# INSECT REPELLING PLANTS

## **DEWORMING CONCOCTION**

This is an old time remedy for de-worming dogs and cats. Mix: 1-teaspoon of dried powdered rosemary and 1-teaspoon of wormwood with 1/2 teaspoon of fresh ground garlic (use full amount on dogs and 1/4 amount on cats). Mix well and divide into 4 equal portions. Give your pet a portion mixed in with food or pet treat four times a day. Repeat this for 3 days and your pet should be completely de-wormed.

## THE SAFE INSTANT KILL INSECTICIDE

The most effective insecticide that instantly kills flying and crawling insects on contact but does no harm to mammals or birds is the dried and crushed flowers of the Pyrethrum Plant. This brown powder will kill or stun the insects the moment it touches them but does no harm to pets when sprinkled on their coats. This member of the daisy family is a beautiful ornamental and will compliment any garden or flowerbed. While very effective, the dried powder only lasts for a few days. You can prolong its use throughout the year by freezing fresh flower heads in zip-lock bags and drying and crushing them as needed.

Tie unused fabric softener sheets onto trees and shrubs or on stakes around plants being bothered by deer. They seem to hate the smell, so buy the brand with the strongest scent and only replace if the scent has faded. Rain does not seem to hinder their effectiveness.

# POWDERY MILDEW, FUNGUS INFECTIONS:

The best spray we have found to control these types of diseases is a spray of half milk, half water. It seems that milk has natural disease fighters that can kill mold and mildew. This can be cows milk, or goats milk, but should be diluted. Pasteurized milk may not be as effective.

FEVERFEW (Tanacetum parthenium): repels most insects LAVENDER (Lavandula spp.): repels silverfish, moths, and is also a disinfectant PENNYROYAL (Mentha pulegium): Repels ants, fleas, gnats and mosquitoes. PENNYROYAL LAWN: same as above

CHRYSANTHEMUM FLOWERS, CHRYSANTHEMUM PLANT: Pyrethrins are natural insecticides produced by certain species of the chrysanthemum plant.

PYRETHRUM DAISY or PAINTED DAISY (Tanacetum cinerariaefolium): Perennial. aphids, mites, sucking insects have a rapid "knockdown" for insects. Pyrethrum is extremely toxic to aquatic life, such as bluegill and lake trout while it is slightly toxic to bird species, such as mallards. Pyrethrins are natural insecticides produced by certain species of the chrysanthemum plant. Pyrethrin compounds have been used primarily to control human lice, mosquitoes, cockroaches, beetles and flies. Inhaling high levels of pyrethrum may bring about asthmatic breathing, sneezing, nasal stuffiness, headache,

nausea, in coordination, tremors, convulsions, facial flushing and swelling, and burning and itching sensations. Pyrethrum Powder is toxic to fleas, roaches, ants, silverfish and many other insects.

RUE (Ruta and/or Ruta graveolens): same as above. Rue is a strongly scented evergreen subshrubs.

TANSY (Tanacetum vulgare): A perennial, herbaceous flowering plant which repels ants, flies, mosquitoes, borers, aphids.

WORMWOOD, COMMON (Artemisia absinthium): Perennial. Repels Carrot Flies, Fleas, Slugs, Mosquitoes, Cabbage Moths, Mice and White Butterflies.

WORMWOOD TREE (Artemisia chinensis): Repels Carrot Flies, Fleas, Slugs, Mosquitoes, Cabbage Moths, Mice and White Butterflies

DALMATIAN PYRETHRUM (Chrysanthemum cinerarifolium): Perennial. This is one of the most effective natural insecticides for flying and crawling insects.

OSAGE ORANGE-Hedge apple (Maclura pomifera) Fruits are a repellent to roaches, ants, crickets, spiders and fleas in the home.

VELVETBEAN (Mucuna deeringiana): Annual. Fast growing, soil improving tropical native well adapted to sandy soils. Reduces populations of peanut and southern root-knot nematode.

### **APHIDS**

ALLIUM (Alliaceae family): The Allium has to be in the ground all year.

ALYSSUM, SWEET (Lobularia maritime): Attracts hover flies, which eat Aphids.

ANISE (Pimpinella anisum): Repels Aphids. Also attracts predatory wasps, which prey on Aphids.

CATNIP (Nepeta cataria): Perennial. Repels Aphids, Ants, Flea Beetles, Japanese Beetles, Squash Bugs, and Weevils. Even mice don't like to be around it.

CHIVES (Allium schoenoprasum): Perennial. Repels Aphids, as well as other flying and crawling insects.

CORIANDER (Coriandrum sativum): Annual. Repels Aphids, Spider Mites and Potato Beetles.

GARLIC (Allium sativum): Bulb. Repels Aphids, Bores, Beetles, Rabbits and Spider Mites.

LAVENDER (Lavandula angustifolia): Perennial. Deters Aphids, Mosquitoes, Fleas and Moths.

ONIONS (Allium cepa): Bulb. Repels Carrot Flies along with other flying and crawling insects and Rabbits.

PEPPERMINT (Mentha piperita): Perennial. Repels Aphids, Ants, Cabbage Lopers, Flea Beetles, Cabbage Worms, Squash Bugs, White Cabbage Moths and White Flies.

PETUNIA (Petunia x hybrida): Controls certain Aphids, Asparagus Beetles, Leafhoppers, Tomato Worms and the Mexican Bean Beetle.

## ANT REPELLENTS

CATNIP (Nepeta cataria): Perennial. Repels Aphids, Ants, Flea Beetles, Japanese Beetles, Squash Bugs, Mosquitoes and Weevils. Even mice don't like to be around it.

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

PEPPERMINT (Mentha piperita): Perennial. Repels Ants, Aphids, Cabbage Lopers, Flea Beetles, Cabbage Worms, Squash Bugs, White Cabbage Moths and White Flies.

MINT (Mentha family): Perennial. Repels Ants and White Cabbage Moths.

ORANGE OSAGE-HEDGE APPLE (Maclura pomifera): Repels Ants, Roaches, Crickets, Spiders and Fleas.

TANSY (Tanacetum vulgare): Perennial. Spread a barrier of Tansy around the base of a plant to stop ants.

### ASPARAGUS BEETLE

PETUNIA (Petunia x hybrida): Controls Asparagus Beetles, Leafhoppers, Tomato Worms, the Mexican Bean Beetle and certain Aphids.

#### BEETLES

GARLIC (Allium sativum): Bulb. Repels Beetles, Spider Mites, Aphids, Rabbits and Bores.

MOUNTAIN TOBACCO (Attenuata): Repels flying and crawling insects.

SAGE (Salvia officinalis): Perennial. Deters Beetles, Cabbage Moths and Carrot Flies.

## BEAN BEETLES

ROSEMARY (Rosmarinus officinalis): Evergreen shrub. Repels Bean Beetles, Moths, Cabbage Moths, Carrot Flies, Flies and Ticks.

SUMMER SAVORY (Satureia hortensis): Deters Bean Beetles and Cabbage Moths.

## **BLISTER BEETLES**

HORSERADISH (Armoracia rusticana): Perennial. Plant with Potatoes to repel Blister Beetles and Potato Bugs.

#### BORES

GARLIC (Allium sativum): Bulb. Repels Bores, Beetles, Spider Mites, Rabbits and Aphids.

### CABBAGE MOTHS

LADS LOVE (Artemisia abronatu): Perennial shrub. Repels Cabbage Moths, Mosquitoes and Moths.

HYSSOP (Hyssopus officinalis): Perennial. Repels Cabbage Moths.

MOUNTAIN TOBACCO (Attenuata): Repels flying and crawling insects.

ONIONS (Allium cepa): Bulb. Repels Carrot Flies along with other flying and crawling insects and Rabbits.

ROSEMARY (Rosmarinus officinalis): Evergreen shrub. Evergreen shrub. Repels Bean Beetles, Moths, Cabbage Moths, Carrot Flies, Flies and Ticks.

SAGE (Salvia officinalis): Perennial. Deters Cabbage Moths, Beetles and Carrot Flies.

SUMMER SAVORY (Satureia hortensis): Annual. Deters Cabbage Moths and Bean Beetles.

WORMWOOD (Artemisia absinthium): Perennial. Repels Cabbage Moths, Fleas, Mosquitoes, Mice, Carrot Flies, Slugs, Mice and White Butterflies.

### CABBAGE LOPERS

PEPPERMINT (Mentha piperita): Perennial. Repels Cabbage Lopers, Aphids, Ants, Flea Beetles, Cabbage Worms, Squash Bugs, White Cabbage Moths and White Flies.

### CABBAGE WORMS

ONIONS (Allium cepa): Bulb. Repels Carrot Flies along with other flying and crawling insects and Rabbits.

THYME (Thymus vulgaris): Perennial. Repels Cabbage Worms and Carrot Flies.

### CARROT FLIES

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

ONIONS (Allium cepa): Bulb. Repels Carrot Flies along with other flying and crawling insects and Rabbits.

ROSEMARY (Rosmarinus officinalis): Evergreen shrub. Evergreen shrub. Repels Bean Beetles, Moths, Cabbage Moths, Carrot Flies, Flies and Ticks.

SAGE (Salvia officinalis): Perennial. Deters Carrot Flies, Cabbage Moths and Beetles.

THYME (Thymus vulgaris): Perennial. Repels Carrot Flies and Cabbage Worms.

WORMWOOD (Artemisia absinthium): Perennial. Repels Carrot Flies, Fleas, Mosquitoes, Mice, Slugs, Cabbage Moths, Mice and White Butterflies.

# CATS

RUE (Ruta graveolens): Evergreen. Used to repel fleas, flies, some rodents, cats, Japanese Beetles in Roses and Raspberries and Moths.

DOGS BANE (Coleus cannis): Repels Cats and Dogs.

HARDY ICE PLANT (Delosperma cooperi): Perennial. Repels Dogs and Cats.

SEDUM (sedum spp.): Perennial. Repels Dogs and Cats.

## **CHIGGERS**

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

ENGLISH PENNYROYAL (Mentha pulegium): Deters Chiggers, Fleas, Mosquitoes, Ticks, Gnats and Flies.

#### COLORADO POTATO BEETLES

HORSERADISH: Repels the Colorado Potato Beetle.

### CRICKETS

ORANGE OSAGE-HEDGE APPLE (Maclura pomifera): Repels Crickets, Ants, Roaches, Spiders and Fleas.

## **CUCUMBER BEETLE**

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

MARIGOLDS

## **DEER**

CROWN IMPERIAL (Fritillaria imperialis): Bulb. Deters animals such as: Deer, Rabbits, Voles and Squirrels, which frequently eat bulbs. Crown Imperial is the only one of more than 100 Fritillaries to emit the foul odor. Due to the odor it produces, it is sometimes referred to as a "STINK LILY."

# **DOGS**

CALENDULA (pot marigold), Repels dogs.

DOGS BANE (Coleus cannis): Repels Dogs and Cats.

HARDY ICE PLANT (Delosperma cooperi): Perennial. Repels Dogs and Cats.

SEDUM (Sedum spp.): Perennial. Repels Dogs and Cats.

# **FLEAS**

NUTRITIONAL YEAST: The natural remedy for any kind of pest in animals and in humans.

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

ENGLISH PENNYROYAL (Mentha pulegium): Perennial. Deters Fleas, Mosquitoes, Ticks, Gnats, Flies and Chiggers.

FENNEL (Foeniculum vulgare): Perennial.

LAVENDER (Lavandula angustifolia): Perennial. Deters Fleas, Aphids, Mosquitoes and Moths.

ORANGE OSAGE-HEDGE APPLE (Maclura pomifera): Repels Fleas, Ants, Roaches, Crickets and Spiders.

RUE (Ruta graveolens): Evergreen. Used to repel fleas, flies, some rodents and cats.

WORMWOOD (Artemisia absinthium): Perennial. Repels Fleas, Mosquitoes, Mice, Carrot Flies, Slugs, Cabbage Moths, Mice and White Butterflies.

GARLIC (Allium sativum): (Garlic combined with brewers yeast protects that protect your pets against fleas. They usually love this sprinkled on their food each day). PENNYROYAL: Place a drop of Pennyroyal on your pets collar to repel fleas. You can also add a few drops of Pennyroyal oil to water and spray around areas where your pets sleeps).

PYRETHRUM DAISY (Chrysanthemum cinerarifolium): Perennial. Repels flying and crawling insects.

ROSEMARY (Rosmarinus officinalis): Evergreen shrub. Evergreen shrub. Repels Bean Beetles, Moths, Cabbage Moths, Carrot Flies, Flies and Ticks.

WAX MYRTLE: The aromatic compounds in the foliage seem to repel insects, especially fleas.

WORMWOOD (Artemisia absinthium): Acts as a flea repellent, a moth repellant, general pesticide and as a tea/spray to repel slugs and snails. Dried worm wood sprigs may be used in the garden as a scent deterrent. Wormwoods are toxic and must not be ingested.

To Make Wormwood Tea: 8 ounces wormwood leaves 4 pints of water 1 teaspoon castile soap

Effective against: Aphids, caterpillars, flea beetles and moths.

Putting dried sprigs of wormwood in the garden along side carrots and onions will mask their scent, confusing insects in particular the carrot rust fly. The dried wormwood will not have the growth inhibiting effects of the fresh herb.

- 1. Simmer wormwood leaves in the water for 30 minutes. Stir, strain, and leave to cool.
- 2.Add the castille soap to wormwood mixture and use to spray.

Don't plant wormwoods near anise, beans, caraway, fennel, peas and sage.

# FLEA BEETLES

CATNIP (Nepeta cataria): Perennial. Repels Aphids, Ants, Flea Beetles, Japanese Beetles, Squash Bugs, Mosquitoes and Weevils. Even mice don't like to be around it.

PEPPERMINT (Mentha piperita): Repels Flea Beetles, Aphids, Ants, Cabbage Lopers, Cabbage Worms, Squash Bugs, White Cabbage Moths and White Flies.

FLY REPELLENTS

BASIL (Ocimum basilicum): Repels Flies, Moths and Mosquitoes.

**BAY LEAF** 

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

**CLOVES** 

ENGLISH PENNYROYAL (Mentha pulegium): Deters Flies, Fleas, Mosquitoes, Ticks, Gnats and Chiggers.

ONIONS (Allium cepa): Bulb. Repels Carrot Flies along with other flying and crawling insects and Rabbits.

ROSEMARY (Rosmarinus officinalis): Evergreen shrub. Evergreen shrub. Repels Bean Beetles, Moths, Cabbage Moths, Carrot Flies, Flies and Ticks.

RUE (Ruta graveolens): Evergreen. Used to repel fleas, flies, some rodents and cats.

SHOO-FLY PLANT (Nicandra physalodes): Repels White Flies.

TANSY (Tanacetum vulgare): Perennial.

**GNATS** 

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

ENGLISH PENNYROYAL (Mentha pulegium): Deters Gnats, Fleas, Mosquitoes, Ticks, Flies and Chiggers.

ONIONS (Allium cepa): Bulb. Repels Carrot Flies along with other flying and crawling insects and Rabbits.

**GOPHERS** 

GOPHER PURGE (Euphorbia Latyrus): Repels Gophers and Moles.

JAPANESE BEETLES

CATNIP (Nepeta cataria): Perennial. Repels Aphids, Ants, Flea Beetles, Japanese Beetles, Squash Bugs, Mosquitoes and Weevils. Even mice don't like to be around it.

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

FOUR-O-CLOCK: (Mirabilis jalapa): Annual in Northern states, perennial in Southern states. Attracts Japanese Beetles, which are quite deadly to them.

LARKSPUR: (Delphinium spp.): Both annual and perennial. Like Four-O-Clock, these plants attract Japanese Beetles, which are quite deadly to them.

RUE (Ruta graveolens): Evergreen. Repels Japanese Beetles in Roses and Raspberries, some rodents, fleas, flies and cats.

## **LEAFHOPPERS**

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

ONIONS (Allium cepa): Bulb. Repels Carrot Flies along with other flying and crawling insects and Rabbits.

PETUNIA (Petunia x hybrida): Controls Leafhoppers, Asparagus Beetles, Tomato Worms, the Mexican Bean Beetle and certain Aphids.

# MEXICAN BEAN BEETLES

PETUNIA (Petunia x hybrida): Controls Mexican Bean Beetle, Asparagus Beetles, Leafhoppers, Tomato Worms and certain Aphids.

**MICE** 

**ALLIUMS** 

# CAMPHOR PLANT (Tanacetum balsamita):

CATNIP (Nepeta cataria): Perennial. Repels Aphids, Ants, Flea Beetles, Japanese Beetles, Squash Bugs, Mosquitoes and Weevils. Even mice don't like to be around it.

DAFFODILS (Narcissus spp.):

DWARF ELDER

ELDERBERRY

**EUPHORBIAS** 

GRAPE HYACINTH (Muscari): Repels rodents.

MINTS:

SWEET PEAS (Lathyrus latifolius): Perennial. Repels mice.

any mints

WOOD HYACINTH (Scilla or squill)

WORMWOOD (Artemisia absinthium): Perennial. Repels Mice, Carrot Flies, Fleas,

Slugs, Mosquitoes, Cabbage Moths, Mice and White Butterflies.

**MOLES** 

GOPHER PURGE (Euphorbia Latyrus): Repels Moles and Gophers.

**MOSQUITOES** 

BASIL (Ocimum basilicum): Annual. Repels Mosquitoes, Moths and Flies.

CATNIP (Nepeta cataria): Perennial. Repels Mosquitoes, Aphids, Ants, Flea Beetles, Japanese Beetles, Squash Bugs, and Weevils. Even mice don't like to be around it. Note: In research conducted at Iowa State University, Catnip was ten times more effective at repelling mosquitoes than the compound used in most commercial bug repellents.

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

LADS LOVE (Artemisia abronatu): Perennial shrub. Repels Mosquitoes, Moths and Cabbage Moths.

LAVENDER (Lavandula angustifolia): Perennial. Deters Mosquitoes, Fleas, Aphids and Moths.

ONIONS (Allium cepa): Bulb. Repels Carrot Flies along with other flying and crawling insects and Rabbits.

ENGLISH PENNYROYAL (Mentha pulegium): Deters Mosquitoes, Ticks, Gnats, Flies, Fleas and Chiggers.

WORMWOOD (Artemisia absinthium): Perennial. Repels Mosquitoes, Mice, Carrot Flies, Fleas, Slugs, Cabbage Moths, Mice and White Butterflies.

# **MOTHS**

BALM OF GILEAD (Populus Candicans): Repels Moths and Silverfish.

BASIL (Ocimum basilicum): Annual. Repels Mosquitoes, Moths and Flies.

BAY LEAF (Laurus nobilis): Evergreen shrub. Repels Moths and Weevils. Also known as: Apollo's Bay Leaf, Bay, Bay Laurel, Grecian Laurel, Indian Bay, Laurel, Nobel Laurel, Poet's Laurel, Roman Laurel, Royal Laurel, Sweet Bay, Sweet Laurel, Wreath Laurel.

DEODAR CEDAR (Cedrus deodara): Chips and bark repel Moths.

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

CLOVES (Eugenia caryophyllata): Small evergreen tree.

EUCALYPTUS (Eucalyptus globules): Evergreen tree.

FEVERFEW (Chrysanthemum parthenium): Biennial/Perennial. Repels flying and crawling insects.

LADS LOVE (Artemisia abronatu): Perennial shrub. Repels Moths, Mosquitoes and Cabbage Moths.

LAVENDER (Lavandula angustifolia): Perennial. Deters Moths, Aphids, Mosquitoes and Fleas.

MINTS, EXCEPT PEPPERMINT: Repels Moths and Ants.

MOUNTAIN TOBACCO (Attenuata): Repels flying and crawling insects.

MUGWORT (Artemisia vulgaris): Repels Moths.

ONIONS (Allium cepa): Bulb. Repels Carrot Flies along with other flying and crawling insects and Rabbits.

PATCHOULI (Pogostemon cablin):

ENGLISH PENNYROYAL (Mentha pulegium):

PEPPER, BLACK (Piper nigrum): Perennial.

PYRETHRUM DAISY (Chrysanthemum cinerarifolium): Perennial. Repels flying and crawling insects.

ROSEMARY (Rosmarinus officinalis): Evergreen shrub. Evergreen shrub. Repels Bean Beetles, Moths, Cabbage Moths, Carrot Flies, Flies and Ticks.

RUE: (Ruta graveolens): Evergreen. Repels Japanese Beetles in Roses and Raspberries, Moths, some rodents, Fleas, Flies and Cats.

SOUTHERNWOOD (Artemisia abrotanum): Great at keeping moths away from woolens.

SANTOLINA TANSY (Tanacetum vulgare): Perennial. When rubbed fresh on the cat or dog, gets rid of the fleas.

THYME (Thymus vulgaris): Perennial.

WORMWOOD (Artemisia absinthium): Perennial. Repels Carrot Fly and White Butterfly. A tea made from the leaves will discourage slugs, snails, aphids, whitefly, etc,

when sprayed. When dried, the leaves will discourage weevil in stored grains, moths and ants. It will deter fleas when used to bath your dog.

#### POTATO BEETLES

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

CORIANDER (Coriandrum sativum): Annual. Repels Potato Beetles, Aphids and Spider Mites.

# **POTATO BUGS**

CHIVES (Allium schoenoprasum): Perennial. Repels flying and crawling insects.

FLAX (Linum usitatissimum): Annual. Plant with Potatoes to repel Potato Bugs.

HORSERADISH (Armoracia rusticana): Plant with Potatoes to repel Potato Bugs and Blister Beetles.

### **RABBITS**

### BONEMEAL

GARLIC (Allium sativum): Bulb. Repels Rabbits, Aphids, Bores, Beetles, and Spider Mites.

MEXICAN MARIGOLDS (Tagetes Minuta): Annual. Also know as "Little Marigold." Secretions from the roots of growing plants have an insecticidal effect on the soil, effective against nematodes and to some extent against keeled slugs. Dried plants can be hung indoors as an insect repellent. Also know as "Little Marigold." Aztec marigold, Dwarf Marigold, Khaki-Bush, Muster John Henry, Stinking Roger, Stinkweed and Wild Marigold.

ONIONS (Allium cepa): Bulb. Repels Rabbits, Carrot Flies along with other flying and crawling insects and Rabbits.

SOYBEAN PLANTS (Glycine max): Repels rabbits, but some say they attract them.

CROWN IMPERIAL (Fritillaria imperialis): Bulb. Deters animals such as: Rabbits, Deer, Voles and Squirrels, which frequently eat bulbs. Crown Imperial is the only one of more than 100 Fritillaries to emit the foul odor. Due to the odor it produces, it is sometimes referred to as a "STINK LILY."

#### ROACHES

ORANGE OSAGE-HEDGE APPLE (Maclura pomifera): Repels Roaches, Ants, Crickets, Spiders and Fleas.

# **RODENTS**

RUE (Ruta graveolens): Evergreen. Used to repel some rodents, Moths, Fleas, Flies, Cats, Japanese Beetles in Roses and Raspberries.

### SLUGS

ROSEMARY (Rosmarinus officinalis): Evergreen shrub. Repels Slugs, Bean Beetles, Moths, Cabbage Moths, Carrot Flies, Flies and Ticks.

WORMWOOD (Artemisia absinthium): Perennial. Repels Slugs, Fleas, Mosquitoes, Mice, Carrot Flies, Cabbage Moths, Mice and White Butterflies.

## **SPIDERS**

ORANGE OSAGE-HEDGE APPLE (Maclura pomifera): Repels Spiders, Ants, Roaches, Crickets and Fleas.

## SPIDER MITES

GARLIC (Allium sativum): Bulb. Repels Spider Mites, Aphids, Bores, Rabbits and Beetles.

CORIANDER (Coriandrum sativum): Annual. Repels Spider Mites, Aphids and Potato Beetles.

# **SQUASH BUGS**

CATNIP (Nepeta cataria): Perennial. Repels Aphids, Ants, Flea Beetles, Japanese Beetles, Squash Bugs, Mosquitoes and Weevils. Even mice don't like to be around it.

DILL (Anethum graveolens): Reported to help control Squash Bugs.

LEMON BALM (Melissa officinalis): Deters Squash Bugs when sprinkled around Squash Plants.

NASTURTIUM (Tropaedlum majus): Helps control Squash Bugs, Cucumber Beetles, and White Flies.

PEPPERMINT (Mentha piperita): Repels Squash Bugs, Cabbage Lopers, Aphids, Ants, Flea Beetles, Cabbage Worms, White Cabbage Moths and White Flies.

## SQUASH VINE BORER

## MARIGOLDS

# SQUIRRELS

CROWN IMPERIAL (Fritillaria imperialis): Bulb. Deters animals such as: Squirrels, Voles, Deer and Rabbits, which frequently eat bulbs. Crown Imperial is the only one of more than 100 Fritillaries to emit the foul odor. Due to the odor it produces, it is sometimes referred to as a "STINK LILY."

Sprinkle LOTS and LOTS of cayenne (hot pepper) powder all over the ground overtop your bulbs.

### **TICKS**

ENGLISH PENNYROYAL (Mentha pulegium): Deters Ticks, Fleas, Mosquitoes, Gnats, Flies and Chiggers.

ROSEMARY (Rosmarinus officinalis): Evergreen shrub. Evergreen shrub. Repels Bean Beetles, Moths, Cabbage Moths, Carrot Flies, Flies and Ticks.

## **TOMATO WORMS**

PETUNIA (Petunia x hybrida): Controls Tomato Worms, Asparagus Beetles, Leafhoppers, the Mexican Bean Beetle and certain Aphids.

## **VOLES**

CROWN IMPERIAL (Fritillaria imperialis): Bulb. Deters animals such as: Voles, Deer, Rabbits and Squirrels, which frequently eat bulbs. Crown Imperial is the only one of more than 100 Fritillaries to emit the foul odor. Due to the odor it produces, it is sometimes referred to as a "STINK LILY."

### WEEVILS

BAY LEAF (Laurus nobilis): Evergreen shrub. Repels Weevils and Moths. Also known as: Apollo's Bay Leaf, Bay, Bay Laurel, Grecian Laurel, Indian Bay, Laurel, Nobel Laurel, Poet's Laurel, Roman Laurel, Royal Laurel, Sweet Bay, Sweet Laurel, Wreath Laurel.

CATNIP (Nepeta cataria): Perennial. Repels Aphids, Ants, Flea Beetles, Japanese

Beetles, Squash Bugs, and Mosquitoes Weevils. Even mice don't like to be around it.

ONIONS (Allium cepa): Bulb. Repels flying and crawling insects.

### WHITE BUTTERFLY

WORMWOOD (Artemisia absinthium): Perennial. Repels White Butterflies, Fleas, Mosquitoes, Mice, Carrot Flies, Slugs, Cabbage Moths and Mice.

## WHITE CABBAGE MOTH

MINT: Repels White Cabbage Moths and Ants.

ONIONS (Allium cepa): Bulb. Repels Carrot Flies along with other flying and crawling insects and Rabbits.

PEPPERMINT (Mentha piperita): Repels White Cabbage Moths, Squash Bugs, Cabbage Lopers, Aphids, Ants, Flea Beetles, Cabbage Worms and White Flies.

## WHITE FLIES

SHOO-FLY PLANT (Nicandra physalodes): Repels White Flies.

PEPPERMINT (Mentha piperita): Repels White Flies, White Cabbage Moths, Squash Bugs, Cabbage Lopers, Aphids, Ants, Flea Beetles and Cabbage Worms.

### FOR PEOPLE

SWEET BASIL (Ocimum basilicum): acts principally on the digestive and nervous systems, easing flatulence, stomach cramps, colic and indigestion. They are taken internally in the treatment of feverish illnesses (especially colds and influenza), poor digestion, nausea, abdominal cramps, gastro-enteritis, migraine, insomnia, depression and exhaustion. Externally, they are used to treat acne, loss of smell, insect stings, snake bites and skin infections. The mucilaginous seed is given in infusion in the treatment of gonorrhoea, dysentery and chronic diarrhoea. It is said to remove film and opacity from the eyes. The root is used in the treatment of bowel complaints in children. Extracts from the plant are bactericidal and are also effective against internal parasites.

BAY LEAF (Laurus nobilis): The bay tree has a long history of folk use in the treatment of many ailments, particularly as an aid to digestion and in the treatment of bronchitis and influenza[244]. It has also been used to treat various types of cancer. The fruits and leaves are not usually administered internally, other than as a stimulant in veterinary practice, but were formerly employed in the treatment of hysteria, amenorrhoea, flatulent colic etc. Another report says that the leaves are used mainly to treat upper respiratory tract disorders and to ease arthritic aches and pains. It is settling to the stomach and has a

tonic effect, stimulating the appetite and the secretion of digestive juices. The leaves are antiseptic, aromatic, astringent, carminative, diaphoretic, digestive, diuretic, emetic in large doses, emmenagogue, narcotic, parasiticide, stimulant and stomachic. The fruit is antiseptic, aromatic, digestive, narcotic and stimulant. An infusion has been used to improve the appetite and as an emmenagogue. The fruit has also been used in making carminative medicines and was used in the past to promote abortion. A fixed oil from the fruit is used externally to treat sprains, bruises etc, and is sometimes used as ear drops to relieve pain. The essential oil from the leaves has narcotic, antibacterial and fungicidal properties.

CITRONELLA OIL or OIL OF CITRONELLA: can be used on humans to repel insects. It is used in recreational areas, outdoor household areas, and around trees and shrubs. CLOVE (Syzygium aromaticum, syn. Eugenia aromaticum or Eugenia caryophyllata): Repels dogs and cats. Attracts insect pests to traps. Repels and kills insect pests.

COMMON CATTAIL (Typha latifolia): the American Indians use a poultice from the roots on wounds, boils and burns.

ENGLISH PENNYROYAL (Mentha pulegium):

GARLIC (Allium sativum): The main therapeutic qualities of garlic describe it as being antiseptic, antibacterial, stimulating digestion, reducing high blood pressure, glandular regulator, diuretic and even cancer deterrent.

GILL-O'ER-THE-GROUND OR GROUND IVY (Glechoma hederacea): tea from the leaves works for lung ailments, jaundice and kidney problems; the tea can be applied externally for backaches and piles.

JAPANESE HONEYSUCKLE (Lonicera japonica): tea from Honeysuckle flowers has been used in Eastern Asia for enteritis, fever, flu and also as an external wash for arthritic joints, sores and scabies.

JEWELEDWEED OR SPOTTED TOUCH-ME-NOT(Impatiens capensis): poultice (a soft moist mass) from the crushed leaves of jewelweed can be used on poison ivy rash; this poultice also works for cuts, burns, bug-bites, sprains, warts and ringworm. Juice from the stems also can be applied to poison ivy rash.

NEEM LEAF (Azadirachta indica): When ingested by the insect, they create hormonal disruptions, which prevent the insect from feeding, breeding or metamorphosing. Azadirachtin by itself is an effective insect anti-feedant and repellent. Unlike chemical insecticides, it works on the insect's hormonal system, not on the digestive or nervous system, and does not lead to development of resistance in future generations. Neem leaf and Neem bark are reported to be effective for cuts, bruises, skin disorders and acne; and as a cosmetic to remove skin blemishes. Medically, it is effective as an analgesic, especially for earaches and headaches. It is also effective in controlling diabetes. In fact, neem leaf is a traditional herb for treating diabetes (Alam et al, 1989) and has been specifically proven to be effective in preventing and treating the disease (Murthy, 1978). PURPLE CONEFLOWER and other species of Echinacea (Echinacea purpurea): reduces the severity and duration of symptoms associated with cold and flu. ROSEMARY (Rosmarinus officinalis): Evergreen shrub. Repels Bean Beetles, Moths, Cabbage Moths, Carrot Flies, Flies and Ticks.

RUE (Ruta graveolens): Evergreen. Used to repel some rodents, fleas, flies, cats,

Japanese Beetles in Roses and Raspberries and Moths.

SLIPPERY ELM (Ulmas rubra): tea brewed from the inner bark helps ease a sore throat and irritated stomach – in addition to other mucous membranes.

SPICEBUSH (Lindera benzoin): the American Indians use a tea from the berries for colds, cramps, arthritis and anemia. Oil from the berries would be applied to bruises and painful muscles. Tea from Spicebush bark helps fevers and to expel worms.

TREE TEA OIL or MELALENCA OIL: recognized as a potent antiseptic. Topical application of tea tree oil is commonly used in skin care and for the treatment of various diseases and conditions. Tree oil appears to be effective against bacteria, viruses, fungal infections, mites (such as scabies) and head lice.

THYME (Thymus vulgaris): Perennial. The essential oil of common thyme is made up of 20-54% thymol which is an antiseptic and is the main active ingredient in Listerine mouthwash. Before the advent of modern antibiotics, it was used to medicate bandages. It has also been shown to be effective against the fungus that commonly infects toenails. It can also be found as the active ingredient in all-natural, alcohol-free hand sanitizers. Also, a tea made by infusing the herb in water can be used for cough and bronchitis. WITCH HAZEL (Hamamelis virginiana): Perennial Shrub. various uses include: spot and blemish control, soothes and heals diaper rash, shrinks bags under the eyes, soothes and reduces external hemorrhoids, varicose vein relief, soothes poison ivy and poison oak, helps in treating chicken pox blisters, seems to heal bruises faster, soothes razor burn (and in some instances, helps prevent it), treats and soothes nasty sunburns, used in treatment of dry skin, used heal and soothe various cuts and bruises, seems to take the bite out of bug bites, and refreshs tired eyes.

### WASPS

CITRONELLA and EUCALYPTUS: These plants are more likely to be effective wasp repellents when they are applied to the skin or a living or yard area in the form of essential oils.

FOXGLOVE (Digitalis purpurea): a biennial plant. Kills wasps, but does not affect other flying insects.

GARLIC, ONION, and PEPPER: a mixture of these ingredients sprayed onto a wasp's nest will send them on their way, never to return.

LEMONGRASS (Cymbopogon citrates): effective wasp repellent.

ROSEMARY OIL: spraying rosemary oil onto the nest and flying wasps works great. MINT: Mint and mint oil both repel wasps.

WORMWOOD (also called Artemisia): a boxy shrub. This plant makes an excellent border for a wasp-free area.

## **WEEVILS**

BAY LEAF (Laurus nobilis, Lauraceae): Place whole leaf in grain and flour packages.

# **ESSENTIAL OILS**

Essential oils are steam distilled concentrates of the natural oils present in plants, flowers, roots, and trees. They are 100% pure and must be carefully used by the drop. Note: Patch test for skin irritations using the diluted oil before general use.

CEDARWOOD (Juniperus mexicana): Apply a few drops inside your chest of drawers to repel moths and other cloth-eating insects.

CITRONELLA (Cymbopagon nardus): Effective insect repellent. May be used full strength or diluted. Try a patch test before using on your skin. Keep out of mucus membranes.

LEMONGRASS (Cymbopogon citratus): Insect repellent. Has pleasant lemon fragrance. Try a patch test before using on your skin.

PENNYROYAL (Mentha puleglum): Use to repel fleas from your pets and home. Also used as a general insect repellent with safe dilutions. WARNING: Abortive. Keep away from pregnant women.

TEA TREE OIL (Melaleuca alternifolia): Repels ticks, leeches, and lice.

PREDATORS: Green lacewings, ladybugs and their respective larvae have a voracious appetite for aphids. Larvae from the syrphid fly also consume aphids. Hover flies and praying mantis feed on aphids.

REPELLENT PLANTS: Anise, chives, coriander (cilantro), garlic, onions, petunias and radish. Nasturtiums act as a trap crop. Aphids definitely prefer yellow flowers.

TO FOIL APHIDS: flatten a square of aluminum foil around the base of plants to bounce light on the undersides of leaves. This also helps the plants in giving them more reflective light.

Squashing a few aphids around the infested plants releases a chemical signal that makes the other aphids drop from the plants and leave.

Try a barrier of powdered charcoal, calcium dust or bone meal to keep them away from your plants.

STINGING NETTLE SPRAY: Aphids & Thrips - Cover 1-quart nettles with water, cover and ferment for 3 weeks. Mix 1 part nettle tea with 7 parts water. Spray.

Use a spray made from a tea of tomato or potato leaves and water.

Chop 12 or so tomato leaves and 1 chopped onion in 1/2 cup of 70% isopropyl alcohol for a few minutes. Apply the mixture directly on aphids with a Q-tip or paintbrush. A forceful spray of water is often enough to knock the aphids off the plant and may

discourage the ants, well sometimes.

Put a bright yellow plastic pan in a strategic spot in the garden. Fill it a third of the way full with water. Aphids are drawn to the yellow color, land on the water, sink and drown.

A soap spray can be used to strip them of their protective wax coating, dehydrating them.

Mix 1 tablespoon of Castile soap to 1 gallon of water, spray.

Garlic oil spray can kill aphids and other soft bodied pests.

A dusting of diatomaceous earth is lethal to aphids. Wear a mask when using DE. Teas made from elderberry or rhubarb leaves can act as a deterrent. Oxalic acid is the

compound present in these plants that makes a spray effective. It is poisonous.

Place banana peels at the base of infested plant. The peels give them a shot of potassium too.

Also Horseradish, elderberry and yarrow tea.

For wooly aphids on apple trees: Grow the trailing type Nasturtiums training them to wrap up and around the tree trunk to ward off these pests. Not only does it repel Aphids it is also very attractive. Note: Nasturtiums will specifically attract the black aphid while

repelling others.

# **MOSQUITOES**

PENNYROYAL (Mentha pulegium): Repels ants, fleas, gnats and mosquitoes. ENGLISH PENNYROYAL (Mentha pulegium): Deters Ticks, Fleas, Mosquitoes, Gnats, Flies and Chiggers.

Prevent mosquitoes from breeding in rain barrels by applying 1-tablespoon of olive oil to the water's surface.

## **SLUGS**

Try lava rock as a barrier in areas where plants need protection.

Use horseradish roots and geranium leaves as barriers.

If you have access to a sweet gum tree (Liquidambar) the spiny fruits it produces make a good slug barrier. The American Sweet Gum tree (Liquidambar styracflua) is hardy from zones 1 to 12

Use cedar, oak bark chips or gravel chips which will irritate and dehydrate them.

Try a barrier line or an overall sprinkle of powdered ginger.

Use wood ashes as a barrier around plants. However try not to let the plant come into contact with the ashes. The ashes act as a desiccant and dry the slugs up.

SHINGLES or SANDPAPER: Get rid of slugs in the infested area then lay a barrier of roof shingles around the area to keep slugs out or use a circle of sandpaper. Spread well crushed eggshells around the plants. The calcium released from the eggshells is an extra benefit that "sweetens" the soil. The sharp edges of the shells will kill slugs.

Sprinkle a line of lime around your plants. A pile of un-aged animal manure has a high acidity and provides a slug-breeding haven leading to the assumption that slugs and snails are more of a problem in acid soils. By applying lime you sweeten the soil making it more alkaline and deterring the slugs. Obviously this won't work around plants requiring a more acidic soil.

Talcum powder and <u>diatomaceous earth</u> also work as a barrier. Please note that Diatomaceous earth will kill earthworms. Please be careful when using DE, taking special precautions not to breath it.

HARDWARE CLOTH: On raised beds staple strips of hardware cloth on wood bordered beds. Extend the cloth about 2 inches beyond the edge making sure the sharp points will be encountered by slugs trying to climb over. It rips them up. You can also use aluminum screening material in the same manner. You can push the barriers directly upright into the

soil for borderless beds.

COPPER STRIPS: The use of copper strips as a barrier will give slugs a jolt of electricity. The metal ions in copper are what repel slugs. There are mixed reports on just how effective this is. One good way to try copper strips is to make a circle of the strip around just the plants you want to protect, remove slugs first. Easier too. Copper sulfate and similar copper based products may also work for the barrier method.

HERBS: A mulch made of stems and leaves of strong smelling herbs like wormwood, mints, tansy, lemon balm along with conifer twigs mixed in will help stop slugs and other pests.

HAIR and FUR: Use a barrier of hair or fur to entangle slugs. This method seems gross, but is quite effective. An additional benefit from using hair is that it supplies some nitrogen to your plants. Human hair, pet fur and horsehair, will all work.

PRUNING: Another possibility could be to use prunings from raspberries, blackberries etc. Anything with fine, sharp stickers may help.

QUACK GRASS: Quack Grass damages the nerves that slugs use for feeding. Chop it up and use it as mulch. Make a tea by cutting it up, soak in 1 quart of warm water for 24 hours, then use as a barrier spray on soil. Try not to spray this directly on plants.

OAK LEAVES, LETTUCE and CABBAGE: Using oak leaves as a mulch deters slugs, so does seaweed if you have access to some. A point of interest is that slugs or snails do not bother red oak leaf lettuce. Red oak leaf is tasty and can take some hot weather. Also of interest is that slugs are attracted to green cabbage, but usually not the red cabbage.

COFFEE GROUNDS: Used coffee grounds spread around susceptible plants may work.

EPSOM SALTS: Epsom salts sprinkled on the soil will supposedly deter slugs and also helps prevent Magnesium deficiency in your plants. Magnesium helps to deepen color, thickens petals and increases root structure.

OAT BRAN: Scatter oat bran on the soil to kill slugs and snails.

BUILDERS SAND: Try barriers of builder's sand, which has a sharp texture.

NUT SHELLS: Ground shells of filberts, pecans and walnuts may work. If you cannot find a source you can grind your own.

COCOA HULLS: Cocoa shell mulch may work as a slug deterrent as well as supplying nitrogen to the soil as it breaks down and also suppresses weeds. There are mixed reports of people using cocoa shells for slug control. Some folks say it works fine to fairly well and some say the slugs love it so much that they are all over it and their slime creates a hard crust on top of the mulch. We will suggest that you buy a small amount of cocoa shells and try it out first. Warning: Dogs may be attracted to and can eat cocoa hulls,

which can be fatal.

ROSEMARY (Rosmarinus officinalis): Evergreen shrub. Sprigs of Rosemary scattered around repel slugs and are refreshing with their piney scent.

<u>MULLEN and SLUGS:</u> Fresh or dried mullein (verbacsum) leaves placed around vulnerable plants and areas repels slugs and snails. Mullein is also a nice tall accent for use as a background planting.

PINE NEEDLES: Try a mulch of pine needles, which works well around strawberry plants.

Plants slugs generally steer clear of: Artemisias, Alyssum, Azaleas, Basil, Corn, Cosmos, Chard, Daylilies, Daffodils, Evergreens, Fennel, Foxglove, Freesia, Fuschia, Garlic, Ginger, Grapes, Hibiscus, Holly, Ivy (Swedish in particular), Jerusalem Cherry, Lemon Balm, Lungwort, Mint, Parsley, Peruvian lily, Pumpkin, Red Cabbage, Red Oak Leaf Lettuce, Rosemary, Rosemary, Rosemary Sage, Sunflower, Tansy, and Quack Grass. Plants like chicory and endive are virtually slug proof.

Use old soap bars as a deer deterrent. Save soap remnants from your bathroom or hotel soap from your travels and place them in a pouch made out of pantyhose or cheesecloth. Hang the pouch near trees, shrubs, or other plants you want to protect.

Spread diatomaceous earth, which is a dust or powder made from ground-up algae, on the ground around plants as a barrier to crawling pests such as caterpillars, slugs, snails, thrips, and earwigs. The powder's sharp edges kill these creatures. Wood ashes have a similar effect.

Mix up your own organic sprays and dusts out of hot-to-the-taste or strong-smelling herbs, spices, and other edibles. Gardeners commonly use: garlic, parsnip roots, bell peppers, onions, cayenne pepper, and pipe tobacco.

Try dormant oil sprays as another nontoxic way to kill insect pests. A coating of dormant oil suffocates bugs without harming trees or plants.

Use wire mesh to keep rabbits out of the garden, creating a barrier that extends at least 2 feet above the ground, plus at least 6 inches under the soil. The openings in the mesh should be no larger than 11 x 2 inches square.

ROTE PLANTING: Insect pests tend to feed on a plant and then lay their eggs in the soil below. When you plant the same thing in the same spot every year, the emerging larvae have a convenient food supply. However, if you move plants around from year to year, you make it harder for the larvae to find food. Moving a plant even 10 feet helps. That's a big distance to a creature just a fraction of an inch long. Ideally, you shouldn't put annuals or vegetables from the same family in the same location more than once every three to five years.