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Organic Vegetable Gardening A Growers Guide

By the Invisible Gardener



Planting a home organic vegetable garden

Your Own Organic Vegetable Garden

The vegetable garden is a very important link between us and the earth. As our garden grows we grow. When we grow our own food we know exactly what has been used to grow this food. We know that the fruit, the vegetables, the herbs that we grow are rich and full of nutrients necessary for our health. Our backyards can provide us with good homegrown food. Growing your own food is a very important aspect of maintaining a healthy mind and body.



Learn from your Past
Organic Vegetable
Gardens

Dont Panic Its Organic! Kill as last resort!

Even more important is growing our own food organically without the use of chemicals that pollute ourselves and our environment. If our home grown food is to have good nutritional value it must be grown in healthy live soil. The fact is, to succeed growing organically, healthy soil is a necessity.

Steps to Creating your Garden Paradise

RAISED BEDS OR NOT. THE DECISION TO HAVE A RAISED BED OR TO GROW IN THE GROUND DEPENDS UPON:

- condition of the soil
- amount of space you have to work with

- amount of time you have available to use
- amount of water you have available to use
- amount of money you want to spend.

A FEW POINTS ABOUT RAISED BEDS:

1. Raised beds allow you to grow from 4 to 7 times more food in the same area then in the same ground.
2. Raised beds allow you greater control over watering costs, pests (from gophers to ants) and crops (especially extending harvest periods).
3. Raised beds allow you greater control of the soil being used. Raised Beds are easy to make and you can recycle (reuse) various materials in making the beds.

Organic Growing is fun and safe



You can use rocks, wood (untreated, unpainted of course), tree logs, bricks. You can use bottles to make the sides of your raised beds. Stick upside down in ground. You can use clay on the inside to mold and hold them together or you can use sand and pack it in or use rope to tie them together. The idea has a lot of potential for reusing glass around the home. Untreated Redwood makes good wood for raised beds. A good size for a raised bed is 10 ft long by 5 ft wide by 12 inches tall with 2 in thick wood. This size is big enough to feed a family of 4. Pine, fir and almost any rather strong wood is all right as long as it is untreated. Never use Rail Road ties that have been treated. This is very bad for your health as well as being bad for the garden (it kills the soil). If you decide not to use a raised bed then you must prepare the area first. I will go over these thing in next pages.

Basic Rules of Organic Gardening

1. Do what you do best. Gardening must come naturally to you.
2. Nutrition Vs Stress. Always provide proper nutrition
3. Compost...make lots of good rich compost
4. Control Stress and you control the pests
5. The Greater the diversity the greater the balance.

6. Learn your vegetables. When you plant will depend on where you live.

Location: Choosing a location for your raised bed is very important and I will cover more later. The location needs to be close to the kitchen to provide easy access for the cook or wife to get at. The location must provide at least 6 to 8 hrs direct sun, with the more the better. Must have proper drainage. So take a walk around your place and see if you can pick the perfect spot. Another consideration is water, it must have a close source.

Garden Filter: Never use city water in your raised bed. Many cities have chlorine (or ?) in their city water. Chlorine kills bacteria, that is what it does best. However an organic garden requires natural bacteria to function correctly. A garden filter or water transformer will help keep your garden alive! You will notice an increase in worms and in the gardens overall health.

Putting together the Raised Bed

A good raised bed should be at least 4 ft x 10 ft x 12 inches high with 2 inch thick wood. Use non treated wood. The wood can be screwed together for easy break down when needed. If you have gophers in your area, you will want to screen the bottom with extra heavy chicken wire. The size of the bed depends on the area and amount of space you have to use. An ideal situation is

to have two or more raised beds. One 4 ft x 12 ft x 12 inches high can produce enough food for a family of four. More beds allow you to rotate the beds and allow one bed to grow green cover that can be turned over.

Filling in the Raised Bed: The following should fit just right into the raised bed. You will have to use what you find in your area.

Start out with a good layer of old horse manure. To this I add either Llama pellets or Rabbit pellets (nature's time released fertilizer). Add 20 lbs of rock dust or any other trace mineral source. Add 20 lbs bone meal, 20 lbs alfalfa meal and 2 bales aged wood. Mix well. Water well (water slowly to allow soil to absorb). To this mixture add 500 lbs compost (if you have it) other wise add enough old horse manure to fill up to 4 inches from the top. Add another 2 bale aged wood or KRA wood product or any light soil. Add another 20 lbs rock dust, 20 lbs bone meal, 20 lbs alfalfa meal. The aged wood will insure the PH will be at the right place. A good PH for the garden is 6.5 to 6.8. Blend everything in together, watering as you go. Finally add enough acid mulch to fill the raised bed up to the top. Remember that this soil will settle after a few days, so keep a few bags of mulch handy to fill to top when needed.

COMPOSTING

The Secret to Growing Organically is Compost. Making good compost is a special art that we all must learn if we are to become Master Organic Gardeners.

Green Composting: 30% of our landfill materials come from this area of our wastes. Grass clippings, leaves, etc. make great additions to our composting system. A shredder will help to speed up the composting process.

Kitchen Composting: It pays to be able to save all of your kitchen wastes. A small container would be useful to have in the kitchen area for this purpose. Make sure it has a lid. We compost all of our kitchen wastes and recycled paper wastes as well as the wood from the matches we use, etc., any thing that will compost is saved. Learning to make compost is a great way to take something that is being thrown away and turns it into food for the soil, for the plants, and food for us.. This is recycling at its best! Make sure that you empty the container every day. I suggest that you can compost the kitchen wastes by layering into your compost. You can also bury the kitchen wastes into your garden allowing the worms a meal. Adding some rock dust to kitchen waste will help reduce smells and fly's, and will also increase microbial activity.

“Raised beds allow you to grow from 4 to 7 times more food then in the same area of flat ground.”

MULCH

Mulching is a very important part of the organic garden. It is an excellent way of recycling. It is always best to compost your mulch before using. Never mulch around plants with freshly cut mulch from trees or grass clippings. This will burn the plants.

What is the difference between mulch and compost?

Compost is the food and mulch protects the food from the elements like rain and the sun that will dry it. Mulch will hold water and not allow the soil/compost to dry. A good mulch is made from aged wood. This is wood that has been recycled from cut trees and composted organically. Often companies add urea to their compost believing that the compost needs this “chemical” nitrogen. So ask before you buy! Urea based products are very detrimental to the soils organisms and should not be used. Instead horse manure can be added. Rock dust will also work well here as rock dust will bind the nutrition together.

THE DRIP SYSTEM

A good drip system is important. A soaker hose will work very well here. The soaker hose can be buried about 2 to 4 inches from the top and can be moved as needed. Remember where the hose is to avoid damaging when planting. A battery timer will help to control the water and is easy to operate.

Place a garden filter between the hose and the timer. Your garden will love this extra touch.

BUY EARTHWORMS FOR YOUR GARDEN

Earthworms will love your raised bed. Give them a head start by buying African red wigglers that are the best kind for this use.

Earthworms will love your raised bed.



“Allow the many creatures of your garden to come together and sing their songs. Promote balance both within yourself and within your garden. Make the garden a place of life and not death.

May your garden flourish and may you flourish!”

MIXING FLOWERS AND HERBS

It is a good idea to plant flowers and herbs along with your vegetables for best insect protection. Try 50% flowers and herbs along with your vegetable garden.

PROTECTION

A raised bed can be protected from extreme heat and cold by placing over it a sheet of plastic nailed down to the wooden sides. This will also help to allow new seedlings to grow and become established. Feeding. Use only natural certified organic fertilizers for best results. Chemicals will only destroy the balance of your garden. Allow time for this balance to occur.



A NOTE:

One of my favorite things to do is to grow my own food. I really enjoy the whole process from starting a garden to deciding what to plant, what variety, where it goes in the garden and how to deal with all the various problems that may occur during a vegetable plant's life time. Someone told me the other day that you will have bugs and you will need chemicals to control them! I replied that while it is true that my garden will have bugs, it is not true that I will need chemicals to control them! What he was saying is that he did not know of any way to control them without using the chemicals. It has been my experience that if you believe in something it will happen and if you do not believe you will find a way not to make it so.

I have been fortunate in that unlike many people who started chemically then switched to Organics, I was never into chemicals and have always been organic in my approach to growing my food, my lawn, my flowers, etc. It is for this reason that my experience has shown me that it can be done 100% organically and that any problems are only waiting for the proper organic solution. It is even more important to grow your food organically since it is something that you must eat to be nourished by it. Chemicals have no place in our vegetable garden! Do not listen to the experts that tell you otherwise. Listen instead to your heart. What does it tell you? Do you poison your food as well as your mind?

Insects have a purpose in this world as do all things. Understand the purpose and you understand life! Who gave us the right to decide who lives or dies? Bugs are not pests but merely bugs living out their lives according to their genetic make up. They must do what they must do. Only we humans have a choice. Let us choose to live in peace with all things. Remember, Kill only as a last resort!



Organic Vegetable Gardening Guide

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Planting a home organic vegetable garden

Why Plan?

Planting a organic garden involves more than putting organic seeds in the ground and hoping for an organic garden. It also involves selecting a location and everything that goes with that, such as preparing the seed bed (what type of seed bed: raised or greenhouse in trays), selecting seeds (always buy organic heirloom so order catalogs : see resources at end of article) and what to grow (make a wish list so



Learn from your Past Organic Vegetable Gardens

Dont Panic Its Organic! Growing your own is fun!

you know what to order), and deciding when to plant what and where it will go in the garden.

Will you sow seeds directly into the beds or will you start them in a green house or tray and then if you do plant directly will you thin or will you try your hand at transplanting*not easy)?

A good garden plan will save time, save you space, save your back and save your money as well as make it fun instead of work!

Gardening with vegetables and fruit is fun and provides delicious and highly nutritious fresh food source. Becoming an organic gardener can add a new dimension of enjoyment to life and bring an awareness of the wonderful world of gardening.

The path to a successful organic vegetable garden is not difficult nor a long one but an exciting healthful life long on going experience!

[Learn from others.](#)

Begin to plan your next garden by learning from your past gardens or if you have never garden before, join a organic gardening club and learn from other organic gardeners. What varieties did you like well or not at all?

Would you like to extend the harvest season to as long as possible or increase the amount of your food grown? Would several small staggered

Organic Growing is fun and safe

Garden Check List



Use this guide to help you grow organically

Steps to a Successful Organic Home Garden

- Use mulches to conserve moisture, control weeds, reduces over head water which causes diseases and attracts pests in plants.
- Keep plants free of insects and diseases by paying attention to problems as they occur and by practicing the available organic methods of control.
- Examine your vegetable plants regularly for potential problems.
- Keep weeds out of your garden by pulling.
- Encourage Beneficials
- Avoid excessive nitrogen.
- Sample soil and have it tested regularly.

Location Location Location

"Selecting a good location is a very key ingredient to having a healthy organic garden."

Select a good location

The Invisible Gardener

plantings thruout the year be desirable (remember how you grew too many lettuce at one time last year?).

Did you try something new last year that you want to include again this year? Is there something new that you want to try this year?



Make a Wish List to help you decide what to grow.

Choose an area with plenty of morning sunlight and some afternoon shade. Most vegetables, especially fruiting types, do best with six to eight hours of full sun exposure.

Leafy and root vegetables will tolerate partial but need bright shade. Don't plant vegetable gardens under or near trees, large shrubs or under fruit trees as tree roots rob fertility, water and especially light from vegetables. Don't plant vegetables in the narrow

I love to Garden!



Andy Lopez Invisible Gardener

shaded space between houses and walls unless it gets full sun and good workable soil. A loose, fertile, well-drained soil is best. If possible, avoid heavy clays or very sandy soils.

An organic potting soil mix, self prepared or purchased, can be used in raised beds or in containers (pots, tubs, boxes, etc). Where the space is limited, container gardening is the way to go.

The ideal organic garden soil is a min of 16 inches to 3 feet), fertile, well-drained and medium-textured. Such soils are usually

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dark colored like compost. Fine-textured, clay soils are difficult to work and frequently form clods as it dries. Very sandy soils do not retain moisture or nutrients well either and organic matter and rock dust applications should be added.

Poorly drained soils will be the most difficult to plant, low in nutrients, high in acidity and encourages plant diseases!

Amend the soil well with compost and rock dust for minerals.



Cultivate
Healthy Soil

"Gardens should be easy to get to" Invisible Gardener

Full sunlight of 8 hours or more, produces the most productive organic gardens. Six to eight hours of daily sunlight is the minimum for good production. Trees and hedges should be avoided, as they not only reduce sunlight but also compete with vegetables for water and nutrients.

Gardens near the house are more accessible and easier to take care of too and to protect. There are generally fewer wild animals near the house and water for irrigation will be easily available. It may be necessary to fence dogs, farm animals and to teach children about the garden. Frequent harvests are also easier and more fun when gardens are near the house or

the kitchen. Consider just a small garden near the kitchen just for frequently needed herbs and other cooking stuff.

Lastly, garden sites should correspond in size to the amount of garden produce needed. Intensive cultivation techniques can only partially make up for a small site. Therefore try to grow what you plan on eating.

Preparation

The Soil Test

A soil test is the only accurate method of determining how much organic fertilizer or rock dust to apply to your organic gardens. If too little organic

organicdatabank.info

Garden Check List



Follow these easy tips to having a bountiful organic garden.

Garden Guide...

- Avoid excessive nitrogen.
- Sample soil and have it tested yearly.
- Apply only certified organic fertilizer to your garden.
- Thin when plants are small to avoid over crowding or plant ust what you need.

Make a Wish List

Grow only what you want to eat....

fertilizer or compost is applied, plants will be starved and the yield of vegetables will be reduced. Too much organic fertilizer will waste both organic fertilizer and money, as plants will be unable to fully utilize it. Too much organic fertilizer can also injure or kill plants just as too much of a chemical fertilizer will burn your plants.

A soil test is a relatively inexpensive way of determining how much, if any, organics is required and

obtaining a certified organic fertilizer recommendation at the same time will help you in your organic garden.

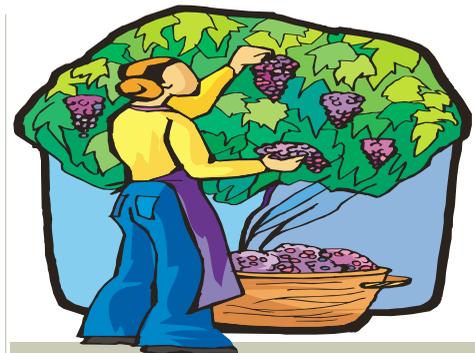
Prep the soil....

Before planting any vegetables, prepare the soil way in advance as you want the soil to settle down before you plant

especially if planting seed. This includes cultivating properly, adding organic matter, and maintaining soil fertility thru proper organic fertilization. Learn to use Rock Dust.

Early in the fall is the best time to begin preparing the soil. Soil

provides nutrients and water for plants. To maintain and improve soil conditions, mix organic matter and organic



You can even grow grapes

fertilizers into the soil before planting, and prepare and cultivate the soil when dry or slightly moist (never when wet). Add Rock dust to increase minerals. Coffee Grinds are good to add. Earthworm castings are excellent to add here too.

Organic matter makes the soil loose (friable) and easy to work. It improves nutrient and water-holding capacity, increases drainage and aeration. Well composted manure, compost, and leaf mulch are commonly used organic materials. Composted animal manure is easy to use and



Garden Check List



Garden Guide

- Avoid excessive walking and working in the garden when the foliage and soil are wet.
- Wash and clean sprayer well after each use with a natural citrus.
- Avoid plantings in wrong time of year.
- Buy only Heirloom seeds

Prepare and care for the soil properly

is relatively free of weed seeds. Apply a layer of organic matter 3 to 4 inches thick on the garden area about 1 to 2 weeks before planting.

Mix rock dust with this material first. Work it into the top 10-12 inches of soil. A good organic fertilizer should be added containing both nitrogen and phosphorus and be applied before planting. These nutrients will benefit most garden crops.

Although soils vary in fertility, a typical organic fertilizer application would be 1 to 2 lbs. (1 to 2 cups) of

13-13-13 per 100 ft. spread evenly over the soil. All these materials should be plowed, roto-tilled or spaded into the top 10 to 12 inches of soil before planting.



In preparing the seedbed, do not work the soil when it is too wet or too dry. If too wet, wait for it to dry sufficiently so it crumbles in your hands. If too dry at a small amount of water to wet down.

Level the area by raking and patting down.

Top dress planted area with a three inch layer of



Grow it

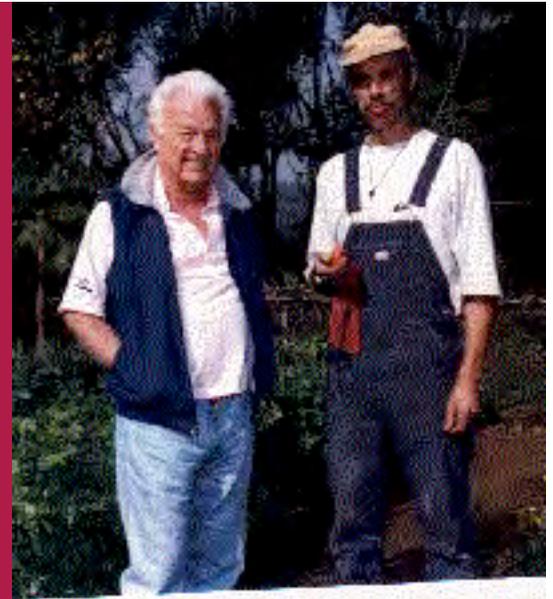
organic mulch after seedlings emerge or after transplanting.

When growing vegetables in close quarters or where good soil is not available, an organic potting soil mix can be used. If the soil doesn't drain well consider using raised beds filled with garden soil and organic potting soil mix, which has coarse sand, perlite or vermiculite.

During the growing season organic fertilizers may be needed. Applying bands of organic fertilizer is called "side-dressing." Apply to the side of

We know how to make our planet into a Garden of Eden. It is time we do it. Here is a fool. I recommend we all use it. Each one of us should have our own Green Acres.

Eddie ALBERT



Eddie Albert and Andy Lopez

the plants a small amount as needed. Alternatively, spread organic fertilizer on the soil surface about 4 inches from the plant and water it in.

However, too much fertilizer too close to the plant may injure plant roots. Examples of side-dressing timing are: tomatoes—after the first clusters of tomatoes form; sweet corn—when plants are “knee high” and tassel; cucumbers, melons and squash. Watermelons really like side dressing. Basically, I like to feed



Gardening is a very healthy way to stay active

Eat Locally **Invisible Gardener**

regularly thru out the growing season. I use foliar applications as well as side dressings of compost and organic fertilizers. If space is limited, it might be better to plant vegetables such as summer squash, peppers and tomatoes rather than corn (corn really needs lots of space). All of these bear large amounts of fruit over an extended harvest period in a small area so plant a few spaced a few weeks apart. Herbs are easy to grow too so decide what you want to use.

Consider also your skills about using organic gardening when dealing with some vegetables, such as okra, radishes, beets, carrots, etc, will nearly always produce a crop with or without chemical pest control. Others, such as cabbage and broccoli, are generally karder to keep insect pests away. Organic gardeners and others who wish to avoid the use of agricultural chemicals may wish to grow more pest-resistant crops such as heirloom varieties and few crops highly susceptible to insects and diseases at first till they learn more organic control methods.

Grow recommended varieties for your area.

Gardening success can be greatly influenced by the varieties you use. Select from recommended lists and from those known to do well locally. It is a good idea to try one or two new heirloom varieties each year. Plant them next to old favorites and see

Dont Panic Its Organic

“Man did not weave the web of life. He is merely a strand in it.

Whatever he does to the web, he does to himself.”

Chief Seattle 1856



Planting a home organic vegetable garden

whats happens. For small gardens, try bush or dwarf varieties. Organic and Heirloom Seed catalogues can be a big help in finding these. Find out what other organic gardeners are growing and get seeds and or plants from them.

Disease-resistant heirloom varieties tend to produce well with out chemical input and do better if grown organically instead of with chemicals.

Small gardens may benefit from compact varieties



One is never too young or too old to grow food.

Grow what wants to grow in your area.

designed to grow in small spaces. These are widely available and frequently produce more in less space. They also have short growing seasons.

Varieties that climb or that are adapted to plant supports such as stakes or cages are also well adapted to small gardens since they grow up instead of sideways.

Buy seeds from your organic heirloom seed companies early in the year so you will be sure to find the varieties or cultivars you want. Select them based on intended use, time of maturity, and disease tolerance. For help in selecting the best cultivars. Seeds can be purchased from organic resources such as heirloom

seeds on the Internet.

For best germination purchase new seed every year so only buy what you need or want to trade with others.. Depending on the vegetable crop, leftover seed can be difficult to store and often germinates poorly. Saving seed from previous harvests can be risky, too.

One problem with saving seed from last year's crop is the possibility of getting plants that are not true to type. Off-type plants are produced because many vegetables are hybrids or easily cross-pollinate in the garden. While these off-type plants may be interesting, sometimes they

Dont Panic Its Organic

ANDY LOPEZ - THE INVISIBLE GARDENER

Living in the secluded hills of Malibu Canyon is a man known as the “Invisible Gardener.” With a title like that, some confusion is inevitable: Could he be a playful, elf-like man who comes down from the canyon at dawn to sprinkle dew over the ground before others awaken? Or simply a wonderfully unobtrusive groundskeeper who literally fades into the landscape while dutifully taking care of the foliage? Actually, as Andy Lopez explains, he is not the “Invisible Gardener” at all - nature is. “I am just one of her helpers,” he states. “And if I could get more people to do what I am doing, instead of consistently destroying the environment she would have a much easier job.”



Planting a home organic vegetable garden

Before planting, find a reputable source for organic heirloom seeds and other organic gardening supplies. I have added a seed list in appendic. Heirloom Seed catalogs can be a big help, but be sure the varieties can locally adapted. I would try them and see how well they grow. Buy new seed since some seeds over a year old will not sprout well. Some seeds can be saved and are best placed in jars or in plastic bags and stored in a cool dry



Nothing like growing it yourself

"I only buy Heirloom Varieties" Invisible Gardener

place. See also seed exchanges.

Vegetable transplants can be purchased at organic garden stores, organic nurseries and organic greenhouses (if you can find them, look on internet: see resources at end of articles). Select plants that are healthy, stocky, medium-sized, with vigorous roots and that are pest free. Avoid plants that are wilted, yellow, spindly, too large or have spots on the leaves, brown lesions on the stems or knots/galls on the roots. Transplants should not be disturbed any more than necessary and should be “hardened-off.” Transplants can also be started at home if desired.

Have all equipment and tools clean and in good condition before working the

soil. A hoe, spade, garden rake, trowel are great tools to use. Study natural pest control recommendations to determine what may be needed after positively identifying the pest.

Some vegetables grow best in cool weather, while others require warm soil and air temperatures like peppers. Factors, such as a late or wet spring, may require you to change your planting dates a bit.

Some vegetables can be sown or planted for fall harvest while some for winter harvest. These crops are more tolerant of cool temperatures. Some vegetables can be sown multiple times for an extended harvest period.

The Organic system is not something to be used only in the vegetable garden, or to control ants, or to avoid toxic products. As expressed by The Invisible Gardener, it means total commitment to healing the good earth naturally. This often means proper fertilization and foliar feeding so that plants can protect themselves.



Grow UP

Many vegetables, including peas, pole beans, squash, cucumbers, gourds, cherry tomatoes, and melons will naturally climb a support and grow up rather than out, leaving more ground space for other crops. Support structures include trellises, strings, tepees made from poles, chicken wire, or leave it to your imagination and taste. Tomatoes also can be trained to grow upright in wire cages or tied up to stakes or even grown down.



Grow all your own Herbs

Planting a home organic vegetable garden

Know your planting dates what are warm weather crops?

Plant your vegetables correctly

Vegetables are started from seed or transplants. Seed can be sown directly into the garden soil, while transplants are started elsewhere and later planted into the garden. Harvest can be obtained sooner with transplants; however, it is more expensive and certain plants do not transplant well. Generally, beans, beets, carrots, cucumbers, lettuce, muskmelons, onions, peas, pumpkin, radish, spinach, squash, sweet corn and watermelon, sunflowers are started in the garden from seed. Vegetables like asparagus, broccoli, cabbage,

cauliflower, eggplant, peppers, sweet potatoes and tomatoes are generally transplanted, but care needs to be taken to minimize root drying and injury.

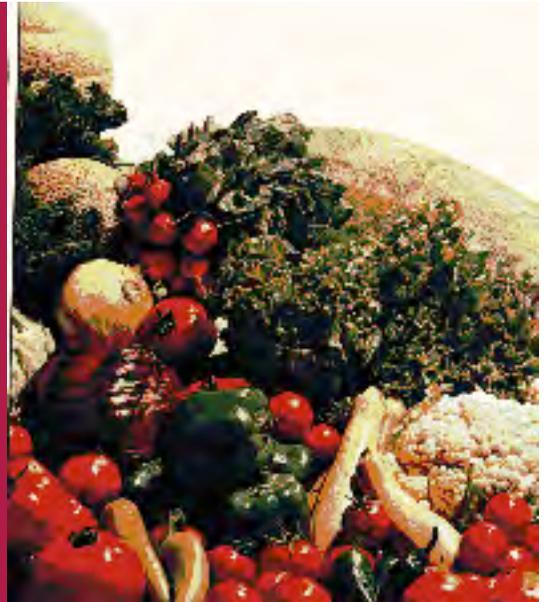
A few simple rules need to be followed in seeding vegetables and most plants started from seeds:

- Plant only a small amount of seeds. Start with 5 seeds and plant 5 seeds every other week. This will keep plants coming in for steady harvest.
- Space seeds properly in the row. Space the seeds uniformly. Sometimes small seeds can be handled better if you use a seed tool for that.

Visit OrganicDataBank.info

People want to be able to say, "I am helping the earth by not using any chemicals that pollute her." Actions and words are not the same. People do far more damage to the earth than they realize!

Invisible Gardener



Planting a home organic vegetable garden

- Plant at the proper depth. A general rule to follow is to place the seed at a depth about four times the diameter of the seed. Cover small seeds such as carrots and lettuce with no more than 2 seeds per inch of soil. Place large seeds such as corn, beans and peas 1 to 2 inches deep.

- Cover seeds and firm the soil over them by gently tamping the soil by hand or the flat back of a hoe. This will prevent rain or sprinkler water



I Love Green Peppers

Grow what you eat Eat what you grow

from washing away the seeds. in the evening.

- Irrigate by sprinkling the soil surface lightly. When using furrow irrigation, hold water until moisture moves across seed row. Seeds need moisture to germinate. Water often enough to prevent drying entirely around the seed. After plants emerge, water less often but deeper.

- Thin plants to the desired number as soon as possible. Remove weaker plants. Scissors can aid in thinning by cutting out young plants. Do not wait too long before thinning or injury will result from crowding and disturbing the remaining plants.

When transplanting follow directions:

- Transplant on a cloudy day or

- Handle plants with care. About an hour before transplanting thoroughly water plants and soil in the containers (pots, bands, flats). Carefully remove plants from their containers, disturbing the roots as little as possible. Try to keep the "soil ball" around the roots. Keep roots moist at all times when they are out of the soil. If roots are "pot bound" loosen soil before planting.

- Dig a hole large enough so that the transplanted plant sits slightly deeper than it grew in the container.

- Use a starter solution Like my superseaweed micro solution to get plants off to a

Make your own Compost



Recycle everything in the Garden



Transplant on a cloudy day or in the evening.

fast start. Starter organic fertilizer is a soluble fertilizer high in phosphorous like my Superseaweed 4-42-10 mixture. Mix the organic fertilizer with water following the label directions (mine is 1 tablespoon per gallon of water). After plants are set in the soil, pour about 1 cup of solution around the roots of each plant. When peat or fiber pots are used, place into a tray of water with the solution and allowed to soak before planting into soil.

- Protect plants for a few days from sun, wind or cold if necessary.



Sowing the seed

Whether in the garden or in flats, you can either sow

enough seed to allow for seeds that fail to sprout and for seedlings that die, or you can plant just the amount you need to eat etc (depends on experience) but not to much that you cant eat it all and waste much. When sowing, you can scatter the seeds or plant them in rolls or hills then pat down to insure seeds are covered with soil. I like scattering seeds.

As a general rule, plant a seed to a depth of not more than three times its thickness. If planted too deeply, the seeds may germinate but die before reaching the surface. If planted too shallowly, wind or rain may blow or wash the seeds away before they sprout.



Eat everything you grow or sell or trade

Be ready to apply a thin layer of compost and mulch (like azalea acid mix) as plants are growing. A light azlalea mix over the newly planted row will help conserve moisture as well. Having a fine acid mulch will not deterr plants from sprouting but will also help to control moisture and diseases.

Plant in rows or mixed depends on you and how comfortable you are with the plantings. Most folks will plant in rows with labels, me, I plant a mixture of plants in a certain area.

Thinning the seedlings

“Thick and thin” is a way to sow

Invisible Gardener



Planting the seed

only grow organically

seeds. Plant seeds twice as close as the desired plant spacing. After germination, pull or cut out the extras to provide growing space for the remaining plants. Pick the weaker of the plants. Remove the surplus while they are small and before they compete with others for light, air, and water or if you are really good at growing just start what you need (I do).

Thin root crops before their taproots become fleshy. When vegetables grow too close together, the plants are stunted, root crops become distorted, and vine crops grow poorly due to self-shading.



“Hardening”

Whether plants are purchased or grown at home, seedlings should be “hardened” to the outdoors before being transplanted to the garden. About 7 to 10 days before planting, move the transplants to a shady, but bright protected location outside. and water well. Do not allow to dry out. Gradually expose the plants to longer periods of sun over several days. Also, allow the plants to dry slightly between waterings during the hardening period.

Hardening young seedlings increases their food reserves and reduces transplant shock.

Transplants buy or grow them yourself

Many crops if not all, such as tomatoes, eggplant, peppers, and cabbage, can be started indoors or in greenhouses and later transplanted into the garden. Many people, myself included, will choose to grow their own transplants.

This allows the organic gardener to select specific varieties that will do well for them and also provide a niche if they are selling. Organic

gardeners find it easier to purchase plants from other organic gardeners such as found in a organic gardening club and or from organic green houses.





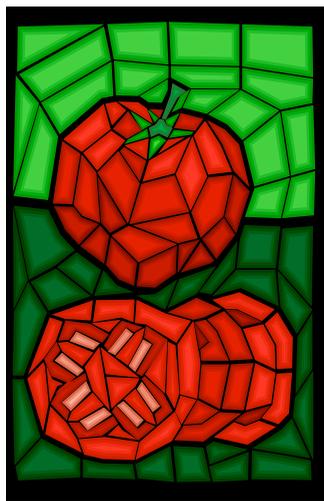
Transplants

Do it yourself?

The main goal in transplanting is to avoid root disturbance as much as possible. With flats of young seedlings, use a sharp knife to cut the soil into blocks around the plants the day before you plan to transplant. Water the blocks thoroughly after cutting.

Try to transplant late in the afternoon or during a cloudy day, even better at night. Protect newly set plants with a light shade during bright, sunny weather for the first 3 to 5 days.

Early plantings may need protection, such as plastic covers or cloches, or milk bottles or anything that



will allow them to grow without being attacked by insects. A good idea is to start them in a green house environment.

Fertilizing transplants—For best growth, give each plant 1 or 2 cups of a liquid starter organic fertilizer immediately after setting it in the ground. A starter solution can be prepared by following directions on a water-soluble certified organic fertilizer or by dissolving

1 tablespoons of an all-purpose garden certified organic fertilizer (such as my 1 3 - 1 3 - 1 3 Superseaweed for all plants) in one gallon of water.

Closely related plants can be grouped into like families for rotation. Families of plants tend to

be susceptible to many of the same insect, disease and nematode problems. By



I Love Corn

grouping vegetable plants into families and moving each family to a different location within the garden each year, many insect and disease problems can be reduced. Plan to group your vegetables by families and to rotate families to different areas of the garden each year. However using a raised bed, you rotated the soil and therefore you can grow the same family over and over again.

Plan your garden layout

Planning ahead will help avoid problems and make your garden a complement to your landscape.

First, sketch a plan of the

Organic Gardening



Rotation

keep the bugs guessing.....



intended planting area for vegetables. Write down the size of the area or location of containers. This is the beginning of a great gardening journal.

- Decide on the vegetable varieties you wanted from your wish list. Select those that your household likes, that are adapted to your climate and practical for the location. If space is a problem, plant those that utilize space efficiently like bush varieties or bush beans, beets, broccoli, cabbage, carrots, leaf lettuce, onions, radishes, Swiss chard, cherry tomatoes, and turnips.



- Mark on the plan where the vegetables will be planted, making sure to leave room for growing space between plants.

Arrange plantings according to harvest periods and growth rates. Plant vegetables adjacent to each other which will be harvested about the same time and alternate plantings. Avoid having taller plants shade younger and smaller vegetables. Use vertical spacing by trellising climbing crops.

Finally, if you really want to be organized, make a drawing of your garden.

Arrange the vegetables so tall vegetables will not shade



Companion Planting?

shorter ones. With a plan, you can plant an efficient organic vegetable and fruit garden when planting time finally arrives.

Water with care.

Irrigation is necessary for all garden crops. Water enough to keep the soil moist (not wet) in the root zone of the plant throughout the growing season. Excessive fluctuations of soil moisture can adversely affect plant growth and food quality.

Regular applications of water need to be made to prevent the soil from becoming too dry but you should also allow to dry in between waterings.

Proper watering can be



Grow it Organically

growing without chemicals is so much better

accomplished by observing the plant and soil. Do not allow the plant to become stressed, wilted or slow-growing. On the other hand, too much water, especially on heavy soils, will exclude air from the root zone, resulting in poor retarded stressed growth.

Strees = Pests

When the soil becomes crumbly upon squeezing, it's time to irrigate. Moisture is needed by seeds for sprouting. Frequent watering will be needed to keep the soil adequately moist and prevent crusting of the surface. A 2 to 3 inch layer of organic acid fine mulch will



help prevent evaporation. Do not place mulch on top of seedlings or transplants, but around them.

As the plant grows, the watering period should be longer, allowing deeper penetration through the root zone. Most vegetables are shallow-rooted and use water from the upper 12 to 24 inches of soil.

Frequency of watering depends on many things. A large plant needs more water than a small plant. A shallow-rooted vegetable (cabbage, onion, lettuce, corn) needs to be irrigated more often than a deep-rooted vegetable (asparagus, tomato,



You can never grow too much food

watermelon). But this depends on the soil and if grown in a raised bed.

Coarse textured soils (sandy loams) need to be irrigated more often than fine-textured (clay or silt loams). Plants need to be watered more often during hot periods than cool periods. In an average situation during warm weather, a good soaking of the soil every 5 to 7 days should give satisfactory results with established plants.

The following irrigation methods are commonly used: sprinkler, soaker hoses and drip . The soaker method delivers water alongside the plants without wetting the leaves.



What to do with Seedlings

Water should be kept in the rows long enough for moisture to completely infiltrate the soil of the root zone.

Drip systems and soaker hoses apply water through a hose which lies beside the crop row. All methods have a place in home gardens.

Traditionally, a raised bed with two rows is used with soaker/drip irrigation, while a flat bed with rolls, sprinkler is normally used. If a watering method moistens the plant foliage, irrigate in the morning so plants have time to dry during the day. This will lessen disease problems. Night time watering encourages disease growth so water in



early am or use drip if you have to water at night or bury the soaker hose.

Plants growing in containers should be watched more closely for water needs because the roots are more crowded. Keep soil moist but do not

over-water. Use a try to water plants from below. Weeds compete with vegetables for water, nutrients, light and space. Weeds can harbor insects and diseases as well. Two important ways to keep down the weeds

in and around your garden is mulching and hand cultivation. If proper attention is given to this problem early on, much time and effort can



Don't Panic It's Organic!

be saved.

Mulching is covering the soil around your vegetables with an organic ground cover material. Besides controlling weeds, mulch will conserve moisture, regulate the soil temperature and keep your vegetables cleaner by controlling dust. By using mulch, very little cultivation will be needed. Some Mulch materials include leaves, straw, sawdust, wood chips, cardboard,



Garden Notes



A garden plan will save you time, space, work and money. Your yields will be increased as you gain experience, as will the length of your harvest season as you learn to grow year round.

A Successful Home Organic Gardener

A well-planned, properly tended organic vegetable garden can provide not only an excellent source of fresh, nutritious organic vegetables and fruits, but also is a source of relaxation and enjoyment for the entire family. With a little space, and a desire to assist nature naturally, anyone can be a successful organic gardener.

Rotation

Rotate what you grow where you grow it.

newspaper, shredded paper, old carpet, and recycled paper. On established plantings, materials are spread lightly around the plants.

Cultivate with a sharp hoe or cultivator just as the weeds begin to sprout. Loosen the total soil surface around the plants without going too deep, which would cut or damage roots. Cultivation will also help aerate the soil and can be used to mix a side-dressing of organic fertilizer, mulch or compost or rock dust into the soil.

Chemical herbicides for weed control are not recommended for use in organic home gardens.

Problems of the garden can be minimized by being prepared for them. Learn about the insects and

diseases that commonly occur in the area and learn natural control methods. Whenever possible select disease resistant heirloom varieties.

Soil problems can be reduced if the steps mentioned earlier are followed; however, crop injury can appear even if proper management has not been followed.

High temperature and shallow watering often can cause stress related problems especially when plantings are made too late in the spring or too early in the fall and do not meet light requirements. Also, as temperatures increase more pest problems will occur;

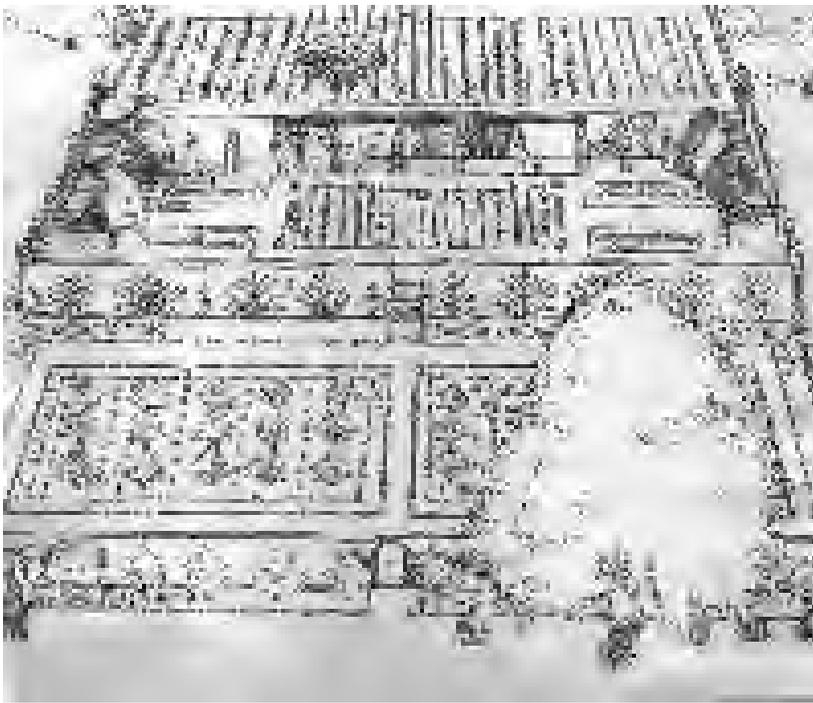
be prepared for them by maintaining regular observations. Learn as much as possible from other organic gardeners.



Frogs are good in the garden

Harvest when ready

The job is not done until your vegetables are harvested from the garden and are on your table ready to be eaten! Most vegetables are at peak quality for only a short period of time and should be harvested that time. Learn to tell the proper time to harvest each crop. Immature vegetables will not improve after harvest and over-mature vegetables will be tough and lack the desired taste and texture. Remember the insects and animals will know when the food is ready too!



Draw your garden before you start.

Warm-Weather Crops

Vegetables that love spring and summer should be started in a greenhouse if possible to get a head start. They do not like cold soil at night so a warming pad is needed. Here are a few.....

Asparagus
Broccoli
Brussels sprouts



Sweet corn
Cucumbers
Eggplant
Muskmelons
Onions
Peppers
Summer squash
Tomatoes
Lima Beans,
Snap Beans,
most Peas,
Zucchini,
New Zealand Spinach,
Okra,
Potatoes

Sweet Potatoes, Jam too,
Pumpkins,
Soybeans,
Squash.
Beets,



Butterflies are good

Radishes,
Collard Greens.
Kohlrabi,
Leeks,
Mustard,
Onions,
Peas,
Shallots,
Spinach,
Turnips

Cool-Weather Crops

Some Cool-Weather Crops

Many brassicas,
leafy greens
root crops
carrots
Beets,



Organic gardening, natural pest control, natural ant control, natural disease control, remineralization, natural tree care, natural rose care, natural termite control and much more!

ORGANICDATABANK.INFO

INVISIBLEGARDENER.COM

Water

too much too little?

- Broccoli,
- Brussels sprouts,
- Cabbage,
- Carrots,
- Cauliflower,
- Celery,
- Chinese cabbage,
- Escarole,
- Fava beans,
- Garlic,
- Kale,
- Kohlrabi,
- Leeks,
- Lettuces,
- Mustard,
- Onions,
- Peas,
- Shallots,
- Spinach,
- Turnips.
- Collard Greens



Enjoy

Andy Lopez
Invisible Gardener



CONTROL WATERING



The New E Garden

Growing food takes on new meaning. ...
Andy Lopez The Invisible Gardener



Grow more Fruits

Several decades ago, victory gardeners planted their victory garden to cope with food shortages during World War II and during World War I, they were called liberty gardens.

Growing your own meets several goals:

- The need for mass-produced food
 - The need to reduce pollution
 - Increased savings on their grocery bills
 - Increased savings on their doctor bills
 - A reduction in gas and auto expenses
 - The need to eat
 - The need to make money
 - The need to be happy
 - The need to be healthy
- The New V Garden?



An E Garden movement that has as a main component an organic approach will go a long ways towards a new 21st century goal of living Green and being better stewards of our planet and all the while helping to establishing a stronger survival skills.

How does one start?

Here are some tips to help you get started on your E Garden

1. Go Organic! Do not allow yourself to be fooled into thinking that anything less then an organic garden is the right thing to do.

Organic Fertilization

Organic Pest Control

2. Location, location, location

where is your Prime Sun location?

front yard

back yard

roof?

other

3. Its in the seeds

Heirloom

Start your own seed bank

eatable natives

4. Its alive! compost ,mulch

To bin or not to bin?

Local rules

Don't use sewer sludge

use rock dust

mulch production

5. Go Up

Raised beds anyone?

roof growing

other

6. Water water water

drip

soaker

water filter

fertigation

7. 5 R's

Reduce

Reuse

Recycle

Rethink

Replant

8. Going into business

Get a green House

Sell to local restaurants

Trade with neighbors

Grow for others

9. Start or join an organic gardening club

Group buying

Share the work

Join ClubIG and get help for life

10. The family that grows together eats together.

get your kids involved

ask them what they would love to eat and grow

make a wish grow list



Do you see the Invisible Garden?



Making the Organic Transition

Proper nutrition is the very foundation of organic growing and pest control. Just as a human body that isn't properly fed is wide open to attack from one illness or another, so it is with plants. Chemical fertilizers are not complete foods. They lack almost all of the important trace minerals. There are over 70 trace minerals that plants and humans need, and chemical fertilizers provide only a few of them.

If plants do not get the trace minerals they need, as well as a variety of enzymes and bacteria, they will become stressed and will be attacked by disease, or pests.

Ants, like most predatory insects, attack plants that are sick or stressed. This is a natural law, like the wolf who only attacks sick sheep. I do not recommend the use of chemical fertilizers. If you presently are using these fertilizers and want to stop,

be forewarned that you must proceed slowly and carefully as you make the transition from chemical fertilizers to exclusively pure organics. As an addict depends on drugs, plants depend on chemical fertilizers for their 'hits' and won't accept organic food at first. Time is needed to allow the plants natural systems to begin to work again. Give yourself and your plants at least a year to go from chemicals to organics. It may take several years of growing organically for the soil to return to life and for the organic materials to kick in. Use the following schedule in making the organic transition.

First Month

Keep using the same amount of chemical fertilizer but also spray a liquid seaweed blend (such as Superseaweed, or Nitron or Agri-Gro) as a foliar feeder. Make sure the soil is in good condition by applying lots of rich live compost. Stop using any chemical pesticides. Start using the many methods mentioned in this book.

Second Month

Reduce the amount of chemical fertilizer by one third, while continuing to spray the leaves of your plants with the liquid seaweed according to the instructions (Superseaweed is five drops per gallon). Replace the chemical fertilizer with a good



compost such as Organa. Apply more compost around plants, turn over soil when possible. Mulch well.

Third Month

By now you should have reduced the amount of chemical fertilizer to one half the original amount you were using before and increased the amount of organic fertilizer to replace the chemical fertilizer. In other words, you are now using one part organic and

100% Organic

you can do it!

one part chemical. You will find that during these months your plants will be under a great deal of stress and may be attacked by various predatory bugs. Use only organic methods to get rid of them. Keep spraying the leaves with a good liquid seaweed weekly or monthly.

Fourth to Eighth month

Stay on the 50/50 basis. This is a good time to see how the plants are responding to their new organic regime. Some plants will not like it at all and may even die, but the majority of plants will do very well. Keep spraying the leaves as often as recommended (as above).

Ninth month

Reduce the use of chemical fertilizers by half again, and increase your organic fertilizer/compost. Follow with a monthly spraying of liquid seaweed.

Tenth month- Twelfth month

Repeat the process. By now you should be using one-quarter of your chemical fertilizer with three quarters organic fertilizer. This is the level you want to stay at for the next two months.

By the end of the first year you should have reduced your chemical usage by 80 percent. You should also have increased your organic usage by 80 percent. During the next few years you should work on reducing the chemicals used, eventually not using any chemicals at all.

Then you'll be 100% Organic!

Any problems your plants may have can be treated with the appropriate organic controls.



GROW ORGANIC!



UREA?

The Truth about Urea...

Brief History

H.M. Rouelle in 1773 discovered Urea in human urine. It was synthesized in 1828 by Friedrich Wohler. This is when Wohler wrote to Berzelius the following: "I must tell you that I can make urea without the use of kidneys, either man or dog. Ammonium cyanate is urea!" This synthesis has since then been trying to deal a severe blow to the belief called "vitalism" which maintains that organic chemicals can be modified by chemistry but could only be produced through the agency of a vital force present in living plants and animals. Here is where the organic gardener and the chemical gardener part ways. Those of you that believe in this vitalism in general stand to the right and those of you that say there's no difference stand to the left! In 1870 urea was

produced by heating ammonium carbamate in a sealed vessel. This provided the basis of the current industrial process for its production.

Production

Chemical Urea is produced commercially by the dehydration of ammonium carbamate ($\text{NH}_2\text{COONH}_4$) at elevated temperature and pressure. Ammonium carbamate is obtained by direct reaction of ammonia with carbon dioxide. These reactions are normally carried out simultaneously in a high pressure reactor.



Natural Urea is produced by animals.

Uses

There are many uses for urea: Pharmaceutical, Resins, Agricultural, as well as Industrial uses; for our purpose we will stick to its agricultural uses and the effects it has on the soil, plants, lawns, trees, etc.

Nitrogen is nitrogen is nitrogen?

The whole idea is that there is a difference between an organic source of nitrogen and a chemical source of nitrogen. Urea (when it was discovered that it could be made from inorganic (non-living) compounds and that

Urea

too much of a good thing?

chemically it was identical to its natural cousin (Urine) was proclaimed as an important tool in growing more food to help feed the world's growing population. This is still the current logic that chemical companies would like you to believe. The American idea that a little is OK but a lot is better does not really apply here.

45-0-0

Urea is 45% nitrogen and 55% inert. Animal urine is closer to 2-5% nitrogen along with a variety of minerals and bacteria. While I admit that nowadays it is easier to get Urea than it is to get animal urine, animal urine is the preferred organic method of nitrogen application. Another good reason most people do not use animal or human urine is health concerns although animal or human urine is perfectly safe to use as long as the donor is healthy. I use animal urine whenever I can and admit that it is harder to get at than its chemical cousin since you have to have access to a farm and make arrangements to have it saved for you as well as to find out if any chemicals have been injected into the animals, etc.. While it is understandable why we use Urea as a urine substitute the negatives far outweigh the positives.

Positives and Negatives about Urea

Positives

Sorry but I can't think of any thing positive about using Urea except it makes money for anyone selling it!

Negatives

- 1 Rapid Growth pushes plants to grow too fast
- 2 Plants grow fast but are very weak
- 3 Promotes stress
- 4 Destroys soil organisms
- 5 Increases pest activities
- 6 Increases disease activities



ANIMAL URINE

- 7 Urea breaks down into various compounds some of which can inhibit plant growth.
- 8 Eventually decreases plant production
- 9 Decreases nutritional values of plants to humans while increases nutritional value to pests.
10. The carbon in Urea based fertilizers is chemically converted to CO₂ and lost to the atmosphere. Carbon is energy to plants and soil micro-organisms.

Why it Causes Stress

11. Not allowed to be used if Certified Organic (they must know something huh?).

More is better?

It is a mistaken idea that more nitrogen is better than less. What you must understand is how nitrogen is available in nature and how plants and soil organisms use it. Nitrogen is produced freely in nature by various mechanisms found in nature. The most obvious sources of nitrogen is animal manure. Another source is bacterial action. The bacteria produce nitrogen in a form available to the root hairs (through which it is absorbed into the plants) as well as a variety of other nutritional sources. Another source (actually #1) is produced by nature herself through the various storms she has on the planet.

Why Urea causes stress

Plants can absorb nitrogen directly from the air as well as from the soil but they can also absorb it directly through their leaves. A basic problem with Urea based products is how it is available to plants. Natural sources provide plants with nitrogen as they need it and when they want it as

opposed to chemical nitrogen such as Urea which is absorbed by the plants in very large amounts whether it needs it or not. This is where stress comes in. By force feeding your plants this chemical nitrogen, you are causing stress in the plants. Stress is also caused by the fact that Urea kills off all beneficial soil bacteria which are needed to breakdown the nutrients needed by plants. As the soil becomes



CHICKENS ARE GREAT

less and less alive, the plants become increasingly dependent on the straight shots of 'food' it gets from the chemical fertilizer you are using.

How you feed your plants is as important as what you feed them.

Some Factors that cause stress in plants:

- 1..dead soil
- 2..low nutrition levels

Urea

Bad for the soil?

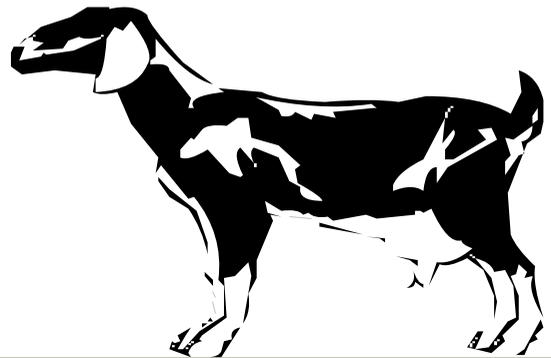
- 3..low mineral levels
- 4..planted in wrong environment
- 5..wrong variety planted
- 6..other chemical use such as herbicides, pesticides, etc.

What Urea does to the soil:

There are two ways to sterilize the soil, using chemicals and using heat. Urea is a chemical that sterilizes the soil by killing off all the good bacteria normally found living in the soil. Urea because of its identical molecular structure is mistaken by bacteria and plants as a food source. Because Urea is a much more concentrated source of nitrogen, the bacteria are not fed but are actually destroyed leaving behind a mutated form of bacteria which the plants cannot use. Slowly plants find themselves weakening, starving from lack of proper nutritionist and stressed out. Their root systems no longer function as they should. They depend more & more on their chemical 'hit' to provide nutrition for them. The soils natural bacterial system is converted into one that cannot be used by plants root systems for food absorption but instead the bad bacteria themselves begin to feed off the plants!

What Urea does to the Plants:

The plants get an immediate 'relief' when you apply or spray fertilizers based on urea or some other chemical form of high nitrogen, but as it wears off the plants return to their weakened state and become even more stressed. This process is repeated over and over again. Less soil bacterium less root hair which equal less food being absorbed by the plants which means less energy, less



GOATS ARE GREAT TOO

minerals, more stress. Many chemical fertilizers are now using timed release fertilizers that release their 'hits' over a time, thus reducing down time. However this is not the case at all, instead the timed release fertilizers merely are increasing stress. Now Plants are stressed out all of the time! Fertilizer companies are also adding more nutrients to their Urea based fertilizers to help plants last longer as well as systemic to fight off pests and diseases. Plants thus stressed out are more inclined to disease and pest attacks then organically grown plants.



What Urea does to Diseases:

The very same bacteria that are normally present in the soil dies and is replaced by a different type of bacteria. Some of the bacteria are of the “bad” type. This is to say the bacteria are of the fungal disease type and are all soil born. They can establish themselves in the soil if certain conditions are right for them. The main condition being the lack of the “good” bacteria.



"The Good Guys and The Bad Guys do not live in the same place!"
The Invisible Gardener



Butterflies are Kool

What are the perfect conditions for diseases to occur?

Dead Soil Chemical over use destroys all soil bacteria expect for a few specific types of bad bacteria that depend on these conditions to grow. Urea when used over many years, destroys this balance of good and bad bacteria.

Stressed Plants Dead soil increases the plant's stress levels due to bad conditions for plant growth.

High Nitrogen is very Bad



Many Butterflies

High Nitrogen High nitrogen causes rapid growth. Rapid growth without proper nutrition causes more stress which in turn restricts more nutrition from being absorbed by plants. High nitrogen also attracts insects that have mutated to handle plants that have such rapid growth. High nitrogen also mutates bacteria into rapid growth cycles.

Environmental stress can be from improper watering to weather cycles such as too much rain or drought. Biological considerations. Planting the wrong variety or type of plant in the wrong environment will certainly cause major stress to plants and all involved.



Over Chemical use of any type from pesticides to herbicides, etc. will cause major damage to soil's Eco system and disrupt nutritional levels.

The Ole Barrel Trick! (The Law of the Minimum) If you were to look at a wine barrel. Notice how the slots are held together by a band going around it with a bottom to hold the liquid. Imagine that each slot of the wine barrel was a element needed by plants. Starting with high nitrogen, potassium, phosphorus and so on. Now lets say they were to actually represent the amount that was available to plants to use. the greater the length the more is available. The nitrogen 'slot' is 1 foot up above the top level of the wine barrel with various lengths of 'slots' for the varying amounts of each. Now lets suppose we started filling it up with water. How far up the barrel could we go before water would start spilling out? The lowest slot of course! All that nitrogen above the lowest slot is useless in holding any water isn't it? Actually all the nitrogen is what cause some of the other slots to be so low. remembering

that there is a basic minimum level of minerals that you want. Too much minerals become toxic to its environment as too much nitrogen becomes toxic to its environment.

What now?

Feed the bacteria first and let the bacteria feed the plants. Use slow release organic sources of nitrogen only.

Never use Nitrogen sources only but combine with minerals and bacteria. Provide minerals in amounts needed by soil and plants. Encourage high bacterial count by increasing use of compost based products or make your own compost.



Feed the Bacteria first.

An organic gardener feeds the soil first

Remember: High Nitrogen=High Stress=Disease/ Pests = Low Minerals=Low Nutrient levels=Low Energy,

High Energy=High Nutrient Levels=No Stress=No Pests/ Diseases!

One final note: There is a reason why Certified Organic Farmers cannot use store bought Urea based products! I am only talking about man made urea and not that naturally made by animals including humans. Please don't

allow people to convince you that there is no difference between the two and it is therefore ok to use it. Tell the plants and the soil that!

Be happy

Happy Growing
Organically of course!
Andy Lopez
The Invisible Gardener



INSECTS



So you have a
Garden, Now what?

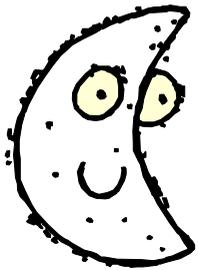
The First Day

They will find you!

The news is out.. new food source in town and its your garden!

So you have a garden and its your first day now what?

The Very first thing I would do is not to wait till the next morning to check out the garden but to go out at night with a flashlight and take a look at night!



In my experince as a gardener, I have found that the insects and other animals are most active at night and that this was the best time to observe them and to find out what they

have in mind for my garden!



There are other predators such as birds, beneficial insects, frogs that come out at night also. I have learned to encourage them as much

as possible by providing for them a good enviroment well suited for their survival.

A Bird bath is a wonderful investment that will pay off in many



ways such as attracting birds and frogs to your garden, both of which will eat your insects and snails.





You know that once insects have found your garden, that it will become a food source for them if you do not stay on top of it. A garden requires lots of attention by you and not from the insects!

Please remember that not all insects are bad so do not get into a kill everything that moves approach!

Here are a few things you can do to help fight off the insects and other creatures that want to eat your food too:

1. A simple Spray to keep bugs off vegetables:
In 3 gallon clean water (allow water to sit in sun for a few hours or get a garden filter), add the following:

1 cup coffee grinds. Place inside a panty hose, tie into a ball and

Coffee, Cream and Molasses any one?

place that into the 3 gallon water. Not decaffeinated because its the caffeine that we want.

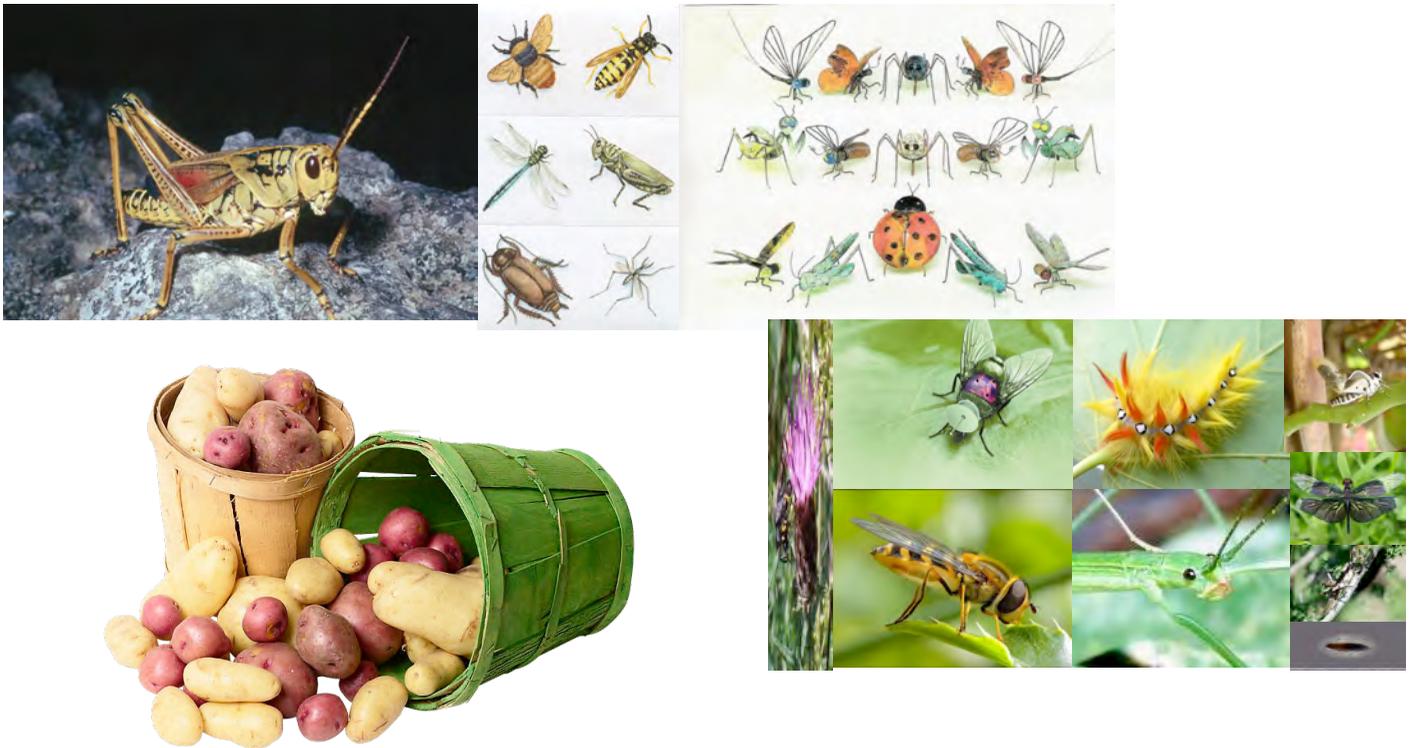
1/2 cup milk. whole milk is best cause we want calcium, bacteria from milk and the fat.

1/2 Granny Smith Organic Molasses or your pref.

1 tablespoon of Superseaweed 13-13-13 per gallon or any other organic fertilizer you want to use.

1 tablespoon Supersseaweed Microbiological activator or any other seaweed / enzyme / bacterial product you choose.

Stirr well and allow to sit over night (so make this batch the



same day you finish your garden).

You dont have to sit overnight but I like doing that cause more bacteria are present but so you can use right away and make a second batch for that.

So this spary is a very important tool for you to use. Spray the leaves of your plants both sides at least once a day, pref a night or early am. Thi spray will alos help you to control diseases as well. You will want to reduce the sorays to several times per week as the plants grow. You will also need to learn how to make other sprays such as compost tea which I will cover next. I would consider joining my club and getting help from me.

If you are already a member then you have access to all the content I placed on my newest website OrganicDatabank.info as well as access to Ask Andy Forums.



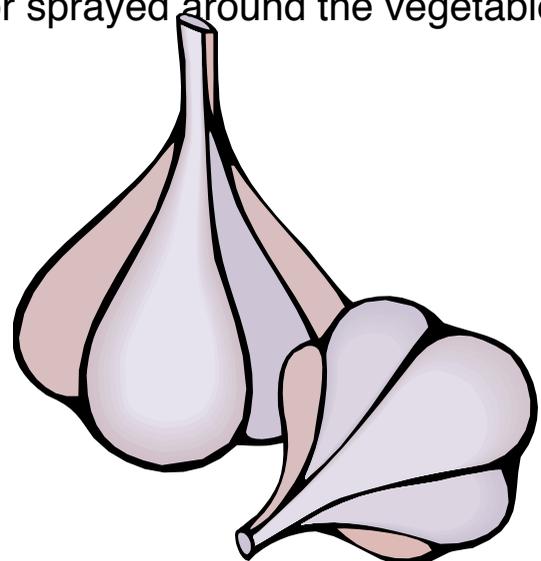
Natural Barriers

Making a natural barrier as soon as possible would be a good idea. Coffee Grinds make for an excellent natural barrier. Just sprinkle a thin layer around your newly planted vegetables! If using a raised bed, sprinkle along the outside area as well.

Flour also makes a good barrier if kept dry.

Garden Grade DE is also a good barrier.

Galic makes a good barrier either planted or sprayed around the vegetables you want to protect.





Protecting your plants

It would be very wise to start off by covering your vegetable with a protective screen which nothing except air can come in or out!

There are many variations of protective row covers from large scale to small scale. You should be able to choose what you need from the many available. Many garden catalogs will provide for various methods of protecting your plants.

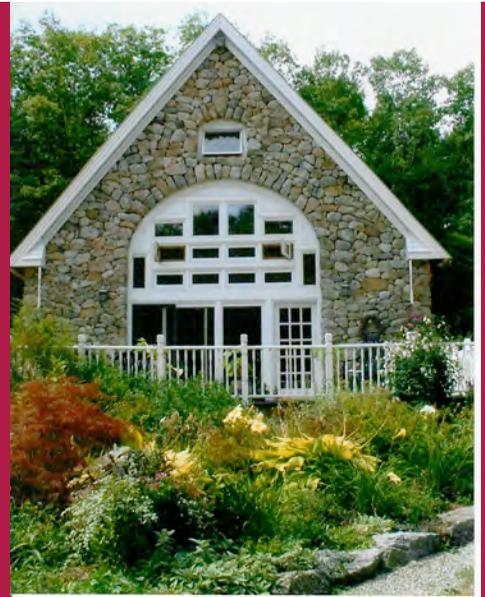
You can also home make a system of protecting your plants from garden center bought items such as shade cloth which is used in nurseries. Use 10% shade cloth or at max 20%.

Learn to use empty gallon water jugs with tops cut off and placed upside over the plants.

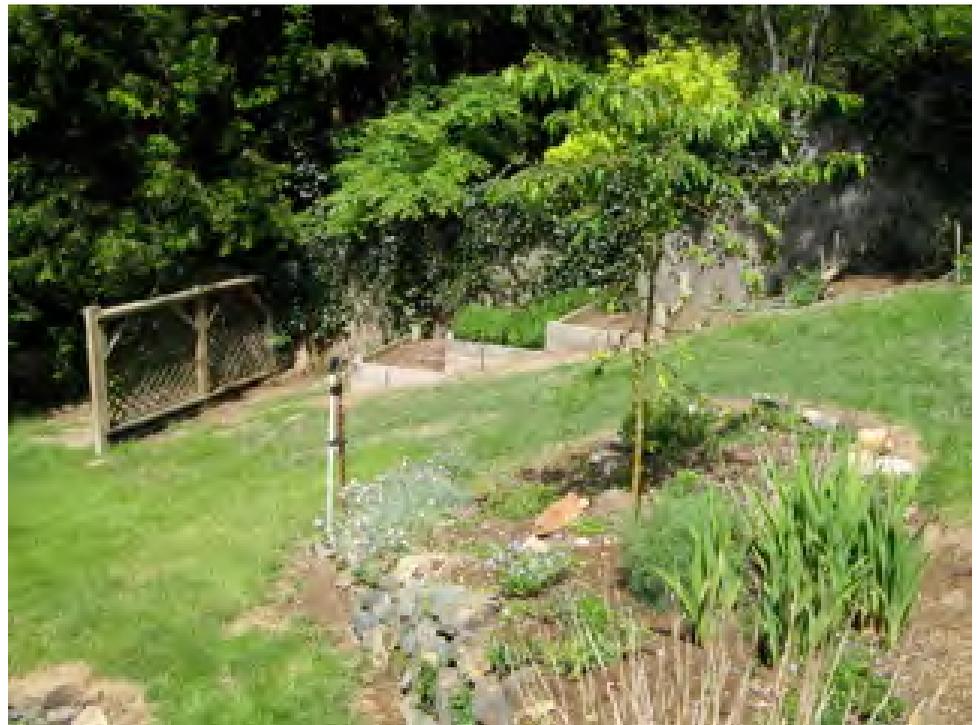


RESEARCHERS SAY SUBSTANCES
THAT HAVE LITTLE EFFECT ON
SEX HORMONES INDIVIDUALLY
BECOME MUCH MORE POTENT
WHEN COMBINED!

Invisible Gardener



Planting a home organic vegetable garden



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Organic Seed Resources



Please try my store above first and see if I have what you are looking for, otherwise heres a list of organic seed resources for you.



Appendix



Appendix 7

PRIMORDIAL SOUP



Organic Gardening depends on having a living soil. The process of assimilation, adsorption and growth is a living system is dependent on bacteria. Bacteria forms the key corner stone for the organic process to happen. I learned early on in my childhood training (my mother and grand mother are both organic gardeners and taught me all about bacteria!) that bacteria is a very useful tool in Organic Gardening; from compost tea to producing the various biodynamic sprays.

SuperSeaweed™ which is an invention of mine, is a result of many years of experimentation and assimilation of my mothers knowledge as well as from my own experiences as a gardener. I like to call SuperSeaweed a “microbiological activator”. In simple terms, it is a special blend of five different types of deep ocean seaweed, chosen for its purity and for its special bacteria. Each seaweed, being from a different part of the world, contains its own special bacteria and its own special minerals. Blending these different liquid seaweed’s produces a complete bacterial and mineral ‘soup’. To this mixture I have added rock dust, which increases mineral content such as calcium, iron, etc. I also add activated Willard Water™, Nitron A-35™, and Agri-Gro™, Acadie™.

When using SuperSeaweed™, only 5 capfuls per gal is required for regular feeding. SuperSeaweed is not a fertilizer but acts as a ‘vitamin pill’. SuperSeaweed also helps to promote needed bacteria and enzymes when used with every watering. Superseaweed allows the soil and plants biological systems to begin to work. Plants and soil require composting and applications of mulch to insure a complete and balanced system.

SuperSeaweed™ is an excellent Rx for sick plants. Use 10 capfuls per gallon water to start with. This will give your plants a boost and help them along in the recovery. Allow a week for results. Then reduce to 5 capfuls per gallon. Repot soil if needed.

SuperSeaweed is excellent for fruit trees and veg-

etables. Use 10 capfuls per gallon, add to sprayer and spray on leaves for fast results! Superseaweed is an excellent foliar feeder for your roses! Use 10 capfuls per gallon, add to sprayer and spray regularly on leaves. See rose chapter for more info on how to use SuperSeaweed™.

Use SuperSeaweed™ on sick trees! Use 10 capfuls per gallon, add to sprayer and spray leaves on trees. Spray weekly for a month. Trees take longer to respond. Soak with SuperSeaweed around base of trees. Pour into tree vents. See Tree vents in index. SuperSeaweed™ works with in-line feeding systems as well as with hydroponics systems. To increase effectiveness add equal amounts of molasses (i.e.. 1 capful SuperSeaweed™ = 1 capful molasses).

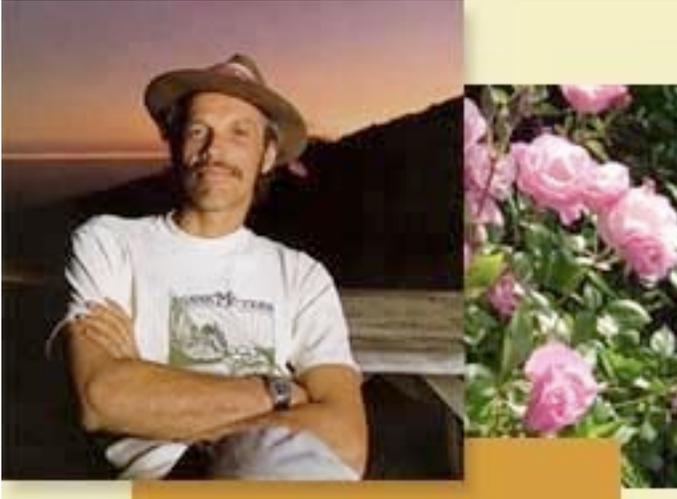
SuperSeaweed™ works great on orchids! Most any flowering plant will do well with regular additions of SuperSeaweed to its water. Since SuperSeaweed is not a fertilizer, I suggest that you add it to your regular liquid organic fertilizer. SuperSeaweed makes your fertilizer last longer and you will have to use less. SuperSeaweed™ also acts as a wetting agent. This allows liquids used in fungus control to work better and should be added to all fungus sprays. SuperSeaweed was invented by myself in 1972 while I attended school at the University of Florida located in Gainesville Florida. It was made to be used in conjunction with other organic fertilizers and not with chemical fertilizers. If you must use a chemical fertilizer, use 1/2 as much of the chemical fertilizer while increasing your organic fertilizers. To Order please see Member application on order page.



Check out Superseaweed Today.

Appendix 8

ANDY LOPEZ - THE INVISIBLE GARDENER



Living in the secluded hills of Malibu Canyon is a man known as the “Invisible Gardener.” With a title like that, some confusion is inevitable: Could he be a playful, elf-like man who comes down from the canyon at dawn to sprinkle dew over the ground before others awaken? Or simply a wonderfully unobtrusive groundskeeper who literally fades into the landscape while dutifully taking care of the foliage? Actually, as Andy Lopez explains, he is not the ‘Invisible Gardener’ at all - nature is. ‘I am just one of her helpers,’ he states. “And if I could get more people to do what I am doing, instead of consistently destroying the environment she would have a much easier job.” Growing up in Puerto Rico/Miami, Lopez was heavily influenced by the fact that his mother grew her own fruits and vegetables and always used animal manure as fertilizer. This organically based philosophy toward gardening techniques laid the foundation of Lopez beliefs and in 1972 he founded Astra’s Garden, based on something of a religion that subscribes to living in harmony with the environment: not polluting; treating all living plant life with respect; and, basically just listening to what the earth is telling us.

People call him a “soil psychologist” yet he prefers the “plant nutrition specialist” appellation instead. Still he does make an effort to get to know his clients - to get a sense of their Lives - as much as possible. “I try to deal with the owner and his/her property as one entity

he maintains, going onto state that it is remarkable how much one’s property reflects one’s emotional state. His wide variety of clients - including in the past, such celebrities as Olivia Newton-John and Mark Harmon, attests to his effectiveness in connecting with people who share his motto (“happy, healthy, holy”) when it comes to living and interacting with the natural surroundings.

Lopez is also the founder of the Invisible Gardeners of America (IGA) club, which he started in an effort to raise the consciousness of all those concerned with their environment. The club publishes a newsletter every month on website or yearly via snail mail, which discusses new products, new procedures, and a number of timely topics relating to planting and growing. It also produces a constantly updated compendium of current environmental reports, providing an essential tool toward understanding the battle against - and alternatives to - polluting chemicals, which is available for free to IGA members on his website.

Lopez professes to be the only ‘Absolutely Organic’ spraying/pest specialist in the United States (at this time, even though he expects more to come out), pointing out that, while others might be semi-organic, they all still rely on chemicals in one form or another. “If it doesn’t come from mother earth, then it isn’t organic,” he states flatly. He goes on to say that 75 percent of all pollution in the U.S. comes from the home: If people would go back to the basics and grow their own food, and take care of their bug problems naturally, chemical pollution would no longer be a problem. Incorporating the philosophies of his various organizations and activities, Lopez’s mission is the education of the public on the necessity to quit using chemicals altogether and in the meantime, to properly dispose of their waste - so that one day the earth may return to its natural cycle of growing and decomposing. He also professes hopes of expanding his club internationally, noting that, “After all, these same problems exist all over the world. They just exist in varying degrees”.

Invisible Gardener

"HEAL THE EARTH AND YOU HEAL YOURSELF"

SOME OF ANDY'S DVD'S CURRENTLY AVAILABLE:

2009 DVD

ANDY LOPEZ
THE INVISIBLE GARDENER'S
HEALTHY GARDEN SHOW 2009 BONUS EDITION

THE HEALTHY GARDEN SHOW
VOL 2 DVD

HEALTHY FAMILY/HOME/GARDEN SEMINAR EARTH
DAY 2009

NATURAL ANT CONTROL DVD
DANCES WITH ANTS 2009

PART 1

NATURAL ANT CONTROL 2009 DVD

PART 2

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Don't Panic Its Organic!

Invisible Gardener's EBOOKS

*All Books are
in PDF Format*

All books are in PDF format and will open upon download. You will need adobe reader or some other type of pdf reader in order to be able to read these pdf EBooks.



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[Invisible Gardener's OrganicDataBank.info](http://InvisibleGardener'sOrganicDataBank.info)



Dances with Ants

Natural Ant Control EBook with Links to resources and formulas as well.

click for details



Natural Termite Control

Various safe methods of Natural Termite Control.

click for details



Natural Pest Control EBook 2009

The Complete 2008 printed version in pdf format!

this book



Natural Pest Control EBook in Spanish 2009

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Andy Lopez

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