

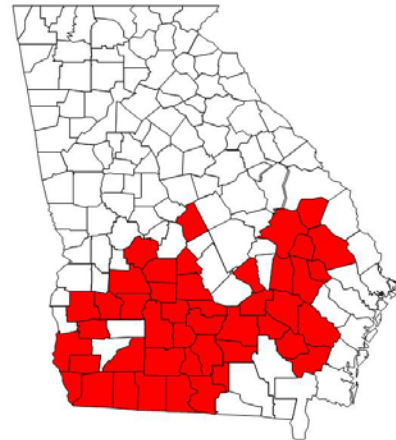
# University of Georgia Herbicide Programs for Tropical Spiderwort (Benghal Dayflower) Control in 2011 Cotton

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Tropical spiderwort is a noxious, exotic, invasive weed that has spread quickly and has become a serious pest in many Georgia agricultural production areas (Figure 1). The increase in prevalence of tropical spiderwort in Georgia may be attributed in part to 1) adoption of weed management programs that lack residual herbicides and 2) adoption of reduced-tillage production systems.

Upon initial observation, tropical spiderwort appears to be a grass (Figure 2). While not a grass, it is a monocot (in contrast to broadleaf weeds, which are dicots) with leaves and stems usually fleshy and succulent. The stems will creep along the ground and root at the nodes. Vegetative cuttings from stems are capable of rooting and reestablishing following cultivation. Tropical spiderwort will produce seed above and below ground (Figure 3).

Figure 1. Georgia counties confirmed to be infested with tropical spiderwort.

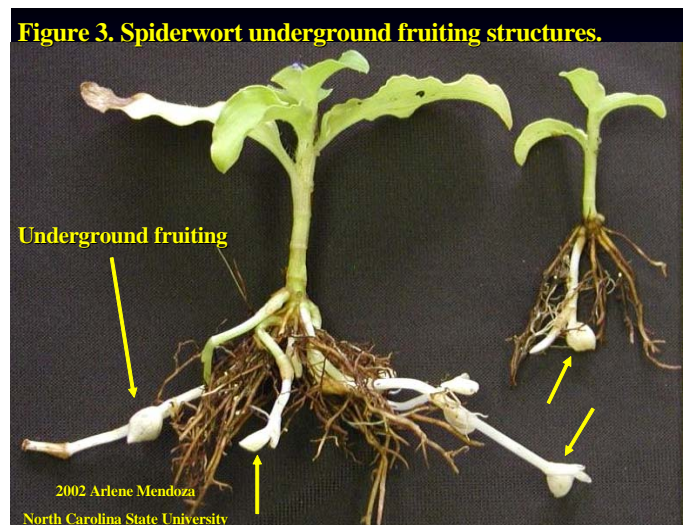


Tables 1 through 3 on back are suggestions for the management of different levels of tropical spiderwort infestations in Georgia cotton. Refer to the most recent cotton production guide or pest control handbook for herbicide rates and proper cotton sizes at time of application.

Figure 2. Newly emerged spiderwort.



Figure 3. Spiderwort underground fruiting structures.



**Table 1. Managing SEVERE Infestations of Tropical Spiderwort in Roundup Ready (RR) Cotton.\***

Preemergence	Postemergence (1- to 4-leaf cotton)	Layby Directed <sup>2</sup>
(Planting before May 10) Use at-plant herbicide appropriate for other weeds	glyphosate + Dual Magnum <sup>1</sup> (12 oz/A)	diuron + MSMA + Dual Magnum (8-12 oz/A)
(Planting after May 10) Prowl <sup>3</sup> + Cotoran	(Spiderwort should be less than 1 inch and the Dual must <b>contact</b> the soil)	

\*Deep turning the land will provide fair control of spiderwort. This practice may be needed in addition to herbicides in some fields.  
 1. Dual Magnum contains S-metolachlor. Other generic brands contain metolachlor, a mixture of R and S isomers. Per unit of product, brands containing S-metolachlor provide longer control.  
 2. In areas where hooded applications are available, glyphosate + Valor + Dual would be similarly effective.  
 3. Prowl will not provide control of spiderwort but will suppress other weeds.

**Table 2. Managing MODERATE Infestations of Tropical Spiderwort in RR Cotton.**

Preemergence	Postemergence (1- to 4-leaf cotton)	Layby Directed
(Planting before May 10) Use at-plant herbicide appropriate for other weeds	glyphosate + Dual Magnum <sup>1</sup> (12 oz/A)	diuron + MSMA or glyphosate + diuron or glyphosate + Aim
(Planting after May 10) Prowl <sup>2</sup> + Cotoran	(Spiderwort should be less than 1 inch and the Dual must <b>contact</b> the soil)	+ Dual Magnum (8-12 oz/A)

1. Dual Magnum contains S-metolachlor. Other generic brands contain metolachlor, a mixture of R and S isomers. Per unit of product, brands containing S-metolachlor provide longer control.  
 2. Prowl will not provide control of spiderwort but will suppress other weeds.

**Table 3. Managing LIGHT Infestations or DELAYING arrival of Spiderwort in RR Cotton.**

Preemergence	Postemergence (1- to 4-leaf cotton)	Layby Directed
Use at-plant herbicide appropriate for other weeds	glyphosate + Dual Magnum <sup>1</sup> (16 oz/A) (Spiderwort should be less than 1 inch and the Dual must be able to <b>contact</b> the soil)	Valor + MSMA diuron + MSMA glyphosate + Valor glyphosate + diuron

1. Dual Magnum contains S-metolachlor. Other generic brands contain metolachlor, a mixture of R and S isomers. Per unit of product, brands containing S-metolachlor provide longer control.