

General Herbicide Information*

Vegetation Treatments Using Herbicides on BLM Lands in Oregon

Environmental Impact Statement

July 2008

Currently approved for use on BLM lands in Oregon

2,4-D

Trade names: Many

A **selective**, foliar-absorbed, translocated phenoxy herbicide used mainly in **postemergence** applications. 2,4-D is effective against many annual and perennial broadleaf weeds. Ester formulations are the most volatile, the amines least volatile. Plants are most susceptible when they are young and growing rapidly.

- Mimics natural plant hormones.

DICAMBA

Trade names: *Banvel, Banvel II, Banvel SGF, Clarity, Trooper, Vanquish, Dicamba, Rifle*

A growth-regulating **selective** herbicide readily absorbed and translocated from either roots or foliage. Effects similar to those of 2,4-D.

- Mimics natural plant hormones.

GLYPHOSATE

Trade names: *Roundup, Rodeo, Kleenup, Accord, Honcho, E-Z-Ject, Jury, Mirage, Protocol, Rattler, Ruler, Silhouette, Glypro, Glyphomax, AquaNeat, Touchdown, Glyphosate, Durango, RT Master, and many others*

A **nonselective** translocated herbicide with no apparent soil activity. Rain within 6 hr after application may reduce effectiveness. Glyphosate translocates to roots and rhizomes of perennial weeds. Complete control may require retreatment. Low-volume applications are most effective.

- Inhibits three amino acids and protein synthesis.

PICLORAM (restricted-use herbicide)

Trade names: **Tordon 22K, Tordon K**

A highly translocated, **selective** herbicide active through both foliage and roots on many broadleaf herbaceous weeds and woody plants. Picloram is persistent; diligently follow precautions to avoid injuring desirable plants. Unmetabolized picloram in treated foliage will pass through livestock, and manure and urine can be toxic to plants.

- Mimics natural plant hormones.

To be examined for use on BLM lands in Oregon

BROMACIL

Trade names: *Hyvar X, Hyvar X-L*

A substituted uracil compound used **preemergence** or as a spot-treatment on brush. A **nonselective** soil-residual herbicide; controls a wide range of weeds and brush.

- Inhibits photosynthesis.

CHLORSULFURON

Trade names: *Glean F.C., Telar DF*

A **selective preemergence** or **early postemergence** herbicide used at low rates. Carefully consider crop rotation plans before using. Recommended for use in wheat, barley, oats, and in fallow on soils of pH 7.5 or less. Telar formulation is a selective broadleaf herbicide used preemergence to postemergence in noncropland areas.

- Interferes with enzyme acetolactate synthase, resulting in a rapid cessation of cell division and plant growth in both roots and shoots.

CLOPYRALID

Trade names: *Stinger, Transline, Clopyr Ag*

A highly translocated, **selective** herbicide active primarily through foliage of broadleaf herbaceous weeds (mostly the Asteraceae, Fabaceae, and Polygonaceae families). Curtail is clopyralid + 2,4-D; **Redeem R&P** and **Confront** are clopyralid + triclopyr.

- Mimics natural plant hormones.

DIFLUFENZOPYR

Trade names: *Mixed with dicamba and sold as **Distinct** and **Overdrive***
 Postemergence, translocated **selective** herbicide to control broadleaf weeds.

- Inhibits auxin transport.

* Used with permission. Information excerpted from the Pacific Northwest 2008 Weed Management Handbook. Peachey, Ed, Dan Ball, Robert Parker, Joseph P. Yenish, Timothy W. Miller, Don W. Morishita and Pamela J.S. Hutchinson, editors. 2008. Corvallis, OR: Extension Services of Oregon State University, Washington State University, and University of Idaho. Always read the label before buying or applying herbicides.



DIQUAT (a moderately toxic herbicide that requires protective gear for handling and application)

Trade names: *Diquat Herbicide, Reward, Reglone*

A fast-acting, **nonselective**, foliar-applied, contact herbicide and plant desiccant. Material is slightly translocated. It is completely inactivated on contact with soil. Using a surfactant enhances its activity.

- Absorbs energy produced by photosynthesis; forms peroxides that disrupt living cells.

DIURON

Trade names: *Karmex, Diuron, Direx, Direx*

A substituted urea compound used **preemergence** to control annual weeds and certain perennials in noncropland and certain agricultural crops. Plant roots absorb and translocate material. It is foliar absorbed when used with a wetting agent. Diuron may persist several months in soil.

- Inhibits photosynthesis.

FLURIDONE

Trade names: *Sonar, Avast!*

An aquatic herbicide to control submersed and immersed plants. Not particularly effective in controlling floating aquatic plants.

- Inhibits carotene formation, resulting in chlorophyll destruction.

HEXAZINONE

Trade names: **Velpar, Velpar DF, Velpar L, Velpar ULW, Pronone**

A foliar- or soil-applied **non-selective** herbicide with soil activity for broadleaf weed, brush, and grass control in cropland, noncropland, forest lands, and rangeland.

- Inhibits photosynthesis.

IMAZAPIC

Trade names: **Plateau, Oasis**

Manufacturer has elected to sell Plateau only to government agencies and not to farmers or ranchers. A **selective postemergence** herbicide effective controlling broadleaf weeds and some grasses.

- Inhibits the plant enzyme acetolactate synthase.

IMAZAPYR

Trade names: **Arsenal, Chopper, Contain, Arsenal Applicator Concentrate, Stalker, Habitat, Imazapyr E-Pro 4, Polaris**
Nonselective, imidazolinone herbicide applied **preemergence** or **postemergence** for long-term total vegetation control. Readily absorbed through foliage and roots. Registered for use only on noncropland.

- Inhibits enzyme used in synthesis of some amino acids.

METSULFURON

Trade names: **Escort, Ally, Cimarron, Metsulfuron**

A **selective postemergence** herbicide used at low rates to control broadleaf weeds in wheat, barley, and fallow. Escort is used for selective broadleaf weed and brush control in pastures, rangeland, and noncropland.

- Interferes with an enzyme, resulting in rapid cessation of cell division in both roots and shoots.

SULFOMETURON

Trade names: **Oust, Spyder**

Broad-spectrum herbicide with **preemergence** and **postemergence** activity for noncropland and forestry use.

- Interferes with an enzyme, rapidly stopping cell division.

TEBUTHIURON

Trade names: **Spike**

A soil-applied herbicide to control woody plants and vegetation. Its half-life in soil is 12 to 15 mo in areas receiving 40 to 60 inches of annual precipitation.

- Symptoms suggest photosynthesis inhibition.

TRICLOPYR

Trade names: **Garlon 3A, Garlon 4 Herbicide, Forestry Garlon 4, Forestry Garlon XRT, Remedy, Renovate 3A, Renovate OTF**

A growth-regulating **selective** herbicide to control woody and broadleaf perennial weeds in noncropland, forestland, range, permanent grass pasture, turf, and rights-of-way. Crossbow is triclopyr + 2,4-D; Redeem R&P and Confront are triclopyr + clopyralid.

- Mimics natural plant hormones.

