple question, but the answer is rarely as simple as “Oh, just spray them with _____, and that will take care of them.” Information is the key to answering this question properly, and this information needs to move two ways. First you need to get a lot more information from the client, and then you probably need to provide them with a lot more information than just the name of an insecticide.

The first piece of information you need is the proper identification of the pest. I know the client just told you what pest they are concerned about, but there is a good chance this identification is not correct. In my experience as an extension entomologist, this happens roughly half the time. Clients think they have a termite infestation when they really have ants, or they think they have ants when they really have termites. The “mites on the azaleas” are probably lace bugs, and the “stink bugs on the tomatoes” may be leaf-footed bugs instead. Sometimes, the problem is not due to insects at all. The “chinch bugs in my St Augustine lawn” may actually be brown patch or take-all disease. The “bugs that bite me when I try to go to sleep at night” may be some type of dermatological or other medical problem. Sometimes it is the other way around—what the client thinks is some non-insect problem is actually due to insects. The “downy mildew on the bottoms of my shrub leaves” may well be scale insects, and the “blight on the crape myrtles” is probably sooty mold caused by aphids. The “wilt disease that’s killing my squash” is probably either squash bugs or squash vine borer, and the “disease problem on the lantanas” is almost surely lantana lace bug injury. The “rabbits eating my tomato transplants” may actually be rabbits, but it could also be cutworms. Proper pest identification is critical. Do not provide any treatment recommendations until you are sure of the pest identification.

Even when you are sure of the pest identification you still need a lot more information before you are ready to provide treatment recommendations. In short, you need to have a clear picture of the specific situation, and this can require asking a lot of questions. Is this inside the house or outside; is this on an ornamental plant or an edible food crop; is this in a commercial crop or a home garden; how many plants are involved; are there children in the area; do you garden organically or conventionally; how experienced are you at handling insecticides; what products do you already have on hand? These are just a few of the general questions you may need to answer, and then there are usually more specific questions for specific pest problems. If you are addressing a flea problem, you need to know if the client has pets. If so, are the pets allowed inside? If so, do they also go outside? Does the house have a crawl space? The bottom line is that you need to be sure you understand the problem as well as possible before trying to suggest a solution for that problem.

The question was “What do I spray,” but the question you really need to answer is “What do I do?” This is because, depending on the particular pest situation, there are often many things other than spraying an insecticide one can do to manage insect pests. Insecticides may well be part of the solution, and in some cases spraying with an insecticide is the best immediate solution, but insecticides are rarely a complete long-term solution to any insect problem. In some cases, insecticides may not even be needed at all. Making clients aware of non-insecticidal methods of insect control is as or more important than recommending an effective insecticide. Non-insecticidal methods of insect control are discussed in more detail in the publications, *Integrated Pest Management in the Home Landscape* and the *Organic Vegetable IPM Guide* that are listed below.

When you do recommend an insecticide, it is important to not only tell the client what to spray, but to also tell them how to spray, when to spray, what results to expect, and to provide other useful information. For example, if you recommend that a client spray their ornamental evergreen shrubs with a product containing spinosad to control bagworms, they also need to know to spray in late spring to early summer while the caterpillars are actively feeding. Spraying in late September, when the insects are in the inactive pupal or egg stage, will not give any control. If some of those evergreen shrubs are fairly large, the client might also need to know how to apply insecticides using a tree and shrub hose-end sprayer. If you recommend that a client drench their azaleas with one of the imidacloprid products to control lace bugs, they also need to know it can take several weeks to see results and that a \$20 quart of product will only treat about three, three-foot tall plants, or two, five-foot tall plants.

When a client asks you “What do I spray,” they are really asking for your help in solving or preventing an insect problem. Don’t fall into the trap of just telling them the name of an insecticide and letting it go at that. Of course, every pest problem is different. Some require a lot of detailed information, and no one can keep all this information in their head for every pest problem. Even if you can tell the client what they need to know, they may not be able to remember it all once they get home. One of the best ways to provide clients with the information they need about how to prevent or solve a particular insect problem is to provide them with written reference material, or at least direct them to an on-line source.

The publications listed below can help answer most of the more common questions about insect pests in Mississippi homes, lawns, landscapes, and vegetable gardens. They provide insecticide recommendations and information on non-insecticidal insect management tools, as well as information on how and when to spray for particular pests. These are all current MSU extension publications that are available as hard copies from local county extension offices. They are also available on-line by going to www.msucare.com, clicking on “Publications” and doing a search for the title (Just a few of the key words in the title is all you really need.). Some of these publications are fairly large, so you may not want to print the whole thing, but it is easy to just print the relevant pages and give to the client.

Publication 2483, Integrated Pest Management in the Home Landscape
Publication 2036, Organic Vegetable IPM Guide
Publication 2568, Protect Your House from Termites
Publication 2443, Control Household Insect Pests
Publication 2347, Insect Pests of the Home Vegetable Garden
Publication 2429, Control Fire Ants in Your Yard
Publication 2331, Control of Insect Pests in and around the Home Lawn
Publication 2472, Insect Pests of Roses

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This information is for educational and preliminary planning purposes only. Brand names mentioned in this publication are used as examples only. No endorsement of these products is intended. Other appropriately labeled products containing similar active ingredients should provide similar levels of control. Always read and follow the insecticide label.

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