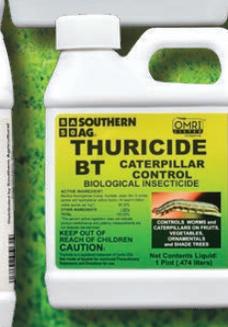
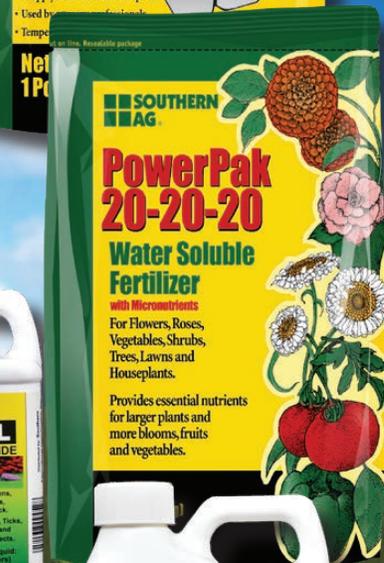
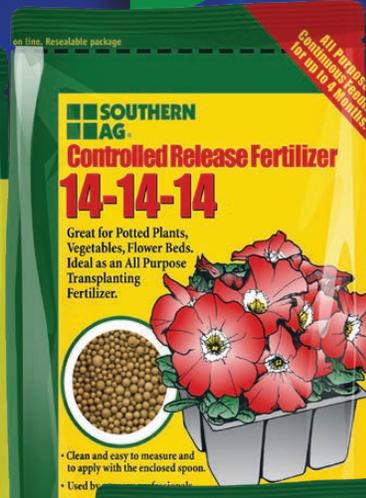
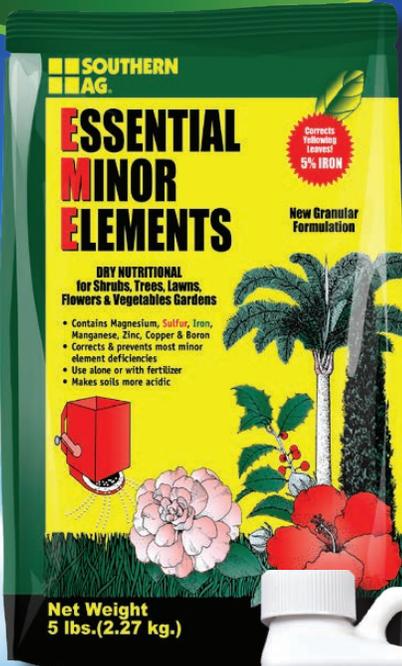


SOUTHERN AG[®] Since 1947

LAWN & GARDEN PRODUCT GUIDE



FUNGICIDES

LIQUID COPPER FUNGICIDE

- Controls diseases caused by bacteria & fungi

• Labeled for control of moss and algae
CONTAINS: 27.15% Copper diammonia diacetate complex (8% Metallic Copper Equivalent, 0.772 lbs per gallon)

USE ON: Many fruits, vegetables, turfgrass (algae control), live oak (spanish moss control) and ornamentals

CONTROLS: Many bacterial and fungal leaf spots, rust, blights. Also controls algae in turfgrass and moss in live oaks.

RATE: For most ornamentals and vegetables use between 2 to 6 tsp. per gallon. Rates vary depending upon use.

See label for specific information.

APPLICATION: Mix with water and apply as a cover spray.

PACKED: 12 x 8 oz. - #02901, 12 x Pt. - #02902, 12 x Qt. - #02903, 4 x Gal. - #02904



LIQUID ORNAMENTAL & VEGETABLE FUNGICIDE contains DACONIL®

- Same active ingredient as Bravo® used in agriculture

- Easy to mix formulation with a spreader sticker included

- Broad Spectrum Disease Control

CONTAINS: 12.5% Chlorothalonil

USE ON: Ornamentals, bulbs, foliage plants, conifers, many types of vegetables, and certain tree and orchard crops.

CONTROLS: Ornamentals; Leaf spot, foliar blight, powdery mildew, rust, and scab. Vegetables; Rust, botrytis, anthracnose, downy mildew, alternaria, blights and blotches.

RATE: Most ornamentals; 2.5 tablespoons per gal. Most vegetables; 2 - 4 tablespoons per gal.

APPLICATION: Mix with water and spray.

PACKED: 12 x Pt. - #06822, 12 x Qt. - #06823, 4 x Gal. - #06824



SA - 20 DISINFECTANT (Commercial Product)

- CLEANER - DEODORIZER - FUNGICIDE - MILDEWSTAT - SANITIZER - VIRUCIDE*

- Virucidal performance against Human Coronavirus (VR-740)

- For use in animal premises

CONTAINS: 10% Alkyl dimethyl benzyl-ammonium chloride and 10% Alkyl dimethyl ethylbenzyl ammonium chloride

USES: Disinfecting greenhouse areas, pots, and tools, algae control

APPLICATION: Mix with water. Depending upon specific use.

PACKED: 4 x gallon - #63514



FUNGICIDES

WETTABLE OR DUSTING SULFUR

- Controls rust of beans & brown rot of peaches
- Controls Powdery Mildew on many ornamentals

- Helps in the control of Rust Mite of Citrus (black fruit)

CONTAINS: 90% Sulfur

USE ON: Mangoes, peaches, strawberries, flowers, shrubs, lawns and many listed vegetables.

CONTROLS: Rust, powdery mildew, brown rot, leaf spots, mites and chiggers.

RATE: (varying) .25 - 2 lbs. per 1,000 sq. ft. or 1- 4 tablespoons per gallon

APPLICATION: Dust

thoroughly or mix with water and apply as a thorough cover spray.

PACKED: 10 x 5 lb. bags - #12305



THIOMYL SYSTEMIC FUNGICIDE

- Repackage of Cleary® 3336 WP

- Treats bulbs after digging for over-wintering

- Controls many stem, crown & root rots

- Controls many leaf spots such as Black Spot of Roses

CONTAINS: 50% Thiophanate Methyl Wettable Powder.

USE ON: Roses, many ornamentals, and bulbs as a bulb dip.

CONTROLS: Anthracnose, fusarium blight, black spot, botrytis and other diseases on ornamentals

RATE: Spray: 2.75 - 3 teaspoons per gal for most uses. See label for correct rate.

APPLICATION: Mix with water, apply as a full volume foliar spray.

PACKED: 6 x 2 oz. - #12900, 6 x 6 oz. - #12909



HERBICIDES

2,4 - D AMINE WEED KILLER

- Low, economical use rate of 1 to 4 pints per acre
- Controls many broadleaf weeds & woody plants
- Use in turf, pastures, rangeland, ditch banks, fences

CONTAINS: 3.8 lbs. per gallon 2, 4-D acid equivalent liquid concentrate in a low volatile amine form.

USE ON: Certain grasses in lawns, parks, golf courses, and pastures; fences, ditch banks, non-crop sites, small grains, and corn (pre and post emergent herbicide)

CONTROLS: Many broad-leaf weeds. See list on label.

RATE: 2- 3 tablespoons in 3 - 5 gallons of water to cover 1,000 sq. ft.

APPLICATION: Apply as a coarse low pressure spray, preferably with fan type nozzle.

CAUTION: SPRAY TO ACCURATELY OBTAIN INDICATED COVERAGE WITHOUT OVERLAP. AVOID DRIFT TO SUSCEPTIBLE PLANTS. **PACKED:** 12 x Qt. - #00203



HERBICIDES

ATRAZINE ST. AUGUSTINE WEED KILLER

- Kills many broadleaf weeds
- Also used in centipede grass
- Provides suppression of crabgrass
- Controls emerged weeds and weeds from seed

CONTAINS: 4% Atrazine

USE ON: St. Augustine and centipede lawn grasses.

CONTROLS: Many common grassy and broadleaf weeds.

RATE: 4.33 ounces per 500 sq. ft. per 1 gallon of spray

APPLICATION: Apply in 2 gallons of water to cover 1,000 sq. ft.

CAUTION: SPRAY TO ACCURATELY OBTAIN INDICATED COVERAGE WITHOUT OVERLAP. NOT RECOMMENDED FOR USE WITH HOSE-END SPRAYERS. Best results are obtained by application in early spring.

PACKED: 12 x Qt. - #00613, and 4 x Gal. - #00614



BROADLOOM SEDGE CONTROL

- Controls nutsedge (nutgrass) & certain broadleaf weeds

- Can be used "over the top" on certain ornamentals

- Low use rate of .75 oz per 1,000 square feet

- Can be mixed with other weed killers

CONTAINS: 42% Bentazon

USE ON: Established turf, and certain ornamentals

CONTROLS: certain broadleaf weeds and sedges

RATE (for turf): 2 pints per acre or .75 oz. per 1,000 sq. ft. in 1 - 2 gallons of water.

APPLICATION: Can be applied with a hose end or pump up type sprayer. Two applications may be necessary to control certain hard-to-control weeds like sedge.

Use an oil concentrate like HERBI-OIL 83-17. Can be combined with other herbicides.

PACKED: 12 x 8oz. - #00721, 12 x Pt. - #00722



BRUSH KILLER

- Simple Directions for Use

- Kills vines and hard-to-control plants

- Prevents sprouting on stumps

- Same active ingredients as GARLON® & REMEDY®

CONTAINS: 8.8% Triclopyr®

USE ON: non-crop areas such as road right of ways, rangeland, pastures, and fence rows.

CONTROLS: Many varieties of brush (including brazilian pepper, trees, vines and stump treatments).

RATE: Foliage spray; 4-8 oz. per gallon. Stump treatment; Brush or spray undiluted product on freshly cut stump.

APPLICATION: Apply as a full volume spray to foliage, shoots, stems and bark.

PACKED: 12 x Pt. - #01112, 12 x Qt. - #01113, 4 x Gal. - #01114



COPPER SULFATE GRANULAR CRYSTALS

- Controls smelly, ugly algae in ponds & lakes
- Controls root growth in sewer connections

CONTAINS: Copper Sulfate (Petahydrate) 99%, Copper as metallic 25.2%

USE ON: Ponds, sewer lines.

CONTROLS: Algae in ponds, plant root growth in sewer lines. **RATE:** Algae; 0.8 lbs. to 2.3 lbs. per acre foot of water.

Root Control; 4 treatments of .5 lbs. each.

APPLICATION: For ponds, dissolve and apply as a surface spray or place granule in cloth bag and drag behind boat until dissolved.

DO NOT simply throw granules on pond as this will not work. See label for other directions.

PACKED: 12 x 1 lb. cannister - #02921, 12 x 2.5 lb. cannister - #02922



CROSSBOW SPECIALTY HERBICIDE (Commercial Product)

- Controls most unwanted trees and brush

- For rangeland, grass pastures, non-crop areas

CONTAINS: 2,4-dichlorophenoxyacetic acid, butoxyethyl ester, Triclopyr BEE

CONTROLS: A wide range of broadleaf weeds, vines, heavy brush, and trees.

USE ON: Pasture grasses, including Bermuda and Bahia grasses. Do not use on St. Augustine and Centipede grasses.

RATE: For spot applications use 4 to 6 fl. oz in 3 gallons of water.

APPLICATION: For spot applications use 4 to 6 fl. oz in 3 gallons of water. Spray to thoroughly wet all foliage.

Application types and rates vary, consult product label for specifics.

PACKED 12 x Qt. - #24863, 4 x Gal - #24864



COMING SOON:

INTERLINE® Herbicide

- Glyphosate Alternative
- Non-selective water-soluble herbicide
- Visual effect and control from application occur within 2 - 4 days after application under good growing conditions

HERBICIDES

LAWN WEED KILLER WITH TRIMEC BROADLEAF HERBICIDE®

- For use on 10 turf types
 - Controls a wide range of broadleaf lawn weeds
 - A combination of 3 proven weed killers
 - Directions for use in a tank type or hose end sprayer
- CONTAINS:** 5.30% Mecoprop, 3.05% 2,4-D, 1.29% Dicamba.



USE ON: Bermuda, Bahia, Blue grass, fescues, rye, Centipede, St. Augustine and Zoysiagrass. (Note: Not for use on improved varieties in the South).

CONTROLS: A wide range of broadleaf lawn weeds.

RATE: 1 - 1.5 oz. per gallon to 400 sq. ft. for southern grasses. 1.5 oz. per gallon to 400 sq. ft. for Northern Grasses.

APPLICATION: Apply as a uniform spray with a fan nozzle on turf or follow the labeled directions for using a hose end sprayer.

CAUTION: Avoid spray drift on shrubs & trees.

PACKED: 12 x Pt. - #13502, 12 x Qt. - #13503, 4 x Gal. - #13504

COMING SOON:

UP-End HydroCap® Herbicide

- For Preemergent Weed Control in Turfgrasses, Landscape or Grounds Maintenance, and Noncropland Areas
- For preemergence control of grasses and certain broadleaf weed species as they germinate.
- When susceptible weeds germinate in the treated area, they contact the herbicide and both shoot and root growth stops.

INSECTICIDES

BORIC ACID ROACH POWDER

- Kills Roaches, Ants & Silverfish indoors
- Packaged in a ready-to-use 12 ounce shaker container
- Use dry or in solution

CONTAINS: 100% Boric Acid

USE IN: Most indoor areas including homes, restaurants, schools, offices, warehouses, vehicles, boats, etc.

CONTROLS: Cockroaches, Ants, Silverfish.

RATE: For dry uses; apply liberally. Mop Solution; 1 cup per gallon.

APPLICATION: Apply where insects are normally found. Apply in closets, cracks and crevices, in walls, along and behind walls and in electrical switch boxes.

PACKED: 12 x 12 oz. - #01000, 6 x 3 lb. - #01003



INSECTICIDES

LAWNSTAR BIFENTHRIN GRANULAR INSECTICIDE

- Controls pest found above and below the lawn surface including chinch bugs and mole crickets
- Use as a spot treatment for fire ant mounds
- Use around house foundations and flower gardens

CONTAINS: 0.2% Bifenthrin

USES: Perimeters around homes, outdoor ornamental and flower gardens and on lawns.

CONTROLS: Many insects including ants, armyworms, centipedes, chiggers, chinch bugs, crickets, cutworms, earwigs, grasshoppers, millipedes, mole crickets, sod webworms, spiders, and ticks.

RATE: 1.15 - 4.6 lbs. per 1,000 square feet or 1 tablespoon per fire ant mound

APPLICATION: Apply evenly by hand or with a spreader and water in.

PACKED: 10 lb. bag - #00806, 20 lb bag - #00809,

25 lb. bag - #20687

**CARBARYL 5% DUST**

- Controls many insects in vegetable gardens & ornamentals
- Use in lawns for Fall armyworm & Sod webworm

CONTAINS: 5% Carbaryl Insecticide

USE ON: Most vegetables, lawns, and ornamentals.

CONTROLS: Mexican bean beetles, armyworms, leafhoppers, grass hoppers, tomato fruitworms, flea beetles, and corn earworms.

APPLICATION: For home gardens; dust plants thoroughly.

PACKED: 12 x 1 lb. shaker canister - #10641

**DIPEL® DUST**

- Low toxicity to humans and animals
- Used by commercial organic growers
- Made from a bacteria that is toxic to certain pests
- Same active ingredient as Thuricide®

CONTAINS: Bacillus Thuringiensis (Bt)

USE ON: Vegetable crops; broccoli, cabbage, cauliflower, celery, collards, cucumber, kale, lettuce, greens, tomatoes, turnips, tobacco and melons.

CONTROLS: Cabbage looper, imported cabbage worm, hornworms. Only controls listed insects.

RATE: 16 - 60 lbs. per acre.

APPLICATION: For home garden use, dust plants thoroughly.

Can be used up until the day of harvest.

PACKED: 12 x 4 lb. bag - #03674,

25 lb. bags - #03677



INSECTICIDES

GRUBS AWAY SYSTEMIC INSECT CONTROL

- Controls grubs, mole crickets and listed insect larvae
- Suppresses chinch bugs
- Treats up to 6,400 sq. ft.

CONTAINS: 0.5% Imidacloporid

USE ON: Turfgrass and landscape plants

CONTROLS: Grubs, Billbugs, European Crane Fly, Annual Bluegrass Weevil and Mole Crickets. Suppresses chinch bugs if applied prior to the hatching of the first instar nymphs.

RATE: 1.4 lbs. - 1.8 lbs. per 1,000 sq. ft.

APPLICATION: Apply prior to egg hatch of the target pest, followed by sufficient irrigation or rainfall to move active ingredient through thatch.

PACKED: 9 lb. bag - #05286, 30 lb. bag - #39130

**GARDEN INSECT DUST**

- Broad Spectrum Ready-To-Use Insecticide
- Controls many insect pests on vegetables & ornamentals

CONTAINS: 0.25% Permethrin

USE ON: Many ornamentals indoors and outdoors and home vegetable gardens.

CONTROLS: Many caterpillars, beetles and leafhoppers i.e. Japanese beetles, tent caterpillars, fall armyworms, flea beetles, and many more.

RATE: Dust lightly to cover both upper and lower leaf surfaces with a thin, even film of dust.

APPLICATION: Use a dust applicator.

PACKED: 12 x 1 lb. plastic shaker canister - #05261,

12 x 4 lb. bag - #05264, 25 lb. bag - #05267

**MALATHION 50% E.C.**

- Broad Spectrum insecticide
- Controls insects on many ornamentals, fruit & vegetables
- Labeled for Mosquito Control

CONTAINS: 50% Malathion (4.4 lbs. per gal).

USE ON: Citrus, ornamentals, listed vegetables, listed fruit trees, strawberries and in outdoor areas.

CONTROLS: Aphids, scale, worms, Japanese beetle, horn flies, lice, ticks, fleas, bed bugs, thrip, leafminers, spider mites, and mosquitoes (use at 4.5 oz. per gallon in outdoor areas)

RATE: Foliar Sprays 1 - 4 teaspoons per gallon water. See label.

APPLICATION: As a full coverage foliar spray.

PACKED: 12 x 8 oz. - #07661, 12 x Pt. - #07662,

12 x Qt. - #07663, 1 x Gal. - #45774

**MALATHION - OIL CITRUS & ORNAMENTAL SPRAY (NOW FORMULATED WITH PARAFINE OIL!)**

- Two active ingredients
- Use on Citrus, Avocados & certain outdoor Woody Ornamentals
- Controls Scale, Mealybugs, Whitefly & Spider Mites

CONTAINS: 5% Malathion, 75% Parafine Mineral Oil.

USE ON: Citrus, avocados, woody ornamentals such as camellias, gardenias, ligustrum, and ixora.

CONTROLS: Scale, white flies, spider mites, and mealy bugs.

RATE: 2 to 2.5 tablespoons per gallon of water.

APPLICATION: As a cover spray or summer oil spray for citrus.

PACKED: 12 x 8 oz. - #07681, 12 x Pt. - #07682, 4 x Gal. - #07684

**CONSERVE® - NATURALYTE INSECT CONTROL**

- Controls caterpillars, thrips, leafminers, beetles & flies on many ornamentals, vegetables, & fruits
- Controls caterpillars, fleas, & fire ants in lawns

CONTAINS: 0.5% Spinosad

USE ON: Vegetables, ornamentals, and fruit trees.

CONTROLS: Fire ants, caterpillars, worms, leafminers, leafrollers, thrips, gall midges, leaf feeding beetles, fruit flies, Colorado potato beetle and corn earworms.

RATE: spray at 2 oz. per gallon of spray or drench at 2 oz. per gallon on Fire Ant mounds

APPLICATION: Mix with water, use as a thorough cover spray.

PACKED: 12 x 8 oz. - #08611, 12 x Pt. - #08612

**INSECTICIDAL SOAP CONCENTRATE**

- Specially-formulated pesticidal soap to protect plants
- Fast acting contact killer for both insect and mite pests
- For use in homes, gardens, and greenhouses

CONTAINS: Potassium Salts of Fatty Acids

USE ON: vegetables, fruit and nut trees, citrus, berries, ornamentals, shrubs, flowers and trees.

CONTROLS: adelgids, aphids, lacebugs, mealybugs, mites, grasshoppers, leafhoppers, scale insects, plant bugs, sawfly larva, psyllids, tent caterpillars, thrips, spider mites, earwigs, whitefly, and powdery mildew.

RATE: mix 4 teaspoons with 1 quart of water

APPLICATION: Apply using a hand-held trigger sprayer, hand sprayer or backpack sprayer. Thoroughly reach all plant parts including underside of leaves.

PACKED: 12 x Pt. - #05802, 4 x Gal. - #05804



INSECTICIDES

PERMETROL LAWN INSECTICIDE GRANULES

- Provides contact & residual control for up to 4 weeks
- Economical, ready to use permethrin insect control
- Controls home invading pests

CONTAINS: 0.5% Permethrin on a granular base.

USE ON: Lawns and around house foundations

CONTROLS: Ants, armyworms, billbugs, centipedes, chinch bugs, cockroaches, crickets, cutworms, fire ants, flea beetles, fleas, grasshoppers, lawn moths, leafhoppers, scorpions, silverfish, Spiders, Sod Webworms, and Ticks

RATE: Lawns; 2 - 3 lbs. per 1,000 sq. ft. Fire Ant Mounds; 1 cup per mound

APPLICATION: Spread evenly with spreader and water in.

PACKED: 12 x 1 lb. canister - #09431, 8 x 4 lb. bag - #09434,

10 lb. bag - #09436, 20 lb. bag - #09439



PERMETROL LAWN INSECTICIDE

- Controls many insect pests outdoors around buildings
- Use in ornamentals, fruit trees, vegetables & lawns
- Labeled for use on dogs & livestock

CONTAINS: 10% Permethrin

USE ON: Lawns, ornamentals, houseplants, ornamental trees, many vegetables, certain fruit trees (apples, peaches, pears, non-bearing citrus), outdoors surfaces, dogs and livestock.

CONTROLS: Ants, aphids, beetles, chinch bugs, crickets, earwigs, fleas, fungus gnats, grubs, leafrollers, mole crickets, scale, spider mites, thrips, whiteflies and worms.

RATE: Fruit Trees; 3 teaspoons per gallon
Lawns; 3 - 7 teaspoons (.5 - 1.2 ozs) per 1,000 sq. ft. Ornamentals; 1-1/3 teaspoons per gallon or 1/3 teaspoons per quart.
Outdoor surfaces (walls, screens); 6.5 oz. per gallon.

Vegetables; 1 - 2 teaspoons per gallon
APPLICATION: Apply to full coverage.

PACKED: 12 x 8 oz. - #09451,

12 x Pt. - #09462, 12 x Qt. - #09453, 4 x Gal. - #09454



PARAFINE HORTICULTURAL OIL

- New formulation
- Use as a horticultural oil or a dormant oil
- Controls scale, white fly, mealy bugs & spider mites
- Use on ornamentals, apples, citrus & avocados

CONTAINS: 98% Mineral Oil, 2% Emulsifier

USE ON: Many woody ornamentals including palms, apples, citrus, avocados, mangos, roses and ivy, and on listed vegetables.

CONTROLS: Scales, white fly larvae, mealy bugs and spider mites.

RATE: Non-dormant uses; 1-3 tablespoons per gallon of water.

Dormant uses; 4-8 tablespoons per gallon of water.

Most other uses; 3 tablespoons per gallon of water. See label.

APPLICATION: Mix with water.

Agitate while spraying.

Apply as a thorough cover spray.

PACKED: 12 x Pt. - #09202,

12 x Qt. - #09203, 4 x Gal. - #09204



PYRETHRIN CONCENTRATE

- Insecticide made from a relative of chrysanthemum
- Controls insects on vegetables, on ornamentals, indoors & on livestock

CONTAINS: 0.96% Pyrethrins and 9.6% Piperonyl Butoxide

USE ON: Many vegetables, ornamentals, livestock, pets, and in households & barns, as space spray, and to control mosquitoes outdoors

CONTROLS: On vegetables and ornamentals; aphids, whiteflies, beetles, and worms. Pets and livestock; fleas, mites, lice, flies, gnats, and mosquitoes. Households and other areas; ants, roaches, silverfish, spiders, and many others. Space Spray: mosquitoes, flies, wasps, and others.

RATE: Vegetables and ornamentals; 2/3 - 2 teaspoons per gal. See label for surface spray, space spray, mosquito control and livestock rates.

APPLICATION: As a thorough spray or dip.

PACKED: 12 x 8oz. - #10401



INSECTICIDES

THURICIDE® BT CATERPILLER CONTROL

- Low toxicity to humans and animals
- Used by Organic growers
- Made from a bacteria that is toxic to certain pests

• Same active ingredient as Dipel®
CONTAINS: Bacillus Thuringiensis in liquid form

USE ON: Vegetables, citrus, nuts, shrubs, trees, tobacco, and flowering plants.

CONTROLS: Controls lepidoptera larvae: caterpillars and worms. i.e. cabbage looper, orange dog, tobacco hornworm, imported cabbageworm and rindworm.

RATE: 2 - 4 teaspoons per gallon.

APPLICATION: Mix with water, add spreader-sticker, use as a thorough cover spray.

PACKED: 12 x 8 oz. - #13021, 12 x Pt. - #13022



TRIPLE ACTION NEEM OIL

Broad Spectrum Fungicide/ Insecticide/ Miticide

- For use on ALL fruits, nuts, vegetables, herbs, & ornamentals
- Prevents & controls black spot on roses & powdery mildew
- Controls aphids, spider mites, scale, whiteflies, & beetles
- Kills eggs, larvae, & adult insects

CONTAINS: 70% Clarified Hydrophobic Extract of Neem Oil

USE ON: Indoor/Outdoor ornamental flowering plants, trees, shrubs, foliage, vegetables, fruits, nuts and landscapes
CONTROLS: As Fungicide -- powdery mildew, black spot, downy mildew, anthracnose, rust, leaf spot, botrytis, needle rust, scab and flower, twig, tip blight, and alternaria.

As Insecticide/Miticide - aphids, spider mites, scale, whiteflies, beetles, leafrollers, and other insect pests.

RATE: 2 tablespoons (1 oz.) per gallon of water.

APPLICATION: Thoroughly mix solution and spray all plant surfaces (including undersides of leaves) until wet. Mix solution frequently as you spray.

PACKED: 12 x 8 oz. - #08721, 12 x Pt. - #08722



FERTILIZERS

ALUMINUM SULFATE

- Great for Hydrangeas
- Acidifies soil (lowers pH), corrects high alkalinity

CONTAINS: Fertilizer grade Aluminum Sulfate, as Metallic 9.0%.

Not for spray application.

USE ON: Acid loving shrubs like rhododendrons, hydrangeas, blueberries, dogwoods, holly, gardenias, camellias, and azaleas.

CORRECTS: Excess alkalinity in the soil.

RATE: For large shrubs use 1 lb. per 3 ft. of height. For Trees, use 1 lb. per inch of trunk diameter.

For small shrubs, use 5 lbs. per 100 sq. ft.

APPLICATION: Broadcast evenly, wash off foliage and water.

PACKED: 10 x 5 lb. bag - #00155



CALCIUM NITRATE

- Excellent source of Calcium and Nitrogen
- Prevents Calcium deficiency

CONTAINS: 15.5% Nitrogen, 19% Calcium - readily water soluble.

USE ON: Most vegetables and flowers.

FOR: Supplying nitrogen and calcium to growing crops. Particularly useful as side dressing.

RATE: One cup per 50 feet of row or one tsp. per plant

APPLICATION: Apply over root zone but not too close to stem.

PACKED: 10 x 5 lb. bag - #01405



CITRUS NUTRITIONAL SPRAY

- Corrects & prevents deficiencies that cause yellowing
- Contains 5 balanced essential nutrients, including zinc
- For use of all ornamentals and fruits trees

CONTAINS: Magnesium 1.0%, Sulfur 4.1%, Iron 1.2%, Manganese 1.2%, & Zinc 1.7%.

USE ON: Citrus, avocados, mangoes, and other tropical fruits.

CONTROLS: Most common minor element deficiencies.

RATE: 1-2 tablespoons per gallon of spray.

APPLICATION: In Winter for normal preventative spray. Apply as a thorough cover spray to run off.

PACKED: 12 x Pt. - #01902,

4 x Gal. - #01904

Note: See University of Florida publication #HS876:

"Citrus Problems in the Home Landscape"



FERTILIZERS

CHELATED GENERAL PURPOSE FLOWER & GARDEN NUTRITIONAL SPRAY

- Can be used on all plants including lawns
- Contains 6 important nutrients, including iron
- Prevents & corrects deficiencies that cause yellowing

CONTAINS: Magnesium 0.50%, Sulfur 3.8%, Copper 0.25%, Iron 2.75%, Manganese 1.00%, & Zinc 0.50%

USE ON: Flowers, shrubs, trees, vegetables and lawns

CONTROLS: Minor element deficiencies, yellowing of foliage, etc.

NOTE: Deficiency symptoms can be caused by improper soil pH.

RATE: Foliar: 1 tablespoon per gallon of water drench: 1 oz. per 100 sq. ft. Lawns: 1 pint per 1,000 sq. ft.

APPLICATION: Mix with water and apply as a drenching spray.

PACKED: 12 x Pt. - #01932, 4 x Gal. - #01934

**CHELATED LIQUID IRON**

- Corrects Iron deficiency in flowers, vegetables, shrubs, & trees.
- Also, use in the lawns for a deep, rich green color.

CONTAINS: Iron 5%.

USE ON: Flowers, shrubs, trees, vegetables and lawns.

CONTROLS: Iron deficiency (yellowing foliage)

RATE: Foliar - 1 TBS per gallon.

Soil Drench - 1 oz. per 100 sq. ft.

Lawns - 1 pint per 1000 sq. ft.

APPLICATION: Mix with water. Apply as a drenching spray.

PACKED: 12 x Pt. - #01952, 4 x Gal. - #01954

**PALM NUTRITIONAL**

- Contains 4 nutrients for palms, including Manganese
- Prevent deficiency that may cause yellowing, browning, curling, & permanent injury in palms

CONTAINS: 1.5% Magnesium, 1.0% Iron & 2.5% Manganese.

USE ON: Palms and other ornamentals.

CONTROLS: Nutritional deficiencies in palms.

RATE: 1 - 2 tablespoons per gallon.

APPLICATION: Apply as a thorough cover spray to run off. Try to spray directly into heart of palm.

PACKED: 12 x Pt. - #01972

4 x Gal. - #01974

**Note:**

For help on nutritional deficiencies of palms, refer to:

University of Florida Extension Publication (IFAS):

"Care and Maintenance of Landscape Palms in South" or "Palm Nutrition Guide"

CONTROLLED - RELEASE FERTILIZER 14-14-14

- Controlled Release Fertilizer
- Continuous metering of nutrients for up to 4 months

USE ON: Potted plants, hanging baskets, flower beds, and vegetable gardens.

RATE: Soil; mix .25 - .5 cups per cubic foot. Bedding plants; .75 - 1 cup per 10 sq. ft. Pot culture; 4 in. - .5 teaspoons, 5 in. - 1 teaspoon and 6 in. - 1.5 teaspoon

APPLICATION: Mix thoroughly with soil/potting mix.

For surface application - mix in soil to 1" deep.

PACKED: 12 x 1 lb. zipper pouch - #02701, 10 x 5 lb. bag - #02705, 20 lb. bag - #02709

**ESSENTIAL MINOR ELEMENTS****Granular Formulation**

- Contains 7 minor elements, high in Magnesium and Iron
- Corrects minor element deficiencies

No mixing/No spraying - use as a dry fertilizer

CONTAINS: Magnesium 8%, Sulfur 8%, Boron .03%, Copper .25%, Iron 5%, Manganese 2%, and Zinc 0.5%.

USE ON: Shrubs, trees, lawns, flowers, and vegetables

FOR: The correction or prevention of minor element deficiencies.

RATE: Gardens - Preventative; .25 - .5 cup per 10 sq. ft. or 1.25 - 2.5 lbs. (2.5 - 5 cups) per 100 sq. ft. Curative; 1 cup per 10 sq. ft. or 5 lbs. (10 cups) per 100 sq. ft. Turf; 1 lb. (2 cups) per 100 sq. ft. or 10 lbs. per 1,000 sq. ft.

APPLICATION: Apply dry and water in thoroughly.

PACKED: 12 x 1 lb. bottle - #04601, 10 x 5 lb. bag - #04605, 25 lb. bag - #04607

**IRON GRANULES**

- No mixing/No spraying - use as a granular fertilizer
- Correct Iron deficiency in acid loving & tropical plants
- Acidifies soil, lowers pH, and corrects high alkalinity

CONTAINS: 30% Iron from Ferrous Iron Sulfate.

USE ON: Lawns, shrubs, trees, and gardens.

FOR: Correction and prevention of iron deficiency and high pH. Iron deficiency appears as intense yellowing of young growth. **RATE:** Dry application; 25 lbs. per 100 sq. ft. (2 lbs. per 1,000 sq. ft.) To reduce pH, .5 - 1 lbs. per 100 sq. ft.

APPLICATION: Spread over treatment area and water in.

PACKED: 10 x 5 lb. bag - #06005,

25 lb. bag - #06007

**KELP GREEN 1.27-0.25-0.32**

- All Natural Fertilizer
- Liquid Cold Process Seaweed Extract
- Derived from Seaweed and fish tankage (Menhaden Fish)
- Safe to use for all lawn and garden applications

USE ON: All plants, including annuals, roses, berries, vegetables, herbs, shrubs, trees and turf.

RATE: 6 to 16 ounces for turf, 2 to 3 ounces for all plants.

PACKED: 12 x 1 Quart - #06403

**MAGNESIUM SULFATE**

- No mixing/No spraying - use as a dry fertilizer
- Corrects Magnesium deficiency in shrubs & trees
- Acidify soils with less risk of staining

CONTAINS: Fertilizer grade Magnesium Sulfate, Magnesium as Metallic 14.0%. Not for spray application.

USE ON: Citrus, palms, trees, shrubs, annuals, and turf.

CONTROLS: Magnesium deficiency - yellowing between the veins of older leaves on plants. On palms, (especially date palms) this deficiency appears as yellowing of older leaflets while the center of the palm blade remains green. Eventually the tips of the older leaves will brown.

RATE: 1 - 2 lbs. per 100 sq. ft. or .5 lb. per 5 ft. of tree spread.

APPLICATION: Spread over treatment area and water-in.

PACKED: 10 x 5 lb. bag - #07405, 25lb. bag - #07407

**MANGANESE SULFATE**

- No mixing/ No spraying - use as a dry fertilizer
- Corrects Manganese deficiency in many plants including Queen palms & Sago palms

CONTAINS: Manganese as metallic 27.0%.

USE ON: Palms, trees, shrubs, vegetables and other plants.

CONTROLS: Manganese deficiency. Leaves will have dark green veins with yellow areas between veins. In palms, this deficiency will cause "frizzle top". New growth will be small and malformed.

RATE: Soil; 1/3 - 2/3 cup per 100 sq. ft. Large Palms; 3 lbs. per tree.

APPLICATION: Broadcast evenly over area to be treated.

PACKED: 10 x 5 lb. bag - #07905, 25 lb. bag - #07907



FERTILIZERS

PLANT STARTER SOLUBLE FERTILIZER 12-48-8

- High in Phosphorous for more roots & flowers
- Great for transplanting & bedding plants

CONTAINS: 12% Nitrogen, 48% Phosphorus (P₂O₅), 8% Potassium (K₂O), and a compliment of minor elements.

USE ON: Transplanted tobacco, most vegetables or any crop where high phosphate is needed.

RATE: For a transplant solution or to drench, mix at 2 tablespoons per gallon. For a spray, mix at 1.5 tablespoons per gallon.

APPLICATION: Transplant solution use .5 to 1 pint per plant or 1 pint per 4 ft. of row.

PACKED: 16 x 3 lb. - #09803

Also available in a 25 lb. bag

**PLUG FAST 12-12-6**

- Contains slow release nitrogen
- Use in the hole of new grass plugs
- High in Phosphorous to kick start new roots

CONTAINS: 12% Nitrogen, 12% Phosphorus (P₂O₅), 6% Potash (K₂O), Iron 1%. 5.6% Nitrogen is slow release.

USE: Formulated for planting lawns by plugging.

RATE: 1 teaspoon per plug planted. 5 lb = 20 trays

APPLICATION: Sprinkle in plug hole under plug as planted.

PACKED: 10 x 5 lb. bag - #10005

**SOIL ACIDIFIER**

- No dust, hard, uniform pellets

CONTAINS: 90% Sulfur

USE ON: Lawns, shrubs, trees and before planting vegetables and flowers.

FOR: The correction of high pH of soils.

RATE: Use 10 to 15 lbs. per 1,000 sq. ft. (1 to 1.5 lbs. per 100 sq. ft.) to reduce pH one unit. Do not overdose, have pH checked before making a second application.

APPLICATION: Spread evenly over area and water in thoroughly.

PACKED: 10 x 5 lb. bag - #11105



FERTILIZERS

20-20-20 POWERPAK WATER SOLUBLE FERTILIZER

- Very popular, high quality & cost effective formulation

- Contains chelated minor elements
- CONTAINS:** 20% Nitrogen, 20% Phosphorus (P₂O₅), 20% Potassium (K₂O) plus Chelated Minor Elements.

USE ON: Flowers, roses, vegetables, shrubs, trees, lawns and houseplants

RATE: Spray at 2 teaspoons or drench at 2 tablespoons per gallon. Lawns; 1 pound per 1,000 square feet in 10 gallons of water.

PACKED: 12 x 1 lb. zipper pouch - #11301, 10 x 5 lb. poly bag - #11305

**30-10-10 MAX ACID WATER SOLUBLE FERTILIZER**

- Great for acid loving evergreens & tropicals

- Contains chelated minor elements
- Promotes deep rich green color

CONTAINS: 30% Nitrogen, 10% Phosphorus (P₂O₅), 10% Potassium (K₂O) plus Chelated Minor Elements.

USE ON: Acid-loving evergreen shrubs, trees, tropical plants

RATE: Spray at 2 teaspoons or drench at 2 tablespoons per gallon. Lawns - 1 pound per 1,000 square feet in 10 gallons of water.

PACKED: 12 x 1 lb. zipper pouch with spoon - #08101

**10-30-20 START, ROOT AND BLOOM WATER SOLUBLE FERTILIZER**

- High in Phosphorous for more roots & flowers
- Great for transplanting & bedding plants

CONTAINS: 10% Nitrogen, 30% Phosphorus (P₂O₅), 20% Potassium (K₂O) plus Chelated Minor Elements.

USE ON: Flowers, roses, houseplants, vegetables, shrubs and trees

RATE: For a transplanting solution, mix 2 tablespoons per gallon of water. Use .5 - 1 pint of solution per plant.

For a foliar feeding, use 1 tablespoonful per gallon of water.

Repeat every 1 - 2 weeks or as needed.

PACKED: 12 x 1 lb. zipper bag with spoon - #12111

**SULFATE OF POTASH 0-0-50**

- Corrects Potassium deficiency in avocado, beans, corn, cherries, citrus, grapes, palms & roses
- Strengthens plants, making them less susceptible to disease & adverse conditions such as winter

CONTAINS: Granular Grade Potassium Sulfate. Not for spraying.

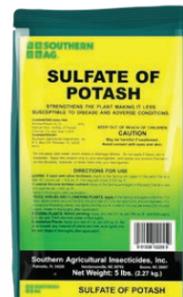
USE ON: Vegetables, flowers, shrubs and lawns.

FOR Use in potassium low soils. Helps plants form healthier, stronger roots, stems, and tubers.

RATE: .5 lb. per 100 sq. ft.

APPLICATION: Spread over treatment area and water in.

PACKED: 10 x 5 lb. bag - #12255

**TRIPLE SUPER PHOSPHATE 0-40-0 BULB BOOSTER**

- Enhances stem strength and flower formation and set

CONTAINS: Granular grade Phosphate 40%. Not for spraying.

USE ON: Vegetables, fruit trees, bulbs, flowers and shrubs

PROVIDES: Phosphorous for increased rooting and blooming.

RATE: At planting; Use 5 lbs. per 200 sq. ft. Vegetables; 1 lb. per 50 foot of row.

Roses or large shrubs; 1/4 cup per plant.

Fruit Trees; 1 cup per inch of trunk diameter.

Top dress; .25 - .5 cup per 20 square feet

APPLICATION: Spread over area and water in thoroughly or incorporate into planting bed.

PACKED: 10 x 5 lb. bag - #12355

**STOP BLOSSOM-END ROT of TOMATOES**

- Prevents tomatoes blossom-end rot due to Calcium deficiency

- Corrects Calcium deficiency

CONTAINS: 31% or 3 lbs. Calcium Chloride per gallon.

CONTROLS: Blossom-end rot/calcium deficiency. **NOTE:** On future crops, proper liming of soil or use of Calcium Nitrate will reduce problem.

RATE: 2 tablespoons (1 oz.) per gallon.

APPLICATION: In water as thorough cover spray.

Compatible with most insecticides and fungicides.

PACKED: 12 x Pt. - #00902, 12 x Qt. - #00903



FERTILIZERS

ZINC SULFATE

- Corrects blind nut disorder in Pecans
- Corrects zinc deficiency (mottleleaf) in avocado, beans, citrus, corn, peaches & nectarines

CONTAINS: Zinc as metallic 31%.

USE ON: Trees, shrubs, berry bushes, and fruit trees.

CONTROLS: Zinc deficiency, rosette on pecans.

RATE: Apply dry at 1.5 lbs. per inch of trunk diameter.

APPLICATION: Broadcast evenly over area to be treated and water

PACKED: 10 x 5 lb. bag - #14955

**10-10-10 ALL PURPOSE FERTILIZER**

- Uniform, homogenous granular formulation
- CONTAINS:** 10% Nitrogen, 10% Phosphorus (P₂O₅), 10% Potassium (K₂O) plus minor elements

SUGGESTED USES: Vegetable gardens & flowerbeds; 1 cup per 25 sq. ft; Roses & large shrubs; 2 - 2.5 cup per 4 ft. of height, Fruit trees; 2-4 cups per tree.

APPLICATION: Broadcast evenly over area and water in.

PACKED: 10 x 5 lb. poly bag - #14975



MISCELLANEOUS

HERBI - OIL 83-17

- Combines a soluble herbicide oil for penetration & a surfactant for wetting

- Increase results with 2,4-D Amine, Atrazine, Broadloom, brush killers & grass killers

CONTAINS: Paraffin-based petroleum oils and a blend of oil soluble surfactants.

USE ON: Weeds with herbicide according to the label.

FOR: Increasing effectiveness of herbicides.

RATE: 1% Emulsion or 1.25 oz. per gallon, 1 pint in 12.5 gallons.

APPLICATION: Apply as a foliar spray with herbicides according to their label.

PACKED: 12 x Pt. - #05302, 4 X Gal. - # 39734

**SURFACTANT FOR HERBICIDES**

- Wetting Agent/Spreader/Penetrant

CONTAINS: Alcohols, C10-16 ethoxylated; polyethylene glycol nonylphenyl ether

USE: With most insecticides, fungicides, herbicides, defoliants, and wettable powders.

FOR: Improve performance of the active spray ingredient by giving them more uniform distribution and better wetting of the plant surface.

RATE: 1 to 2 pints per 100 gallons water. (1 - 2 teaspoons per gallon of water)

PACKED: 12 x Pt. - #12202, 4 x Gal. - #66754

**SPREADER STICKER**

- Combines two spray adjuvants in one product
- Use with most pesticides to improve results

- Increases residual activity of sprays by preventing wash-off

CONTAINS: Modified phthalic glycerol alkyd resin, Octyl phenoxy polyethoxy ethanol and Isopropanol

USE: Can be used with almost all insecticide, fungicide, herbicide and nutritional sprays on Ornamentals and Vegetables. Aids in spreading of spray material on waxy leaved plants such as Roses and Cabbage. Helps prevent spray material from weathering due to rain and dew. Increases effectiveness of insecticide and fungicide sprays.

RATE: Use 1 tablespoon per gal of spray.

PACKED: 12 x 8 oz. - #12101, 12 x Pt #12102, 4 x Gal. - #65724



