

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

Species	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 or fall)	penoxulam + oxyfluorfen (spring or fall)
CONIFERS (WHEN DORMANT IN SPRING OR FALL)											
Douglas-fir	R	R	S	R	R	R	S	R	R	I-R	R
True firs (<i>Abies</i> sp)	R	R	S	I-R	R	R	S		I-R	S-I	R
Western hemlock	R	I-R	S	I-R	R	R	S		I-R	S-I	R
Ponderosa Pine	R	R	I-S	S-I	R	R	S	R	S	S	R
Western red cedar	R	I-R	S	I-R	S	I-R	S	R	R	S-I	R
Western larch	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.- evergreen		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-S	I	R	I	S	S		R		
Fern, sword		I	R	R	R	I-S	S		R		
Grasses, annual		S	R	R	S	S	R	S-I	R	S	S
Grasses, perennial		S	R	R	S	S	R		R	S	S
Herbs, broadleaf	S**	S	S-I	S	S	S-R	S-R	S-I	I-S	S	S
<p>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.</p>											