

Organic Fertilizers

- Unlike the chemical kind, organic fertilizers feed soil organisms in addition to your plants, helping to **build healthy soil**—not destroy it.



Organic Fertilizers

- Be wary of products labeled organic that have an NPK (nitrogen-phosphorus-potassium) ratio that adds up to more than 16.



Organic Fertilizers

- Derived From: Hydrolyzed Poultry Manure, Bone Meal, Hydrolyzed Fish Protein, Hydrolyzed Soy Protein, Potassium Sulfate & Kelp Extract.
- Total Nitrogen 1.00 %
- Available phosphate 3.00%
- Soluble Potash 1.00%
- Calcium 1.00%





Organic fertilizers/amendments

Triple super phosphate- rock phosphate (organic) treated with a acid bath (renders it inorganic).

Bone meal- Organic source of phosphorus.



Epsom Salts



EPSOM SALTS

Before applying Epsom salt, however, it's a good idea to have your soil tested to determine whether it's deficient of magnesium. You should also be aware that many plants, like beans and leafy vegetables, will happily grow and produce in soils with low levels of magnesium. Plants like rose, tomatoes and peppers, on the other hand, require lots of magnesium, and therefore, are more commonly watered with Epsom salt. When diluted with water, Epsom salt is easily taken up by plants, especially when applied as a foliar spray. Most plants can be misted with a solution of 2 tablespoons of Epsom salt per gallon of water once a month. For more frequent watering, every other week, cut this back to 1 tablespoon.

<https://www.gardeningknowhow.com/garden-how-to/soil-fertilizers/epsom-salt-gardening.htm>

Organic soils

- The need for disease- and weed-free media favors the use of soilless media, or potting mixes, that are made primarily from natural materials, such as peat, compost, and/or manures augmented with perlite, vermiculite, peat moss, and organic fertilizers.



Organic soils



urpee® Natural & Organic Premium Growing Mix 0.12-0.12-0.12

Guaranteed Analysis

Total Nitrogen (N)	0.12%
0.012% Ammoniacal Nitrogen	
0.012% Other Water Soluble Nitrogen	
0.096% Water Insoluble Nitrogen*	
Available Phosphate (P_2O_5)	0.12%
Soluble Potash (K_2O)	0.12%
Calcium (Ca)	0.12%

Derived from composted poultry manure, feather meal and sulfate of potash.

**0.096% slow release nitrogen derived from composted poultry manure and feather meal.*

Information regarding the contents and levels of metals in this product is available on the internet at: <http://www.aapfco.org/metals.html>

La información relacionada con el contenido y los niveles de metales en este producto se encuentra disponible en Internet en <http://www.aapfco.org/metals.html>

F2167

INGREDIENTS: This product is formulated from

Organic soils

of food waste
a year!

than 5 recycled!

decomposing food fills up almost **1/5** of all landfill space!

ingredients: this mix is regionally formulated and contains a blend of processed pine bark or wood fines, coir, perlite and compost (compost made from yard trimmings and food scraps).

in Georgia and New Hampshire, this product contains: 50% processed pine bark, coir, perlite and compost (compost made from yard trimmings and food scraps).

in California, this product contains wood fines, coir, perlite and compost (compost made from yard trimmings and food scraps).

F002052

join the ecoscraps revolution

americans  throw away over **30 million tons** of food waste a year!

in america nearly **40%** of food goes uneaten!

rotting food creates **methane** which is **20x** more harmful to the environment than carbon dioxide!

less than **5%** of food waste is recycled!

decomposing food fills up almost **1/5** of all landfill space!

Make your own potting soil





HORTICULTURAL VERMICULITE

VERMICULITA HORTÍCOLA

FINE GRADE EXCELLENT FOR SEED STARTING
DE ALTA CALIDAD Y EXCELENTE PARA LA PRODUCCIÓN DE SEMILLAS

Helps improve soil aeration and drainage
Ayuda a mejorar la aireación del suelo y el drenaje

Perfect for **GERMINATION** of **SEEDLINGS** and **PLANT CUTTINGS**
Perfecta para la germinación de plántulas y el recorte de plantas

REDUCES SOIL COMPACTION



Perlite

Perlita

**Improves Drainage &
Aeration In Potting Mixes**

Mejora el drenaje y la aireación en las mezclas para macetas

**Enriched With
Miracle-Gro® Plant Food**
Enriquecida con el fertilizante
de Miracle-Gro®

**Helps Prevent
Soil Compaction**
Ayuda a prevenir la
compactación del suelo

NET CONTENTS / CONTENIDO NETO 8.45 lb. at 4 quarts / 8.8 l

Organic weed suppression

- NOP regulations allow the use of newspaper or other recycled paper as an "allowed synthetic" with the provision that it be "**without glossy or colored inks**" (refer to NOP regulations 205.2, 205.601(b)(2), and 205.601(c)). It does take some work to separate out the newspapers that are neither glossy nor use colored inks.



Organic weed suppression

- **Cardboard** can be a useful material used in organic gardening for suppressing weeds, retaining moisture and adding organic matter to your soil.





Herbicide drift from Synthetic herbicide

- High temperatures (above 85°F) during or immediately after application may cause some synthetic herbicides to vaporize and, like highly volatile formulations, move to areas outside the site of application. Volatilized herbicides in a vaporized state may still be capable of causing damage.



Herbicide drift from **SYNTHETIC HERBICIDE**



Organic weed control



Organic weed control



Organic weed control



Organic Herbicide

- **Boiling water** will kill any plant growth it touches. It is very inexpensive and simple to use. It is superb for killing annual weeds and can control and/or kill perennial weeds. It is a popular non-toxic means for killing weeds growing in cracks and driveways.



Organic herbicide

The contact nature of the vinegar + salt mixture can be a benefit. If you need to kill weeds in close proximity to a desirable plant (say, killing chickweed in a flower bed), then glyphosate can be problematic. Only one or two stray drops from the glyphosate spray bottle onto a flower might be enough to kill the entire plant. A few stray drops of the vinegar + salt solution, on the other hand, will probably cause a little speckling but won't kill the desirable plants.



Organic herbicide

- Vinegar concentrates make effective organic weed killers with almost immediate results. Spraying the solution directly on a weed strips off the foliage's waxy cuticle that protects the plant's cells from losing water. This causes the weed to dry out down to the root.



Organic herbicide

- Pour 1/2 gallon of vinegar into a bucket.
- Add 1/2 cup of table salt.
- Stir in 1 tablespoon of liquid dishwashing soap.
- Funnel the weed killer into a plastic spray bottle



Organic herbicide



Organic Herbicide



Organic herbicide



Organic Herbicide



Lespedeza



Lespedeza



Organic Herbicide



Organic Herbicide



Organic Herbicide



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Organic Herbicide



Organic Herbicide

- Post emergent of all herbaceous broadleaf and grass weeds
- Fast-acting and effective: kills dandelions within 3 hours
- Active Ingredients: Citric Acid (24%), Clove Oil (8%)
- Inert Ingredients (68%): Water, Lauric Acid, Octanoic Acid, Gum Arabic, Xanthan Gum, Sodium Acetate.



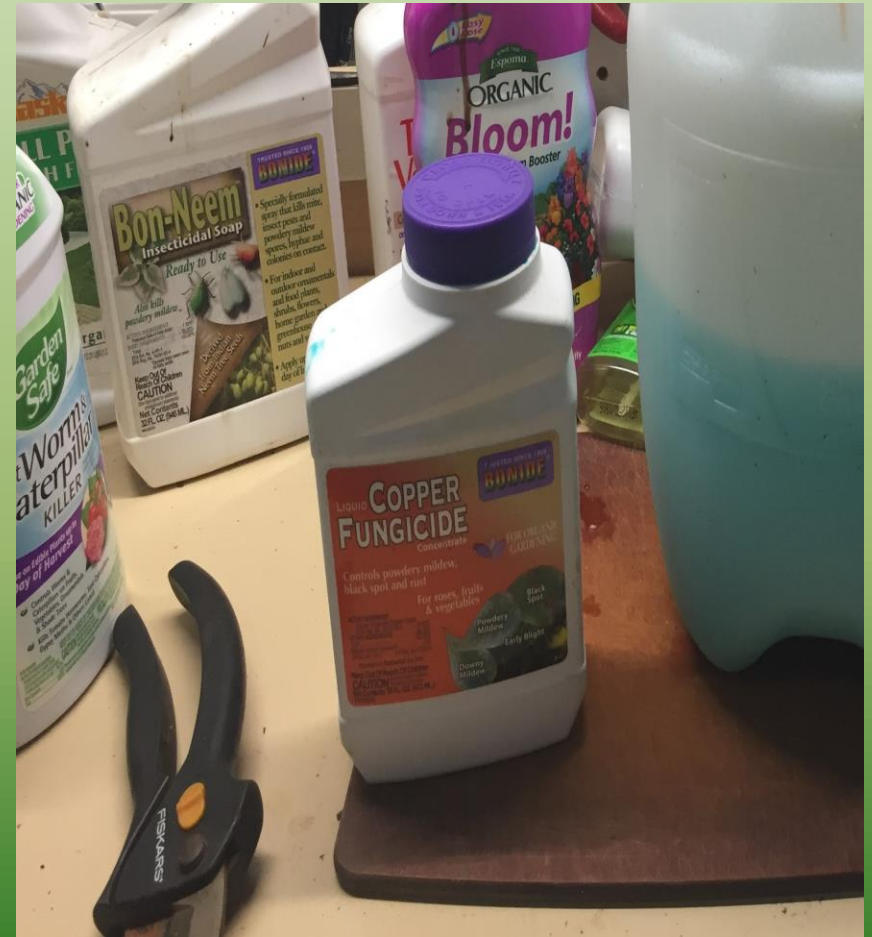
Organic Herbicide

- A natural post emergent herbicide (selective) that can be used on the following weeds and does not harm warm or cool season grasses:
- Dandelion, Plantain Clover, Ground Ivy, Knotweed, Purslane, Black Medic, Wild Violet, Foxtail, Quack Grass, Barnyard Grass, Curly Dock, Annual Bluegrass, Foxtail, Orchard Grass, Catch Weed, and more.
- **OMRI listing is pending.**



Organic fungus control

- Application of copper is a routine disease control practice in organic tomato production in the eastern United States. Copper functions both as a fungicide and bactericide and is labeled (under the NOP) for anthracnose, bacterial speck, bacterial spot, early and late blight, gray leaf mold, and septoria leaf spot.

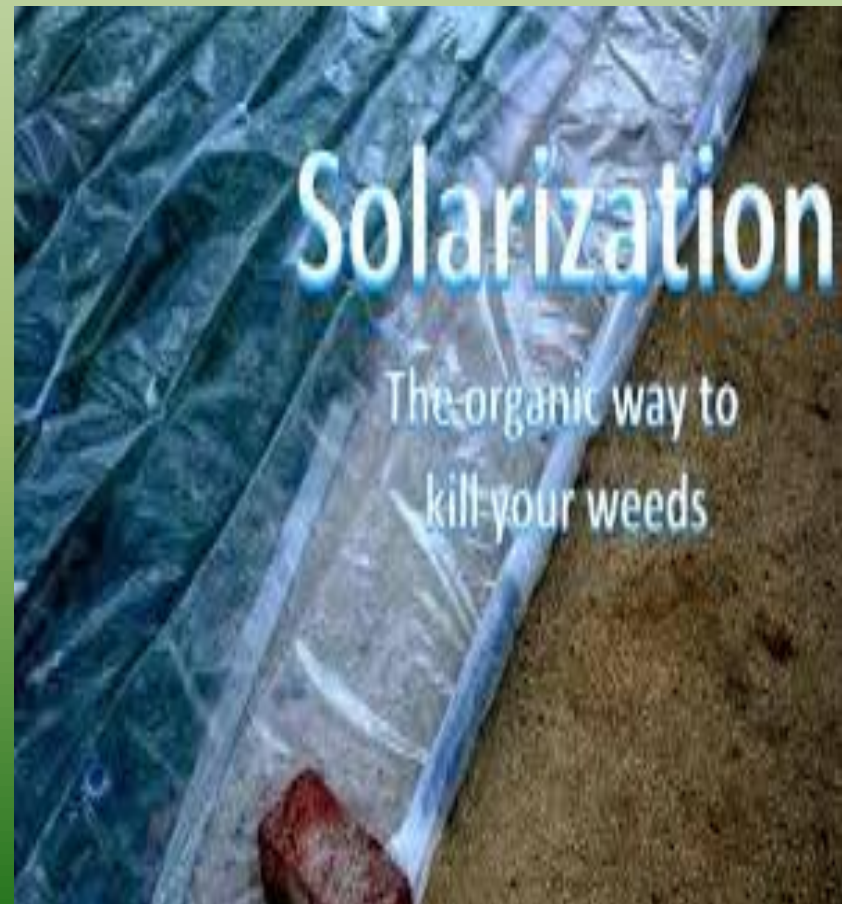


Soil solarization

James J. Stapleton, Ph.D., Integrated Pest Management plant pathologist at the University of California's Kearney Agricultural Center Academic Unit

<https://www.youtube.com/watch?v=NEZKINoOhGY>

- Cultivate the soil, and collect and dispose of dead plants and other debris that might harbor pests.
- Level and smooth the soil surface.
- Irrigate the soil very well to at least 12 inches deep to increase its heat conductivity.
- Lay a clear plastic tarp on the soil surface. (1 to 4 mil painter's plastic works well and is readily available.) Anchor the edges of the tarp with soil. The closer to the soil surface the plastic is, the better the heating. Remove the tarp after 4 to 6 weeks and resume gardening.



Organic fungus control

