

2010 GROWING GUIDE





COMPOST TEA

Liquid fertilizers made from manure and compost have been around for centuries. Manure tea made from worm castings can be sprayed on leaves or added to the soil to form a protective barrier against bad fungi and bacteria. Repeated applications revitalize the soil and allow the cultivation of plants without the need for chemical fertilizers and pesticides.



To make your own compost tea, you will need a 5 gallon bucket, a fish tank aeration pump, and a nylon sock. As a food source, humic acid, earth worm castings and sugar.

- Fill bucket with water. Setup aeration pump, and run the pump for at least one hour to remove the chlorine from the water.
- "Add to the water" two tablespoons of sugar, two ounces of Age Old Liquid Kelp and two liquid ounces of Humic.
- Place one pound of earthworm castings into sock and suspend the casting into the bucket for at least 24 hours, but no more than 48 hours. During the entire brewing process, and storage period keep pumping air into the solution. This will keep the organisms in the tea active and alive.
- Use the brew within 24 hours after brewing process is complete.

How To Use The Tea

GARDENS FLOWERS AND ORNAMENTALS:

At the time of planting, drench ground with 6 ounces of tea in sufficient water to cover 100 square feet. When crop emerges and reaches the three to four true leaf stage, spray with 3 ounces of tea in sufficient water to completely cover the leaves and ground. Repeat applications every 7 to 10 days during growing season. It is recommended to discontinue usage at least two weeks prior to picking.

TURF AND LARGE ACREAGE:

Apply to soil two weeks prior to planting at a rate of 10 gallons per acre. Two to three weeks after emergence, spray crop with 5 gallon of tea per acre in sufficient water for proper coverage. Repeat application monthly.

ORGANIC TOMATOES GROWN IN AGE OLD SOIL BAGS



You can have garden fresh tomatoes and vegetables all year long by growing them in our 20 quart soil bags. This is an easy alternative to other hydroponics systems because the roots develop and grow in an organic media that has the initial proper pH, wetting capacity and porosity. The setup can be as small as one or two bags, or as complex as a complete greenhouse. If weather permits, this system can be setup outdoors in either a cold frame or in a raised bed operation. Plants can be hand watered, or a low volume irrigation system using timers and drip tubes can be installed. This irrigation system can also be used for fertilizing the crop. Any concerns about poor soils or contaminated soils are not an issue because the crops are growing in a truly organic soil media.

Set-up:

- Punch a series of holes in the under side of the bag for drainage. Place the bag on a sheet of plastic or in a plastic container. Cut one or two "X's" on the top side, and insert tomato transplants into bag. Take the plastic from the "X" cut and fold back around the stem of the plant to minimize exposure of the media to light. Water transplants in at the rate of one teaspoonful of AGE OLD BLOOM per gallon of water. Do not over water*.
- Initially check moisture on a daily basis and if dry re-water with AGE OLD BLOOM at the rate of one teaspoon per gallon of water.
- At bloom initiation, increase feed rate of AGE OLD BLOOM to two teaspoonfuls per gallon of water. Alternate feedings of BLOOM with two teaspoons of CA-LIBUR 20 in a gallon of water.
- At fruit set, switch to a weekly feeding of AGE OLD GROW at one teaspoon per gallon, or AGE OLD FISH and SEAWEED at the rate of two teaspoonfuls per gallon of water.
- Continue feeding on a weekly schedule throughout growing season.

For help in controlling insect pressure, an additional leaf feed of two teaspoons of CA-LIBUR 20 in a gallon of water can be applied bi-weekly during fruiting season. Leaf feed AGE OLD FISH AND SEAWEED at the rate of one teaspoon per gallon of water.

FIELD GROWN VEGETABLES & TOMATOES

Growing rows of vegetables and tomatoes can be done in a low maintenance manner by using plastic row covers, or by mulching your garden with grass clippings. Simple drip irrigation systems can be made using “leaky pipe” or a simple set-up of drippers. For fertilization, either feed using a hose-end sprayer, or purchase a simple bucket siphon system. Hose-end sprayers, and siphon systems normally apply fertilizer at a dilution ratio of between (1 to 14) and (1 to 16), based on a normal garden hose pressure of about 40 psi.

EXAMPLE: If your fertilizer instructions say to feed one teaspoon per gallon of water, in a bucket, you would add 14 to 16 teaspoons of fertilizer to a gallon of water. Put the siphon attachment on your water line and put the siphon tube into the concentrate. The water coming out the end of your hose will contain one teaspoon of fertilizer for each gallon of water applied to your plants.

For constant feeding of fertilizer with each watering, you will want to apply fertilizers at the rate of 150 ppm. If you plan on feeding the plants on a seven to fourteen day schedule, feed at the rate of 300-350 ppm. For special applications that encourage bigger and better fruiting, leaf feed sprays containing calcium, environmental stress applications, and organic pesticides can be added. Use Age Old Bloom prior to fruit set, and finish with Age Old Grow.

FEEDING SCHEDULES



Bloom per Gallon of Water	ppm	E.C.	Grow per Gallon of Water	ppm	E.C.	Fish & Seaweed per Gallon of Water	ppm	E.C.
1 teaspoon	200	0.46	1 teaspoon	100	0.17	1 teaspoon	100	0.18
2 teaspoons	400	0.98	2 teaspoons	275	0.35	2 teaspoons	200	0.35
1 tablespoon	500	1.08	1 tablespoon	250	0.52	1 tablespoon	350	0.68
1 ounce	1100	2.17	1 ounce	650	1.27	1 ounce	850	1.7
64 ounce hose-end	1000	2.0	64 ounce hose-end	500	1.01	64 ounce hose-end	600	1.2

ADDITIONAL PRODUCTS



Ca-Libur 20 - 1 to 2 tablespoons per gallon of water. Apply after fruit set

Kelp - 1 to 2 teaspoons per gallon of water. Apply as a stress drench. Apply prior to frost for cold weather frost protection.



IMPORTANT NOTICE: DISCLAIMER AND LIMITATION OF LIABILITY: This product has been researched to provide necessary data to support its uses stated on the label, or stated in this document. The user should always follow the label directions and exercise judgment and caution when using the product under their growing conditions. NO WARRANTY OR REPRESENTATION IS MADE, EXPRESS OR IMPLIED, CONCERNING THE RESULTS OBTAINED FROM THE USE OF THIS PRODUCT. The exclusive remedy of the user or buyer and the liability of Age Old Organics and EnP Inc, or its affiliates, for any and all losses, injuries, or damages resulting from the use and handling of this product shall be the purchase price paid by the user or buyer for the quantities of the product involved.



HYDROPONICS

For the proper maintenance of your hydroponic growing systems, you will need to know the pH and the EC levels of your water. The results of this measurement will provide you with the ability to measure the actual nutrient level within your system. Add the nutrients separately to the water and again take the pH and EC readings. Subtract the results of your water from the new results, thus giving you the actual EC level of only the nutrient in your system.

Initial Water Reading		
pH	E.C.	E.C. x 500 = ppm

As a general rule, the ideal level for optimum growth is a range of 800 to 1200 ppm and a pH range of 5.8 to 6.3. Add water to your system as needed, and keep measuring both the pH and EC levels of your solution. Add additional nutrients as required. Total systems should be flushed and restocked every two to four weeks.

Liquid Soil A			Liquid Soil B			Liquid Soil A and B together		
Amount	E.C.	ppm	Amount	E.C.	ppm	Amount	E.C.	ppm
1 tsp (5 ml)	0.2	100	1 tsp (5 ml)	0.3	150	1 tsp A 2 tsp B	0.7	350
2 tsp (10 ml)	0.5	250	2 tsp (10 ml)	0.5	250	2 tsp A 2 tsp B	1.2	600
3 tsp (15 ml)	0.7	350	3 tsp (15 ml)	0.7	350	3 tsp A 6 tsp B	2.1	1150
4 tsp (20 ml)	1.0	500	4 tsp (20 ml)	1.0	500	Not recommended		

Age Old Bloom, Grow and Fish and Seaweed can also be added to hydroponic and NFT systems as an organic supplement to the basic two part liquid soil system. The pH of hydroponic systems should be between 5.8 and never above 6.5. The use of an EC meter will help you maintain the optimum levels of nutrients for the best growing response. Any sign of excessive algae growth in the growing system will indicate the need to flush and recharge the system. The chart below provides general guidelines for indoor gardening.

Plant	E.C. Level	ppm
Peppers	2.0-2.7	1000-1350
Tomatoes	2.2-2.5	1100-1400
Lettuce	0.3-1.4	150-700
Rooted Cuttings	0.4-1.6	400-800

Amount	Grow		Bloom		Fish & Seaweed		HELP	
	E.C.	ppm	E.C.	ppm	E.C.	ppm	E.C.	ppm
1 tsp (5 ml)	0.18	90	0.3	150	0.2	100	0.30	150
2 tsp (10 ml)	0.33	165	0.66	330	0.4	600	0.50	250
3 tsp (15 ml)	0.81	405	1.33	665	1.4	700		

GROWING TIPS

Potatoes

Planting:

Soak eyes in a solution containing 1 teaspoon of Liquid Kelp and a gallon of water for up to 24 hours prior to planting. Prepare ground for transplants, work in 3 to 5 pounds of Grow Formula per 100 square feet into the top 4 to 6 inches of soil. Add one scoop of Root Rally below each eye. Water in completely.

Growers Tip:

Potatoes love leaf feeding. Monthly feedings of Ca-libur 20 and Liquid Grow at a rate of 1 tablespoon per gallon of water. The calcium helps prevent brown spots.

New Plantings Grapes and Fruiting Berries

Soak roots prior to planting for up to 24 hours in a solution of Liquid Kelp at the rate of 2 ounces per gallon of water. Prepare soil and fertilize by following the instructions for planting.

Established Plantings: Starting in early spring, leaf spray bushes with a solution containing one teaspoon of Liquid Kelp, and one teaspoon of Liquid Grow per gallon of water monthly. Repeat sprays until leaves start to turn in the early fall.

Growers Tip:

The addition of 1 to 3 ounces of Ca-Libur 20 per gallon of water used as a drench during fruiting season will help produce firm sweet berries.

Gardens

Seeds:

Prepare seed bed by loosening to a depth of 6 to 8 inches. Make a trench at the proper depth as noted on seed packet. Add Root Rally at the rate of one scoop per foot of row. Cover seed and spread Dry Bloom at the rate of 5 pounds per 100 square feet. Water in completely making sure moisture reaches at least 2 inches into the soil.

Seed Emergence:

Water plantings with a solution of two teaspoons per gallon of water using Liquid Bloom. Repeat applications every 10 to 15 days using one teaspoon per gallon, till flower or fruit initiation. After initial flowering or fruit formation continue fertilization program using Liquid Grow at the same rate.

Transplants:

Prepare soil by loosening to a depth of 6 to 8 inches. Place one scoop of Root Rally into the bottom of hole. Place planting and replace soil mix. Top dress ground with one scoop of Grow Formula for each plant. Water in completely. Spray plants every 15 to 30 days with one tablespoon per gallon of water containing Liquid Grow.

Winterizing Perennials:

Loosen soil around the plant out to the crown line to a depth of 3 to 6 inches. Sprinkle Dry Fruit formula at a rate of 3 to 5 pounds per 100 square feet. Work into the top 2 to 3 inches of soil, and water in with a solution of one tablespoon of Liquid Kelp per gallon of water. Pour over plant and soil, thoroughly wetting area to a depth of at least 2 inches.

Growers Tip:

Many times better results are achieved by using half rates of liquid fertilizer and fertilizing with each watering. The addition of Promote to your watering will reduce the need to water as often.

GROWING TIPS

Strawberries and Fruiting Bushes

Strawberries:

Prepare ground for transplants by working in 3 to 5 pounds per 100 square feet of Grow Formula into the top 3 to 4 inches of soil. If soil is very hard and compacted, add Growing Soil Mix to the soil until it works up well. Add one scoop of Root Rally to bottom of holes. Place plantings and replace soil mix. Water in completely with 2 teaspoons of In Full-Bloom for every gallon of water. Foliar feed every 7 to 14 days using 1 teaspoon per gallon of water. After bloom set, foliar feed using 1 to 2 teaspoons of Liquid Grow per gallon of water every 15 to 30 days.

Established Beds:

In early spring top dress with In Full-Bloom at the rate of 3 to 5 pounds per 100 square feet. Foliar feed plants every 7 to 14 days with one to two teaspoons of Liquid Bloom for every gallon of water. Repeat application every 7 to 14 days. After bloom set, foliar feed by adding 1 to 2 teaspoons of Liquid Grow per gallon of water every 15 to 30 days.

Winterizing Beds:

In the fall, mow patch with lawnmower, and top dress with Dry Fruit at the rate of 5 pounds per 100 square feet. Water in application using two teaspoons of Liquid Grow.

New Plantings Trees and Shrubs

Planting:

Prepare a solution containing one ounce of Liquid Kelp and one tablespoon Promote for each gallon of water. Place roots in container and soak for 24 hours prior to planting. Add one scoop of Root Rally into prepared hole prior to planting. Replace soil, and water thoroughly with the same solution used for root soaking.

Root Feeding:

Make a tank mix using one ounce of Liquid Grow, one tsp Soluble Mycorrhizae, and one Tbsp Promote for each gallon of water. Prepare sufficient solution so the you can soak the ground to a depth of one inch starting at the base of the plantings to the crown. After applying the solution, then water in completely to a depth of at least three inches. If you are using a root feeder. Make the same solution and apply in a circular even pattern starting at the base of the planting, and extending out to the crown.

Growers Tip:

The addition of Promote on a regular schedule will reduce the need to water as often and will encourage deeper root growth.

Container Plantings

New Planters:

For large planters mix Growing Soil Mix with 1/3 to 2/3 native soil. Wet media, and prepare planting holes by adding one scoop of Root Rally to bottom of holes. Place plantings and replace soil mix. After planting is complete, sprinkle one scoop of In Full-Bloom per square foot of planter surface over the top. Water in completely. For proper maintenance of plantings, mix one teaspoon of Liquid Grow per gallon of water every 7 to 10 days.

Established Planters:

Sprinkle one scoop of Grow Formula for every 6 inches of planter surface. Work into the top 2 to 3 inches of soil. Water in completely with 1 tablespoon of Liquid Grow for every gallon of water. Repeat fertilizer application every 15 to 30 days. When adding new plants to established planters, prior to planting place one scoop of Root Rally in bottom of hole. Place planting and replace soil mix. Water in completely with a solution of one teaspoon Liquid Kelp per gallon of water. Water planters in normal manner adding one tablespoon of Liquid Grow per gallon of water every 15 to 30 days.

Growers Tip:

Over watering is one of the most common mistakes made by gardeners, be careful, Check by sticking your finger up to the first joint into the soil. If it is damp, don't water. When you do water, make sure you wet the soil all the way to the bottom of the container.