ORGANIC WEED CONTROL, the definitive guide



safe

effective

save money

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ORGANIC WEED CONTROL



The beautiful field pictured above is all Organic. No chemical herbicides are used and it wins awards. Yes, it can be done.

Organic weed control works; it's easier, less expensive, more effective, saves water and is safer than chemicals.

So why do we so often resort to chemicals? The answer is effective marketing from the companies that produce chemical herbicides. Look at this picture.



Note the little clover. A large chemical herbicide company says that 'Clover grows to deliberately disrespect us'. 'You can't let that happen!!!' Their answer is for us to poison our whole lawn with their product. How ridiculous. Clover is a pretty little plant

that provides free nitrogen and improves our soil. Our grandparents used to deliberately sow their lawns with clover to enhance them.

We can have beautiful lawn and gardens and not have to resort to dangerous chemicals. This booklet will explain how *and* by following Natural Law we come out way ahead.

All plants are beneficial in their own way. Our job as sustainable managers is to learn what they are telling us. Weeds are no different. Weeds give us important information about our lawns and gardens. They grow best when the right conditions exist that favor their growth. This is the same for all life forms. If we change the environment (soil) that *doesn't* favor weed growth then our problems go way down. More on that later, let's get some basics out of the way.

- Chemical herbicides and chemical fertilizers promote weed growth.
- All chemical herbicides are poisons that hurt all plants, even the ones they are supposed to protect.
- All chemical herbicides are poisonous to humans and pets. Remember if you can smell it, the chemical is entering your body.
- When weeds are present they are telling you 'how to correct the soil'.





In Organics we view all life (including weeds, pest insects and disease) as indicators that tell us valuable information about our environment. A problem is the symptom of something deeper.

Organic weed control starts with biology and natural

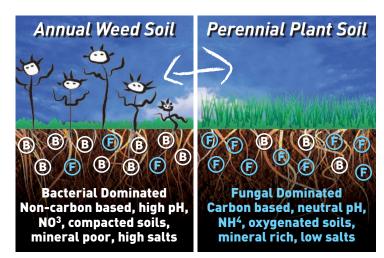
law. Mother Nature in her infinite wisdom grows plants to fit the soil. She never wants her 'skin' bare. Think soil erosion. When you have a lot of weeds you have 'weedy soil'. Weedy soils are primitive soils and the plants that grow best there are what we call weeds.

From an environmental perspective, we understand that weeds are part of natural soil → plant succession. Weeds have very important purposes. In poor soils only what we call weeds will grow well and they are the only plants that hold the soil together thus preventing erosion. While they are holding the soil together the weeds are busy making the soil better by mining hard to reach minerals, adding carbon, increasing microbial life and improving soil structure. When left alone for a few thousand years the soils improve to the point where the perennial grasses, ornamentals and trees move in and the weeds move out. Natural law at work.

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An abundance of weeds tell you that you have primitive soil with these characteristics:



Applying chemical fertilizers and herbicides cause the soil to go 'weedy'. Here's why:

- Weedy soils are low in minerals. Note most chemical fertilizers have only 3 5 minerals. Plants want at least 52.
- Weedy soils are low in oxygen. Chemical fertilizers and herbicides are salts that will cause soil compaction which reduces oxygen.
- Weedy soils are high in pH. The chemical approach pushes high (alkaline) pH.
- Weedy soils are low in carbon. Chemical management reduces carbon.
- Weedy soils are bacterial dominated rather than fungal dominated. The chemical approach pushes soils bacterial.

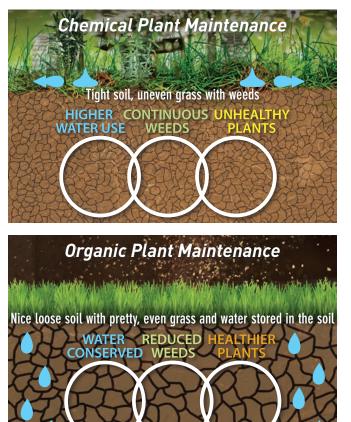
Plants need both bacteria and fungi. But the simpler the plant (annual weed) the more simple (bacterial) it wants the soil life. A more fungal soil naturally selects a higher order group of plants like perennial grasses, flowers, vegetables, shrubs and trees. See chart next page.



Plant & Microbe Succession Image: Descent relation of the second second

Bacteria -----> Fungi

With chemicals we get connected circles of problems but with Organics we get connected circles of solutions.



The Organic weed control program starts here

Change the soil to grow favorable plants and not weeds. This will be far and away the least expensive, most effective and longest lasting. Do chemicals ever solve the problem for long? Don't the weeds always come back?

The goal is to shift the soil from poor and primitive to healthy and more complex. The easiest way to do this is with quality Organic fertilizers, quality Humates and Compost.

With this program you will create and maintain soils that are high in organic matter (carbon), have good oxygen flow, are rich with beneficial microorganisms with an emphasis on fungi, soils low in salts and high in minerals.

When this happens say goodbye to most of your weed problems and hello to healthier soils, healthier plants and safer environments.

This is your Organic Weed and Feed. You'll provide proper nutrition to your plants and have less weeds.

Quality Granular Organic Fertilizer Per label rates, 2 – 3 times a year as budget and time permits. Start anytime and allow 3 months between applications.

Quality Granular Humates

Per label rates, 1 – 2 times a year as budget and time permits. Can be applied the same day as the Organic fertilizer.

Option → Quality Fungal Dominated Compost 1 time a year Quality compost can substitute for 1 Organic fertilization and 1 Humates application.

Note – this does not happen overnight. It is generally the next weed season when you see significant results for weed reduction. But the other benefits of a healthier and safer landscape you will enjoy right away.

In the beginning and as the Organic program continues the following are acceptable practices for safe weed control:

- Mowing Do not let your 'weed' plant get to seed head. Just one crabgrass plant can produce 150,000 seeds during one season. At the same time we want to mow our lawns high for a couple of reasons; one to shade out weed seeds and two, help the plants to develop deep roots.
- 2) Hand pulling yes there will be this and it's hugely effective. We know of very large grounds maintenance operations where this is standard. The key is consistency and diligence.





- 3) Water and drainage most annual weeds like low oxygenated soils so too much water and poor drainage will cause many weeds to grow. Another good feature of Organics is that as we improve our soils we will need less water.
- 4) AgraLawn Cinnamon Weed Killer very effective for small areas but not practical for large areas. Kills annual broadleaf and grassy weeds yet safe for turf areas. It works super quick – complete kill in 6 – 8 hours. It is not effective when day time temperatures are below 75.



Cinnamon Based Selective Herbicide

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5) Mulch – Quality is paramount. We like aged native hardwood the best, 2" – 3" depth all over the bed. When you use aged mulch it will not rob nutrients from the plants, will suppress weeds, conserve water and as it breaks down will provide nutrition for the plants and soils. There are no labeling laws for mulch, compost or soil so anybody can say anything



about their soil products and if you buy poor quality products you'll get nothing but troubles.

6) Vinegar – The Organic 'Round Up'. It will burn all plants so be careful. Be sure to use the 20% vinegar and do not dilute. Vinegar does not kill the weed like Round Up but doesn't have the safety problems either. Vinegar works by burning the foliage. Quite often it shocks the plant so bad that it doesn't grow back. But sometimes the weed will



re-surge so a 2nd or 3rd application is needed. The younger the weeds the more complete kill you get.

- 7) Corn Gluten An Organic pre-emergent; meaning it will prevent weed seeds from germinating and will provide nitrogen to your plants. It does have limitations which is why we don't see a lot of it used. The limitations are the expense, short active window (2 months) and being able to find it in the crumb state (easier spreading) rather than meal form. A lot of people confuse Corn Gluten with Corn Meal. They are different products and Corn Meal is mainly used as an Organic fungicide.
- 8) Torch Guns All men love these and they work exceedingly well. We like the Red Dragon which produces 500,000 btu's of flame. The stronger the gun the faster your job goes.



9) Salt – Salt, used since Roman times, to kill plants is very effective in the right situations and one application will last for years. It is very toxic to all plants which is why we hate the high salt chemical fertilizers so prevalently used in agriculture and horticultural. But salt used in the right situation like cracks,



fence line, gravel parking areas, etc is a much better strategy than chemical herbicides.

10) Acceptance – If the appearance of any weed freaks you or your client out then poisons and not Organics are for you. The belief that we need to constantly poison our landscapes to get rid of all the weeds is crazy. <u>Please see related article,</u> www.microlifefertilizer.com/



the-biggest-con-game-in-the-lawn-and-garden-world/. Besides when has chemical herbicides ever solved the problem? Don't the weeds always come back?

IN THE END IT IS ABOUT VALUE. WHAT STRATEGY IS CHEAPER, MORE EFFECTIVE, LONGER LASTING AND SAFER? ORGANICS CLEARLY RULE.









Mike Serant owns MicroLife All Organic Biological Fertilizers, www.microlifefertilizers.com. Since 1988 he has been making the world's best plant and soil nutrition. Mike has been a leading Organic educator to professionals and homeowners for 26 years.



PLEASE VISIT OUR WEB SITE FOR LOTS OF GREAT ORGANIC **INFORMATION**

- Photos of MicroLife in action
- 'How to go Organic' Manual
- 'Plant Our Home' Planting **Specification Booklet**
- MicroLife Fertilization Schedule

MicroLife All Organic Biological Fertilizers

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