

# CHEMICAL WEED AND BRUSH CONTROL



## SUGGESTIONS FOR RANGELAND

**2007 UPDATE**

*This publication provides an update for some of the herbicide recommendations contained in B-1466.  
The herbicide control recommendations contained in this update for a specific weed  
or brush species supercedes any information contained in the original publication.*

## Common, Chemical and Product Names of Herbicides\*

| Herbicide common name                    | Chemical name   | Product name   | Active ingredient or acid equivalent                                |
|--|---|--|---|
| Aminopyralid                             | 2-pyridine carboxylic acid, 4-amino-3, 6-dichloro-2-pyridine carboxylic acid, triisopropanolammonium salt     | Milestone  | 2 lbs./gal.   |
| Aminopyralid 1:8, 2, 4-D                 | See aminopyralid and 2, 4-D   | Forefront  | 3 lbs./gal.   |
| Clopyralid                               | 3,6-dichloro-2-methoxybenzoic acid  | Reclaim, Pyramid R&P   | 3 lbs./gal.   |
| 2,4-D                                    | (2,4-dichlorophenoxy) acetic acid   | Weedar 64, Formula 40, Hi-Dep, Weedone LV4, Esteron 99 and others    | concentration varies depending on product                           |
| Dicamba                                  | 3,6-dichloro-2-methoxybenzoic acid  | Banvel, Clarity,Vision   | 4 lbs./gal.   |
| Dicamba:2,4-D(1:3)                       | See dicamba and 2,4-D   | Weedmaster, Banvel + 2,4-D, RangeStar                                | 4 lbs./gal.   |
| Diesel fuel oil or kerosene              | refined petroleum fractions   | Several manufacturers  |   |
| Fluroxypyr                               | 1-methylheptyl ester: ((4-amino-3,5-dichloro-6-fluoropyridin-2-yl)oxy)acetic acid                             | Vista  | 1.5 lbs./gal.   |
| Glyphosate                               | N-(phosphonomethyl) glycine   | Several including Rodeo**, Roundup, Roundup Ultradry, Glyphosate 417 | isopropylamine salt*, concentration varies depending on the product |
| Hexazinone                               | 3-cyclohexyl-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4(1H, 3H)-dione                                      | Velpar L, Pronone Power Pellet                                       | 2 lbs./gal. (Velpar L) 75% (Pronone Power Pellet)                   |
| Imazapyr                                 | 2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-3-pyridinecarboxylic acid                   | Arsenal, Habitat**   | 2 lbs./gal.   |
| Metsulfuron methyl                       | methyl 2[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]carbonyl]amino] sulfonyl] benzoate                    | Escort, Clean Pasture, MSM 60DF                                      | 60%   |
| Metsulfuron:Chlorosulfuron 3:1           | See Metsulfuron methyl + 2-Chloro-N-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl) aminocarbonyl]benzenesulfonamide | Cimarron Plus  | 48% metsulfuron<br>15% Chlorosulfuron                               |
| Metsulfuron:Chlorosulfuron 1:1           | See metsulfuron: Chlorosulfuron   | Cimarron X-Tra   | 30% Metsulfuron<br>37.5% Chlorosulfuron                             |
| Metsulfuron methyl<br>Dicamba:2,4-D(1:3) | See metsulfuron methyl, vision and 2,4-D  | Cimarron Max   | 60% (Part A)<br>3.87 lbs./gal. (Part B)                             |
| Picloram                                 | 4-amino-3,5,6-trichloro-2-pyridinecarboxylic acid   | Tordon 22K, Triumph 22K, Picloram 22K                                | 2 lbs./gal.   |
| Picloram:Fluroxypyr(1:1)                 | See picloram and Fluroxypyr   | Surmount   | 1.34 lbs./gal.  |
| Picloram:2,4-D(1:4)                      | See Picloram and 2,4-D  | Grazon P+D, Gunslinger   | 2.5 lbs./gal.   |
| Tebuthiuron                              | N-[5-(1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl]-N-N'-dimethylurea   | Spike 20P, Spike 80 DF   | 20% (Spike 20P)<br>80% (Spike 80 DF)                                |
| Triclopyr                                | {(3,5,6-trichloro-2-pyridinyl)oxy}acetic acid   | Clear Pasture, Pathfinder II<br>Remedy Ultra, Triclopyr 4 EC         | 0.75 lbs./gal. (Pathfinder II)<br>4 lbs./gal. (all others)          |
| Triclopyr:Fluroxypyr (3:1)               | See triclopyr and 1-methylheptyl ester:((4-amino-3,5-dichloro-6-fluoropyridin-2-yl)oxy)acetic acid            | PastureGard  | 2.0 lbs./gal.   |
| Triclopyr:2,4-D(1:2)                     | See triclopyr and 2,4-D   | Crossbow   | 3 lbs./gal.   |

\*Herbicides have been identified by the accepted Weed Science Society of America common name, and when practical, one or more product names.

\*\*Aquatic label

Items in gray boxes are recent changes approved by the Rangeland Herbicide Use Committee.

| Page | Weed Controlled  | Herbicide<br>(common and chemical names – page 4) | Herbicide quantity<br>(active ingredient rate in parenthesis) |   | Spray volume<br>(per acre for broadcast, as described for individual plant)  | Time to apply  | Remarks   |
|------|--|---|---|---|--|--|---|
|      |  |   | Broadcast rate<br>per acre                                    | Individual plant/<br>spot treatment               |  |  |   |
| 6    | African rue  | Velpar L  |   | VH<br>2 ml/plant                                  | Use an exact delivery handgun to apply undiluted herbicide to soil surface at the edge of the plant canopy.  | Spring or summer.  | Do not use on heavy clay or caliche soils.  |
|      |  | Pronone Power Pellets                             |   | 1 pellet/plant                                    |  |  |   |
|      |  | Spike 20 P  | H<br>7.5 lbs. (1.5 lbs.)                                      |   |  |  |   |
|      |  | Arsenal   | H<br>1 qt. (0.5 lbs.)   | VH<br>0.5%  | 10 to 25 gal./ac. for ground broadcast. Thoroughly wet foliage for individual plant treatment. Add 1 to 2 qts. of surfactant per 100 gals. water.    | Late September through October (to first frost).   | Applications should be made to fall regrowth that is in good growing conditions. Recommend using individual plant treatment when growing with desirable vegetation to reduce non-target damage. Arsenal is a non-selective herbicide and will kill or damage desirable vegetation if sprayed. |
| 7    | Broomweed<br>(annual or common),<br>plantain (tallow weed),<br>wild carrot | Escort or Cimarron                                | VH<br>0.1 oz.   |   | 2 to 4 gals. water for aerial spray;<br>10 to 25 gals. water for ground broadcast application. Add 1 to 2 qts. of surfactant per 100 gals. of water. | Spring, weeds less than 4 inches tall  |   |
|      |  | Cimarron Plus                                     | VH<br>0.125 oz.   |   |  |  |   |
|      |  | Cimarron X-tra                                    | VH<br>0.2 oz.   |   |  |  |   |
| 8    | Broom snakeweed<br>(perennial broomweed)<br>(continued)                    | Escort or Cimarron                                | VH<br>0.6 oz.   |   | 2 to 4 gals. water for aerial spray;<br>10 to 25 gals water for ground broadcast application. Add 1 to 2 qts. of surfactant per 100 gals. of water.  | Optimum time is in the fall, but may be applied in the spring.   |   |
|      |  | Cimarron Plus                                     | VH<br>0.75 oz.  |   |  |  |   |
|      |  | Cimarron X-tra                                    | VH<br>1.2 oz.   |   |  |  |   |
|      |  | Cimarron Max                                      | H to VH<br>Rate 1 to Rate 2                                   |   |  |  |   |
|      |  | Spike 20P   | VH<br>3.75 lbs. of pellets<br>(¾ lb.)                         | VH<br>¼ oz. of pellets<br>(⅓ oz.) per 100 sq. ft. |  | Any time—optimum period is Oct. 1 to April 1, except in the Trans-Pecos where optimum period is May 1 to July 1. | Use only on sand, loamy sand, sandy loam, loam, silt loam, silt or sandy clay loam soils.   |
| 10   | Lespedeza  | Remedy  | VH<br>1 to 2 pts.<br>(½ to 1 lb.)                             |   | Ground broadcast 20 to 20 gals. per acre with 1 to 2 qts. of surfactant per 100 gals. of water.  | June through August under good growing conditions.   | Plants need to be 12 to 18 inches tall before spraying. Use the higher rate if plants are large, approaching maturity, or if the infestation level is high.   |
|      |  | Escort or Cimarron                                | H<br>0.5 oz.  |   |  |  | Begin application at flower bud initiation through full bloom.  |
|      |  | Cimarron Plus                                     | H<br>0.7 oz.  |   |  |  |   |
|      |  | Cimarron X-tra                                    | H<br>1.0 oz.  |   |  |  |   |
|      |  | Cimarron Max                                      | H<br>Rate 2   |   |  |  |   |

| Page | Weed Controlled   | Herbicide<br>(common and<br>chemical names<br>– page 4) | Herbicide quantity<br>(active ingredient rate in parenthesis)  |                                     | Spray volume<br>(per acre for broadcast, as<br>described for individual plant)   | Time to apply   | Remarks |
|------|---|---|--|-------------------------------------|--|---|---------|
|      |   |   | Broadcast rate<br>per acre                                     | Individual plant/<br>spot treatment |  |   |         |
| 11   | Rayless goldenrod<br>(jimmyweed)  | Escort or Cimarron                                      | VH<br>0.75 oz.   |                                     | 2 to 4 gals. of water for aerial spray;<br>10 to 25 gals. of water for ground<br>broadcast application. Add 1 to 2 qts.<br>of surfactant per 100 gals. of water.   | Fall.   |         |
|      |   | Cimarron Plus   | VH<br>1.0 oz.  |                                     |  |   |         |
|      |   | Cimarron X-tra  | VH<br>1.5 oz.  |                                     | Thoroughly wet foliage for individual<br>plant treatment. Add 1 to 2 qts. of<br>surfactant per 100 gals. of water.   |   |         |
|      |   | Surmount  | VH<br>6 pt. (1.0 lb.)  | VH<br>2%                            |  |   |         |
|      |   | Tordon 22K  | VH<br>1 qt. (½ lb.)  | VH<br>1%                            |  |   |         |
| 11   | Threadleaf Groundsel  | Escort or Cimarron                                      | VH<br>0.4 oz.  |                                     | 2 to 4 gals. of water for aerial spray;<br>10 to 25 gals. of water for ground<br>broadcast application. Add 1 to 2 qts.<br>of surfactant per 100 gals. of water.   |   |         |
|      |   | Cimarron Plus   | VH<br>0.5 oz.  |                                     |  |   |         |
|      |   | Cimarron X-tra  | VH<br>0.8 oz.  |                                     |  |   |         |
|      |   | Cimarron Max  | VH<br>Rate 2   |                                     |  |   |         |
| 12   | Upright Prairie-coneflower  | Escort or Cimarron                                      | VH<br>0.2 oz.  |                                     | 2 to 4 gals. water for aerial spray;<br>10 to 25 gals. of water for ground<br>broadcast application. Add 1 to 2 qts.<br>of surfactant per 100 gals. of water.  | Spring, before flower stalk<br>development.                           |         |
|      |   | Cimarron Plus   | VH<br>0.25 oz.   |                                     |  |   |         |
|      |   | Cimarron X-tra  | VH<br>0.4  |                                     |  |   |         |
| 13   | Baccharis (dryland willow,<br>Roosevelt willow, seep<br>willow or willow baccharis) | 2,4-D low volatile ester                                | H<br>3 pts. to 3 qts.<br>(1.5 to 3 lbs.)<br>4 lb./gal. product | H<br>1%                             | 4 to 5 gals. of water for aerial spray.<br>15 to 20 gals. water for ground<br>broadcast. For individual plant<br>treatment thoroughly wet the entire<br>foliage, stems and trunks. Add 1 to<br>2 qts. of surfactant per 100 gals. of<br>water. | Spring, when leaves are fully<br>expanded and dark green<br>in color. |         |
|      |   | Grazon P+D  |  | H<br>1%                             | For individual plant treatment<br>thoroughly wet the entire foliage,<br>stems and trunks. Add 1 to 2 qts. of<br>surfactant per 100 gals. of water.   |   |         |
|      |   | Weedmaster  |  | H<br>1%                             |  |   |         |

| Page | Weed Controlled                            | Herbicide<br>(common and<br>chemical names<br>– page 4) | Herbicide quantity<br>(active ingredient rate in parenthesis)  |                                     | Spray volume<br>(per acre for broadcast, as<br>described for individual plant)  | Time to apply   | Remarks   |
|------|--|---|--|-------------------------------------|---|---|---|
|      |  |   | Broadcast rate<br>per acre   | Individual plant/<br>spot treatment |   |   |   |
| 22   | Mesquite (suppression<br>and weed control) | 2,4-D amine or low<br>volatile ester                    | L<br>2 to 4 qts. (2 to 4 lbs.)   | M<br>2% (4 lbs./gal. product)       | For aerial applications suggested<br>total spray volume is 4 gals./acre.<br>Use oil-in-water emulsion (1 to 5 oil<br>to water ratio considered optimum),<br>or water plus surfactant, crop oil or<br>methylated seed oil.<br><br>For ground broadcast applications<br>the suggested total spray volume is<br>10 to 25 gals./acre. Use oil-in-water<br>emulsion (1 to 5 oil to water ratio<br>considered optimum), or water plus<br>surfactant, crop oil or methylated<br>seed oil.<br><br>Thoroughly wet foliage for individual<br>plant treatments. Add 1 to 2 qts. of<br>surfactant per 100 gals. of water or<br>an oil-in-water emulsion (5% diesel +<br>95% water). | Late spring to mid-summer<br>with mature leaves (dark<br>green color). Optimum<br>period of application begins<br>when soil temperature at a<br>depth of 12 inches reaches<br>75 degrees F and continues<br>for 45 days.<br><br>If treatment is applied<br>prior to optimum soil<br>temperatures, efficacy will<br>be decreased and multiple<br>applications over a period<br>of years may be necessary<br>to maintain less than 10%<br>canopy. | Treatments will control many weeds.<br>When using oil-in-water emulsion use<br>emulsifier. Use of a treatment with a low<br>control rating may result in multi-stem<br>growth that may be more difficult to<br>control in the future. |
|      |  | Grazon P+D  | L<br>1 to 1.5 qts.<br>(0.6 to 0.9 lbs.)  |                                     |   |   |   |
|      |  | Weedmaster  | L<br>1 to 1.5 qts.<br>(1 to 1.5 lbs.)  |                                     |   |   |   |
|      |  | Cimarron Max  | L<br>Rate 1 to Rate 2  |                                     |   |   |   |
|      |  | Tordon 22K + 2,4-D<br>amine or low volatile<br>ester    | L<br>0.5 to 0.75 pt.<br>( $\frac{1}{8}$ to $\frac{3}{16}$ lb.)<br>Tordon 22K<br>+<br>1 to 1.5 qts.<br>(1 to 1.5 lbs.) 2,4-D,<br>4 lbs./gal. product  |                                     |   |   |   |
|      |  | Banvel + 2,4-D amine<br>or low volatile ester           | L<br>0.5 to 0.75 pt.<br>( $\frac{1}{4}$ to $\frac{3}{8}$ lb.) Banvel<br>+<br>$\frac{3}{4}$ to 1 $\frac{1}{8}$ qts.<br>( $\frac{3}{4}$ to 1 $\frac{1}{8}$ lbs.) 2,4-D,<br>4 lbs./gal. product |                                     |   |   |   |
|      |  | Remedy  | L<br>1 pt. to 1 qt.<br>(0.5 lb. to 1 lb.)  | M<br>1%                             |   |   |   |
|      |  | Banvel  | L<br>1 pt. to 1 qt.<br>(0.5 lb. to 1 lb.)  | M<br>1%                             |   |   |   |

| Page | Weed Controlled        | Herbicide<br>(common and<br>chemical names<br>– page 4) | Herbicide quantity<br>(active ingredient rate in parenthesis)                   |  | Spray volume<br>(per acre for broadcast, as<br>described for individual plant)  | Time to apply   | Remarks   |
|------|------------------------|---|---|--|---|---|---|
|      |                        |   | Broadcast rate<br>per acre  | Individual plant/<br>spot treatment    |   |   |   |
| 23   | Mesquite               | Remedy  |   | VH<br>2% in diesel fuel oil            | Apply to the base of the trunk from 12 to 18 inches above the soil surface. Apply until solution puddles on soil surface.   | Anytime soil is dry and pulled away from the trunk.   |   |
|      |                        | Reclaim   | M to H<br>⅓ qt. to ⅔ qt.<br>(¼ to ½ lb.)  | VH<br>1%                               | For aerial applications suggested total spray volume is 4 gals./acre. Use oil-in-water emulsion (1 to 5 oil to water ratio considered optimum), or water plus surfactant, crop oil or methylated seed oil.                      | Late spring to mid-summer with mature leaves (dark green color). Optimum period of application begins when soil temperature at a depth of 12 inches reaches 75 degrees F and continues for 45 days thereafter. When Reclaim is used alone or in a tank mix the period should continue for 60 days. For optimum root kill do not spray if white flowers or bean elongation are observable, if over 25% of the leaf canopy is damaged due to insects, disease or hail, if soil temperatures are less than 75 degrees F, 1 ft. deep, or if new vegetative growth is present due to recent rains. | Use 1 pt./ac. Tordon 22K plus ½ pt./ac. Remedy, ½ pt./ac. Banvel plus ½ pt./ac. Remedy, 1 pt./ac. Tordon 22K plus ½ pt./ac. Banvel, 1 pt./ac. Tordon 22K plus ⅓ qt./ac. Reclaim and ⅓ qt./ac. Reclaim only in West Texas. Banvel and Banvel mixtures have been more effective in West Texas than in other parts of the state. Use mixtures that include ¼ pt./ac. Remedy and ⅓ pt./ac. Reclaim only in Montague, Wise, Parker, Hood, Somervell, Bosque, Coryell, Lampasas, Burnet, Blanco, Kendall, Bandera, Real, Edwards and Val Verde counties and those counties north and west of the named counties. Mixtures that include ½ pt./ac. Remedy and ⅔ pt./ac. Reclaim will give better control than mixtures with ¼ pt./ac. Remedy and ⅓ pt./ac. Reclaim. When using oil-in-water emulsion, use emulsifier added to oil for proper emulsion. Use of a treatment with a low-control rating may result in a multi-stem growth form that may be more difficult to control in the future. |
|      |                        | Remedy + Tordon 22K                                     | M<br>½ to 1 pt. (¼ to ½ lb.) Remedy + 1 to 2 pts. (¼ to ½ lb.) Tordon 22K       | M to H<br>½% Remedy +<br>½% Tordon 22K | For ground broadcast applications the suggested total spray volume is 10 to 25 gals./acre. Use oil-in-water emulsion (1 to 5 oil to water ratio considered optimum), or water plus surfactant, crop oil or methylated seed oil. |   |   |
|      |                        | Remedy + Banvel   | L<br>½ to 1 pt. (¼ to ½ lb.) Remedy + ½ to 1 pt. (¼ to ½ lb.) Banvel            | M<br>½% Remedy +<br>½% Banvel          |   |   |   |
|      |                        | Remedy + Reclaim  | M to H<br>¼ to 1 pt. (⅓ to ½ lb.) Remedy + ⅓ to ⅔ pt. (⅓ to ½ lb.) Reclaim      | VH<br>½% Remedy +<br>½% Reclaim        | Thoroughly wet foliage for individual plant treatments. Add 1 to 2 qts. surfactant per 100 gals. of water or an oil-in-water emulsion (5% diesel + 95% water).  |   |   |
|      |                        | Tordon 22K + Banvel                                     | M<br>1 to 2 pts. (¼ to ½ lb.) Tordon 22K + ½ to 1 pt. (¼ to ½ lb.) Banvel       | H<br>½% Remedy +<br>½% Banvel          |   |   |   |
|      |                        | Tordon 22K + Reclaim                                    | M to H<br>1 to 2 pts. (¼ to ½ lb.) Tordon 22K + ⅓ to ⅔ qt. (¼ to ½ lb.) Reclaim | VH<br>½% Tordon 22K +<br>½% Reclaim    |   |   |   |
| 26   | Pricklypear, tasajillo | Tordon 22K  | H<br>1 pt. to 1 qt. (¼ lb. to ½ lb.)  | VH<br>1%                               | 2 to 4 gals. oil-in-water emulsion as aerial spray (a 1 to 5 diesel fuel oil to water ratio is considered optimum).   | Anytime; best results have been obtained with late summer through fall applications.  | Use emulsifier when adding diesel fuel oil to water. Use 1 pt./ac. Tordon 22K only on High Plains where no brush overstory is present. Late summer or fall applications, especially with Vista, will provide best results, but aerially spray in the winter or early spring if heavy overstory of woody plants is present or if damage to live oak is a concern.  |
|      |                        | Surmount  | H<br>2 qt. (0.67 lb.)   | VH<br>1%                               | 20 to 25 gals. oil-in water emulsion as ground broadcast (1 gal. diesel fuel oil per 20 to 25 gals. water) or 20 to 25 gals. water per acre plus 1 to 2 qts. surfactant per 100 gals. water).                                   |   |   |
|      |                        | Grazon P+D  | H<br>1 gal. (2.5 lbs.)  | VH<br>2%                               | Thoroughly wet plants for individual plant treatment adding 1 to 2 qts. surfactant per 100 gals. of spray mix.  |   |   |
|      |                        | Vista   |   | VH<br>1%                               |   |   |   |
|      |                        | Gramoxone Extra   | These two treatments are deleted from B-1466.                                   |  |   |   |   |
|      |                        | Tank mix Tordon 22K with Gramoxone Extra                |   |  |   |   |   |

| Page | Weed Controlled | Herbicide<br>(common and<br>chemical names<br>– page 4) | Herbicide quantity<br>(active ingredient rate in parenthesis)                      |   | Spray volume<br>(per acre for broadcast, as<br>described for individual plant)  | Time to apply  | Remarks  |
|------|-----------------|---|--|---|---|--|--|
|      |                 |   | Broadcast rate<br>per acre   | Individual plant/<br>spot treatment           |   |  |  |
| 29   | Saltcedar       | Arsenal   | VH<br>2 qts. (1 lb.)   | VH<br>1%                                      | Minimum 10 gals./acre for aerial or ground broadcast sprays. Thoroughly wet foliage for individual plant treatment. Add 1 to 2 qts. of surfactant per 100 gals. water.                        | July through September or until leaves begin to turn yellow. | When exposure to aquatic environments is possible, use aquatic labels of Arsenal and Roundup (see table “Common, Chemical and Product Names of Herbicides”). Arsenal alone or in combination with Roundup will cause damage to desirable plants if contacted by the spray mix. |
|      |                 | Arsenal + Roundup                                       | VH<br>1 qt. (½ lb.)<br>Arsenal + 1 pt.<br>(½ lb.) Roundup                          | VH<br>½% Arsenal<br>+<br>½% Roundup           |   |  |  |
|      |                 | Remedy  |  | VH<br>25% in diesel fuel oil                  | Apply to lower 12 to 18 inches of trunk to wet the trunk; do not spray to point of runoff. Apply completely around the trunk.   | Growing season when leaves have mature leaves.               | This is commonly called the low volume basal application method. Use a hollow cone nozzle with XI orifice.   |
|      |                 | Tank mix Arsenal with Rodeo (glyphosate)                | This recommendation is deleted, and moved to the remarks section.                  |   |   |  |  |
| 30   | Yucca           | Remedy  |  | H<br>2% in diesel fuel oil                    | Spray the center of each individual whorl of leaves to the point of runoff  | Anytime  | Complete coverage of leaves is not necessary. The crown of each plant must be thoroughly wetted with the herbicide mixture.  |
|      |                 |   |  | H<br>2% in 1:5 diesel fuel oil:water emulsion |   | May through September.                                       | Use emulsifier and agitate to maintain emulsion. Complete coverage of leaves is not necessary. The crown of each plant must be thoroughly wetted with the herbicide mixture.   |
|      |                 |   |  | VH<br>15% in diesel fuel oil                  | Use an adjustable cone nozzle (XI orifice) and spray a 2 second burst into each whorl.  | Spring and summer.   | Direct spray into the center of each whorl.  |
|      |                 |   |  | H<br>Undiluted<br>2 to 4 ml./plant whorl      | Use an exact delivery handgun set at 2 or 4 ml. per whorl dose.   |  |  |
|      |                 | Pathfinder II   |  | VH<br>Undiluted                               | Use an adjustable cone nozzle (XI orifice) and spray a 2 second burst into each whorl.  |  |  |
|      |                 | Cimarron Max + 2,4-D low volatile ester                 | H<br>Rate 2 Cimarron Max +<br>1 pt. to 1.5 pts. 2,4-D<br>(4 lb. a.i./gal. product) |   | Crop oil concentrate, modified seed oil or modified seed oil/ organosilicone are the preferred adjuvants. For aerial applications a minimum of 4 gals./ac. total spray volume is recommended. | Spring through fall prior to frost.                          | A second follow-up application of Cimarron Max at Rate 1 or Rate 2 plus 2,4-D low volatile ester at 0.5 to 0.75 lbs. a.i./ac. within 2 years of the initial application may be required to control yucca seedlings and regrowth from rootstocks..                              |
|      |                 |   |  |   |   |  |  |
| New  | Burrobrush      | Tordon 22K  |  | VH<br>1%                                      | Thoroughly wet foliage for individual plant treatment.  | April through July.  |  |
|      |                 | Grazon P+D  |  | VH<br>2%                                      |   |  |  |

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Revision