

Examples of General Use Insecticides, Acaricides and Molluscicides for Home Vegetable Gardens, Fruit Crops 2011 Registrations in New Mexico

**Dr. Carol Sutherland, Extension Entomologist, NMSU
& State Entomologist, NM Dept. Agriculture**

This is NOT a complete listing of these pest management products, but will give the reader names of potential products to consider by primary active ingredient. This list is not an endorsement or recommendation of any product(s). The label will tell you if the product is appropriate for a particular vegetable and will list certain pests attacking that vegetable or fruit. The products listed below vary considerably in terms of efficacy, residual action, mode of action and cost. You will find “conventional” pesticides listed here as well as those appropriate for use by “certified organic growers.” Products that meet the “organic product” requirements for the New Mexico Organic Commodity Commission, the Organic Materials Review Institute AND are currently registered by the Environmental Protection Agency and New Mexico Department of Agriculture are marked with **. RTU = Ready to Use; RTS = Ready to Spray.

**READ THE LABEL before purchasing or using any of these products!
Follow all directions on the label for mixing, application, storage,
disposal and general safety recommendations.**

Soaps, Fats, Glyceric Oils, Salts of Fatty Acids: many are potassium or ammonium salts of fatty acids selected for low phytotoxicity; they asphyxiate pests or disrupt their cuticles. Some may suppress transmission of certain plant viruses to some extent; others may disrupt pest behavior;---e.g.

Safer Brand 3-in-One Concentrate II
Concern Garden Defense MultiPurpose Spray RTU
Concern Multi-Purpose Insect Killer Concentrate (w/pyrethrins)
Safer Brand Fruit & Vegetable Insect Killer II
Garden Safe Brand Fungicide 3-in-1 RTU
Garden Safe Multi-Purpose Insecticidal Soap Insect Killer
Green Light Rose Defense II RTU
Green Light Tomato & Vegetable Spray RTU
Natural Guard Insecticidal Soap (and RTU)
Natural Guard Neem PY (oil w/pyrethrins)
Safer Brand Bug Patrol Lawn & Landscape Insecticide
Worry Free Brand Insecticidal Soap
Earth-Tone Insecticidal Soap
Fertilome Rose, Flower and Vegetable Spray (neem oil)
Safer Brand Yard & Garden Insect Killer II Concentrate (w/pyrethrins)
Safer Brand Insecticidal Soap
M-Pede Insecticidal Soap
JMS Organic Stylet Oil

Phosphoric Acid, Iron Salt (for Slugs and Snails)

Bayer Advanced Dual Action Snail & Slug Killer Bait RTU
Garden Safe Slug & Snail Bait
Spectracide Snail & Slug Killer Bait
Worry Free by Lilly Miller Ferramol Slug & Snail Bait
Sluggo Plus
Sluggo

Metalddehyde (for Slugs and Snails)---e.g.

Bug-Geta Snail & Slug Killer 1
Deadline M-PS
Hi-Yield Improved Slug & Snail Bait
KGro Snail & Slug Killer 1
Metarex 4% Snail & Slug Bait

Carbaryl---conventional synthetic insecticide; a carbamate; widely used on edible and landscape plants for over 50 years; fewer sites and pests on labels as time passes---e.g.

Bayer Advanced Complete Insect Killer for Gardens
Gardentech Sevin RTU
10% Sevin Granules, Loveland Products
Fertilome Liquid Carbaryl Garden Spray
Hi-Yield Lawn & Garden Insect Killer Granules
Hi-Yield 5% Carbaryl Garden & Pet Dust
Hi-Yield 10% Carbaryl Garden & Pet Dust

Malathion--- conventional synthetic insecticide; an organophosphate; widely used on edible and landscape plants for over 50 years; fewer sites and pests on labels as time passes; ---e.g.

Hi-Yield 5% Malathion Dust
Hi-Yield 55% Malathion Spray

Pyrethrum, pyrethrins: paralytic (nerve poison); temporary paralysis if dosage is too low; often have PBO synergists added or other insecticides to increase efficacy;---e.g.

Concern Multi-Purpose Insect Killer RTU
Concern Rose & Flower Insect Killer
Concern Tomato & Vegetable Insect Killer
Garden Safe Brand Lawn & Garden Insect Killer
Fertilome Quick Kill Home, Garden & Pet Spray
KGro RTU Tomato & Vegetable Insect Killer
Pyganic 1.4EC or 5.0EC (both ** products have pyrethrum from powdered, dry flower heads of SW Asian and African spp. Of Chrysanthemum)
Safer Brand Yard & Garden Insect Killer or **...Killer II ** (both w/soap)

Permethrins---synthetic pyrethrins with enhanced toxicity, residual activity; ---e.g.

Eliminator Ant, Flea, Tick & Mosquito Killer (& RTU)
Eliminator Flower & Garden Insect Killer RTS

ermethrins (cont.)---synthetic pyrethrins with enhanced toxicity, residual activity (cont.)

Eliminator Mosquito & Flying Insect Killer RTS
 Eliminator Termite & Carpenter Ant Killer Concentrate
 Gardstar Garden & Poultry Dust
 Gordon's Bug No-More Multi-Purpose Concentrate (& RTS)
 Pre-Strike Yard & Garden Spray
 Terro Mosquito Killer Yard & Patio Protection
 Tractor Supply Co., Groundwork Conc. Multi-Insect Killer 2
 Tractor Supply Co., Groundwork Hose End Multi-Ins. Killer 2
 KGro Multi-Purpose Garden & Pet Dust
 Fertilome Indoor/Outdoor Multi Insect Spray
 Hi-Yield Garden, Pet & Livestock Dust
 Hi-Yield Indoor/Outdoor Broad use Insecticide Including Turf & Gardens

Biological By-products from Assorted Microorganisms (mostly bacteria or fungi);---e.g.

Safer Tree, Shrub & Vegetable Caterpillar Killer BT Conc.
 Vectobac---*B. thuringiensis israelensis* for aquatic fly larvae
 Gnatrol--- “
 Green Light Bt Worm Killer
 Green Light Dipel Dust
 Green Light Lawn & Garden Spinosad
 Hi-Yield Rotenone 100 Insecticide Dust
 Hi-Yield Spinosad Landscape & Garden Insecticide RTU
 Fertilome Dipel Dust
 American Brand Thuricide Concentrate (Voluntary Purchasing)
 Safer Brand Garden Dust
 Safer Tree, Shrub and Vegetable Caterpillar Killer Bt Concentrate
 Entrust (spinosad, a soil fungus by-product)
 Monterey Garden Insect Spray (spinosad)
 Mycotrol-O (*Beauveria bassiana*, a fungus that sickens or kills certain insects).
 Dipel DF and **Dipel Pro DF**--Bt spore endotoxin paralyzes larval gut

Minerals: silicon is the common element in sand and rock-based materials---e.g.

Diatect Multipurpose Insecticide II (silicon dioxide, pyrethrins)
 Protect-it (stored seed) (silica gel, silicon dioxide)
 Results Fire Ant Insecticide (silicon dioxide, pyrethrins)
 Surround WP Crop Protectant (Engelhard Corp.) (kaolin clay; acts as a physical barrier, color mast and irritant to some insects; also anti-transpirant)

Neem Products: botanical byproducts from the south Asian neem tree; includes seed extracts and the active ingredient azadirachtin; some repellency; acts as insect growth regulator with contact, ingestion or some systemic activity. Can be phytotoxic.---e.g.

Agroneem
 AZA-Direct Biological Insecticide**

Other Botanical By-products, by active ingredient

Hot Pepper Wax (& RTU) by Voluntary Purchasing Group

Nicotine: Highly toxic in concentrated form

Fertilome Dog & Rabbit Ridder---animal repellent

Repel Animal Repellent (Farnam Laboratories)---animal repellent

Rotenone: still used as a fish toxicant (but not in the products below)

BONIDE LIQUID ROTENONE PYRETHRINS SPRAY
EAR MITE SOLUTION (Durvet, Inc.)
FERTI-LOME ROSE AND FLOWER DUST
GARDEN DUST FOR FRUITS, VEGETABLES, AND FLOWERS RTU
GREEN LIGHT ROSE AND FLOWER DUST
HI-YIELD ROTENONE 100 INSECTICIDE DUST

Cube resins, not rotenone

BONIDE LIQUID ROTENONE PYRETHRINS SPRAY
EAR MITE SOLUTION
FERTI-LOME ROSE AND FLOWER DUST
GARDEN DUST FOR FRUITS, VEGETABLES, AND FLOWERS READY TO USE
GREEN LIGHT ROSE AND FLOWER DUST

NOTE: Products listed above are those the average home gardener might be expected to find without too much difficulty on the pest control shelves in discount stores, department stores, nurseries, garden centers, home improvement stores, hardware stores and farm supply stores. Those products marked with ** for “certified organic producers may require special order; inquire about availability of these products---or assistance in ordering---from local farm/chemical suppliers or the manufacturers (on-line or telephone).

**Certified Organic Producers need to get approval to use even the ** products from this list to their crops. Call your Organic Certification Specialist/Inspector and/or the NM Organic Commodity Commission---(505)- 841-9067) for approval and instructions on documenting product use.