

## Tropical Soda Apple Control: Sorting Through the Options<sup>1</sup>

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Tropical soda apple (TSA) has been a significant weed problem in Florida for almost two decades. For many years, however, herbicide recommendations were relatively simple. Remedy herbicide was the only product labeled for TSA and it was the only product recommended by IFAS. But the past 3 years has seen a dramatic increase in the number of herbicides available for TSA control. Currently, Forefront, Milestone, Pasturegard, and Remedy are available, each of which can be used to control TSA. So, where do we go from here? Which product is best and which one should be used?

All of these herbicides were developed for a specific reason and each has strengths and weaknesses. As is common in all areas of pest management, there is not one product that solves every problem. Therefore, it is important to understand the benefits of these herbicides so they can be used to achieve their maximum effectiveness. To do this, we have developed a table of the strengths and weakness of each herbicide (Table 1). This table will aid in the decision-making process when

selecting the proper herbicide to be used in a specific scenario.

We would suggest that Milestone is an excellent choice for pastures where TSA is the dominant species and few other weeds are present. However, if TSA is the target species, but a variety of other weeds are present (dogfennel <30" tall, coffeeweeds, etc.), Forefront will provide greater control of these species than Milestone, while also being highly effective on TSA. If a wide variety of annual and perennial weeds are present and TSA is a significant problem, Remedy is likely the best option. Remedy will not be expected to give season-long control of TSA, but it will alleviate many of the other weed problems and allow you to specifically target TSA with Milestone or Forefront at a later time, if needed. In pastures that are dominated by annual and perennial weeds, with a few small interspersed TSA plants, Pasturegard would be an excellent choice. Pasturegard is not as effective on large TSA as the other products, but it will likely be the most effective herbicide for cleaning up large weedy areas with multiple species.

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As stated previously, there is no single “best option” for all scenarios. However, we now have many different options for pasture weed management and are able to achieve unprecedented levels of TSA control. By knowing these strengths and weaknesses of these herbicides, the proper herbicide can be selected to maximize weed control per dollar spent.

## Section Heading

### EDIS publications:

SS-AGR-50 Tropical Soda Apple (*Solanum viarum*, Dunal) in Florida  
(<http://edis.ifas.ufl.edu/WG201>)

SS-AGR-77 Tropical Soda Apple: A Noxious Weed in Florida (<http://edis.ifas.ufl.edu/UW097>)

SS-AGR-78 Shipping Cattle, Not Tropical Soda Apple Seed (<http://edis.ifas.ufl.edu/UW187>)

SS-AGR-130 Management Practices to Control Tropical Soda Apple  
(<http://edis.ifas.ufl.edu/UW188>)

ENY-826 Biology of *Gratiana boliviana*, the First Biocontrol Agent Released to Control Tropical Soda Apple in the USA  
(<http://edis.ifas.ufl.edu/IN487>)

ENY-824 Classical Biological Control of Tropical Soda Apple in the USA  
(<http://edis.ifas.ufl.edu/IN457>)

### West Florida Research and Education Center:

Tropical Soda Apple (<http://tsa.ifas.ufl.edu/>)

Tropical Soda Apple Best Management Practices--

North Florida

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<http://tsa.ifas.ufl.edu/00Slides/NorthFlorida/index.html>)

South Florida

(

<http://tsa.ifas.ufl.edu/00Slides/SouthFlorida/index.html>)

**Table 1.** Herbicides for control of tropical soda apple--strengths and weaknesses.

Trade name	Common name	\$/A <sup>1</sup>	Strengths	Weaknesses
Milestone 5 – 7 fl oz/A	Aminopyralid	12-22	Low use rate; highly effective on TSA of all sizes; controls existing plants and germinating seedlings; excellent choice for spot-spraying TSA.	Poor control of dogfennel and many other common weeds; does not control woody brush or blackberry.
Forefront 2 – 2.6 pt/A	Aminopyralid + 2,4-D	14-22	Highly effective on TSA of all sizes; controls existing plants and germinating seedlings; controls a greater variety of small seasonal weeds than Milestone, particularly dogfennel.	Does not control woody brush or blackberry; less effective on large dogfennel and other difficult-to-manage weeds than Remedy or Pasturegard.
Remedy 2 pt/A	Triclopyr	18-22	Broad spectrum control of many weed species; effective on woody brush; excellent for TSA in mixture with other hard to manage weeds.	Less effective on mature TSA; does not control germinating seedlings; control of TSA is best if plants are mowed prior to application.
Pasturegard 3 – 4 pt/A	Triclopyr + fluroxypyr	18-24	Broad spectrum control of many weed species; effective on woody brush.	Less effective on TSA of all sizes; does not control germinating seedlings.
<sup>1</sup> These are approximate prices. These prices are subject to change relative to quantity of herbicide purchased, corporate promotions, region of the state, and many other factors.				