

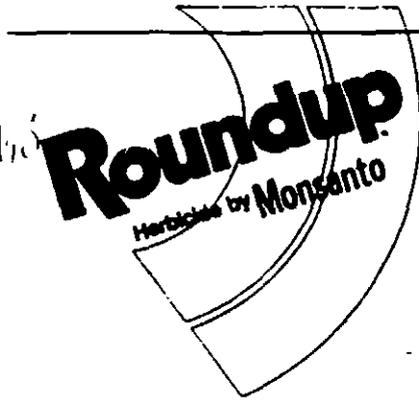
PM 25 524-308 1/3

SUPPLEMENTAL LABELING

READ AND FOLLOW THE ENTIRE LABELS FOR ROUNDUP® HERBICIDE AND ARSENAL™ 2 WSL BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.

"Labels" as used in this supplemental labeling refers to the label booklet for Roundup herbicide, the label instructions for Arsenal 2 WSL and this supplement.

NOT REVIEWED
In Accordance with PR Notice 82-2.
Based on Draft Labeling Dated 1/20/70



(EPA Reg. No. 524-308)

ROUNDUP HERBICIDE PLUS ARSENAL 2 WSL FOR NONCROP AREAS SUCH AS NON-IRRIGATION DITCHBANKS, DRY DITCHES, DRY CANALS, FENCEROWS, ROADSIDES, INDUSTRIAL SITES, PIPELINES, UTILITY RIGHTS-OF-WAY AND RAILROADS.

Keep out of reach of children.

WARNING!

In case of an emergency involving this product, Call Collect, day or night, (314) 694-4000.

Roundup® is a registered trademark of Monsanto Company.
Arsenal™ is a registered trademark of American Cyanamid Company.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with the labeling.

This label must be in the possession of the user at the time of the herbicide application.

When applied as directed, this tank mixture will control or partially control labeled woody brush, trees and herbaceous weeds in noncrop areas. In addition to the weeds labeled for Roundup herbicide, this tank mixture will control arrowweed, saltcedar and yaupon.

HAND-HELD AND HIGH-VOLUME APPLICATIONS

Use 4 quarts of Roundup plus up to 4 pints of Arsenal 2 WSL per 100 gallons of spray solution. Apply to foliage of actively growing vegetation. Applications should be

made on a spray-to-wet basis. Spray coverage should be uniform and complete. Do not spray to the point of runoff.

BROADCAST APPLICATIONS WITH GROUND EQUIPMENT

Use 2 to 5 quarts of Roundup plus up to 4 pints of Arsenal in sufficient water to apply in a total spray volume of 10 to 40 gallons per acre. Apply to foliage of actively growing vegetation.

AERIAL APPLICATIONS (HELICOPTER ONLY)

Use 2 to 5 quarts of Roundup plus up to 4 pints of Arsenal in sufficient water to apply in a total spray volume of 10 to 15 gallons per acre. Apply to foliage of actively growing vegetation.

Apply to woody brush and trees after full leaf expansion until initiation of fall color.

Avoid direct applications to any body of water. Do not apply on ditches used to transport irrigation water.

Read and carefully observe the label directions, cautionary statements and all information on all the labels of both products used in this tank mixture before proceeding with this recommendation. Additional precautionary statements are made in these labels. Use according to the most restrictive label directions for each product in the mixture.

Read "LIMIT OF WARRANTY AND LIABILITY" in the label booklet for Roundup before using this product. Those terms apply to this supplemental labeling and, if those terms are not acceptable, return the product unopened at once.

MAP-3102

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SUPPLEMENTAL LABELING

READ AND FOLLOW THE ENTIRE LABEL FOR ROUNDUP® HERBICIDE BEFORE PROCEEDING WITH THE USE DIRECTIONS CONTAINED IN THIS SUPPLEMENTAL LABELING.

"Label" as used in this supplemental labeling refers to the label booklet for Roundup herbicide and this supplement.



(EPA Reg. No. 524-308)

ROUNDUP HERBICIDE FOR FORESTRY AND UTILITY RIGHTS-OF-WAY

Roundup® is a registered trademark of Monsanto Company.

In case of an emergency involving this product, Call Collect, day or night, (314) 694-4000.

**Keep out of reach of children.
WARNING!**

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with the labeling.

This label must be in the possession of the user at the time of the herbicide application.

FORESTRY AND UTILITY RIGHTS-OF-WAY

See "General Information" and "Mixing Additives and Application Instructions" sections of the label booklet for Roundup for essential product performance information.

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF SPRAY WITH FOLIAGE OF DESIRABLE TURFGRASSES, TREES, SHRUBS, OR OTHER DESIRABLE VEGETATION SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.

NOTE: If spraying areas adjacent to desirable plants, use a shield made of cardboard, sheet metal or plywood while spraying to help prevent spray from contacting foliage of desirable plants.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seeds.

Read and carefully observe the label claims,

cautionary statements and all information on the labels of each product used. Use according to the most restrictive label directions for each product used in recommended tank mixtures.

NOTE: NOT RECOMMENDED FOR USE AS AN OVER-THE-TOP BROADCAST SPRAY IN SILVICULTURAL NURSERIES, OR CHRISTMAS TREE PLANTATIONS.

For specific rates of application and instructions for control of various brush, annual and perennial weeds, see the "Weeds Controlled" section of the label booklet for Roundup. For specific rates of application for release of listed coniferous species, see the "Conifer Release" part of this section of the label.

Where repeat applications are necessary, do not exceed 10.6 quarts of this product per acre per year.

AERIAL APPLICATION

This product may be applied using aerial spray equipment for silvicultural site preparation, conifer release and rights-of-way treatments. See the "Application Equipment and Techniques" part of the "Mixing, Additives and Application Instructions" section of the label booklet for Roundup for information on how to properly spray this product by air.

DO NOT APPLY THIS PRODUCT BY AIR TO RIGHTS-OF-WAY SITES IN THE STATE OF CALIFORNIA.

In order to reduce the aerial application drift hazard to aquatic sites*, to nontarget sites, or any site containing desirable vegetation, always maintain appropriate buffer zones. A buffer zone of the following minimum distances should be maintained:

- Helicopters using a Microfoil™ boom, a Thru-Valve™ boom (TVB-45), or equivalent drift control systems, should maintain at least a 50-foot buffer zone.
- When using other aerial equipment:
 1. Maintain at least a 75-foot buffer zone for applications using 2 quarts or less per acre of this product.
 2. Maintain at least a 125-foot buffer zone for application using more than 2 quarts per acre of this product.
 3. Maintain at least a 400-foot buffer zone for applications on rights-of-way when applied from 75 feet or more above ground level.

These distances should be increased if conditions favoring drift exist.

*Aquatic sites include all lakes, ponds, and streams used for significant domestic purposes or angling.

™Microfoil is a trademark of Union Carbide Agricultural Products, Inc.

™Thru-Valve is a trademark of Waldram Specialties, Inc.

SITE PREPARATION

Following preplant applications of this product, any silvicultural species may be planted.

POSTDIRECTED SPRAY

In established silvicultural sites, use as a spray on the foliage of undesirable vegetation.

Care must be exercised to avoid contact of spray, drift or mist with foliage or green bark of desirable species.

CONIFER RELEASE

For release, apply only where conifers have been established for more than one year. Vegetation should not be disturbed prior to treatment or until visual symptoms appear after treatment. Symptoms of treatment are slow to appear, especially in woody species treated in late fall. Injury may occur to conifers treated for release, especially where spray patterns overlap or the higher rates are applied or when applications are made during periods of active conifer growth. Do not use additional surfactant with conifer release applications.

Applications must be made after formation of final conifer resting buds in the fall or prior to initial bud swelling in spring. Some autumn colors on undesirable deciduous species are acceptable provided no major leaf drop has occurred. Use the following rates for conifer release to control or partially control the weeds listed in the "Weeds Controlled" section of the label booklet for Roundup.

For release of the following conifer species:

Douglas fir	Pines*
<i>Pseudotsuga menziesii</i>	<i>Pinus spp.</i>
Fir	Spruce
<i>Abies spp.</i>	<i>Picea spp.</i>
Hemlock	
<i>Tsuga spp.</i>	

*Includes all species except eastern white pine, loblolly pine or slash pine

Apply 1-1/2 to 2 quarts of this product per acre except in Washington and Oregon, west of the crest of the Cascade Mountains. For spring treatments west of the crest of the Cascade Mountains, apply 1 quart of this product per acre before conifer bud swell for control of annual weeds. For fall treatments in Washington and Oregon, west of the crest of the Cascade Mountains, apply 1 to 1-1/2 quarts of this product per acre before any major leaf drop of deciduous species.

For release of western hemlock apply 1 quart of this product per acre.

For release of the following conifer species:

Loblolly pine	Slash pine
<i>Pinus taeda</i>	<i>Pinus elliotii</i>
Eastern white pine	
<i>Pinus strobus</i>	

Late Season Application — Apply 1-1/2 to 2 quarts of this product in a minimum of 5 gallons of spray solution per acre during early autumn. Applications made prior to September 1 or when conditions are conducive to rapid growth of conifers will result in potential for increased injury in the form of tip and/or needle burn. Injury may decrease with later application. Some autumn colors are acceptable at time of application. Apply prior to frost or leaf drop of undesirable plants. Applications made according to label direction will release loblolly pine, eastern white pine and slash pine by reducing competition from the following species:

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<i>Fraxinus</i> spp. Cherry, Black <i>Prunus serotina</i>	<i>Diospyros</i> spp. Peppar, Yellow <i>Liriodendron tulipifera</i>
Pin <i>Pinus pensylvanica</i>	Sassafras <i>Sassafras albidum</i>
Elm <i>Ulmus</i> spp.	Sourwood <i>Oxydendrum arboreum</i>
Hawthorn <i>Crataegus</i> spp.	Sumac: Winged <i>Rhus vernix</i>
Locust, black <i>Robinia pseudoacacia</i>	Smooth <i>Rhus glabra</i>
Maple, red <i>Acer rubra</i>	Winged <i>Rhus copallina</i>
Oak: Black <i>Quercus velutina</i>	Swallowtail <i>Liquidambar styraciflua</i>
Post <i>Quercus stellata</i>	
Southern Red <i>Quercus falcata</i>	
White <i>Quercus alba</i>	

Apply only to those sites where woody brush and trees listed in this label constitute the majority of the undesirable species.

ROUNDUP® PLUS OUST™ TANK MIXTURES FOR CONIFER RELEASE FROM HERBACEOUS WEEDS

To release loblolly pines from herbaceous weeds, tank mixtures of this product with Oust will provide control of annual weeds listed in the "Weeds Controlled" section of the label booklet for Roundup and the Oust label, and partial control of the perennial weeds listed below.

Apply 16 to 24 fluid ounces of Roundup with 2 to 4 ounces of Oust in 10 to 30 gallons of spray solution per acre. Make application to actively growing weeds as a broadcast spray over the top of the young loblolly pines.

This tank mixture may be applied using aerial equipment. When applying by air, use the recommended rate in 5 to 15 gallons of spray solution per acre.

For control of annual weeds below 12 inches in height (or runner length on annual vines) use the low rates of both products. Use the higher rates of both products when annual weeds are in more advanced stages of growth and approaching flower or seed formation.

Use the higher rates of both products for partial control of the following perennial weeds. Use the lower rates for suppression of growth.

Bahiagrass <i>Paspalum notatum</i>	Johnsongrass** <i>Sorghum halepense</i>
Broomsedge <i>Andropogon virginicus</i>	Peelgrass** <i>Diodia teres</i>
Deck, curly <i>Rumex crispus</i>	Trumpet creeper* <i>Campsis radicans</i>
Dogfennel <i>Eupatorium capilliflorum</i>	Vaseygrass <i>Paspalum urvillei</i>
Fescue, tall <i>Festuca arundinacea</i>	Vernain, blue <i>Verbena hastata</i>

* Suppression at the higher rates only.
** Control at the higher rates.

Pine damage may occur or can be accentuated if treatment takes place when young trees are under stress from drought, flood water, insects or disease.

and Company.

NOTE TO USER

This product must not be used in areas where adverse impact on Federally designated endangered/threatened plant or aquatic species is likely.

Prior to making applications, the user of this product must determine that no such species are located in or immediately adjacent to the area to be treated.

CUT STUMP TREATMENTS

Woody vegetation may be controlled by treating freshly cut stumps of trees and resprouts with this product. Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut vegetation close to the soil surface. Apply a 50 to 100 percent solution of this product to the freshly cut surface immediately after cutting. Delays in application may result in reduced performance. For best results, applications should be made during periods of active growth and full leaf expansion.

When used according to directions for cut stump application, this product will CONTROL, PARTIALLY CONTROL or SUPPRESS many types of woody brush and tree species, some of which are listed below:

Alder <i>Ainus</i> spp.	Saltcedar <i>Tamarix</i> spp.
Eucalyptus/Biogum <i>Eucalyptus glauca</i>	Sweetgum <i>Liquidambar styraciflua</i>
Madrone <i>Arbutus menziesii</i>	Tan Oak <i>Lithocarpus densiflorus</i>
Oak <i>Quercus</i> spp.	Willow <i>Salix</i> spp.
Reed, giant <i>Arundo donax</i>	

INJECTION AND FRILL APPLICATIONS

Woody vegetation may be controlled by injection or frill application of this product. Apply this product using suitable equipment which must penetrate into the living tissue. Apply the equivalent of 1 ml of this product per each 2 to 3 inches of trunk diameter. This is best achieved by applying 50 to 100 percent concentration of this material either to a continuous frill around the tree or as cuts evenly spaced around the tree below all branches. As tree diameter increases in size, better results are achieved by applying diluted material to a continuous frill or more closely spaced cuttings. Avoid application techniques that allow runoff to occur from frill or cut areas in species that exude sap freely after frills or cutting. In species such as this, make frill or cut at an oblique angle so as to produce a cupping effect and use undiluted material. For best results, application should be made during periods of active growth and after full leaf expansion.

This treatment will CONTROL the following woody species:

Oak <i>Quercus</i> spp.	Sweetgum <i>Liquidambar styraciflua</i>
Peppar	Sycamore <i>Platanus occidentalis</i>
<i>Populus</i> spp.	

woody species:

Black gum <i>Nyssa sylvatica</i>	Hickory <i>Carya</i> spp.
Dogwood <i>Cornus</i> spp.	Maple, red <i>Acer rubrum</i>

TANK MIXTURES FOR FORESTRY SITE PREPARATIONS

ROUNDUP® PLUS OUST™

This tank mixture may also be used as a site preparation treatment for sites to be planted to jack pine, loblolly pine, red pine, slash pine and Virginia pine.

When applied as directed, this product plus Oust provides control of annual weeds listed in the "Weeds Controlled" section of the label booklet for Roundup and Oust, and control or partial control of the perennial weeds listed below.

Apply 1 to 2 quarts of this product with 2 to 4 ounces of Oust in 10 to 40 gallons of spray solution per acre as a broadcast spray to actively growing weeds.

This mixture may be applied by aerial equipment in site prep operations. When applied by air, use the recommended rates in 5 to 15 gallons of spray solution per acre.

For control of annual weeds, use the lower rates of these products.

For control of the listed perennial weeds, use the higher rates of both products. For partial control, use the lower rates.

Bahiagrass <i>Paspalum notatum</i>	Johnsongrass** <i>Sorghum halepense</i>
Bermudagrass* <i>Cynodon dactylon</i>	Peelgrass** <i>Diodia teres</i>
Broomsedge <i>Andropogon virginicus</i>	Quackgrass <i>Agropyron repens</i>
Deck, curly <i>Rumex crispus</i>	Trumpet creeper* <i>Campsis radicans</i>
Dogfennel <i>Eupatorium capilliflorum</i>	Vaseygrass <i>Paspalum urvillei</i>
Fescue, tall <i>Festuca arundinacea</i>	Vernain, blue <i>Verbena hastata</i>

* Suppression at the higher rates only.
** Control at the lower rates.

When used in combination as recommended by Monsanto Company, the inclusion of Monsanto shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the Monsanto products in such combination use.

Read the "LIMIT OF WARRANTY AND LIABILITY" in the label booklet for Roundup and Oust before using this product. Those terms apply to this supplemental labeling and if those terms are not acceptable, return the product unopened at once.

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