



## Yard & Garden Chemicals – Organic & Inorganic

So you think you want to learn all there is to know about yard & garden chemicals? How much time do you have? This handout is to give you some basic information and guidelines about using both inorganic and organic products. By inorganic we mean manmade chemical applications, typically petroleum based. By organic we mean natural products that come from naturally occurring compounds. An informed gardener is a smart gardener and we strongly suggest learning about any product you are thinking about using and understanding both what it works best on and how it works.

The best way to avoid overusing any applications is to avoid problems in the first place. Using mulch can cut down on weeds. Pulling weeds by hand before they go to seed can cut down weed problems. Keeping moisture levels consistent can help avoid fungal problems. Using drip irrigation rather than overhead sprinklers on some plants can help keep fungus at bay. Cleaning up fallen fruit and leaf debris under fruit trees and shrubs can keep pests from happily overwintering in comfort. Avoiding overcrowding plants and good pruning practices can help decrease stress that pest cue in on to attack plants. Right plant, right place means less stress on plants too.

No matter which kind of application you use there are some basic guidelines for all these kinds of applications.

1. Identify what you are treating and use the best application for it. Try to understand how the product you want to use works. Applications for the most part work one of two ways. *Systemic* which means they are absorbed by the plant or pest and the chemical works on it at the cellular level. Think of this as you taking an aspirin for pain. *Topical or contact* which means the product affects the plant or pest by interfering with its survival, often by coating it with oil of one kind or another. Think of this as applying a lotion for a rash.
2. Always read and follow the label directions. More is not better and can be quite harmful. You can find measuring cups with ounce measures in most kitchen supply aisles.
3. Use caution with all products, even if they are organic or natural. Wash your hands after use, wash clothes separately from other laundry. With inorganic applications wear a mask or other protective gear if indicated on the label.
4. Check the weather before using applications. Rain within 24 hours can be a problem. Wind can be a problem. Cold snaps can cause trouble. Bright sunlight can be a problem. Calm, dry, early mornings are good.
5. Store and dispose of applications properly. Keep liquid products where they do not freeze in winter. Use the county hazardous waste collection days to dispose of containers. Triple rinse containers before disposing of them in your own trash.
6. Write the dilution rate on the container in permanent marker. This tip saves you looking for glasses every time. While you are at it write the year of purchase too. Products over 5 years old should be replaced.
7. Don't use one sprayer for everything. Use one for killing plants and one for treating plants at the very least. Periodically clean the sprayer out completely. Small sprayers are good for pest and disease treatments. Hose end sprayers are great for weed killer applications.

Feel free to bring samples of plant problems to the Plant Land experts for help with diagnosing and treatment.