

Forrest Hill Organic Community Garden

Organic Gardening Standards

Our philosophy

Gardening organically is a commitment to health, a respectful relationship to the earth, and a love for the many facets of gardens and gardening. For us, being organic is sticking to a simple philosophy: keeping our gardens and our gardeners healthy.

Keeping the gardens healthy means that we work in natural ways to improve soil structure and nutrients; we recycle the gardens' organic matter back into the earth; and we promote a healthy ecosystem where birds, insects, plants, microorganisms, and people all reach a natural balance that is beneficial for all.

Natural methods to keep the garden healthy include composting, companion planting, crop rotation, mulching, raised beds, solarizing, double-digging, cover cropping, using green manures, carefully selecting crop species, weeding, and being flexible. Importantly, keeping the garden healthy also means that we don't use synthetic chemicals. Synthetic chemicals are found in fertilizers, pesticides, and herbicides.

Fertilizers

We want the land to receive only natural, or organic, fertilizers. This completes a natural cycle of growth and decay—nutrients stay within the garden. Chemical fertilizers like Miracle Gro might seem good at first, but organic growers have learned that after time, these fertilizers can ruin the soil structure, kill microorganisms, and produce unnatural chemical levels in the soil. Growers end up having to dump more and more chemical fertilizers on depleted soil that can't hold onto the nutrients, resulting in high fertilizer costs and a very unhealthy ecosystem with excess fertilizer running off into the groundwater and onto other plots.

The best fertilizer money can buy is made in our gardens. Organic compost is truly a revitalizing and magical gardening mixture. It provides nitrogen, phosphorus, and potassium, as well as other nutrients (calcium, magnesium, sulfur, and micronutrients). Furthermore, composting aerates soil, breaks up clay, binds together sand, improves drainage, prevents erosion, neutralizes toxins, holds precious moisture, releases essential nutrients, and feeds the microbiotic life of the soil. No chemical or additive comes close to providing so many benefits.

Forrest Hill Organic Community Garden has the soils in our gardens tested annually. The results show that the soil is very healthy—they contain amounts of potassium and phosphorus that will produce healthy plants. Nitrogen is water soluble and it should be added each year, preferably through compost or cover-cropping and green manures. With such great soil to start with, all of our growers can save lots of money by simply composting and using this rich supplement to get their plants producing wonderful produce.

Below is a list of organic fertilizers that we **allow** and **do not allow** in our gardens.

For Nitrogen:

Best Practice	Meets Organic Standards	Does Not Meet Organic Standards ⁺
Compost from the garden	Purchased Organic Compost	Sewage sludge
"Green manures" *	Herbivore manure **	Carnivore manure, any manure with antibiotics
Kelp or seaweed (liquid and powder)	Blood and Bone Meal ☼	All ammonia-derived sources
Alfalfa meal	Hoof and horn meal ☼	All chemically-synthesized sources
	Fish Emulsion	Chilean nitrate (16-0-0)

⁺ Not allowed, not considered organic.

* Green manure = a type of cover crop grown to add nutrients and organic matter to the soil. It can also be used as a living mulch to protect and improve soil conditions.

**Manure from herbivores (not carnivores) is often considered a good source of organic matter for your garden beds, but raw manure needs time to cure or age. This curing process best takes place in compost where it needs to reach high temperatures to kill pathogens and weed seeds. Organic, aged manure is available in bags for purchase at many nurseries and plant stores. If getting raw manure from animals that are not yours, it is important to be aware of their diet and living conditions before accepting, then aging it in a hot compost pile for at least 6 months before application. If you have questions about using manure, please talk to FHOCG staff.

☼ Blood and blood meal are slaughterhouse by-products. When you buy any animal product, whether manure, blood, bone, or hoof & horn meal, read the package carefully and ask the supplier if the animals were raised under organic conditions. Even this does not guarantee problem-free products; some people believe that blood and bone meal may pose a health danger if not applied properly; make sure to apply at the time and in the amounts recommended. The application of bone meal requires the use of an appropriate respirator.

* Depending on where you live and the history of your land, your soil type and conditions will vary. It is a good idea to have a soil test done in order to determine your soil type and any nutrient deficiencies.

For Phosphorous:

Best Practice	Meets Organic Standards	Does Not Meet Organic Standards ⁺
Rock phosphate	Bone meal ☼	Acidulated phosphates (superphosphate)
Soft phosphate (colloidal)	Soap phosphate	All synthetic sources (DAP, MAP, etc.)
	Fish emulsion	Fish emulsion with added phosphate

⁺ Not allowed; not considered organic.

☼ see above.

For Potassium*:

Best Practice	Meets Organic Standards	Does Not Meet Organic Standards+
Wood ashes (check labels)		Chilean nitrate of potash (15-0-14)
Granite or feldspar dust		Muriate of potash, KCl (0-0-60)
Green sand		All synthetic sources
		Charcoal ashes (from a BBQ or stove, etc.)
		Cigarette ashes

* Depending on where you live and the history of your land, your soil type and conditions will vary. It is a good idea to have a soil test done in order to determine your soil type and any nutrient deficiencies.

+ Not allowed; not considered organic.

Pesticides

We believe that a healthy garden takes care of its own pests. Our organic gardens do not typically have the same pest problems that chemical farms and gardens do because we rotate crops, we build up soil microorganisms and natural predators, we plant companion crops, and the garden takes care of the rest. In extreme cases, there are other organic methods of pest control, which include using biodegradable soap solution on plant foliage, attracting natural predators, handpicking larger pests, and planting a “friendly zone” for pests. Using genetically modified crops that are resistant to pests or pesticides is not an organic option. There are plenty of naturally resistant crops available.

An organic garden creates a healthy ecosystem which is the habitat for all kinds of plants, animals, and insects (including pests). The organic garden reaches a state of equilibrium where pests usually do not pose a significant threat to produce. Conventional (Chemical) farms, where herbicides and pesticides reduce the ecosystem to a fragile state and where only one crop is being grown, are much more susceptible to pest infestation. Studies show that robust and healthy plants have far fewer pest problems than stressed ones. Just as a healthy person who eats nutritiously is less susceptible to disease, healthy plants are less likely to develop disease and be plagued by pests. Pests are a symptom, not a cause. They plague a plant when something else, namely poor growing conditions, is present.

The first line of pest control for the organic grower should be a careful evaluation and maximization of the soil and nutrients for a plant. Good compost and loose, rich soil are often the best solutions for pests, and they can be accomplished before the plant is even grown! Make sure that your plants receive enough water and sunlight, you choose plants that grow well in this part of the world, you grow two or more crops together, and you rotate your crops. All of these prevent insect problems.

Should you jump to pest controls when you see some nibbling on your leaves? Not necessarily. Often when leaves are eaten by insects, the produce itself may still be good (some studies show a yield increase of 30% when insects eat a percentage of leaves). Also, remember that organic gardening is about establishing a healthy ecosystem. Planting an extra 5-10% of area for your crops is one way to counteract the natural give-and-take. Compared to the damage done to large farms that grow only one crop, you'd still be 20% ahead!

We do not want anything that does not meet organic standards to be used in our gardens.

It is a good idea to speak with a community garden council member before applying any pest controls to make sure you've got the right concentrations (sprays), the right habitat (beneficial insects), or the right plan (companion plants, handpicking, row covers).

Below are pest controls that may be used when there are still problems despite trying the methods listed above.

Best Practice	Meets Organic Standards	Does Not Meet Organic Standards ⁺
Beneficial insects*	♣ Neem	Bendiocarb, Bug B Gon, Captan, Consan
Hand-picking (esp. at night for snails)	♣ Pyrethrins	Cygon, Detergent, Diazinon, Dursban
☺ Spraying with garlic, onion, oil, & pepper sprays	▲ Rotenone	Insectagon, Kelthane, Lindane, Malathion
☺ Biodegradable soap [†] solutions(not detergent)	■ Nicotine	Permethrin, Pest Meal, Sevin
Traps (beer, pheromone, sticky, water, food)	▲ Sabadilla	Slug and Snail Bait, Thiodan,
Row covers	Iron phosphate, diatomaceous earth (for slugs and snails)	
Companion plants [☼]		

⁺ Not allowed; not organic.

*These include ladybugs, praying mantids, trichogramma wasps, lacewings, tachinid flies, syrphid flies, and BT (*Bacillus thuringiensis*), but don't forget about encouraging bird habitat as well as homes for toads, snakes, and spiders.

☼ Companion planting is the planting of different crops in close proximity for the purpose of assisting in nutrient uptake, pest control, pollination, or other factors to increase crop productivity. Common companion plants include marigolds, nasturtiums, borage, basil, mint, yarrow, garlic, onions.

Check here for a more complete companion plant chart for vegetables.

[†] An example of a biodegradable soap is Dr. Bronner's®; you can look on the labels of other soaps to see if they are biodegradable as well.

▲ "Even though botanical pesticides-such as rotenone, ryania, and sabadilla-come from plants, they're very toxic, they kill pests and beneficials alike and are poisonous for you too-so we won't recommend their use.

♣ Two other botanicals, pyrethrins (from pyrethrum daisies) and neem (from a subtropical tree) are less toxic and can be useful in some cases where there are few other options. Nowadays, however, organic gardeners have so many other methods and low-toxicity products available that using even these two pesticides is rarely necessary", quote taken from *Insect, Disease & Weed I.D. Guide* published by Rodale.

■ Don't use nicotine solution on tomatoes, eggplants, or peppers because tobacco chemicals can kill these plants. Keep the spray away from [animals](#) and children. Not recommended.

☺ Homemade spray recipes are available. Please ask a garden council member.

Herbicides

As for weed control, the use of herbicides is not part of a philosophy that keeps a garden healthy. Weed control methods used in our gardens include primarily mulching to suppress weed growth (which also helps conserve water), hand weeding and hoeing. An example of mulching is the application of 2 layers of newsprint covered with straw, grass clippings, leaves, etc. Please do not use Preen 'n Green, Roundup, Weed-B-Gon, or ANY other herbicide in our gardens.