

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

Species	atrazine (spring)	clopyralid (all)	glyphosate (summer to fall)	picloram (all)	2,4-D (spring, fall)	hexazinone (spring)	sulfometuron (spring or fall)	metsulfuron (summer to fall)	indaziflam (spring or fall)	triclopyr ester (spring to fall)	imazapyr (summer ot fall)	penoxulam + oxyfluorfen (spring or fall)
CONIFERS (WHEN DORMANT IN SPRING OR FALL)												
Douglas-fir	R	R	R	S	R	R	R	S	R	R	I-R	R
True firs (Abies sp)	R	R	R	S	I-R	R	R	S		I-R	S-I	R
Western hemlock	R	R	I-R	S	I-R	R	R	S		I-R	S-I	R
Ponderosa Pine	R	R	R	I-S	S-I	R	R	S	R	S	S	R
Western red cedar	R	R	I-R	S	I-R	S	I-R	S	R	R	S-I	R
Western larch	R	R	S-I	S	I	S	R	S	R	S	S	
WOODY SPECIES												
Alder			I	S	I-S	I-R		R		S	S	
Blackberry			I	S	R	I	I-S	S		S	R	
Cascara			S	I	I	R		I		S	I	
<i>Ceanothus</i> spp.			I-R*		S	I		I		S	S-I	I
Cherry			S	S	S	R		S		I	S	
Chinquapin			I-R*		I	R		I		S	S	
Elderberry		S	S	S	R	R		S		S	S	
Hazel			S	I	I	R		R		I	S	
Madrone			I-R*	S	S	R		I		I	S	
Manzanita spp			R	S	S	R		I		I	R	I
Maple, bigleaf			I	I	R	R		R		I	S	
Maple, vine			S	I-S	R	R		I		I-S	S	
Poison-oak			S	S	R	R				I-S	S	
Salmonberry			S	I	R	I	I	S		I	I	
Scotch broom			I		I					S	R	
Snowberry			S		I-S			S		I	I	
Tanoak			R	S	I	R		I		I-S	I	
Thimbleberry			S	I	I	I	I	S		I	I	
Willow ( <i>Salix</i> spp.)			S	I-S	R-S	R				I-S	S	
GRASSES AND HERBS												
Fern, bracken	I		I-S	I	R	I	S	S		R		
Fern, sword	R		I	R	R	R	I-S	S		R		
Grasses, annual	S		S	R	R	S	S	R	S-I	R	S	S
Grasses, perennial	S-R		S	R	R	S	S	R		R	S	S
Herbs, broadleaf	I	S**	S	S-I	S	S	S-R	S-R	S-I	I-S	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.