

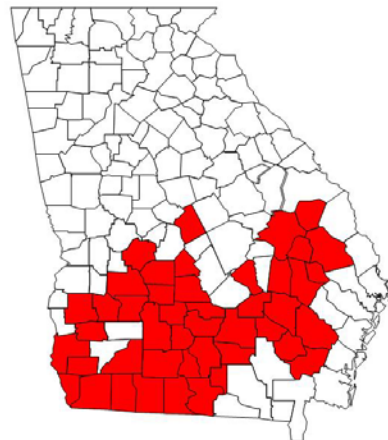
# University of Georgia Herbicide Programs for Tropical Spiderwort (Benghal Dayflower) Control in 2012 Cotton

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Tropical spiderwort is a noxious, exotic, invasive weed that can spread quickly and has become a serious pest in many Georgia agricultural production areas (Figure 1). Increased prevalence of tropical spiderwort between 1998 and 2007 was likely a response to the 1) adoption of weed management programs lacking residual herbicides and the 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.

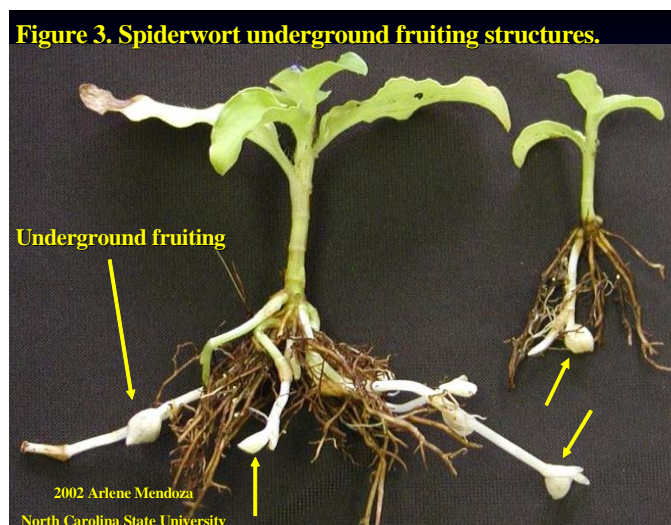


Tables 1 through 3 on back are suggestions for the management of different levels of tropical spiderwort infestations in Georgia cotton. Refer to the most recent cotton production guide or pest control handbook for herbicide rates and proper cotton sizes at time of application.

Figure 2. Newly emerged spiderwort.



Figure 3. Spiderwort underground fruiting structures.



**Table 1. Managing SEVERE Infestations of Tropical Spiderwort in Roundup Ready (RR) Cotton.** <sup>1</sup>

Preemergence	POST 1	POST 2	Layby Directed
(Planting before May 10) Use at-plant herbicide appropriate for other weeds	glyphosate + Warrant (3 pt/A)	glyphosate + Dual Magnum <sup>1</sup> (16 oz/A)	Direx + MSMA + Dual Magnum <sup>2</sup> (12-16 oz/A) or Warrant (3 pt/A)
(Planting after May 10) Cotoran + herbicides appropriate for other weeds	<i>(Spiderwort should be less than 1 inch and the Warrant must contact the soil)</i>	<i>(Spiderwort should be less than 1 inch and the Dual must contact the soil)</i>	

<sup>1</sup> Deep turning the land will provide fair control of spiderwort. This practice may be needed in addition to herbicides in some fields.

<sup>2</sup> Dual Magnum contains S-metolachlor and can be applied topically once per crop.

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

Preemergence	Postemergence	Layby Directed
(Planting before May 10) Use at-plant herbicide appropriate for other weeds	glyphosate + Dual Magnum <sup>1</sup> (16 oz/A) or Warrant (3 pt/A)	Direx + MSMA or glyphosate + Direx or glyphosate + Aim + Dual Magnum (12 oz/A) or Warrant (3 pt/A)
(Planting after May 10) Cotoran + herbicides appropriate for other weeds	<i>(Spiderwort should be less than 1 inch and the Dual or Warrant must contact the soil)</i>	

1. Dual Magnum contains S-metolachlor and can be applied topically once per crop.

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

Preemergence	Postemergence	Layby Directed
Use at-plant herbicide appropriate for other weeds	glyphosate + Dual Magnum (16 oz/A) or Warrant (3 pt/A)  <i>(Spiderwort should be less than 1 inch and the Dual or Warrant must be able to contact the soil)</i>	Direx + MSMA Valor + MSMA glyphosate + Valor glyphosate + Direx

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