



College of Agriculture, Human and Natural Sciences

### Cooperative Extension Program

# Agriculture and Natural Resources FACT SHEET ANR-8

An Outreach Education Program Serving Limited Resource Individuals, Families and Communities

## HERBACEOUS WEED CONTROL IN NEWLY PLANTED LOBLOLLY, SLASH and LONG LEAF PINES

By

Fitzroy D. Bullock, Extension Professor  
Small Farm and Integrated Pest Management

*"Don't be fooled, pine trees need to escape from weeds."*

There are various herbicides registered for the control of grasses and broadleaf weeds in newly planted pines. The selection and application of any one herbicide or herbicide combination will depend largely on the weed spectrum.

The following is a brief insight into the herbicides that are available and how they can be used to give your young pine trees a rapid head start. Remember that the first year of a pine tree's growth is the most important since it is the time that a good root system is established.

### 1. Atrazine:

*AAtrex Nine-0 - 2.2-4.4lbs/A*  
*AAtrex 4L - 4-8 pts/A*

Atrazine provides both preemergence and postemergence activity. Apply in a minimum of 10 gallons of water per acre. Application may be made as a directed spray or over the top of pines, but before weeds exceed 1.5 inches. This treatment will control many annual grasses and broadleaf weeds. The addition of an oil concentrate containing 1 percent to 20 percent surfactant will improve the control of existing weeds. Use only on loblolly and slash pines.

### 2. Imazapyr:

*Arsenal (Applicators Concentrate) - 6.0 to 10 fl. ozs/A*

Apply over-the-top or as a directed spray to pines. Apply in at least 25 gallons of water/A. The addition of 0.25% of a non-ionic surfactant by volume will help improve control. This treatment will provide good control of most grasses and broadleaf weeds and suppression of blackberries/brambles. This treatment is a good fit in areas where Johnsongrass and Bermuda grass are serious problems. Arsenal will provide both preemergence and postemergence weed control. Use 6.0-10 fl.oz. on loblolly pines, 4-8 fl. oz on slash pines and 4-6 fl. oz. on long leaf pines.

**3. Metsulfuron:**

*Escort 60 DF - 0.5-1.5 oz/A* (for use only on trees established for at least one year)

Apply over-the-top or directed in at least 25 gallons of water/A for the control of many broadleaf weeds. This treatment is especially good where blackberries/brambles are a

problem. Do not use a surfactant when treating pine trees that are less than 1 year old. Use only on loblolly and slash pines.

**4. Sulfometuron:**

*Oust 75 DF - 2-8 ozs/A*

Apply over-the-top or as a directed spray. Make application in at least 20 gallons of water/A to actively growing broadleaf weeds (Personal experience has shown that 4oz/A is adequate for general broadleaf weeds.)

Do not add a surfactant if application is to be made over the top of pines. This treatment provides both preemergence and postemergence weed control.

**5. Sulfometuron + Atrazine:**

*Oust - 2-8 ozs/A*

+

*AAtrex Nine - 0-2.2-4.4lbs/A*  
or *AAtrex 4L - 4-8pts/A*

Apply over-the-top or as a directed spray. Make application in at least 20 gallons of water/A to actively growing grasses and broadleaf weeds. This treatment is especially good for coarse

textured soils for the first and second year where brambles and sickle pod are major problems.

**6. Sulfometuron + Hexazinone**

*Oust 75 DF - 2-4oz/A*

+

*Velpar2 L - 2-3pts/A*

Apply in at least 20 gallons of water/A for the control of many broadleaf weeds, vines and small woody plants. This treatment is especially good in areas where sprouts from roots of woody plants might become a serious problem.

**7. Hexazinone + Sulfometuron**

*Oustar 75 DF (Velpar + Oust)*

Apply Oustar to loblolly pines, slash pines, or long leaf pine seedlings for the control of many grasses and broadleaf weeds. Make application of 12-16 oz./A to seedlings established for more than one year. Make application in 10-40 gallons per acre. Do not apply under stress conditions.

**8. Fluazifop**

*Fusilade DX - 16-24 fl. oz/A*

Apply in at least 25 gallons of water per acre. Application should be made over the top of pines and actively growing grasses. Always add 1 percent crop oil concentrate, or 0.25 percent of a non-ionic surfactant by volume. This treatment will give only postemergence control of grassy weeds. A split application may be necessary for perennial grasses. Fusilade **will not** control broadleaf weeds or sedges. Fusilade may be used on all pine species.

**9. Sethoxydim:**

*Vantage 1.0 L - 2.25-3.75 pts/A*

Apply in at least 25 gallons of water to actively growing grassy weeds. A split application may be necessary to help control perennial grasses. Do not add surfactant or crop oil to Vantage. This treatment will not control sedges or broadleaf weeds.

**10. Clethodim:**

*Envoy 0.94 – 16 fl. oz. per acre*

Apply over the top for control of annual and perennial grasses. Make application in enough water for good coverage (20-30 gallons per acre). The addition of a crop oil concentrate or a non-ionic surfactant will improve control. This treatment may be used on all pine species. Do not apply under drought conditions.

**11. Glyphosate:**

*Accord 4E – 12 -24 fl. ozs/A*

Apply in no more than 25 gallons of water/A. Application should be made to actively growing weeds. Use 0.25% of a non-ionic surfactant by volume or 6.0 fl. oz/A of Entry II to help improve control. Do not apply during rapid candle expansion when application is made over-the top of pines. Use only on loblolly and slash pines. Do not exceed 16 fl. oz. for slash pines.

**12. Glyphosate + Sulfometuron**

*Accord - 12-24 fl. ozs/A*

+

*Oust 75 DF - 2-4 ozs/A*

Apply in at least 25 gallons of water per acre. Application should be made to actively growing broadleaf weeds and grasses. Non-ionic surfactant at 0.25 percent by volume should be added to help improve control. Do not apply this mixture during rapid candle expansion when over-the-top application is made. This treatment will control many grasses, broadleaves, and sedges and give suppression of blackberries/brambles. Use only on loblolly and slash pines. Do not exceed 16 fl. oz. of Accord on slash pines.

CONVERSION TABLE FOR HERBICIDES ON SMALL AREAS			MEASURING TABLES FOR HERBICIDES
Rate per Acre	Rate per 1000 Sq. Ft.	Rate per 100 Sq. Ft.	
Liquid Materials			Herbicides are often bought in large packages or containers which do not have specific instructions for mixing smaller amounts to treat small areas. The following table compares various measurements that are needed to make smaller amounts of spray:
1 pt.	3/4 Tbs.	1/4 tsp.	3 teaspoons (tsp.) = 1 tablespoon (Tbs.)
1 qt.	1 1/2 Tbs.	1/2 tsp.	2 tablespoons = 6 teaspoons = 1 fluid ounce
1 ga.	6 Tbs.	2 tsp.	4 tablespoons = 1/4 cup = 2 fluid ounces
25 gal.	4 1/2 pts.	1 cup	1 cup = 16 tablespoons = 8 fluid ounces
50 gal.	4 1/2 qts.	1 pt.	2 cups = 1 pint = 16 fluid ounces
75 gal.	6 1/2 qts.	1 1/2 pts.	2 pints = 1 quart = 4 cups
100 gal.	9 qts.	1 qt.	4 quarts = 1 gallon = 16 cups
Dry Materials			16 ounces = 1 pound
1 lb.	2 1/2 tsp.	1/4 tsp.	
3 lbs.	2 1/4 Tbs.	3/4 tsp.	
4 lbs.	3 Tbs.	1 tsp.	
5 lbs.	4 Tbs.	1 1/4 tsp.	
6 lbs.	4 1/2 Tbs.	1 1/2 tsp.	
8 lbs.	2/5 cup	1 3/4 tsp.	
10 lbs.	1/2 cup	2 tsp.	
100 lbs.	2 1/4 lbs.	1/4 lb.	
<i>Precautionary Statement</i>			<i>Disclaimer Statement</i>
<p>In order to protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label. Persons who do not obey the law will be subject to penalties.</p>			

This *Agriculture & Natural Resources* Fact Sheet is part of a series prepared by the Small Farms Program of the Cooperative Extension Program at Tennessee State University.

For more information, contact your local county Agricultural Extension agent (See your telephone blue pages). Printable copies of this fact sheet can be found on our website.

#### *Educating People for Better Living*

TSU-04-0044(A)-11-533210

The Cooperative Extension Program offers its programs to all persons regardless of race, color, age, national origin, gender or disability and is an Equal Opportunity employer.

The Agriculture Extension Service and the U.S. Department of Agriculture cooperating

#### *Printed by:*

DocuTech Printing Service  
Tennessee State University  
Cooperative Extension Program  
3500 John A. Merritt Blvd.,  
Box 9635  
Nashville, TN 37209-1561  
615-963-1842

Chandra Reddy, Dean and Extension Administrator

Latif Lighari, Associate Dean of Extension