

Estimated Sample Costs for Some Herbicides and Equipment in Grape Vineyards in California
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Table 1. Herbicides registered in grape vineyards in California

| Pre-emergent | Lb ai/Acre | Post-emergent | Lb ai/Acre |
|-----------------------------|----------------|---------------------------------------|-------------------|
| diuron (Karmex, Direx) | 2.4 – 3.2 | clethodim (Prism) - NB | 0.09 – 0.12 |
| flumioxazin (Chateau) | 0.1875 – 0.375 | diquat (Reglone) | 0.375 – 0.5 |
| isoxaben (Gallery T&V) - NB | 0.5 – 1.0 | fluazifop-p (Fusilade DX) - NB | 0.25 – 0.375 |
| napropamide (Devrinol) | 4.0 | glufosinate (Rely) | 1.0 – 1.5 |
| norflurazon (Solicam) | 1.0 – 4.0 | glyphosate (Roundup, Touchdown, etc.) | 0.5 – 4.0 |
| oryzalin (Surflan, etc.) | 2.0 – 6.0 | MSMA (MSMA 6 Plus, etc.) – NB | 2.0 |
| oxyfluorfen (Goal, etc.) | 1.0 – 2.0 | oxyfluorfen (Goal) | 0.5 – 1.0 |
| pendimethalin (Prowl) - NB | 2.0 – 4.0 | paraquat (Gramoxone Max) | 0.6 – 0.9 |
| pronamide (Kerb) | 1.0 – 4.0 | sethoxydim (Poast) | 0.3 – 0.5 |
| simazine (Princep, etc.) | 2.0 – 4.0 | 2,4-D amine (Weedaxe, etc.) | Varies by product |
| thiazopyr (Visor) - NB | 0.5 – 1.0 | | |
| trifluralin (Treflan, etc.) | 0.5 – 1.0 | | |

NB = non-bearing only

Table 2. Sample costs of some commonly used herbicides in grapes in the central valley

| Pre-emergent | Lb ai/acre | Product/acre | Cost (\$) | Cost/acre (\$)* |
|-----------------------------------|------------|------------------|--------------------|-----------------|
| Goal 2XL | 1.0 | 4.0 pt | 95/gal | 11.88 |
| Goal 2XL + Surflan A.S. | 1.0 4.0 | 4.0 pt 8.0 pt | 95/gal 90/gal | 11.88 22.50 |
| Pricep Caliber 90 | 2.0 | 2.2 lb | 3.20/lb | 1.76 |
| Karmex DF | 2.4 | 3.0 lb | 3.25/lb | 2.44 |
| Princep Caliber 90 + Karmex DF | 2.0 2.0 | 2.2 lb 2.5 lb | 3.20/lb 3.25/lb | 1.76 2.44 |
| Post-emergent | Lb ai/acre | Product/acre | Cost (\$) | Cost/acre (\$)* |
| Rely | 1.0 | 8.0 pt | 59/gal | 14.75 |
| Touchdown | 1.0 | 2.6 pt | 48/gal | 3.90 |
| Roundup Ultramax | 1.0 | 1.6 pt | 40/gal | 2.00 |
| Glyphosate (generic) | 1.0 | 2.0 pt | 15/gal | 0.94 |
| Gramoxone Extra | 0.5 | 1.6 pt | 36/gal | 1.80 |
| Ammonium sulfate | --- | 0.2 lb | 18/lb | 0.90 |

*Treating a 3' berm and 12' row spacing in a vineyard (herbicide cost only), cost will vary with location.

Table 3. Various equipment and estimated operating costs for grape vineyard weed management

| Equipment | Speed (MPH) | Outlay cost (\$) | Operating cost/A (\$)¹ |
|---------------------------|-------------|------------------|------------------------|
| Perfect in-row mower² | 1 - 3 | 8,500 | 32 |
| Kimco in-row mower² | 1 - 3 | 9,000 | 32 |
| Rears in-row mower² | 1 - 3 | 2,500 | 32 |
| Flail mower² | 3 - 4 | 4,000 | 42 |
| Hand-held weed eater | NA | 200 | 125 |
| Kimco in-row tiller² | 1 - 2 | 11,000 | 40 |
| L&H in-row tiller² | 2 - 3 | 4,500 | 22 |
| L&H hoe plow² | 3 - 4 | 4,500 | 28 |
| Off-set disc (8')² | 3 - 5 | 9,400 | 24 |
| Propane flamer² | 1 - 2 | 3,000 | 40 |
| Steamer² | 1 - 2 | 4,000 | 40 |
| Enviromist sprayer + ATV | 3 - 5 | 6,000 | 22 |
| Patchen Weed Seeker + ATV | 3 - 5 | 6,000 | 22 |
| 100 gal weed sprayer² | 3 - 5 | 3,500 | 31 |

¹Includes costs associated with equipment, maintenance, tractor, labor, and hrs of use/acre

²Pulled with a 60 HP tractor with 4WD