



The Townsend Profile

A Newsletter of Townsend Chemical

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Volume 1

Late Season Treatment Opportunities

With winter just a few months away comes the potential for hibernation among herbicide crews. However, there are products available and treatments that can be made to keep crews productive during typically slow periods. **Vista® herbicide.**

Although it's best to apply broadcast foliar treatments in the spring and summer months when plants have fully leafed out and are actively growing, research from Dow AgroSciences LLC suggests the new label rate increases the ability of managers mixing Vista with products like Garlon® and Tordon® herbicides to improve control, even with applications that occur later in the season (prior to leaf senescence). The results are based on, and representative of, a wide variety of plant species and growing conditions existing nationwide.

Our trials show that adding Vista herbicide to Garlon or Tordon noticeably increases the uptake of both products," says Pat Burch, field research biologist with Dow AgroSciences. "This translates to improved control. We have really noticed this on later-season applications to pine and some hard-to-control oak species like shingle oak, among other species."

The U.S. Environmental Protection Agency accepted a label update for Vista® herbicide. The updated label includes a rate increase to 2^{2/3} pints (42 fl. oz) per acre per year and removes the annual broadcast treatment limitation of only one, allowing crews to make multiple applications of Vista every year.

Dormant Stem Treatments - Dormant stem treatments allow crews to control brush throughout the winter season and resemble a foliar treatment, except it takes place during the winter season. For best results, treatment should occur within 10 weeks of bud break. The applicator sprays the plants entire bark and stems, as if the plant still had its leaves. This method uses Garlon® 4 herbicide and a crop oil concentrate mixed with water as the carrier.

Cut-Stump Treatments - Cut-stump (also referred to as cut-surface) treatments are made by applying herbicide to the cut surfaces of target plants. The herbicide translocates from the cambium layer of treated brush to the root system for complete control with no resprouting.

Applicators work individually using backpack or hand-held sprayers to treat freshly cut tree and brush stumps following mechanical treatment. Traditional hand-pump-type backpacks fitted with traditional wands work best. You should use the appropriate nozzles for the spray patterns recommended by product labels.

Ideally, cut-stump treatments should be made within one hour after mechanical treatment. The herbicide is applied directly to the exposed cambium area next to the bark. Herbicides in an oil carrier (like Pathfinder® II herbicide) also require the applicator to treat the outside circumference of the stump down to the soil line.

The most effective way to make cut-surface treatments is to use ready-to-use products such as Pathfinder® II or Pathway® herbicides from Dow AgroSciences.

Pathfinder II is a convenient, ready-to-use herbicide that provides excellent control of more than 80 species of woody plants. In addition, Pathfinder II allows you the flexibility to treat cut surfaces immediately after cutting, or up to one month later.

Pathway herbicide offers all the ready-to-use benefits of Pathfinder II while also providing control of tough, root-suckering brush species. However, since it is a water-based formulation, surfaces must be treated immediately with Pathway to ensure proper control. If more than an hour has elapsed since the time of cutting, you will need to use Pathfinder II or another-oil based product.

®™ Trademark of Dow AgroSciences LLC

Radiarc® is a registered trademark of Waldrum Specialties

Tordon is a federally Restricted Use Pesticide.

HOW TO OPTIMIZE BASAL BARK AND CUT STUMP APPLICATIONS WITH STALKER® HERBICIDE & TCD AX-IT BASAL OIL

For consistent, broad-spectrum basal bark and cut stump brush control, only a tank mix of **AX-IT Basal Oil, Stalker** and **Garlon* 4** lets you gain complete control over more than 30 species of unwanted vegetation.

Proper Technique for Basal Bark Application

Preparing the Herbicide mix for application:

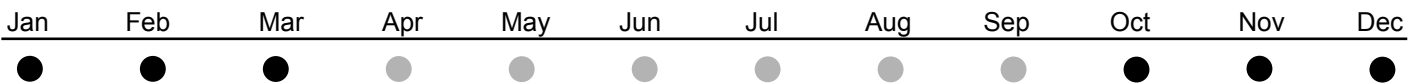
Following label directions, a typical recommendation for both basal bark and cut stump treatments is a 3% **Stalker® herbicide**, 20% **Garlon 4**, and 77% **AX-IT Basal Oil** to make one gallon of total solution.

Applying the Stalker, Garlon 4 and AX-IT Basal Oil mix to bark: Using a backpack sprayer with a wand fitted with a ConeJet® tip, thoroughly wet the bark with the herbicide mixture approximately 16 to 18 inches from the ground. Spray the entire circumference of the stem, **but do not apply so much herbicide mix that it puddles or runs off onto the surrounding soil.** A pressure gauge is available to regulate application to a constant pressure.

Application Timing:

A basal bark application of **Stalker, Garlon 4, and AX-IT Basal Oil** mix is recommended any time after the first frost of the season, once vegetation has lost its leaves until foliage begins to return in the spring.

TCD AX-IT Basal Oil can be blended or tank mixed with **Garlon 4-Stalker-Tordon K** to achieve success on hard to control species such as ash, black locust, cherry, shingle oak, sweet gum and also invasive plant species such as autumn olive, amur maple, bush honeysuckle, glossy buckthorn, multiflora rose and tree of heaven.



• **Optimal timing** for basal bark applications. Note that timing of the first frost and loss of leaves and the return of foliage vary according to geography.



CORRECT

Apply **Stalker** plus **Garlon 4** tank mix to bark 16 to 18 inches from the ground



INCORRECT

DO NOT over apply herbicide. The herbicide should not run off onto the surrounding soil.



To learn more, contact:
Townsend Chemical Division
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BASF
 The Chemical Company

DID YOU KNOW?

NO PIECE OF PAPER CAN BE FOLDED IN HALF MORE THAN SEVEN TIMES.

DONKEYS KILL MORE PEOPLE ANNUALLY THAN PLANE CRASHES.

OAK TREES DO NOT PRODUCE ACORNS UNTIL THEY ARE FIFTY YEARS OR OLDER.

DOW CHEMICAL IS THE SECOND LARGEST USER OF NATURAL GAS IN THE USA.

THE PLASTIC THINGS ON THE END OF SHOELACES ARE CALLED AGLETS.

SNICKERS ARE THE NUMBER ONE SELLING CANDY SOLD IN VENDING MACHINES.

AN AVERAGE HUMAN LOSES ABOUT 200 HEAD HAIRS PER DAY.

TCD IVM SEMINARS 2005

INDIANA | OHIO

March 8 Zanesville, OH
March 10 Nashville, IN
March 15 Plymouth, IN
March 17 Wapakoneta, OH
March 29 West Lafayette, IN
-Road School

KENTUCKY

February 1 Bardstown, KY
February 2 & 3 Bardstown, KY
-National Sales Meeting
February 24 Bowling Green, KY

MICHIGAN

March 22 Gaylord, MI Best Western
March 24 Alma, MI Comfort INN



Townsend Chemical Division
9211 E. Jackson Street
Selma, Indiana 47383
1.800.616.4221
www.townsendchemical.com

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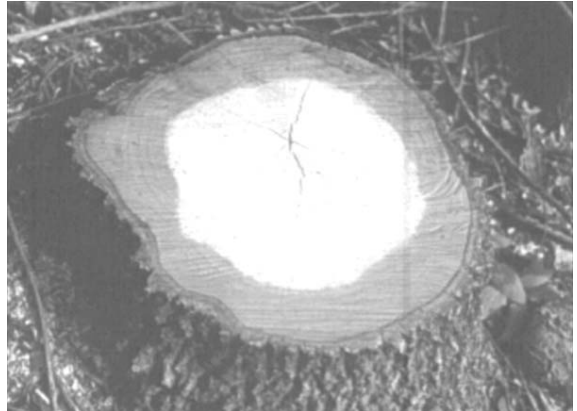
Dow AgroSciences herbicides for cut- surface applications

Pathway*II herbicide is a convenient, ready-to-use formulation. It controls a broad spectrum of woody plant species - including stubborn hardwoods and root-suckering species most herbicides can't handle. By carrying Pathway with them, cutting and trimming crews can treat and eliminate resprouts while clearing rights-of-way. This is particularly helpful in maintaining aesthetically pleasing rights-of-way and greatly extends the interval before a maintenance treatment is needed. Application is made by spraying the exposed cambium area next to the bark. It is important to treat this area around the entire circumference of the tree.

Pathfinder* II herbicide is a convenient, effective, ready-to-use product that can be used for cut-stump applications. Because it eliminates the need for mixing, Pathfinder II greatly reduces operator exposure during handling. It also saves time and ensures use of proper rates for optimum effectiveness. With application of Pathfinder II, in addition to treating the cambium area, you need to spray the outside circumference of the stump down to the soil line. The herbicide's penetrating action (due to its diluent, which is derived from a naturally occurring non-petroleum substance), and this method of application, mean you can cut now and spray later without sacrificing control. Pathfinder II offers excellent control of more than 80 woody plant species, including ash, oak and other difficult-to-control hardwoods.

Garlon* 3A herbicide is great for cut-stump applications in areas with standing water. It's also ideal along the banks of ponds, lakes, marshes or wetland areas on rights-of-way. Apply undiluted Garlon 3A to the freshly cut stump with a sprayer or paint brush.

Cut-Surface Applications



Stump Treatment. Stump treatments provide excellent control of woody plant root systems, especially root-suckering species. Ideally the treatment is applied within an hour after cutting the tree. Avoid treating when heavy sap bleeding can reduce the effectiveness of the herbicide product.

FREE OFFER EXTENDED THROUGH APRIL

Now through April 15, 2005, order two cases (2x2^{1/2} gallons) of Accord, for your stump treatment needs, *and receive, at no charge a 2 quart Townsend CST sprayer.* This is a \$17 value that will give you many years of good service. If you are applying low volume basal, consider AX-IT basal oil in our convenient short filled 2^{1/2} gallon containers with dye already added. Each 2^{1/2} gallon jug has 15 pints of basal oil plus blue dye. Add 5 pints of Garlon 4 to fill the line (a 3 to 1 mix) making it 25% Garlon. Order 4 cases (2 x 15 pints) of AX-IT with dye and 1 case (2 x 2^{1/2} gallons) of Garlon 4 and receive free two Townsend CST sprayers OR \$30 off a Birchmeier BCS 2^{1/2} gallon closed systembackpack. Offer also applies to blended products in 15 gallon Trail Pak closed system drum. Take your choice or order in multiples and take advantage of BOTH offers.

Call **Little Jimmy B** or your TCD Sales Representative to place your order.

1-800-616-4221

Basal Applications



Low-volume basal bark. This method uses a high rate of **AX-IT** (20%-30%), which effectively controls trees up to 6 inches in diameter at a low spray volume. It is highly efficient for treating long stretches of rights-of-way with fewer fill-ups. In some cases, an applicator can spray all day with 4 to 5 gallons of herbicide solution. Spray the lower 12 to 15 inches of bark circumference until wet, but not to the point of run-off, using a solid or adjustable cone nozzle.

*Trademark of Dow AgroSciences, LLC
AX-IT Trademark of TCD
Stalker-Trademark of BASF



To learn more, contact:
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www.townsendchemical.com

Dow AgroSciences herbicides for basal applications

Pathfinder*II herbicide is a convenient and effective ready-to-use product perfect for low-volume basal bark treatments. Because it eliminates the need for mixing, Pathfinder II greatly reduces operator exposure during handling. It also saves time and ensures use of proper rates so that you get more consistent results. Pathfinder II is formulated with a diluent that is derived from a naturally occurring non-petroleum substance for superior penetrating capability. It offers excellent control of more than 80 woody plant species, including ash, oak and other difficult-to-control hardwoods.

Garlon*4 herbicide an easy-to-mix liquid formulation - is proven standard for basal bark applications. It provides outstanding control of more than 80 woody plant species, including stubborn hardwoods like ash, gum, maple and oak. Because Garlon 4 can be applied using a variety of methods, it provides additional flexibility to meet special needs.

Rate:

Low Volume basal bark mixture

Use 20% to 30% Garlon 4 herbicide in AX-IT oil diluent. Use the higher rate for hard-to-control species or trees with diameters larger than 4 inches.

TCD AX-IT basal oil can be blended or tank mixed with Garlon 4-Stalker-Tordon K to achieve success on hard to control species such as ash, black locust, cherry, shingle oak, sweet gum and also invasive plant species such as autumn olive, amur maple, bush honeysuckle, glossy buckthorn, multiflora rose and tree of heaven.

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- No container disposal
- No mixing mistakes in the field costing time and money
- Increased production
- Worker safety - reduces chemical exposure to the applicator
- Reduces the chance for spills

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**We
Accept**





DuPont™ Oust® Extra

Sometimes A Little Extra Makes A Big Difference

For years, DuPont Oust XP herbicide has set the standard for long-lasting broad spectrum control. It's been the ideal foundation for bareground treatments.

Now, you can get the control you've come to expect from Oust XP along with improved performance on hard to control species in one product.

Introducing DuPont Oust Extra herbicide

New Oust Extra provides foliar and residual control of a broad spectrum of broadleaf weeds, grasses and vines. It delivers all the benefits of Oust XP with a lot of EXTRAS:

An EXTRA spectrum of control

Oust Extra is a broad-spectrum herbicide that provides both foliar and residual control of broadleaves and grasses, vines and winter annuals.

EXTRA Value

Oust Extra is effective at low application rates and this one product controls herbaceous weeds, grasses and vines.

EXTRA Time

It is easy to use, and re-suspends in solution more completely for fewer problems after wind and rain delays.

Plus, Oust Extra provides all of these EXTRA species, thistles, giant foxtail, johnsongrass, crabgrass, and barnyard grass

Broadleaves and grasses

pigweed species, thistles, giant foxtail, johnsongrass, crabgrass, and barnyard grass

Vines

dewberry, blackberry and multiflora rose (wild roses)

Winter annuals

chickweed, henbit and bur buttercup

Mixes better for fewer delays

Oust Extra is produced using DuPont XP formulation technology. This proprietary process creates an end product that is uniform in size for improved solubility and easier measuring. XP technology improves the way the product mixes in the tank, resulting in more uniform spray coverage for more consistent weed control. Another key benefit of this formulation technology is that it allows Oust Extra to re-suspend in solution more completely, which means fewer problems after rain and wind delays.

Easier on the environment, too

Oust Extra is applied at a low-use rate which means you can reduce the chemical load on the treated acres without compromising control.

Benefits of using Oust Extra

- Provides foliar and residual control of broadleaf weeds, grasses and vines in one product.
- Applied at low-use rates
- Offers residual control without volatility or odor
- XP-formulated for consistent, uniform spray coverage
- Re-suspends in solution more completely for fewer problems after rain and wind delays

Use recommendations

Here's how it works

Timing and use rates for non-crop sites

- Apply Oust Extra as a preemergence or early postemergence spray before or during the rainy season when weeds are actively germinating or growing
 - Apply at the rates indicated by weed type. When applied at lower rates, Oust Extra provides short-term control of weeds listed; when applied at higher rates, weed control is extended.
 - To improve preemergence to early postemergence control of weeds and grasses, add 2 2/3 to 5 1/3 ounces per acre of Oust Extra to the recommended rates of the following herbicides: DuPont Hyvar X, Krovar I DF, Velpar or Telar DF herbicide; Diuron DF herbicide, GlyproPlus dicamba, AM 40 IVM 24D.



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Townsend Chemical Division
9211 E. Jackson St.
Selma, IN 47383