

'Organic' Doesn't Always Mean 'Safe'

Tip of the Week from Paul Tukey, *People, Places & Plants*

If you've been reading our magazine or watching our television show for long, you know we're on the organic bandwagon. Most days, when you watch all the TV ads for all of Scotts' synthetic fertilizers and pesticides, it feels as if we're pulling the organic wagon ourselves. That company, which changed its name to Scotts Miracle-Gro in March, reportedly spends more than \$100,000 million on advertising each year to convince us its products are safe and good for the garden.

We could begin a whole diatribe about synthetic versus organic in the garden. We could debate safety claims made by a whole range of manufacturers of synthetic garden products. And we could re-state our firmly held belief that, by and large, organic products are safer and better for the garden, for your family and for the planet.

Everyone once in a while, though, I'm reminded to step off the bandwagon for a clarification: "organic" doesn't *always mean* "safe."

In its basic definition, organic is defined as being derived from natural sources. Synthetic products like Miracle-Gro, on the other hand, are created in a laboratory setting. In the case of many organic fertilizers, they break down and release nutrients slowly and naturally. Synthetic fertilizers tend to give plants quick bursts of nutrients and then quickly leach their residues into the soil and groundwater. These excess nutrients are responsible for ruining lakes, ponds, streams and rivers □\ and the reason why communities like Marblehead, Mass., and the entire province of Quebec have put significant restrictions on synthetic lawn and garden products.

The real safety issues, however, come in the discussion of pesticides. You might assume that because a pesticide is organic, it's safe, or at least safer than a synthetic pesticide. I'm referring to products such as insecticidal soaps, Bt (*Bacillus thuringiensis*), pyrethrum (from African mums), and rotenone (derived from the pea family). These four active ingredients are listed in a full range of organic pesticides.

All of these ingredients can be dangerous, should only be used with caution and only when absolutely necessary. Rotenone, in particular, is highly toxic and even Bt will bring words of Warning on product labels. Pyrethrum, a widely used organic chemical, will kill everything from asparagus beetles to wasps, but it's also a nerve toxin that is especially toxic to young children.

Mind you, I'm not suddenly reversing the field and saying organics are bad in the garden. I'm saying that when it comes to pesticides, organic or synthetic, you need to be careful. You should try to avoid pesticides altogether by keeping your soil healthy, using row covers when insects are at their worst, and taking time to learn about other alternatives. A product from Gardens Alive known as Surround at Home, for example, is made from natural kaolin clay. When sprayed on plants, it will keep aphids and Japanese beetles from munching away, but it won't harm you or the environment one bit.

In the end, the biggest part of "going organic" is to understand that the switch is not a product-for-product swap. Our parents were conditioned to reach for the Raid when a single insect appeared and our generation has begun to understand that we need to live in better harmony with nature. If our plants are somehow failing, we all desperately want a quick fix in the form of a spray bottle or can. It would be better, though, if we took the arrival of insects as indicators that something was not quite right with our soil, our watering, or the amount of light hitting the plant. It would be great if we could all diagnose our plant problems and never reach for a pesticide, either synthetic or organic.

Until that day comes, however, please use caution with whatever products you choose.

© Paul Tukey, April 28, 2005.