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)	penoxsulam + 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 (Abies 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 / incense 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	R
Coast redwood	R	S	S	I	S	I-R	S	R	I	S	R
WOODY SPECIES											
Alder		I	S	I-S	I-R		R		S	S	
Blackberry		I	S	R	Ι	I-S	S		S	R	
Cascara		S	I	ı	R		I		S	I	
Ceanothus spp evergreen		I-R*		S	I		I		S	S-I	1
Cherry		S	S	S	R		S		1	S	
Chinquapin		I-R*		I	R		I		S	S	
Elderberry	S	S	S	R	R		S		S	S	
Hazel		S	1	I	R		R		1	S	
Madrone		I-R*	S	S	R		I		1	S	
Manzanita spp		R	S	S	R		I		1	R	I
Maple, bigleaf		I	Ī	R	R		R		1	S	
Maple, vine		S	I-S	R	R		I		I-S	S	

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)	penoxsulam + oxyfluorfen (spring or fall)
Poison-oak		S	S	R	R				I-S	S	
Salmonberry		S	I	R	I	I	S		I	1	
Scotch broom		I		I					S	R	
Snowberry		S		I-S			S		I	1	
Tanoak		R	S	I	R		1		I-S	1	
Thimbleberry		S	ļ	I	I	1	S		I	1	
Willow (Salix spp.)		S	I-S	R-S	R				I-S	S	
GRASSES AND HERBS	1										
Fern, bracken		I-S	l	R	-	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

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.