

ONA REPORTS

published in

THE FLORIDA CATTLEMAN AND LIVESTOCK JOURNAL

March-1997

Influence of Frost on Tropical Soda Apple Control

By Paul Mislevy

University of Florida, Range Cattle REC



For questions or comments regarding this publication contact

[Paul Mislevy](#)

Tropical soda apple (TSA) is a broadleaf perennial weed that is spreading across Florida and other southeastern states at an alarming rate. Within a 7 year period one-half million acres of land or 17% of Florida's improved pastures have been covered with this weed. This infestation does not account for TSA found in citrus groves, sugarcane and vegetable fields, road sides, canal banks, and state lands.

Tropical soda apple ranges from three to six feet tall and produces fruit and seed throughout the year. A major concentration of fruit is produced during the cool season (September and April). Mature fruit are solid yellow and contains 400 to 500 seeds, with each plant averaging 100 fruit, resulting in 40,000 to 50,000 seed/ plant/year. Seed germination averages about 70 to 75%. The greatest number of seedlings tend to develop from September to April, with little or no seed germination during the summer (April-August).

Control Recommendations

Previous studies demonstrated that one mowing of TSA to a 3 inch stubble, followed by 50 to 60 days regrowth, then the broadcast application of 1.0 Ib/A Remedy + 0.1% non-ionic surfactant provides 95 to 100% control. The application of 1.0 Ib/A Remedy + 0.1% surfactant on non-mowed adult plants will only provide about 80-85% control. Therefore, mowing followed by regrowth prior to herbicide application is very important. Areas of the state that receive a heavy frost, killing the TSA plant back to the soil surface, can substitute the frost for a 3 inch mowing. This would be a savings of about \$10/A. Growers should plan to broadcast spray TSA plants 50 to 60 days following the last killing frost.

The following is a cost/A breakdown for Remedy applied at 1.0 lb/A

Cost/A: Remedy 1.0 lb/A =	\$20.00
Non-ionic surfactant =	\$2.60
Herbicide application =	<u>\$5.00</u>
Total/A =	\$27.60

Spot Treatment

Growers that have scattered TSA plants or plants found growing in areas that can not be mowed should also take advantage of the killing frost and spot spray with a 1.5% solution + 0.1% non-ionic surfactant (1.5 gal Remedy + 13 oz surfactant in 100 gal water) 50 to 60 days after the last frost. Do not wait longer than 60 days, because TSA plants will be harder to kill. Those plants growing under trees that were not killed by the frost can be controlled by the above rates, since they are growing in shade and are more easily killed. Normally Remedy will not harm oak and pine trees provided the chemical does not come in contact with the foliage. For additional information call (941) 735-1314.