## **Synthetic Lawn Chemicals**

By Greg Sykes (greg@grsykes.com)

Autumn is approaching and that means we prepare our yards for the winter. Hopefully, you've saved yard clippings and leaf mulch since most plants grow beautifully with natural, low-cost materials. Yard preparation may include fertilizing your lawn—there's truth in the saying, "Fertilize in the fall, if at all." If you absolutely must apply any sort of synthetic chemicals to your yard, please be sure to either avoid application onto streets and sidewalks or clean up these spills; any unabsorbed chemical simply wastes your money. If you have gone throughout the year mulching grass clippings into your yard, chances are your lawn is already in great shape without a chemical supplement!

Synthetic lawn chemicals also wash directly into the watershed and pollute our drinking water, let alone the effects on wildlife. Even domesticated animals walking on treated sidewalks can suffer chemical burns. If it's bad for pets and wildlife, what do you think it's doing to you and your children playing on it? Some of the chemicals are hormone analogs, which means they can induce biochemical reactions in our bodies. Like our bodies have keys to unlock biochemical pathways, these analogs pick the locks and alter normal biological processes. That is one of the ways exposure to certain chemicals may promote cancer.

OK, so lawn chemicals aren't hurting you now. Acute symptoms usually develop after a high-level exposure. Can anyone tell us about the chronic effects? After years of work, we can see the chronic effects of Agent Orange on people and EPA recalling formerly "safe" chemicals such as chlordane. Do you honestly see a need to play Russian roulette with the latest chemical concoction?

Sometimes the active ingredient is perfectly safe for humans, but the "inert" substances are what's bad for you. These inert ingredients may be surfactants, stabilizers, emulsifiers, and other "functional" substances, but not the chemical directly acting on the target organism. Since these compounds, such as formaldehyde, are not "active ingredients," they are absent from the label. If you really want to know what's in the fertilizers, herbicides, and pesticides, file an inquiry under the Freedom of Information Act.

Personally, I'm happy to deal with a botanically diverse lawn or one that is less than chartreuse and be free of chemical worries. Of course, you are still free to lawfully use chemicals as stated on the label. Should you choose the latter alternative, kindly be good, responsible neighbor and restrict these chemicals to only your property instead of public areas.

## Further reading:

http://www.niehs.nih.gov/oc/factsheets/cancer-environment.pdf

http://www.fairfaxcounty.gov/dpwes/watersheds/whatis.htm

http://www.refusetousechemlawn.org/health effects

http://www.ars.usda.gov/research/programs/programs.htm?np code=201&docid=340&page=3

\* \* \* \* \*