Every year I learn new facts and control techniques for insect pests. Some come from refereed, scientific journals, others from forwarded e-mails.

Insect pest management is a complex science in which thousands of our brightest and most accomplished laboratory and field scientists spend their entire careers. For example, in one area of public health pest management - mosquito control - hundreds of millions of dollars are spent each year to work on new and better ways to control mosquitoes in an effort to reduce the over one million fatalities due to malaria transmitting mosquitoes each year. It is an impressive effort and it has been going on for years in nearly every country of the world.

What continues to amaze me is that each year people send me ridiculously simple solutions, often citing these as being a cure-all, for pandemic and perennial insect pest problems and ask that I pass them along.

For example, I just received a notification, not a question, but a notification, that the use of Listerine, sprinkled on the deck and around the yard, would instantly kill mosquitoes. This particular piece of ‘science’ is as follows:

"I was at a deck party awhile back, and the bugs were having a ball biting everyone. A man at the party sprayed the lawn and deck floor with Listerine, and the little demons disappeared. The next year I filled a 4-ounce spray bottle and used it around my seat whenever I saw mosquitoes. And voila! That worked as well. It worked at a picnic where we sprayed the area around the food table, the children's swing area, and the standing water nearby. During the summer I don’t leave home without it.

I tried this on my deck and around all of my doors. It works - in fact, it killed them instantly. I bought my bottle from Target and it cost me $1.89. It really doesn’t take much, and it is a big bottle, too; so it is not as expensive to use as the can of Bug-spray you buy that doesn’t last 30 minutes. So, try this, please. It will last a couple of days. Don’t spray directly on a wood door (like your front door), but spray around the frame. Spray around the window frames, and even inside the dog house. Pass it on."

The sarcastic side of me wants to jump for joy at this news. “This is so fantastic! It will be such a relief to the hundreds of professional scientists who have spent their entire careers working on a control for mosquitoes. And here it was, the whole time, on the shelf of every retail store in America - - Listerine! ........ And a friend tried it and it worked!. Talk about validation. Wow! I know that the millions dying every year due to malaria and other mosquito-borne diseases will also find this interesting!!! And good for the dog house too? This is truly incredible!”
The logical side of me, however, says, "Maybe this IS too good to be true. If it WAS true, the folks at Listerine would have developed a label to put on their product and would be making a zillion dollars off of this new discovery. Certainly good news for Listerine employees, bad breath, and mosquito bite sufferers world-wide. Bad news for hungry mosquitoes, those currently with jobs at the world health organization and other mosquito control scientists."

The reality is that there will probably always be home-spun remedies for the control of insects and other pests. While we will never say that there is no merit in them, they will seldom be as good as their billing.

This much we do know. Eating garlic, installing electronic ultrasonic gadgets, performing voodoo, planting special shrubs, putting sheets of fabric softener in your pockets, and sprinkling various concoctions from the refrigerator or the medicine cabinet around the yard are not viable solutions for mosquito problems, despite what your e-mail says.

Other popular mosquito control methods also have dubious impact on keeping mosquitoes in check. According to Wayne J. Crans, Associate Research Professor in Entomology at Rutgers University, the following often-touted mosquito solutions are not worth the time or money spent on them.

**Bug zappers.** Though the satisfying sizzle you hear from this modern day insect torture device will convince you it's working, don't expect much relief from backyard mosquitoes. According to Crans, biting insects (including mosquitoes) generally make up less than 1% of the bugs zapped in these popular devices. Many beneficial insects, on the other hand, do get electrocuted.

**Citrosa plants.** While citronella oil does have proven mosquito-repellent properties, the genetically-modified plants sold for this purpose do not. In tests by researchers, the test subjects were bitten as often while surrounded by the Citrosa plants as without them. In fact, mosquitoes were observed landing on the leaves of Citrosa plants during the study.

**Bats and/or purple martins.** While both bats and the colonial purple martins will consume mosquitoes, the offending insects make up a small percentage of their natural diet. Assertions about these insectivores being effective mosquito controls grew out of misrepresented and misinterpreted data from unrelated studies. While providing habitat for bats and purple martins has its value, don't do it if only to reduce your mosquito populations.

**Ultransonic devices.** Electronic devices that transmit sounds to mimic male mosquitoes or dragonflies do not work. Crans goes so far as to suggest "the claims made by distributors border on fraud."

Enough said. Pass it on!