

Identification & Management of Spiderwort & Tropical Spiderwort

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Spiderwort (*Tradescantia ohiensis*)

Identification

Spiderwort is a native perennial that forms clumps throughout the pasture (figure 1).



Figure 1. Spiderwort forming clumps in a pasture.
Photo Credit: Doug Mayo. UF/IFAS Extension

Leaves & Stems: The stem is large and fleshy; leaves are narrow and grass-like. The leaves can be up to 1.5 feet long and arch downward from the stems (figure 2).

Flowers: Purple to pink flowers with three petals appear in dense clusters (figure 2).

Roots: The roots are fibrous and not spreading but can create offshoots (figure 2).

Biology

Spiderwort emerges in the spring and continues to flower and create a prolific number of seeds during the summer. It is a fleshy, clump-forming perennial. Although this plant can reproduce vegetatively through root offshoots, it spreads mostly by seed.



Figure 2. Leaves, stems and roots of spiderwort.
Photo Credit: Michael Durham, and Pratap Deckota, UF/IFAS Extension

Control

Hand removal of the entire plant (roots included) is the best form of control; therefore, pastures need to be scouted often to detect this weed before it reaches a population that makes hand removal impractical. Tillage may serve to spread the plant, rather than decrease its numbers. Herbicides (i.e. glyphosate, 2, 4-D, triclopyr) provide temporary control and need to be applied repeatedly until the weed is exhausted (See UF/IFAS EDIS Publication SS-AGR-404).

Tropical Spiderwort aka Benghal Dayflower (*Commelina benghalensis*)

Identification

Tropical spiderwort is commonly misidentified as spreading dayflower (*Commelina diffusa*) and Asiatic dayflower (*C. communis*). Although control methods do not differ greatly between the species, there are morphological characteristics that separate tropical spiderwort from the other dayflowers:

Leaves & Stems: Stems are fleshy, succulent, covered in fine hairs and have a light green color. Young leaves are egg-shaped but become more pointed or lanceolate when they mature. Leaf margins are entire (smooth). Small white or red hairs may be present on the leaf sheath (figure 3). Tropical spiderwort leaves are wider and shorter than other dayflower species and may contain hairs on the young leaves and petioles. Other dayflower species have leaves that are waxy, thick and glabrous (no hairs).



Figure 3. Left: Leaf sheath with red hairs. Right: Mature leaves. Photo Credit: Annette Chandler, UF/IFAS

Flowers: Tropical spiderwort flowers have three petals, they are purple/lavender, while other dayflowers have blue flower petals (figure 4).

Roots: Roots are fibrous but contain shallow rhizomes. The most unique feature of tropical spiderwort is its ability to produce underground flowers. These flowers, which produce viable seed, appear as swollen nodes. No other dayflower species produce underground flowers (figure 5).



Figure 4. Tropical spiderwort flower. Photo Credit: Herb Pilcher, USDA Agricultural Research Service, Bugwood.org



Figure 5. Tropical spiderwort roots and subterranean flowers. Photo Credit: Dr. Ted Webster, University of Georgia



Figure 6. Tropical spiderwort forming a dense mat in a pasture. Photo Credit: Pratap Deckota, UF/IFAS

Biology

Tropical spiderwort typically germinates in June/July in Florida. It is a prostrate, spreading perennial with fleshy stems that root readily at the nodes. Some stems may be erect to about 12 inches. This plant can form a dense mat if not managed (figure 6).

Control

Mowing is not an effective means of control as broken stems can regenerate into new plants. Tillage may also serve to spread the plant because of the presence of the underground seeds. Herbicides (i.e. glyphosate, 2, 4-D, triclopyr) provide temporary control and need to be applied repeatedly until the weed is exhausted (See UF/IFAS EDIS Publication ENH1085).