Texas A&M Scientists Testing New Brush Control Method

A new method of range brush control is being tested by a trio of Texas A&M University scientists.

It consists of deliberately forcing growth of underground buds before applying herbicide. After the growth, the herbicide is sprayed on, catching both the upper part of the tree and the sprouts. This results in a dead tree from top to bottom.

In laboratory experiments, the researchers — Page W. Morgan of the Plant Sciences Department, Robert E. Meyer, U.S. Department of Agriculture plant physiologist at the University, and Morris G. Merkle of the Soil and Crop Sciences Department — sprayed mesquite and huisache seedlings with a hormonal growth regulator known as 2-chloroethanephosphonic acid. Called Ethrel for short, the chemical is still experimental.

The first effect, they learned, was defoliation. Then, the tops of the plants showed a big increase in the number of branches and leaves per node. At the same time, there was considerable sprouting from basal and lateral buds at the bottom of the seedlings. When these plants were sprayed with a herbicide, they died without resprouting.

Morgan emphasized that the system is simply a new principle—one he hopes will work in the field. There is no guarantee that this approach will revolutionize brush control, he concluded.

Pine Sawfly Bite Not Fatal; How to Spray If You Wish

Tree damage from the Virginia pine sawfly isn't as serious as it may appear, say North Carolina State University foresters.

The sawfly, on the rampage in sections of North Carolina, causes trees to look poorly, but Fred Whitfield, extension forestry specialist, maintains that, to his knowledge, no pine trees of any size have been lost to the insect.

"Small pines of seedling size are seriously weakened by the sawfly attack, and," he continued, "in some cases, they will die. But trees of pulpwood size or larger recover from the damage."

Although sawflies feed on needles, new needles begin to come back on new shoots, and by mid-summer the trees should be green again, Whit-field contends.

"The tree won't look like it's 100% recovered," he explains, "because it will only have one year's growth of needles. But it will recover in practically all cases."

Fortunately, the sawfly has at least 50 enemies such as parasites and predators, Whitfield stated. Also, many fly larvae die from prolonged hot or cold weather, and from wet snowstorms in early fall.

"I don't think the use of chemicals is necessary in most cases," Whitfield said. "But if someone feels they must spray, two effective materials are sevin and malathion."

Sevin is recommended at the rate of $1\frac{1}{4}$ lbs. of 80% wettable powder per 100 gal. water; malathion at the rate of two lbs. of 25% wettable powder per 100 gal. water. Follow label directions, advises Whitfield.

He claims that the best procedure for a few colonies feeding on small trees is to pick or shake them off and destroy them.

Generally, only the larvae worms — are seen. The adult sawfly, akin to wasps and bees but more nearly resembling the fly, is seldom seen, Whitfield said.



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