

## SUMMARY OF ALLOWABLE COSMETIC PESTICIDES FOR OUTDOOR DOMESTIC HORTICULTURAL USE

Prepared by the Toronto Master Gardeners, July 2009

The following list summarizes the products that are now permitted to be used for home outdoor gardening under the revised Ontario pesticide law. The legislation restricts / controls what can be used in the garden, not just what can be sold. As a result, our reading of the legislation is that home remedies cannot be used legally since they are not included in the lists of allowable products. This interpretation is consistent with the public statement and positions taken by Ministry of the Environment staff.

The legislation groups the allowable products into Class 5 and Class 6 – products in Class 5 are identified with an “\*” and are only available for sale from licensed retailers, e.g. nurseries and garden centres. Products in Class 6 are more widely available.

In recommending any pesticide, it is important to remember that the new Ontario legislation also requires that specific products must only be used for uses listed on their labels.

### Acetic Acid (horticultural vinegar)

- Used for
  - Non-selective herbicide; more effective for smaller annual weeds, will not kill roots of perennial weeds
- Available products
  - EcoClear Ready RTU for Fast Acting Weed Control\*
  - Scott’s Econsense pathclear weed control spray with quick connect sprayer\*
  - Scott’s Econsense pathclear weed control spray with pull ‘n spray applicator\*
  - President’s choice weed controller
  - Scott’s ecosense pathclear weed control spray
  - Grotek elimaweed ready to use non-selective herbicide
  - Green earth weed and grass killer ready to use

### Bacillus thuringiensis kurstaki

- Used for
  - Naturally occurring bacteria that causes illness and death in various insect larvae, including caterpillars of pest species such as gypsy moth, spruce budworm, cabbage looper; will also affect a number of beneficial insect larvae
- Available products
  - Safer’s BTK Biological Insecticide\*
  - Bioprotec Eco\*
  - Rona Eco BTK – Bioinsecticide\*

### Boracic acid (Boric acid)

- Used for
  - Insecticide for control of ants, cockroaches, termites, and other crawling insects; acts as a stomach poison; dry powder can also act as an abrasive to damage insects’ exoskeleton; for horticultural use, need to ensure that the specific product is labelled for garden use
- Available products
  - The Insect Destroyer in Powder\*
  - Surekiller Insect Powder\*
  - Later’s Boric Acid Dust\*
  - Insect Stop Crawling insect destroyer powder\*
  - Safer’s attack ant killer
  - Doktor doom granular bait
  - Wilson roach powder insect dust
  - Surekill bug buster
  - Niban granular bait
  - Green earth homecare ant, roach, and crawling insect killer

**Borax**

- Used for
  - See boric acid
- Available products
  - Super ants killer
  - Safer's attack ant trap
  - Later's ant traps
  - Insect kure ant trap
  - Gourmet liquid ant bait
  - Wilson antout ant bait
  - Green earth homecare liquid ant bait
  - Wilson liquid antex
  - CIL liquid antout
  - Raid liquid ant killer
  - Ortho home defence max ant trap
  - CIL ant traps
  - Wilson ant trap
  - Ant-b-gon ant killer liquid

**Capsaicin**

- Used for
  - The active ingredient in hot peppers; used as an animal repellent
- Available products (these also include oil of black pepper and piperine as active ingredients)
  - Sentagone animal repellent
  - Havahart critter ridder

**Copper sulphate**

- Used for
  - Non-specific algaecide; will kill beneficial zooplanktons as well as undesirable algae
- Available products
  - Crystalline H2O\*
  - Crystal Pond Algaecide\*

**Corn gluten meal**

- Used for
  - Non-selective herbicide that acts by inhibiting germination, especially for annual weed seeds; frequently used for crab grass control in lawns
  - Note – to use as a legal herbicide, you must ensure that the specific product is labelled as a herbicide
- Available products
  - Turfmaize Pre-emergent weed seed germination inhibitor with corn gluten meal\*
  - Nutrite Pre-emergent crabgrass weed seed germination inhibitor\*
  - Collingwood corn gluten meal herbicide\*
  - Scott's Turf Builder weed preventer corn gluten meal herbicide\*
  - Bioprotec inhib\*
  - Turfmaize bioweed 'n feed lawn fertilizer 9 -0 -0 \*
  - President's choice weed seed inhibitor and lawn fertilizer\*

**Dried blood**

- Used for
  - Animal repellent
- Available products
  - Plantskydd deer repellent soluble powder
  - Plantskydd deer repellent solution

**Fatty acid**

- Used for
  - Non-selective, post-emergent herbicide that is most effective against annual weeds since it only kills plant tissues on contact; most effective when applied to young, actively growing weeds under 5 – 6 inches tall; may provide some suppression of perennial weeds
- Available products
  - Safer's Topgun Weedkiller/Herbicide Fast Acting \*
  - Safer's Superfast Patio Weed Killer \*
  - Safer's topgun weed killer fast acting
  - Safer's superfast patio weed killer ready to use
  - Safer's superfast patio weed killer

**Iron phosphate (ferrous or ferric)**

- Used for
  - Specific pesticide to kill slugs and snails; the iron phosphate causes the slugs / snails to stop eating resulting in death within a few days; not harmful to other insects, pets, etc.
- Available products
  - Escar-go slug and snail bait\*
  - Safer's slug and snail bait
  - Scott's ecosense slug-b-gon slug and snail bait

**Iron sulphate (ferrous or ferric)**

- Used for
  - Herbicide used to kill moss growing in lawn; most effective if applied when moss is actively growing; lawn needs to be thoroughly watered after application; will burn leaves of other plants if comes into contact with them; will stain stone and concrete; once moss has been killed it needs to be removed and area reseeded with grass seed
- Available products
  - GreenLeaf Moss Control\*
  - Scott's turf builder lawn fertilizer 22-2-2\*
  - Wilson hose spray moss killer and lawn food 5-0-0\*

**Lime sulphur or calcium polysulphide**

- Used for
  - Relatively broad-based fungicide that inhibits the germination of spores to control powdery mildew, downy mildew, black knot, rust, scab and black spot
- Available products
  - Wilson Lime Sulphur\*
  - Lime Sulphur \_Les Produits de controle superieurs inc.) \*
  - Later's Lime Sulphur solution \*fungicide/miticide) \*
  - CIL Mother Earth Lime Sulphur concentrate \*

**Mineral oil (herbicidal or plant growth regulator or insecticidal or adjuvant)**

- Used for
  - Insecticide used to control various insects including scales, aphids, whiteflies and mites – works by smothering eggs laid on plants, smothering insects, destroying the waxy coating on insects' exoskeletons; and/or interfering with feeding
  - May be toxic to some plants, always test on small portion of plant before broad application
- Available products
  - Plant products dormant oil spray emulsifiable insecticide \*
  - Green earth horticultural oil insect spray \*
  - Later's dormant oil spray \*
  - Wilson liquid dormant oil spray insecticide
  - Liquid insecticide d'huile a vaporisation pour arbres dormants

**Putrescent whole egg solid**

- Used for
  - Animal repellent to be sprayed on trees and shrubs primarily to deter deer
- Available products
  - Deer-away big game repellent concentrate
  - Deer-away big game repellent powder

**Sclerotinia minor**

- Used for
  - A naturally occurring plant pathogen (fungus) that can be used as a biological control for broad-leaved weeds in turf (esp. dandelions) – it acts by suppressing leaf growth
  - May cause a watery soft rot on many fruits, vegetables and ornamental plants so should be used with caution around such plantings
- Available product
  - Sarritor domestic granular biological herbicide\*

**Silicon dioxide (diatomaceous earth)**

- Used for
  - Non-selective pesticide to control various pests including earwigs, slugs, ants and potato beetles – abrasive powder that damages the exoskeleton of any insect that comes in contact with the powder and/or the digestive tract if eaten
  - Will harm beneficial insects and other beneficial garden organisms such as earthworms
- Available products
  - Insect stop 100% natural \*
  - Insecolo (all natural) all purpose insecticide home and garden \*
  - House & Garden Insect Destroyer\*
  - The Cockroach and Ant Destroyer\*
  - The Earwig Destroyer\*
  - Silverfish and Cockroach Destroyer\*
  - ProGreen earth S.D. Insect Dust\*
  - Insectigone crawling insect killer
  - Insectigone cockroach and ant killer
  - Insectigone earwig killer
  - Insectigone ant killer
  - Green earth dio bug and slug killer
  - Insect stop cockroach and ant killer
  - Insect stop silverfish and cockroach killer
  - Insect stop earwig killer
  - Insect stop ant killer
  - Green earth indoor/outdoor insect dust
  - Green earth ant and roach insect dust
  - Green earth slug and bug insect killer dust
  - Raid earthblends ant and earwig dust

### Soap (alkanolamine salts or fatty acid or potassium salts of fatty acid)

- Used for
  - Non-selective insecticide that is most effective against small, soft-bodied insects such as aphids, white flies; also effective for earwigs; acts by dissolving the outer, waterproof layer of the insect's exoskeleton; must come into contact with the insect to be effective
    - May damage some plants so test on small portion of each type of plant before general spraying is undertaken since fatty acids are the active ingredient both in insecticidal soaps at concentrations of 1 – 1.5% and in herbicides at concentrations of around 3%
  - Herbicide to control moss in turf – moss growth is indicative of other problems with turf's growing conditions which must be addressed or moss will regrow
- Available products
  - Insect Stop Insecticidal Soap\*
  - Pro Insecticidal Soap concentrate\*
  - Safer's insecticidal soap concentrate
  - Safer's insecticidal soap for houseplants
  - Safer's de-moss moss and algae killer
  - Safer's rose and flower insecticide natural (ready to use)
  - Safer's de-moss moss killer herbicide
  - Safer's aphid and whitefly killer natural ready to use
  - Safer's spider mite spray natural
  - Safer's rose and flower insecticide natural \*
  - Green earth insecticidal soap \*
  - Green earth ready to spray insecticidal soap
  - Green earth hose spray insecticidal soap
  - Safer's insecticidal soap
  - Zap! Insecticidal soap
  - Safer's 3 in 1 garden spray
  - Bioprotec soap insecticidal soap
  - Scott's ecosense insecticidal soap ready to use
  - Scott's ecosense insecticidal soap concentrate

### Sulphur

- Used for
  - Fungicide to combat powdery mildew, scab, rust and black spot by inhibiting the germination of spores and negatively affecting growth – most effective if used as a preventive or as soon as symptoms appear
- Available products
  - The giant destroyer \*
  - Safer's natural garden fungicide \*
  - Later's garden sulphur \*
  - Safer's defender natural garden fungicide
  - Safer's defender garden fungicide
  - Safer's sulphur dust fungicide miticide
  - Green earth garden fungicide ready to use
  - Green earth garden sulphur