

| | Dead Zone | Edge | Terminator | Ureabor | Weed Out | Weed Out II | Knockdown |
|-----------------------------|-----------|------|------------|---------|----------|-------------|-----------|
| Annual Weeds & Grasses | ██ | ██ | ██ | ██ | ██ | ██ | |
| Perennial Weeds and Grasses | ██ | ██ | ██ | ██ | ██ | ██ | |
| Aquatic Weeds | | ██ | | | | | |
| Alder | ██ | | | | | | |
| Algae | | ██ | | | | | |
| Bahia Grass | ██ | | | | | | |
| Barnyard Grass | ██ | | | | | | ██ |
| Bermuda Grass | ██ | ██ | ██ | | | | |
| Bindweed | ██ | | | | ██ | | |
| Blackberry | ██ | | | | | | |
| Bladderwort | | ██ | | | | | |
| Bluegrass | ██ | | | ██ | | | |
| Bouncing Bet | | | ██ | | | ██ | ██ |
| Bracken Fern | | | ██ | | | ██ | ██ |
| Bromegrass | ██ | | | | | | |
| Broom Grass | | | ██ | | | | |
| Broomsedge | | | | | | | ██ |
| Cheatgrass | | | | | ██ | ██ | |
| Cherry | ██ | | | | | ██ | |
| Chickweed | ██ | | | | | | |
| Clover | ██ | | | | | | |
| Coontail | | ██ | | | | | |
| Crabgrass | ██ | ██ | ██ | ██ | ██ | ██ | ██ |
| Dallisgrass | ██ | ██ | ██ | ██ | ██ | ██ | |
| Dandelions | ██ | | | | | | ██ |
| Dewberry | ██ | | | | | | |
| Dogbane | | | ██ | | | | |
| Downy Brome | | | | ██ | | | |
| Elderberry | ██ | | | | | | |
| Elodea | | ██ | | | | | |
| Fescue | ██ | | | | | | |
| Foxtail | ██ | | ██ | | | ██ | ██ |
| Goldenrod | | | ██ | | | | |
| Honeysuckle | ██ | | | | | | |
| Horsetail | | | ██ | ██ | ██ | ██ | ██ |
| Johnson Grass | ██ | ██ | ██ | ██ | ██ | ██ | ██ |
| Kikuyu Grass | | ██ | | | ██ | | ██ |
| Koachia | | | | ██ | | | |
| Kudzu | ██ | | | | | | ██ |
| Lambquarter | ██ | | | ██ | | ██ | ██ |
| Lettuce | ██ | | | | | | |
| Mustard | ██ | | | | | | |
| Naiad | | ██ | | | | | |
| Nut Grass | | | ██ | | | | |
| Nutsedge | ██ | | | | | | |
| Oak | ██ | | | | | | |
| Orchard Grass | ██ | | | | | | |
| Pennygrass | ██ | | | | | | |
| Pigweed | ██ | | | ██ | | | |
| Poison Ivy/Poison Oak | ██ | | | | | | |
| Pondweed | | ██ | | | | | |
| Purple Top Dandelion | | | ██ | ██ | | | |
| Quack Grass | | ██ | | | ██ | | |
| Ragweed | ██ | | | | | ██ | ██ |
| Raspberry | ██ | | | | | | |
| Rose | ██ | | | | | | |
| Rye Grass | | ██ | ██ | ██ | ██ | ██ | ██ |
| Salt Grass | | ██ | ██ | ██ | ██ | ██ | ██ |
| Salvinia | | | ██ | | | | |
| Sandbur | ██ | | | | | | |
| Shepherdspurse | ██ | | | | | | |
| Smooth brame | | | ██ | | | | |
| Sumac | ██ | | | | ██ | ██ | |
| Sunflower | | | | | | | |
| Thistle | ██ | | | | | | |
| Timothy | ██ | | | | | | |
| Trumpet Creeper | ██ | | | | | ██ | ██ |
| Turkey Mullen | | | | | | | |
| Vaseygrass | ██ | | | | | | |
| Water Hyacinth | | ██ | | | | | |
| Water Lettuce | | ██ | | | | | |
| Watermilfoil | | ██ | | | | | |
| Wild Carrot | | | ██ | | | | |
| Wild Oats | | | ██ | | | ██ | |
| Willow | ██ | | | | | | |

Herbicides



Non-sterilant – Non-selective

DEAD ZONE

- 18% Glyphosate concentrate
- Dilute 3-6 oz per gallon water to treat 300 sq. ft.

ADVANTAGES

- Enters plant by foliage contact, then spreads into stem and roots
- Nonresidual-Inactivated on contact with soil
- Controls many annual and perennial weeds, brush and grasses

Non-sterilant – Non-selective

EDGE

- Water-based concentrate
- 1.85% Diquat Dibromide
- Aquatic and land use
- Dilute approximately 1:8 for land use

ADVANTAGES

- Contact kill (foliage only)
- Nonresidual-Inactivated on contact with soil
- Labor saving
- Low odor
- Contains no petroleum distillates

Sterilant - Non-selective

TERMINATOR

- Highly concentrated
- Total kill
- 2.44% Lithium salt of Bromacil
- Dilutes 1:9 with water

ADVANTAGES

- Non-flammable
- Chemical is carried into the root zone by moisture, providing longterm control
- Lasts a full growing season

Sterilant – Non-selective

UREABOR

- Granular, systemic kill
- Semi-soil sterilant
- 1.5% Bromacil
- 1-1.8 lbs covers 100 sq. ft.
- Apply dry granules with hand spreader

ADVANTAGES

- Ideal for tall weeds, sandy soil or high rainfall areas
- Ready to use
- Non-corrosive
- Economical

Sterilant – Non-selective

WEED OUT

- Solvent-based, ready to use, soil sterilant
- 1.09% 2,4-D ester for foliage burndown
- 0.98% Bromacil for root action control
- One gallon covers up to 1,000 sq. ft.

ADVANTAGES

- Controls weeds and grasses by contact and root action
- Contains anti-drift agents
- Lasts a full growing season
- Will not leak, stays where it is spread

Sterilant – Non-selective

Knock Down

- Solvent-based, ready to use, soil sterilant
- 0.29% 2,4-D
- 0.50% Bromacil for root action control
- One can covers up to 65 sq. ft.

ADVANTAGES

- Controls annual weeds and grasses including foxtail, ryegrass, wild oats, crabgrass, wheatgrass, broomsedge, ragweed, lambs quarter and turkey mullein
- Controls other hard-to-kill perennial weeds and grasses, such as Johnsongrass, saltgrass, bouncing bet, bracken fern and horsetail

Annuals: A plant that lives and grows for one year; the plant completes its life cycle within a single growing season.

Biennial: Plant which lives and grows for two years. Usually biennials develop a leaf cluster and root system the first year. The second year yields flowers and seeds, then the plant dies.

Bromacil: An excellent soil sterilant used as a pre- and post-emergent herbicide. It is a substitute uracil compound that must be carried to the root system through moisture and absorption before killing action results. Although it is slow acting, Bromacil is noncorrosive and nonvolatile.

Burndown: The effect is usually a fairly rapid wilting, withering and browning of the plant upon coming in contact with the herbicide. Burndown may or may not be related to the plant actually dying. Desiccation or dehydration are also captured as burndown symptoms.

Contact Kill: Herbicides must directly contact portions of the plant above ground to be effective.

Desiccate: A term used for "drying" or "withering" of leaves.

2,4-Dichlorophenoxyacetic acid (2,4-D): 2,4-D is a selective weed killer. While it is used as a postemergent weed killer, it can also be used in some applications as a pre-emergent weed killer. The use of this product will actually cause the plant to rapidly grow itself to death. 2,4-D does not affect animals and has a very low mammalian toxicity throughout the plant. 2,4-D is highly volatile and can affect adjacent plants. This herbicide is more effective against broadleaf weeds than against cereals and grasses.

Diquat dibromide: A contact, non-selective herbicide and plant desiccant, applied post-emergent. This herbicide is used as a general contact weed killer, which doubles as an aquatic weed killer. When used in non-crop areas, the plant foliage should be

completely covered. When used as an aquatic herbicide, water should be clear with no suspended silt and flow should be very slow or still. Diquat is very effective in small doses. Rapid killing is visible in just a few days. It is inactivated immediately upon contact with the soil. Diquat has been found to be more effective on broadleaf plants. In order for this herbicide to perform its killing action, sunlight and oxygen must be present.

Drift: Carry over of the herbicide spray during application due to wind and/or temperature. When applying contact kill or non-selective herbicides, care must be taken to prevent wind currents and/or overspray from accidentally spraying desired plants.

Glyphosate: Non-selective, non-sterilant herbicide active ingredient that works to inhibit the enzyme essential to the formation of a plant-specific amino acid (protein). Effective on over 110 different annual and perennial weeds and grasses, this material is one of the most widely used actives today in retail, agricultural, and lawn & garden applications. Ideally suited for widespread use, the translocation type herbicide is absorbed by leaves and stems and produces browning and kill of the entire plant. Rate of kill is directly proportional to metabolism of plant in growth. Replanting can occur usually after just seven days, making the treatment-replant cycle very short.

Herbaceous Plants: Plants having tops (above ground portion) that die each year and do not develop woody tissue.

Hydrocarbon: Solvents commonly used as the carrier for oil-based herbicides.

Leaching: The "flushing" of active herbicide (usually a sterilant) into an area where the weed killer was not applied. The "run off" is the result of either irrigation or rainwater flushing the active ingredient out of the treated area.

Non-selective: A general herbicide formulated to kill any plant.

Perennial: A plant that lives for more than two years. They grow and bloom over the spring and summer and then die back every autumn and winter, then return in the

spring from their root-stock rather than seeding themselves as an annual plant does.

Prometon: Formulated in 1957 by Ciba-Geigy Corp., this is a non-selective herbicide that is applied to both pre-emergent and post-emergent weeds for total vegetation and brush control in non-crop areas. This herbicide should be applied either at weed emergence or 2 or 3 months afterwards. In most cases, it will control weed growth for a full season or longer.

Root Kill: Refers to the effect produced by herbicide formulations upon the root system. Root kill is important for preventing weed regrowth from the root system after herbicide treatment.

Selective: Herbicide that kills only certain plants.

Sterilant: These weed killers are non-selective herbicides and, as the name implies, affect the soil such that no plants will grow in the treated area for one growing season (or more). This type of weed control chemical is particularly suited for industrial, commercial and other non-crop, non-agricultural land treatment.

Succulent: Refers to plants using high volumes of water for survival.

Top Kill: Describes the effect of herbicide formulas on the part of the plant above the ground surface.

Triazines: When you see the word "atrazine" or "simazine" in the ingredients statement, you will know you are dealing with a triazine. These -zine compounds are soil sterilants. The primary disadvantage of these materials is that they do not kill as many plant species as do some of the other products. They are considered to have a limited spectrum of activity.

Wetting Agent: A surface acting agent that allows water to flow better by lowering its surface tension. A small amount of wetting agent added to water allows the soil to absorb water more readily. Wetting agents aid in the coating of vegetation more evenly when an herbicide is applied. Also referred to as surfactant.