



Result Demonstration Report

EASTERN RED CEDAR MANAGEMENT USING INDIVIDUAL PLANT TREATMENTS

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SUMMARY

The leaf-spray treatment with Tordon 22K resulted in an apparent plant kill of 98 and 97% in 2001 and 2002, respectively, at a cost of \$0.03 per plant. The test herbicide, Surmount, resulted in a 97% apparent plant kill in 2002. The 2002 hand-cutting treatment resulted in 100% apparent kill of treated plants with a cost of \$0.01 per plant. Leaf-sprays appear to have potential for Eastern red cedar management.

PROBLEM

Eastern red cedar is aggressively invading rangelands in the Post Oak Savannah. At present, only soil applied Tordon 22K or Velpar L are recommended treatments. These soil applied herbicides can kill non-target species such as oaks.

OBJECTIVES

Individual plant treatments offer ranchers a viable tool for brush maintenance. This demonstration was established to determine the costs and effectiveness managing this brush species with a leaf-spray herbicidal treatment and hand cutting small plants. In particular, the demonstration was established to evaluate the leaf-spray method as a safer alternative to soil-applied herbicides.

MATERIALS AND METHODS

In April, 2001 and May, 2002, leaf-spray treatments and hand-cut plots were established in Bastrop County. Leaf-spray treatments were applied using Brush Buster methods by 2- or 3-person crew

using an ATV equipped with spray tanks and 3 sprayguns equipped with 5500-X8 Adjustable Conjet Nozzles. Plants were treated with a mixture of 1% Tordon 22K or 1% of a test herbicide (Surmount) + 0.25% surfactant + 0.25% HiLite Blue Dye in water. Hand-cutting was done with gas-powered brush cutter. In 2002, the brush cutter was equipped with a commercial circular saw blade.

RESULTS AND DISCUSSION

The Tordon 22K leaf-spray apparent plant-kill was 98 and 97% in 2001 and 2002, respectively. The test herbicide, Surmount, provided 97% apparent plant kill in 2002. Tordon 22K treatment cost was about \$0.03 per plant. Using the factory blade in 2001, about 280 plants were cut in 1 hour with a cost of \$0.02 per plant with a 100% plant-kill. Using a commercial circular saw blade in 2002, 300 plants were cut in 30 minutes at a labor cost of \$0.01.

CONCLUSIONS

Tordon 22K and Surmount leaf-sprays appear to have potential for Eastern red cedar management. More data will be necessary before this approach can become a recommended treatment.

ACKNOWLEDGMENTS

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