# SOUTHERN AG® Since 1947

# LAWN & GARDEN PRODUCT GUIDE



**BAITS** 

MOLE CRICKET BAIT

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TRIPLE ACTION NEEM OIL	7	Garden Center and State agency employees. State agencies

# **BAITS**

#### MOLE CRICKET BAIT

- Same formulation used by golf courses and sports fields
- Low use rate

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may provide additional information on specific control

Southern Agricultural Insecticides, Inc.

P.O. Box 218, Palmetto, FL 34220

TRADEMARK RECOGNITIONS

or info@southernag.com

information, rates, timing, applications and days to harvest

"tsp.", refers to level teAspoonfuls. Direct any questions to:

limitations. Permit may be required for commercial application.

CORTEVA: CONSERVER, DITHANER M-45, GARLONR, REMEDYR, HUFFY BIKE

CERTIS: THURICIDER PBI GORDON CORPORATION: TRIMECR

When rates are given as "TBS," refers to level tablespoonfuls and

**CONTAINS:** 5% Carbaryl insecticide

on an attractant feed base.

**USE ON:** Vegetables, flowers, fruits,

lawns, and ornamentals. **CONTROLS:** Cutworms, armyworms, crickets, darkling ground beetles, mole crickets grasshoppers and sowbugs.

**RATE:** 0.45 lb. to 0.9 lb. per 1,000 sq. ft. **APPLICATION:** Apply evenly over area

with fertilizer spreader.

PACKED: 8 x 3.6 lb. bag - #08353,

9 lb. bag - #08359

Also available in a 40 lb. bag - #49519.



CAPTAN

#### **SNAIL & SLUG BAIT**

- This bait does not require watering in
- · Low use rate

• Creates "guard line" at the edge of plantings CONTAINS: 3.25% Metaldehyde pelletized bait. **USE AROUND:** Fruit trees, berries, vegetables,

ornamentals. lawns and greenhouses.

CONTROLS: Snails and slugs.

RATE: 1 lb. treats 1,100 - 1,500 square feet

(30 - 40 lbs per acre)

**APPLICATION:** Spread evenly over area to

be protected.

**PACKED:** 12 x 1 lb. canister - #10901,

12 x 2.5 lb. bag - #10910,

20 lb. bag - #10919

Also available in a 40 lb. bag - #64459



# **FUNGICIDES**

#### **CAPTAN FUNGICIDE**

- · Controls Botrytis Rot (grey mold) on Strawberries
- Labeled for many fruits, ornamentals and lawns

CONTAINS: 50% Wettable Powder Captan.

USE ON: Fruit Crops: Almonds, apples, apricots, blueberries, cherries, grapes, nectarines, peaches, plums, and strawberries. Ornamentals: Azaleas, begonias, camellias, carnations, gladiolus, chrysanthemums and roses. Also grasses.

CONTROLS: Scab, Black Spot, Botrytis, Anthracnose, Brown Rot, Damping-Off, Root Rot, Leaf Spot, Brown Patch & Downy Mildew.

**RATE:** Foliar spray 2 teaspoons - 4 tablespoons per gal. of water. Grasses -1 tablespoon in 1 gallon of water per 1,000 sq. ft.

**APPLICATION:** Foliar Spray; Mix with water and apply as a thorough cover spray.

PACKED: 12 x 8 oz. - #01600

#### **DITHANE M-45**

- Labeled for many exotic ornamentals such as African Violets, Ferns, & Dendrobium Orchids
- Preferred by many rose growers for Black Spot
- Commonly used in the commercial production of tomatoes, squash & melons **CONTAINS:** 80% Mancozeb

**USE ON:** Many ornamentals, vegetables (potatoes, corn, squash, cucumber, melon,

CONTROLS: leafspots, rust, botrytis, anthracnose, early and late blights, and downy mildew.

APPLICATION: Mix with water. Apply as a thorough cover spray.

PACKED: 12 x 1 lb. plastic bottle - #03900,

8 x 2 lb. tub - #03912

and papaya)

#### **GARDEN FRIENDLY FUNGICIDE**

- For all organic and non-organic applications
- Controls or suppresses fungal and bacterial plant diseases
- Broad specturm biofungicide controls foliar and soil-borne diseases
- · Can be used as a drench for diseases
- Leaves behind little or no residue CONTAINS: 98.85% Bacillus amyloliquefaciens strain D747

USE ON: All Ornamentals, Turf Vegetables,

Fruits, Nuts, and Herbs.

CONTROLS: Alternaria leaf spot, alternaria, anthracnose, bacterial canker, bacterial leaf spot, bacterial spot, bitter rot, black eye, black root rot, black rot, black spot on roses, bot rot/white rot, botrytis blight bottom rot, brown canker, brown patch, cedar apple rust, citrus canker, damping off, dollar spot, downy mildew. early and late blights, fire blight, flyspeck, fruit rots, fusarium wilt, gray and white mold, gray leaf spot, greasy spot, leaf and fruit spots, leaf blight, leaf spots, melanose, peach leaf curl, pecan scab, post bloom fruit drop, powdery mildew, pythium, root rot, rusts, rusty spot, scab, sclerotinia blight, shot hole, sooty blotch, stem rot, walnut blight. RATE: Vegetables, fruit, nuts, herbs and

ornamentals: 1 teaspoon per gallon of water. For lawns; 1 teaspoon per gallon. Use 2 to 5 gallons of spray per 1,000 sq. ft. APPLICATION: Foliar Spray; Mix with water and apply as a thorough cover spray.

PACKED: 12 x 8 oz. - #05171,12 x Pt. - #05172







VALENT BIOSCIENCES: DIPELR
CLEARY CHEMICAL CORP.: 3336 WPR. SYNGENTA: BRAVOR, DACONILR

# **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 ornanentals 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)

SA-20 DISINFECTANT

• For use in animal premises

CONTAINS: 10% Alkyl dimethyl benzylammonium 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



#### 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

LIQUID COPPER FUNGICIDE

**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



2,4-D AMINE

WEED KILLER

# 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 COV-ERAGE WITHOUT OVERLAP. AVOID DRIFT TO SUSCEPTIBLE

PLANTS. PACKED: 12 x Qt. - #00203

# **HERBICIDES**

ATRAZINE

#### 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 sedaes

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

# BROADLOOM\*\*\* SEDGE CONTROL

#### **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



#### **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



# **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

**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



AWNSTAR

#### **DIPEL® DUST**

BORIC ACID

ornamentals.

- · 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



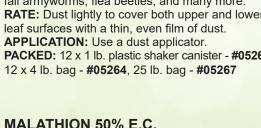
- Broad Spectrum Ready-To-Use Insecticide
- Controls many insect pests on vegetables & ornamentals

**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.

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



#### **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,

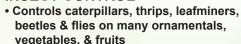
ligustrum, and ixora. CONTROLS: Scale, white flies, spider

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, 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, psylids, tent canterpillers, 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



GARDEN INSECT DUST

**MALATHION** 

0



























ALUMINUM SULFATE

# **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

#### 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 gallonof 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

#### 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

#### 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;

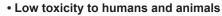
2/3 - 2 teaspoons per gal. See label for surface spray, space spray, mosquito control and livestock rates.

APPLICATION: As a thorough spray or dip.

PACKED: 12 x 8oz. - #10401

# **INSECTICIDES**

#### THURICIDE® BT CATERPILLER CONTROL



- 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 larve: 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 Sprectrum 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 alternia.

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

THURICIDE

TRIPLE ACTION

**NEEM OIL** 

#### **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.

**FERTILIZERS** 

**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**

FLOWER & GARDEN

#### 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 vellowing, 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



LIQUID

IRON

University of Florida Extension Publication (IFAS): "Care and Maintenance of Landscape Palms in South" or "Palm



- 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



SSENTIAL

LEMENTS

#### **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

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

25 lb. bag - #06007

area and water in.



# **FERTILIZERS**

#### **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 vellowing 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



#### **PLANT STARTER SOLUBLE** FERTILIZER 12-48-8

• High in Phosphorous for more roots & flowers

• Great for transplanting & bedding plants

CONTAINS: 12% Nitrogen, 48% Phosphorus (P<sub>0</sub>0<sub>c</sub>),

8% Potassium (K<sub>2</sub>0), 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



- 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 (P<sub>2</sub>O<sub>5</sub>), 6% Potash (K<sub>2</sub>0), 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



12-48-8 Fertilize

#### **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









For help on nutritional deficiencies of palms, refer to:

Nutrition Guide"



# **FERTILIZERS**

#### 20-20-20 POWERPAK WATER **SOLUBLE FERTILIZER**

- Very popular, high quality & cost effective formulation
- · Contains chelated minor elements CONTAINS: 20% Nitrogen, 20% Phosphorus (P<sub>2</sub>0<sub>5</sub>),

20% Potassium (K,0) 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 (P<sub>0</sub>0<sub>c</sub>),

10% Potassium (K<sub>0</sub>0) 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 (P<sub>2</sub>0<sub>5</sub>),

Minor Elements. **USE ON:** Flowers, roses, houseplants,

vegetables, shrubs and trees RATE: For a transplanting solution,

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

APPLICATION: In water as thorough cover spray. Compatible with most insecticides and fungicides. PACKED: 12 x Pt. - #00902, 12 x Qt. - #00903



# **BLACK SNAKE SULFUR**

 A natural solution for a wide range of gardening problems **CONTAINS:** 90% Sulfur

PACKED: 10 x 5lb. - #00825



**HERBI-OIL** 

# 10-10-10 ALL PURPOSE FERTILIZER

• Uniform, homogenous granular formulation CONTAINS: 10% Nitrogen,

10% Phosphorus (P.O.),

10% Potassium (K,0) plus minor elements **SUGGESTED USÉS:** 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.

**FERTILIZERS** 

ZINC SULFATE GRANULAR

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



# **MISCELLANEOUS**

#### **HERBI - OIL 83-17**

ZINC SULFATE

& nectarines

and fruit trees.

trunk diameter.

to be treated and water

on pecans.

• Corrects blind nut disorder in Pecans

**CONTAINS:** Zinc as metallic 31%.

**USE ON:** Trees, shrubs, berry bushes,

**CONTROLS:** Zinc deficiency, rosette

RATE: Apply dry at 1.5 lbs. per inch of

**PACKED:** 10 x 5 lb. bag - #14955

**APPLICATION:** Broadcast evenly over area

· Corrects zinc deficiency (mottleleaf) in

avocado, beans, citrus, corn, peaches

- 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

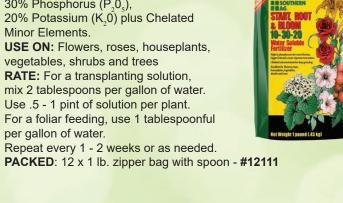
- Combines two spray adjuvants in one product
- Use with most pesticides to improve results
- · Increases residual activity of sprays by preventing wash-off CONTAINS: Modified phthalic glycero alkyd resin, Octyl phenoxy polyethoxy ethanol and Isopropanol

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,

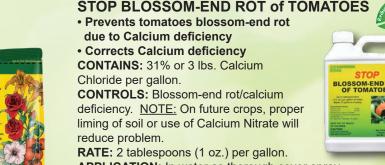
12 x Pt #12102, 4 x Gal. - #65724













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# **MISCELLANEOUS**

#### **BLUE COLORANT**

(Commercial Product)

• Non-staining spray pattern indicator

• Fleeting tint indicator CONTAINS: proprietary

**APPLICATION:** Inert with most pesticides

and fertilizers.

Cleans with soap and water. **RATE:** 1 Tbs per gallon or 2 oz per 4 gallons

PACKED: 12 x Qt - #20893,

4 x Gal. - #20894



#### **NO DRIFT**

(Commercial Product)

- Deposition Aid
- Drift Retardant
- Increases spray deposition by reducing the amount of fine particles produced

**CONTAINS:** Linear Non-lonic Polyacrylamide **APPLICATION:** NO DRIFT will retard, but cannot totally eliminate, drift hazards

due to variations in pesticide usage, application conditions and techniques.

**RATE:** 1 teaspoon per gallon **PACKED:** 12 x Qt - #30453



#### **DEFOAMER**

(Commercial Product)

• Designed to reduce foam in spray tanks and dip tanks

**CONTAINS:** Silicone based material **RATE:** 1/2 tsp per 4 gallons or 1-2 oz. per 100 gallon of solution **PACKED:** 12 x QT - #27003



# METHYLATED SEED OIL (Commercial Product)

 Spray adjuvant for post-emergence application with herbicides
 CONTAINS: proprietary

APPLICATION: May be used as a replacement for non-ionic surfactants and crop oil (petroleum oils)

RATE: 1 oz per gallon or 1-4 pints/acre

**PACKED:** 12 x Qt - **#48053**, 4 x Gal. - **#48054** 



#### **STUMP REMOVER**

• Increases decomposition of wood by balancing the ratio of carbon & nitrogen which increases activity from bacteria

**CONTAINS:** proprietary **FOR:** Speeding the decay of stumps

RATE: .25 lb. for small stumps, 1 lb. for large stumps

**APPLICATION:** Drill top and sides of the stump. Add Stump Remover and

soak with water.

PACKED: 12 x 1 lb. plastic bottle - #12160



# TANK CLEANER

(Commercial Product)

• FOR SMALL HAND HELD SPRAYERS: Use 1 fluid ounce of this product per gallon of rinse water

CONTAINS: proprietary
FOR: Pesticide residue remover

RATE: 1 oz per gallon or 1-2 qt/100 gallons

PACKED: 12 x QT - #67553



# Notes

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#### TABLE OF WEIGHTS, MEASURES & DILUTIONS

#### **WEIGHTS:**

28.35 Grams = 1 Ounce 16 Ounces = 1 Pound = 453.6 Grams 1 Kilogram = 1000 Gram = 2.205 Pounds 1 Gallon water = 8.34 Pounds = 3.8 Kilogram 1 Cu. Ft. water = 62.4 Pounds = 28.3 Kilogram 1 Ton = 2,000 Pounds = 907 Kilograms

#### **VOLUME AND LIQUID MEASURE**

3 Teaspoons = 1 Tbs. (Tablespoons) = 14.8 ml (Millilitres)
2 Tablespoons = 1 Fl. oz. (Fluid ounces) = 29.6 ml
8 Fluid ounces = 16 Tablespoons = 1 Cup = 236.6 ml
2 Cups = 32 Tbs. = 16 Fl. oz. = 1 Pint = 473.1 ml
2 Pints = 64 Tbs. = 32 Fl. oz. = 1 Quart = 946.2 ml
1 Litre = 1000 ml = 0.2642 Gallons = 33.81 Ounces
1 Gallon = 4 Quarts = 128 Fl. oz. = 256 Tbs. = 3785 ml

#### LENGTH AND LAND MEASURE

1 inch = 2.54 cm (centimeters) 100 cm = 1 Meter = 3.281 Feet 1 mile = 5,280 Feet = 1,609 Kilometers 43,560 square feet = 1 Acre 1 Acre = 0.4047 Hectare

#### **USEFUL FORMULAS**

Area of a Rect. or Square
Area of a Circle
Area of a Circle
Circumference of a Circle
Circumference
Circumference
Circumference
Circle
Circumference
Circle
Circumference
Circle
Circle
Circumference
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#### MEDIA VOLUME EQUIVALENTS

Container S	Size	No. P	er Cubic Yd.			
2 1/4 inch			8,140			
3 inch			3,300			
4 inch			1,210			
4 1/2 inch			950			
1 Gallon			225			
3 Gallon			120			
5 Gallon			45			
15 Gallon			14			

# EQUIVALENT QUANTITIES OF DRY MATERIALS (WETTABLE POWDERS) FOR VARIOUS QUANTITIES OF WATER:

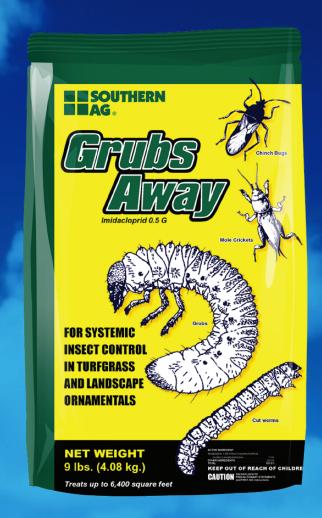
WATER		QUANTITY OF DRY MATERIAL						
100 gal.	1 lb.	2 lb.	3 lb.	4 lb.	5 lb.	6 lb.		
5 gal.	0.8 oz.	1.6 oz	2.40 oz.	3.20 oz.	4 oz.	4.8 oz.		
1 gal.	1.5 tsp.	1 tbs.	1.5 tbs.	2 tbs.	2.5 tbs.	1 oz.(3 tbs)		

NOTE: Wettable pesticide materials vary considerably in density. Therefore the teaspoonful (tsp.) and tablespoonful (tsp.) measurements in this table are not exact dosage by weight but are within the bounds of safety and efficiency for mixing small amount of spray.

# EQUIVALENT QUANTITIES OF LIQUID MATERIALS (EMULSION, CONCENTRATES, ETC.) FOR VARIOUS QUANTITIES OF WATER:

WATER QUANTITY OF LIQUID MATERIAL						
100 gal.	1/2 pt.	1 pt.	2 pt.	3 pt.	4 pt.	5 pt.
5 gal.	1 tbs.	1 fl.oz.	1.5 fl.oz.	2.5 fl.oz.	3 fl.oz.	4 fl.oz.
1 gal.	1/2 tsp.	1 tsp.	2 tsp.	3 tsp.	4 tsp.	5 tsp.

**NOTE:** These are approximate equivalents.



# Distributed by:

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