

## Effectiveness of Major Forestry-registered Herbicides during Seasons of Optimum Usage, Oregon Basis

Species	atrazine (spring)	clopyralid (all)	glyphosate (late summer)	picloram (all)	2,4-D (spring, fall)	hexazinone (spring)	sulfometuron (fall)	metsulfuron (summer)	metsulfuron (fall)	triclopyr ester (spring)	imazapyr (late summer)
<b>Conifers</b>											
Douglas-fir	R	R	I-R	S	I-R	R	I-R	S	I	I-R	I
Firs, true	R	R	R	S	S-I	R	R	S		I	I
Hemlock	I-R	R	I-R	S	I-R	R	R	S		I	I
Pines	R	R	I-R	I-S	S-I	R	R	S		S	S-I
Red cedar, western	I-R	R	I	S	S	S	I-R	S	I-R	I	
<b>Woody Species</b>											
Alder			I	S	I-S	I-R	I-R	R	R	S	S
Blackberry			I	S	R	I	I-S	S	S	S	R
Cascara			S	I	I	R		I		S	I
<i>Ceanothus</i> spp.			I-R*		S	I		I		S	S
Cherry			S	S	S	R		S		I	S
Chinquapin			I-R*		I	R		I		S	S
Elderberry		S	S	S	R	R		S	R	S	S
Hazel			S	I	I	R				I	S
Madrone			I-R*	S	S	R		I		I	S
<i>Manzanita</i> spp.			R	S	S	R		I		I	R
Maple, bigleaf			I	I	R	R	R	R	R	I	S
Maple, vine			S	I-S	R	R	R	R	R	I-S	S
Poison-oak			S	S	R	R	R			I-S	S
Salmonberry			S	I	R	I	I	S	S	I	I
Snowberry			S		I-S			S	S	I	
Tanoak			R	S	I	R	R	I		I-S	I
Thimbleberry			S	I	I	I	I	S	S	I	I
<i>Willow</i> spp.			S	I-S	R-S	R				I-S	S
<b>Herbs</b>											
Fern, bracken	I		I-S	I	R	I	S	S	S	R	
Fern, sword	R		I	R	R	R	I-S	S	S	R	
Grasses, annual	S		S	R	R	S	S	R	R	R	S
Grasses, perennial	S-R		S	R	R	S	S	R	R	R	S
Herbs, broadleaf	I	S**	S	S-I	S	S	S-R	S-R	I	I-S	S

R = resistant to highest rates I = intermediate or variable; highest rates effective S = sensitive; killed by medium or lower rates  
 \* Glyphosate has intermediate activity if applied after full leaf expansion but before wax develops on leaves of evergreen species; it has marginal conifer selectivity in spring.  
 \*\* Clopyralid has activity on selected broadleaf weeds such as Canada thistle and other thistles.