# Allowed, Restricted and Prohibited Substances for Produce and Livestock

The following are lists containing some of commonly used substances that are *allowed*, *restricted* and *prohibited* in the CNG Program. This list is NOT exhaustive, but is meant to give producers and consumers a better general idea of our standards and address some common questions.

Because certain substances are allowed for particular uses, but not others, this list is organized by use: Fertility and Soil Amendments, Plant Pests and Diseases, Weed Control, Livestock External Parasiticides, Livestock Feed Additives, and Livestock Health.

NOTE: Check the OMRI List for materials or products that are not listed below.

NOTE: While there are many substances not listed under OMRI that would qualify for CNG use, any material listed by OMRI is allowed, with the exception of Rotenote, which is a prohibited substance.

NOTE: CNG allows the use of Paper Pot Transplanters.

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**Restricted Substances for Produce** 

Fertility, Soil Amendments and Potting Mixes

Plants Pests and Disease

Weed Management and Miscellaneous

**Restricted Substances for Livestock** 

**Prohibited Substances for Produce** 

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Additional Useful Resources

# Allowed Substances for Produce

# Fertility and Soil Amendments – Allowed

Animal and plant products such as:

- bone meal
- · blood meal
- feather meal
- fish emulsion
- · alfalfa meal
- soybean meal
- molasses
- neem
- yucca

Compost – NOTE: for plant materials, but be heated to at least 131°F (55°C) for at least 3 days. For compost containing animal and plant materials, must be heated to 131°-170°F for at least 15 days and must be turned 5 times.

Compost tea – NOTE: same restrictions as raw manure – "It may only be (i) applied to land used for a crop not intended for human consumption; (ii) incorporated into the soil not less than 120 days prior to the harvest of a product whose edible portion has direct contact with the soil surface or soil particles; or (iii) incorporated into the soil not less than 90 days prior to the harvest of a product whose edible portion does not have direct contact with the soil surface or soil particles."

#### Cover crops

Rock minerals such as

- High-calcium aglime
- Dolomitic limestone
- Rock phosphates
- Gypsum
- Sulfate of potash-magnesia
- Mined potassium sulfate
- Greensand or glauconite
- Glacial gravel dust
- Lava sand
- Granite meal

### Plant Pests and Diseases – Allowed

Biological and microbial products such as

- Bacilus thuringiensis (Able©, Bt©, Dipel©, Deliver©, Foray©)
- Bacillus subtilis (Serenade©)
- Beauveria bassiana (Mycotrol©)
- Coniothyrium minitans (Contans©)
- Myrothecium verrucaria (DiTera©)

Diatomaceous earth

Hydrogen Peroxide - for sanitizing or disinfecting

**Insect Netting** 

Minerals such as

- Elemental sulfur
- Bicarbonate, potassium or sodium
- Kaolin clay (Surround WP©)

Oils - narrow range petroleum, vegetable and fish oils are allowed for insect and pest control during the dormant and growing seasons

Pheromones and pheromone traps

Plant-derived substances such as

- Neem
- Pyrethrum
- Caraway oil
- Seed fennel
- Corn gluten
- Garlic
- Quassia
- Equisetum
- Ryania

Row cover

Soaps (non-detergent) – Approved only for use on food crops (or equipment that come into contact with food crops) as a pesticide, fungicide, or algaecide. If used as herbicide, must be used only on non-food plants or around buildings, roadways, etc.

Streptomycin Sulfate and Tetracycline- only for fire blight in apples and pears

Sticky traps

Sulfur dioxide—underground rodent control only (smoke bombs)

Vitamin D3 (Cholecalciferol) – for rodent control

# Weed Management and Miscellaneous- Allowed

Mulch such as

- Biodegradable plastic
- Paper that is not glossy and does not have colored ink
- Plastic mulch, so long as it is removed at the end of season
- Straw, pine bark, wood chips and other plant based mulches that do not contain dyes or synthetic compounds

Paper pot transplanters

Plastic tarps, so long as they are removed at the end of season

Vinegar

Row cover and frost cloth

Weed barrier, so long as it is removed at end of season

NOTE for perennial growers: "In perennial cropping systems, plastic mulch, weed barriers or row covers may be left in the field beyond the harvest season; however, these inputs must be removed before the plastic decomposes or breaks into pieces so that it is not possible to effectively remove all pieces from the soil."

# Allowed Substances for Livestock

### Livestock External Parasiticides – Allowed

#### Biologicals such as

Spinosad (Natular<sup>TM</sup>)

#### Botanicals such as

Pyrethrum (Equisect<sup>TM</sup>)

#### Essential oils such as

- Citronella
- Grapeseed
- Jojoba
- Lemongrass
- Soybean oil

### Livestock Feed Additives – Allowed

NOTE: these "may not be used in amounts above those needed for adequate nutrition and health maintenance at its specific stage in life. May not be used to stimulate growth or production."

Diatomaceous earth

Fish meal

Kelp and seaweed meal

#### Minerals such as

- Calcium
- Carbon
- Cobalt
- Copper
- Iron
- Magnesium
- Manganese
- Phosphate
- Potassium
- Sodium

<ul><li>Sulfur</li><li>Zinc</li></ul>
Probiotics -some products can be fed routinely, while others can only be administered in case of illness
Salt
Synthetic Phosphorous
Synthenic Selenium
Yeast
Yucca
Livestock Health – Allowed

Aspirin - to reduce inflammation

Colostrum/Whey Antibodies

Essential oils such as

- Eucalyptus
- Lemon
- Oregano
- Thymol

Glycerin – "must be produced through the hydrolysis of fats or oils."

Iodine – topical

Mineral oil – topical

Oxytocin

Probiotics – NOTE: some products can be fed routinely, while others can only be administered in case of illness

Vaccines

# **Restricted Substances for Produce**

## Fertility, Soil Amendments, and Potting Mixes - Restricted

High salt content fertilizers such as sodium nitrate, potassium sulfate, potassium chloride –must have a plan to limit salt accumulation

Raw manure – must be applied 120 days before harvest

Sodium (Chilean) nitrate -must not account for more than 20% of crop's total N requirement

Synthetic micronutrients – use is permitted if there is a documented deficiency NOTE: Micronutrients— may only be used for fertility, and there must be a documented deficiency. Micronutrients made from nitrates or chlorides are prohibited

#### Plant Pest and Disease - Restricted

Boric acid—only if there is no direct contact with organic food or crops

Copper –must be used in a manner that prevents accumulation in the soil

Soaps - non-detergent only; for food crops only; as a pesticide, fungicide, or algaecide. If used as herbicide, must be used only on non-food plants or around buildings, roadways, etc. Cannot be used for disease control

# Weed Management and Miscellaneous - Restricted

Herbicidal soaps – must not come into contact with crops, only for controlling weeds around buildings and roadways.

# Restricted Substances for Livestock

Atrophine - only by lawful written order of veterinarian and with a meat withdrawal period of 56 days for slaughter stock, and milk discard of 12 days for dairy

Butrophanol – only by lawful written order of veterinarian and with a meat withdrawal period of 56 days for slaughter stock and milk discard of 12 days for dairy.

Invermectin (for dairy stock and breeder stock) –only for emergency treatment, milk products from a treated animal may not be marketed as CNG for 90 days. For breeder stock, must not be used during the third trimester. It is prohibited for use on slaughter stock.

Poloxalene – only for emergency treatment of bloat.

# **Prohibited Substances for Produce**

# Fertility, Soil Amendments, and Potting Mixes – Prohibited

Ash from manure burning

Chemically-processed minerals, including quick lime and sugar lime

Compost with sewage sludge

Glossy paper or paper with colored ink

Rockwool

Synthetic compost starter

Synthetic fertilizers such as

- Ammoniacal nitrogen
  - Potassium Chloride
  - Synthetic nitrates
  - Synthetic phosphates
  - Urea and uric acid

Synthetic wetting agents

### Plant Pests and Diseases - Prohibited Substances

Detergent-based soap products

Heavy metal or petroleum based pesticides

Nicotine sulfate and other tobacco products

Rotenote

Synthetic insecticides, fungicides, miticides such as

- Allethrins
- Metam Sodium
- Neonicotinoids
- Synthetic Pyrethoids

Synthetic wetting agents

# Weed Management and Miscellaneous - Prohibited

Heavy metal or petroleum based herbicides

Micronutrient-based herbicides

Paper mulch with glossy paper or paper with colored ink

Soap-based herbicides

Synthetic and DNA herbicides such as

- 2,4-D
- Atrazine
- Dicamba
- Glyphosate

# **Prohibited Substances for Livestock**

**Anti-biotics** 

Feed grown or treated with synthetic fertilizers or pesticides

Genetically modified feed or probiotics

Genetically modified pro-biotics

Invermectin (for slaughter stock)

Most conventional veterinary medications

Most parasiticides

Slaughter bi-products, urea and manure re-feeding www.naturallygrown.org

# Additional useful resources:

- -List of Vendors of Microbial and Botanical Insecticides and Insect Monitoring Devices, from the University of Kentucky, College of Agriculture:
  - http://www.ca.uky.edu/entomology/entfacts/ef124.asp
- -Efficacy of OMRI Approved Insecticides and Acaricides, by Corin Pease, Dept of Entomology, University of California, Davis:
  - http://www.vineyardteam.org/files/resources/Corin%20Pease Organic%20Alternatives.pdf