

## Kicking the Chemicals

by Jack Shoultz

It's going on 8 years since my wife and I made the decision to change our way of growing roses. Before then we used everything anyone told us worked in his or her garden. We sprayed with all the old tried and true fungicides and pesticides then tried all the new stuff that was up-and-coming. Our feeding regiment consisted of six or eight bags of high-energy chemicals. We used high nitrogen for a good kick-off in the spring. We then used a balanced N-P-K for other times and a high phosphorous for 2 weeks before a rose show. In between, we used a whole bunch of other things.

We didn't really think about what we were doing other than reading the directions on all these containers and listening to speakers who talked about how to use the chemicals properly. Our spraying attire included the facemask, boots, gloves, long sleeved shirt, hat, etc. We at least complied with the full gear necessary for some sort of safety in spraying, but it sure wasn't my favorite thing to do.

For a long time we thought this is how everyone grew roses. Looking back we think it's because the nonchemical group is much less vocal and are more content to let everyone garden his or her own way. While visiting other people's gardens I would always ask what they used for mildew, which was our worst enemy. I was surprised when someone would say they didn't spray and their garden looked great. This brought about a curiosity if it could really be done. That is, could we grow good roses and actually show them without all the chemicals? So we started investigating as to what people could use in place of chemicals and we started reading anything we could find on organic gardening.

As I read more and more, it seemed to bring back memories of what I saw as a kid growing up on a farm in Missouri. I remember when the fields were sprayed with pesticides because of the grasshoppers, corn bores, etc. Back in those days, DDT was the chemical of choice. I remember my dad's cousin did this spraying for several years as a second job (he was a farmer too). At first he wore the mask and all the proper attire but as time went on, the less important and more trouble it was to take these precautions. About 15 years later, while in his 40s, he was diagnosed with cancer and died a quick and painful death. The doctors were positive the cause of his type of cancer was his high exposure to DDT.

I also seem to remember that when something became less effective, the resolution was to make the spray more lethal by increasing the concentration. I'm glad to say that is not the case now. Dad used this chemical for a couple of years then changed to a new type of pesticide called "inoculants." This was a chemical put in the soil that came up through the roots of the plants. But he was aware of what this did to the soil and every 2 years we grew a green crop [cover crop] and plowed it under to revitalize the soil.

This "inoculant" sounds like the precursor of our now popular systemic fertilizers that put pesticides and fungicides in the soil. How can we revitalize what they destroy as they go down through the soil? It is harder to try a new way but if you take the initiative to think your way through less chemical use, the more satisfaction and less worry you will encounter.

To help make the decision, here is a list of reasons why you should try to avoid chemicals

- 1) Health - Less illness associated with chemical use (i.e. cancer and neurological disease, which are on the increase).
- 2) The Earth - What do chemicals do in the soil and air? Where do they end up?
- 3) Family and Friends - Future generations will appreciate it.
- 4) Less Stress, More Fun - Less stress by not worrying about the consequences of what you are doing in your garden and more fun when you find an organic remedy that works.

Chemical use has been around for many years but many of the original chemicals are not. Most of them have been banned or are just not useful anymore. This could be because after continued use the malady that it was intended for has developed a resistance. If that happens, then there may not be a resolution except to see what Mother Nature can accomplish on her own.

Another reason for chemicals disappearing is that they are found to cause health or environmental problems. Dursban (chlorpyrifos) and diazinon, two organophosphate pesticides that are broad spectrum neurotoxins, are being banned. Birds have died from just one granule of diazinon, and it has been found in the air, rain, and fog. It is also a major source of drinking water contamination. Even with all that the government is allowing the manufacturer to continue providing the product until June 2003 and sell it until the year 2004.

A report out of Stanford University reveals that 70 percent of all people who have Parkinson's disease have had exposure to pesticides. Miracle Gro brand fertilizer has been banned in 10 states due to underground water contamination. The list continues to grow. Household pesticides and chemicals are often blamed as the cause of many maladies but those used outside are the same chemicals, just different applications or concentrations.

I am continually learning more and more about what is okay to use and what isn't. Until 2 years ago, I thought Miracle Gro was okay and we used it many times. But now we found new and more natural methods. It is more of a challenge for us to find the right methods of feeding and trying to keep our plants disease and pest free.

It is common knowledge that healthy plants can combat most problems. Healthy plants need healthy soil for the best results. If your soil is healthy then the plant can more efficiently take in the nutrients needed for strong production. One of the best things you can do is composting. This can be very rewarding as you are not only sending less natural material to the landfills, but you are also enriching your own soil with no cost except a little time and effort.

It is not easier to grow roses without chemicals; in fact I think you need to become more aware of what is going on in your garden on a daily basis. Keeping your roses clean will go a long way in preventing disease and pests from getting a foothold in your garden. This is the balance that most of us are trying to achieve. The results are so much more rewarding knowing that what you are doing and how you do it are not adversely affecting the people around you. We are continuing to try new ideas as well as many of the old remedies to find out what works better in our garden.

With the continued push for more organic products, it seems the larger companies are starting to listen. When you buy products for your garden, ask for natural products, read the ingredients and warning labels. The more we push for safe products, the faster they will become available, the less pricey they will be, and the more widespread their use will become, thus eliminating more chemical usage.