

KILLING TREES AND SHRUBS WITH KEROSENE AND SODIUM ARSENITE

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Kerosene and sodium arsenite are the two chemicals commonly used to kill mesquite. There is no danger to livestock with kerosene, but there is with sodium arsenite.

KEROSENE -- Good results have been obtained in killing mesquite trees and many other species of trees and shrubs, with liberal amounts of kerosene applied at the base of the tree at the ground line. Kerosene applied to stumps, immediately after cutting the trees down, has given about the same percentage of kill as when applied to standing trees.

Kerosene may be applied from a can of suitable size with a long spout tapering to about three-sixteenths inch diameter, or some such device. A sprayer may be used, but there is a tendency with it to not get enough kerosene in the ground. Better to let the oil run than to spray it on. For a tree six inches in diameter at the ground, at least a quart of kerosene is needed for a treatment. Enough kerosene should be used to penetrate the soil against the tree stump to a depth of six or eight inches, which may be as much as a third of a gallon or more for a large tree. Less kerosene is required where the soil around the tree is sandy or porous than where the soil is tight and inclined to be impervious to water or oil. Single stem trees do not require as much kerosene as those with several branches from the ground.

The best time of year to use kerosene is when the ground is dry which is usually in the summer or early fall.

Tests have shown that diesel fuel is just as effective as kerosene, but slower in action.

SODIUM ARSENITE -- This is the most effective and economical chemical for tree killing. Care must be taken to keep livestock away from it. Cases have been reported where livestock were killed from residues spilled around, carelessly or otherwise, or washed off stumps, months after the poison was used.

Sodium arsenite may be applied either in a frilled deep girdle around a standing tree or to a freshly cut stump. The latter is easier as far as labor is concerned.

Sodium arsenite is available commercially in liquid and dry powder forms. The liquid form may be applied to freshly cut stumps at full strength, or diluted with two or three times as much water as liquid sodium arsenite, or used according to directions.

A stock solution of liquid sodium arsenite may be made by dissolving ten pounds of dry sodium arsenite powder in six pints of boiling hot water. This solution is practically equivalent to commercial liquid sodium arsenite. Liquid sodium arsenite may be made from white arsenic, lye, and water, as follows:

Thoroughly mix, in dry form, two thirteen-ounce cans of common lye with six and one-half pounds of white arsenic (arsenic trioxide). Place this dry mixture in an iron or steel vessel that will hold at least two gallons and add hot water slowly. Stir with a long wooden paddle. Add the water fast enough to prevent violent boiling. To the above amounts of dry chemicals a total of five pints of water should be added to make a stock solution. This solution may be used full strength or diluted as suggested for commercial liquid sodium arsenite.

Liquid sodium arsenite solution is applied to freshly cut stumps with a paint brush or a swab. All the exposed sapwood should be treated with sodium arsenite.

If sodium arsenite is applied to standing trees in deep frilled girdles, it may be poured from a gallon oil can having a long spout, tapered to about three-sixteenths inches diameter.

Livestock are best protected if they are fenced away from the area that is being treated until after heavy rains have washed off any poison left on the stumps or vegetation or the ground, into the soil or into streams where it is diluted to a harmless degree. Small puddles of water containing sodium arsenite are a hazard.

CAUTION: Avoid breathing either white arsenic powder or the fumes from the the boiling solution. Wear gloves and keep the material off the body elsewhere.

Kerosene treatment is rather expensive and sodium arsenite treatment is rather dangerous; hence, cheaper and less dangerous chemicals are being sought. It is thought that there is a possibility of effecting tree or shrub poisoning by cutting trees off and letting them sprout, and then spraying the sprouts with a weed killer. Most commercial weed killing chemicals are not so hazardous to livestock as is sodium arsenite.

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