

FACT SHEET

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CONTROL OF BACCHARIS

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Landowners often ask the question, how do I control desert willow, dryland willow, Roosevelt willow, seep willow, black willow? The problem has many names and is common to landowners with baccharis, a plant that resembles willow but grows on upland soils.

Nine species of baccharis grow in Texas. These belong to the composite family, the most common of which are eastern, narrowleaf, prairie, willow and wright. Another specie, yerba-depasmó, is poisonous. In fact, all baccharis species may be considered potentially poisonous.

The baccharis plant group consists of native, warm season, shrubby, shallow rooted perennials with poor grazing qualities. The plants are dioecious, since the male and female flowers grow on different plants. Whitish to yellow flower heads appear showy in the fall. Baccharis plants retain their leaves well into the winter. Baccharis grows on most all soils. Heaviest infestations occur in the blacklands, following mechanical brush control methods, abandoned cultivated fields and valley range sites. Baccharis seems to have increased and invaded many acres of rangelands in recent years. If a control program is not started, baccharis could become a severe problem in a few years on certain range sites.

Baccharis, if not controlled, will become a dense, thick stand, rendering the area unfit for grazing. It can be controlled by one or a combination of chemical and mechanical methods:

MECHANICAL CONTROL

Plowing with a disc or moldboard plow provides excellent control. Seed the area to a high producing forage grass.

Shredding is effective in removing the tops of mature plants. Plants that resprout can be controlled with herbicides, provided the baccharis infestation is not growing near susceptible crops.

Tree grubbing scattered plants with a tree gruber mounted on a farm tractor gives effective control. Hand grubbing provides effective control for seedling baccharis.

HERBICIDAL CONTROL

Individual Plant Treatment

Foliage wetting spray applied with power sprayer or knapsack hand sprayer, using 3 pounds 2,4-D low volatile ester mixed in 100 gallons of water plus 8 ounces wetting agent produces satisfactory plant kill. Use 40 pounds of pressure with the hand sprayer and about 100 pounds of pressure with the power sprayer handgun equipped with a No. 4 orifice. Wet thoroughly the entire foliage, stems and trunks with the herbicide solution. Apply during the growing season when there is sufficient soil moisture to produce luxurious plant growth. Spring treatments produce the highest degree of plant kill. Apply when the wind is less than 10 miles per hour to insure better spray coverage and less danger of downwind drift. The herbicide mixture costs about \$3.75 per 100 gallons. This amount treats 100 or more 6-foot plants.

Basal Spray

Use *2,4-D low volatile ester* mixed at the rate of 8 pounds per 100 gallons of diesel oil. Cost of the chemical solution is about 21 cents per gallon. Use on baccharis growing in areas where susceptible crops are not affected.

Use *2,4, 5-T low volatile ester* mixed at the rate of 8 pounds per 100 gallons of diesel oil. Cost of this chemical solution is about 38 cents per gallon. Use to treat baccharis in susceptible crop areas.

Spray each chemical mixture on the lower 12 inches of the trunks. Apply sufficient solution to run to crown. The mixture can be applied with a knapsack or power sprayer. One gallon chemical mixture should treat from 25 to 50 stems. Treat each stem on all sides for best results. Best control

is obtained in summer and winter. However, most anytime of the year satisfactory control is possible. Limit individual plant treatment to infestations of 150 plants or less per acre.

Cut stump—The plants can be cut off and the stumps treated with undiluted 2,4-D amine. Cover the entire cut surface thoroughly with specific coverage on the cambium layer. Trees can be cut off with an ax, power saw or shredder. One gallon of 2,4-D amine costs about \$4 per gallon and should treat about 1,000 stems with 1-inch diameter.

Broadcast Treatment

In *ground spraying* with boom-type or boomless-type nozzles—use 1½ to 2 pounds 2,4-D low volatile ester per acre. Use 15 to 20 gallons solution per acre with the boom-type and 20 to 30 gallons solution per acre with the boomless-type. The swath width for the boomless-type should be reduced to one-half the effective swath width. For example, if the spray nozzle covers 40 feet effectively, reduce to 20 feet for complete spray coverage on all plants.

Spray coverage is most important in controlling woody vegetation. Limit ground broadcast spraying to dense stands—over 150 trees per acre—that are 4 feet tall or less. Apply in the spring or fall when plants are growing vigorously. Fall treatments should be at the rate of 3 pounds per acre.

In *aerial spraying* use 1½ to 2 pounds 2,4-D low volatile ester in 4 to 5 gallons of solution per acre. Aerial spray when the baccharis growth is over 4 feet tall and on areas where ground spraying is impossible. In susceptible crop areas, limit aerial spraying to fall treatments only. Fall treatments should have 3 pounds 2,4-D per acre in 5 gallons solution. Add a wetting agent to the solution.

The cost for applying 2,4-D by ground or aerial spraying methods is about \$4 per acre for the spring application and \$5 per acre for the fall application.

MANAGING CONTROLLED AREAS

Defer the controlled area to improve forage conditions for efficient livestock production. Proper grazing use reduces the re-infestation and prolongs the time for control of regrowth and seedlings. Controlling seedlings and regrowth when the plants are small and few in number per acre is the most economical approach.

USE ALL HERBICIDES WITH CAUTION. FOLLOW DIRECTIONS ON THE USDA APPROVED LABELS. HERBICIDES USED PROPERLY BRING GOOD RESULTS AND DO NOT AFFECT SUSCEPTIBLE CROPS. MISUSE OF HERBICIDES PRODUCES POOR RESULTS.