



How To Master Organic Gardening

EVERYTHING YOU NEED TO KNOW
ABOUT ORGANIC GARDENING, FROM
COMPOSTING TO VEGETABLE GARDENS

GoOrganicGardening.com

PREVIEW VERSION

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Introduction

Why would you want to master organic gardening? The reasons are many. Organic gardening is a more sustainable way of gardening. It is better for the environment. And, it is actually more fun. When you use organic gardening methods, you will attract more birds and butterflies to your yard. In the long run, you will spend less money and time maintaining your lawn and garden. You can have peace of mind that your guests, children or pets can run around in your yard without fear of being poisoned by pesticides.

The best part about organic gardening is that it is relatively easy. Once you learn the information in this ebook and put it into practice, you will have mastered organic gardening. That will leave you more time to actually enjoy your garden, rather than spending all of your time working in it.

Let's begin!

Part One

Understanding Organic Gardening



Chapter One

What is Organic Gardening?

Technically, organic gardening is just like every other type of gardening—except that it doesn't use synthetically produced fertilizers, pesticides, herbicides, or mulch. Any inputs for the garden are derived from natural sources.

Organic gardening is, actually, more of a mindset than a strict code of rules. Organic gardening starts with the premise “feed the soil, not the plant.” Organic gardeners strive to garden in ways that are environmentally sustainable, take advantage of symbiotic relationships between plants, animals, insects, and fungi.

Organic Gardening: The General Approach

Most of those who engage in “organic gardening” do so because they are environmentally conscious, but many also do it because they enjoy the challenge of setting up a dynamic garden, where various living inputs interact on a daily basis. This is in a stark contrast to normal gardening techniques, which rely on killing many of the living inputs used in organic gardening—and instead using commercial, synthetic substitutes.

Organic gardening can probably best be characterized by the use of fungus, bacteria, wood chippings, natural compost, chemical-free mulch, manures, and protein feeds. Organic gardening also places emphasis on acquiring inputs locally—that is, either in the contiguous property area or within the town or region (depending how on strictly the gardener in question adheres to the concept). These sustainable gardening practices can provide an interesting challenge to those who wish to reduce environmental impact of lawn and garden care.

What Organic Gardening is NOT

A lot of people think that the term “organic” means “safe.” Those two terms do not mean the same thing. Neither does the terms “organic gardening” and “sustainable gardening.” There are elements of organic gardening that are sustainable, or more sustainable than conventional gardening techniques. There are elements of organic gardening that are safer than conventional gardening techniques.

This book explains how to apply organic gardening techniques for any type of lawn or garden. It is not a substitute for reading the label and using care any time you purchase or use a garden input like soil, compost, a pesticide, herbicide or fungicide. You always want to use

care. Even though many organic substances are better for the environment, you should still use care when working with anything besides plain, old, room-temperature water!

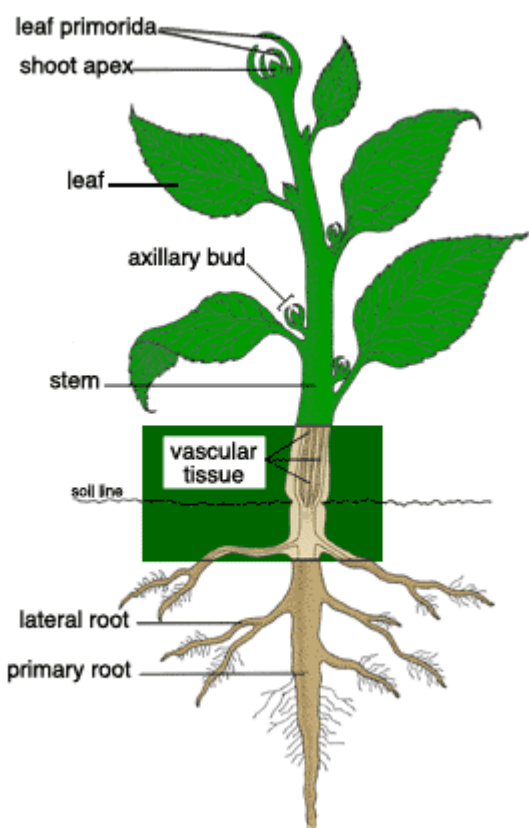
Organic gardening is also not officially sanctioned by any governing body. Commercial agriculture is regulated by government bureaus, and in order to receive a coveted “organic” badge on products, commercial operations have to be inspected and follow strict rules. Nobody officially designates whether home gardeners are organic or not.

Instead of getting hung up on minutiae, we recommend following as many practices in this book as possible, and you will achieve the spirit of organic gardening - **growing plants in harmony with the environment around you.**

Chapter Two

All about Plants

In order to properly care for your plants, you need to know about the parts of the plant and the plant life cycle. This knowledge will help you give your plants the best possible care. Because organic gardening is about more than just fixing a problem by purchasing a “miracle fix,” a basic knowledge of plants will make you a much more successful organic gardener.



Plant Parts Glossary

Root - The collective term for all of the (typically) below-ground parts of the plant.

Primary Roots - Largest roots of the plants. They serve as storage units for some plants, like potatoes. Plants that have large primary roots and few lateral roots are said to have a “taproot.” Dandelions have taproots, which is why they are so hard to uproot.

Vegetables that are actually taproots are carrots, beets, parsnips and turnips.

Lateral Roots - Medium sized roots that lead

from the root hairs to the primary roots. They are primarily conductors of fluids within the plants.

Root Hairs - Root hairs are where the real work of the roots is done. The root hairs soak up water and nutrients that are then transported to the lateral and primary roots. The root hairs are microscopic and easily disrupted. Their disruption can interfere with plant growth because the plant cannot take up the water and nutrients it needs. The root hairs also help establish the water tension between the top of the leaves that are evaporating water and the bottom of the plant that is taking up water. This is called “capillary action.”

Shoot - the collective term for all above ground parts of the plant.

Stem - The structural support system and primary vertical water and sugar conducting part of the plant. The cells that move water and sugar up and down through the plants are called “vascular bundles.”

Leaf - The leaf is where photosynthesis to produce food occurs. The photosynthesis takes place in molecules called “chloroplasts” that absorb light.

Flower - The flower is the reproductive part of the plant. From the flower develops the seeds and, when applicable, the fruit.

Fruit - A fruit is the composition of material that contains all of the plant seeds. Tomatoes are fruits, as are acorns. Ears of corn are actually the fruit of the corn plant because they are derived from the reproductive part of the corn plant, the flowers (tassels).

Axillary Bud - These buds sprout from the intersection of the leaf with the stem. Sometimes, you will want to pinch off these buds so that the main plant grows larger.

Apical Meristem - The very top of the shoot where the plant grows. The apical meristem releases plant hormones that keep lateral buds from sprouting. If you want a more full, bushy plant, you will need to pinch off the apical meristem.

Crown - This is the area of the plant where the root meets the shoot. Generally, the crown is just above the soil line.

Petiole - The “leaf stem.” This is the part of the leaf that connects to the plant stem. The petiole carries water, nutrients and gas (carbon dioxide and oxygen) to and from the leaf.

Parts of the Plant: Food Plants



Knowing which part of the plant you are eating, and therefore harvesting, will help you harvest your organic vegetable garden.

Roots

These vegetables are roots or modified roots: potatoes, carrots, turnips, radishes, parsnips

Stems

These foods that you grow are the stems of the plant: rhubarb, ginger root, asparagus



Leaves

These foods that you grow are the leaves of the plant: spinach, swiss chard, lettuce, cabbage, kale, basil, sage, parsley, celery (The leaf stalk, or petiole is what makes up the “celery sticks” we eat.), onions, leeks

Flowers

These foods that you grow are actually the flowers of the plant: broccoli, cauliflower, artichoke



Fruits

These foods that you grow are the fruits of the plant: peppers, tomatoes, zucchini, summer squash, winter squash, corn, eggplant, cucumbers, melons, beans, strawberry, raspberry, blueberry



Parts of Flowers

The flowers are the reproductive part of the plant. It is important to know the parts of a flower so that you can successfully grow your annuals, perennials, vegetables or herbs.

If you want to save seeds from your plants, you will need to grow certain varieties in opposite corners of the garden because they can cross pollinate.

Flowering plants are divided into two groups - dicots and monocots. This refers to the number of leaves within the seed, and seed leaves are called cotyledons. So, dicots have two seed leaves on the plant embryos within the seeds and monocots have one seed leaf. The flower parts are similar, but occur in different multiples, as shown in the diagram above.

MONOCOTS

1 Cotyledon (seed leaf)
cotyledon



Parallel-veined leaves

Primary vascular bundles scattered



Pollen monosulcate



Root system adventitious



Floral parts in 3's
Fewer than 10% of species are woody

DICOTS

2 cotyledons



Net-veined leaves

Primary vascular bundles in a ring



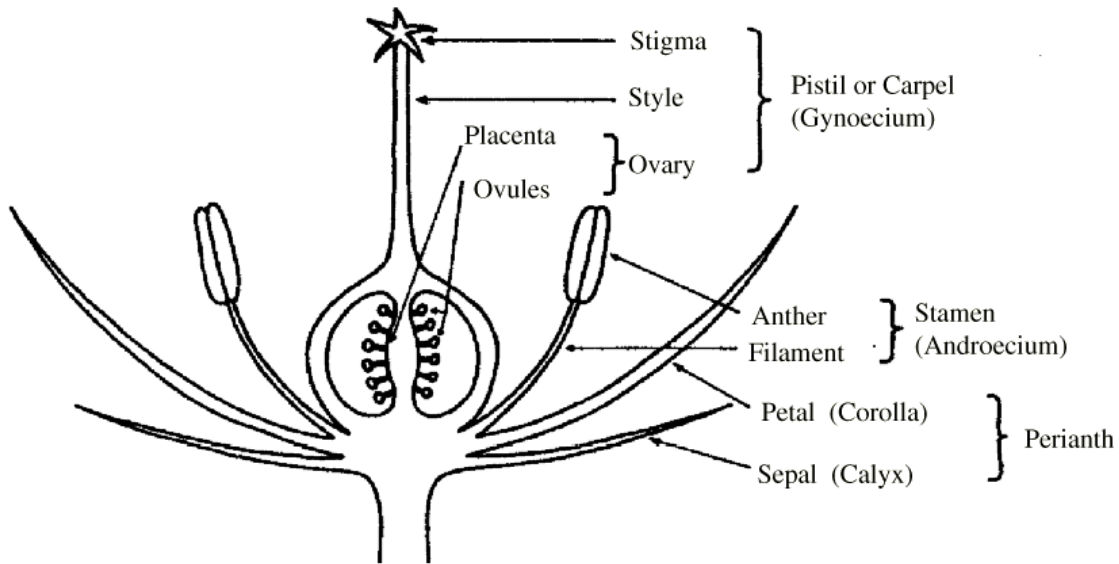
Pollen mostly tricolpate



Root system primary and adventitious



Floral parts in 4's or 5's
About 50% of species are woody

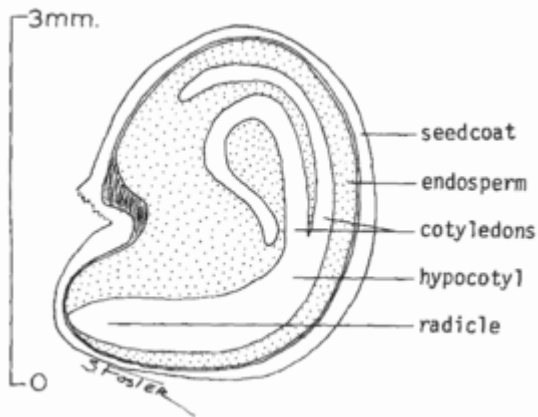


Above, is a diagram of the parts of a flower. You can see that the ovary of the flower, when cut up and down, looks a lot like a tomato that has been cut from top to bottom, longitudinally.

During pollination, wind, animals or water transfers pollen from one plant to the stigma of another plant, causing fertilization and reproduction. So-called “open pollinated” varieties will self-sustain without intervention, and are often preferred by organic gardeners who are interested in seed saving and preserving heirloom varieties. Hybrids result from the crossing of two very distinct varieties. The resulting seeds have what is called “hybrid vigor,” meaning that they are uniform and robust, but you cannot get the same plants the next year if you save the seeds from the fruits of the plants that grow as a result of the hybrid seeds.

You may notice, if you read the news, that there is quite a backlash going on against Monsanto. That is because they are producing both genetically modified and hybrid seeds that cannot be saved, or self-perpetuated. These plants sometimes contaminate plants in nearby fields, making it more and more difficult to grow and perpetuate open pollinated varieties.

Parts of Seeds

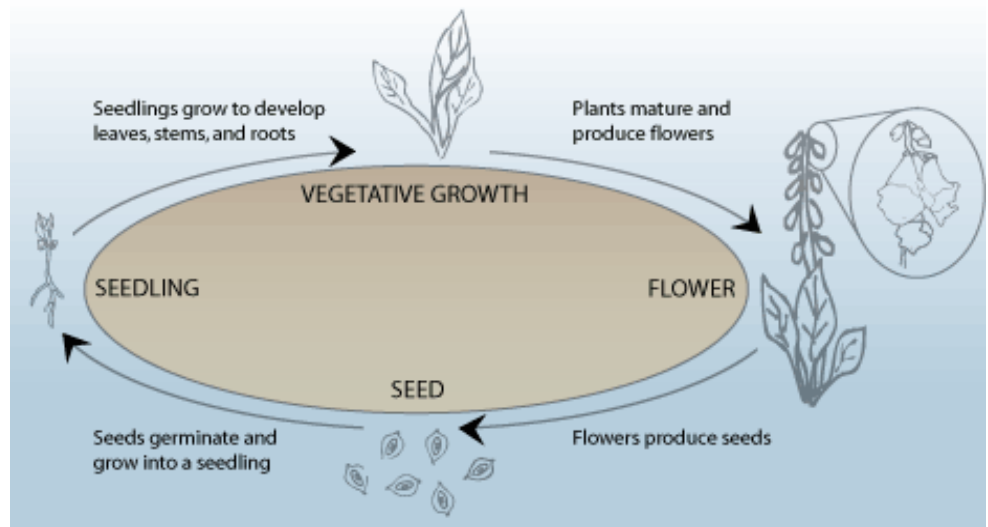


In addition to the parts of the flower, it is useful to know the parts of a seed and understand how the seed works.

A seed has a baby plant inside it. That is the embryo. Seeds also have food stored inside them.

When seeds are kept at optimum temperature and humidity conditions, they can last for years. The protective outer layer of the seed is called the seed coat. When a seed is given conditions favorable for growing, usually involving water, the embryo will begin growing, burst through the seed coat and begin setting down roots and pushing up a shoot.

The radicle is the first part of the plant to emerge from the seed, and eventually becomes the root. The cotyledons are the first, embryonic, leaves.



Plant Life Cycle

Basically, a seed sprouts and produces a plant that flowers and produces seeds, which then sprout. The cycle continues. Annual plants complete this entire life cycle within one season. Biennials take two years to complete their life cycle.

A seed will sprout, the plant will grow leaves and store energy. Then, it will undergo a period of dormancy. After the period of dormancy, the plant will re-sprout, flower and produce seeds.

Many vegetable plants like carrots, radishes, turnips and other root crops are biennials. If you want to grow and harvest seed from these plants, you need to dig up the roots and save them, replanting them next year to allow them to flower and produce seeds.

Perennials are almost a combination of annuals and biennials. Perennial plants can sprout, flower and produce seeds in one year, but at the same time they are doing that, they are also storing energy to survive a dormant period to be able to re-sprout again.

Understanding the parts of a plant and the plant life cycle will help you become a better organic gardener. You will know how to talk about specific parts of a plant that might have a problem, and how to correctly interpret information that can help you solve the problem. You will also be able to give your plants better care, which will result in more flowers, bigger vegetables and fewer overall pest and disease problems.

To purchase this ebook in its entirety, please go to:

<http://www.goorganicgardening.com/ebook/getitnow.php>

Thank you very much! If you have any questions, feel free to email me at
chris@goorganicgardening.com

Yours,
Chris Molnar
Editor, Goorganicgardening.com

P.S. The last page has a list of great gardening books Katie and myself have read and put into practice over the years, and consider them to be the best books on organic gardening you can find anywhere!

Recommended Reading

This list of books is not comprehensive, but each of these books gives you a big bang for your buck, and will help you further refine your organic gardening methods.

[The Gardener's A-Z Guide to Growing Organic Food](#)

[The Rodale Book of Composting: Easy Methods for Every Gardener](#)

[Rodale's Vegetable Garden Problem Solver](#)

[Secrets to Great Soil](#)

[Carrots Love Tomatoes](#)

[Botany for Gardeners, Revised Edition](#)

[The New Self-Sufficient Gardener](#)

[The Truth about Organic Gardening](#)

[The Truth about Garden Remedies](#)

[Seed to Seed](#)

[The Gardener's Bug Book](#)

[The Gardener's Guide to Plant Diseases](#)

[Attracting Birds, Butterflies and Other Winged Wonders to your Yard](#)

[Teeming with Microbes](#)

[Square Foot Gardening](#)

[Organic Lawn Care Manual](#)

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