

## ***SolviNix*<sup>TM</sup>, a Natural Biological Herbicide to Control Tropical Soda Apple**

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We have discovered that *Tobacco mild green mosaic tobamovirus* (TMGMV), a plant virus that naturally occurs in Florida, infects and kills tropical soda apple (*Solanum viarum*; TSA). Through extensive testing, we have confirmed that TMGMV can be used safely and effectively as a bioherbicide for TSA. The virus could be used at very low rates of 200 to 1000 mg per acre to kill TSA. We are currently testing two application systems that appear to be practical and user-friendly: an all-terrain-vehicle-based boom sprayer and a high-pressure spot-sprayer.

We have developed an industrial process to mass-produce the virus and formulate it into two bioherbicide formulations: a liquid concentrate (*SolviNix* LC) and a wettable powder (*SolviNix* WP). These formulations have been approved for experimental testing in Florida under an Experimental Use Permit issued by the U.S. EPA. This testing is also approved by the Florida Department of Agriculture and Consumer Services.

In 2008, we are allowed to test *SolviNix* over 5000 acres (total) and in all Florida counties except the Highlands County. The occurrence of an endangered plant species in the Highlands County and lack of data on the effect of the virus on this species caused the EPA to bar testing this county. We now have data to show this species is not affected by the virus and we hope that all Florida counties will be included when *SolviNix* is approved for commercial use.

The EUP trials are intended to generate efficacy, application and shelf-life standards for full registration of *SolviNix*. To conduct these trials, we are in need of cooperators (ranchers, private land owners, public land managers). Our aim is to offer *SolviNix* to livestock, dairy, and natural resource segments that are receptive to a natural biological herbicide that provides high levels of TSA control.