

Torpedograss



Figure 1. A stand of torpedograss and centipedegrass.



Figure 2. Individual plant.



Figure 3. Torpedograss rhizome. Source: Wallace, Rebekah. *Torpedograss*. 2010, Bugwood.org.

Torpedograss (*Panicum repens* L.) is a nonnative perennial grass native to Eurasia. It is considered one of the world's worst weeds (Holm et al., 1977). When fully mature, torpedograss can grow up to 3 feet tall and form dense monotypic stands that displace native species and lead to a loss of diversity and overall ecological health (Figure 1). Torpedograss is a threat to wetlands and riparian zone areas because it eliminates desirable native plants. Once established in wetlands, it spreads onto adjacent terrestrial sites. Rhizomes produce new shoots and roots at every node to form dense stands aboveground. Torpedograss now occupies thousands of acres of marsh in Florida and occurs in 75 percent of Florida's 67 counties.

Torpedograss is also a problem weed in turf and other areas in home landscapes. It has been considered for listing as a noxious weed in Mississippi by the Department of Agriculture and Commerce; however, it is not currently regulated. Torpedograss can also be a problem in orchards and many other crops grown with minimal soil disturbance. It does not provide adequate forage or habitat quality compared to the native plants it displaces. Once established, control can be extremely difficult.

Description

Vegetative

Torpedograss is a perennial, rhizomatous grass that can grow in excess of 2.5 feet tall. In wetlands, rhizomes may float or move with contaminated soil after flooding events. The sharp rhizome tips are the basis for the

common name of torpedograss. It produces seeds, but viability is variable in North America, so the primary means of spread is vegetative (rhizome) reproduction. The aerial stems of torpedograss range from 1 to 3 feet tall and are glabrous (hairless). Upper leaf sheaths are glabrous or hairy, and leaf blades are stiff, linear, and flat to folded and range from $\frac{1}{25}$ to $\frac{1}{4}$ inch wide by 1 to 10 inches long. Blades often have a grayish coloration. Blades are glabrous to sparsely hairy below, but usually long-haired above, particularly near the ligule (a short, hair-like membrane).

Flowering

The inflorescence is a loose, open, or upright terminal panicle, 3 to 9 inches long. Inflorescences may be produced year-round. Spikelets are oval, 2–3 millimeters long, about 1 millimeter wide, and glabrous. The first husk around the grain is short, with the appearance of being shortened by cutting. The first husk is also loose and nearly encircles the base of the other spikelet bracts.

Dispersal

Similar to cogongrass [*Imperata cylindrica* (L.) Beauv.], the introduction of torpedograss to the United States was either an accident (as ballast water contamination) or deliberate (for forage uses sometime before 1876 when it was first collected in Mobile, Alabama). The extensive distribution of this plant is due in part to its movement in turfgrass and as a contaminate in containerized ornamentals. Rhizomes can also be moved by floodwater flowing through contaminated wetlands.

Habitat

Torpedograss is commonly found in tropical and subtropical climates with moist, sandy soils. It often grows near ditches, marshes, wetlands, estuaries, shores of freshwater lakes, ponds, and rivers, as well as along the coastal shores of estuaries, bays, and oceans. Rhizomes can grow out from the shoreline and float in the water. Although torpedograss does well in wet soils, it is tolerant of drought when growing inland. It even outcompetes bermudagrass and other southern turfgrasses in lawns and sod production. It can be a problem weed in sugarcane and many other crops. Torpedograss prefers open areas with unrestricted sunlight, yet it can persist under partially shaded conditions.

Distribution

Torpedograss probably originated in the Old World (Holm et al., 1977). It is found from Southern Europe and Northern Africa to Asia and Australia. It also occurs in the New World tropics and subtropics. In the United States, it is found in California, Hawaii, and from Texas to Florida and North Carolina in the southeastern United States. Specifically, it occurs in all Gulf states.

Control Methods

Chemical

Chemical control is the preferred method for torpedograss control (Tables 1). Glyphosate and imazapyr are labeled for management of torpedograss in aquatic

sites. Glyphosate and imazapyr can also be used on terrestrial sites; however, the product used must be labeled for use in the application site. This means you must only use products with an aquatic label when managing torpedograss on an aquatic site. On terrestrial sites, such as bermudagrass turf, Drive can be used for selective torpedograss suppression, and Paramount can be applied to forages (Table 1).

Mechanical

Tillage practices have been used with little success. Tillage alone fragments the rhizomes and stimulates new growth. The best mechanical treatment strategies provide only temporary control of torpedograss. Therefore, landowners should use all precautionary measures feasible to prevent infestations. Closely inspect sod and containerized landscape material to make sure torpedograss rhizomes are not present in the growing media. Carefully inspect boating equipment, such as propellers and trailer rails, to make sure torpedograss vegetation is not transported between water bodies.

References

- Holm, L. G., D. L. Plucknett, J. V. Pancho, & J. P. Herberger. 1977. *The World's Worst Weeds: Distribution and Biology*. East-West Center/University Press of Hawaii. pp. 353-357.
- Wallace, Rebekah. *Torpedograss*. 2010, photograph, Bugwood.org, <https://www.weedimages.org/browse/detail.cfm?imgnum=5426583>. (Figure 3)

Table 1. Chemical suggestions for torpedograss control.

Herbicide	Formulation	Site	Rate
Glyphosate	2 lb ae/gallon Rodeo, Aquamaster, Glyfos, etc. Roundup, Glypro, Accord, etc.	Aquatic Terrestrial	2% solution 2% solution
Imazapyr	2 lb ae/gallon Arsenal, Ecomazapyr, Habitat, Polaris, etc. Arsenal, Arsenal Powerline, Chopper, Polaris, etc.	Aquatic Terrestrial	1% solution 1% solution
Quinclorac	Drive 75DF, Paramount 75DF	Terrestrial	1 lb/Acre

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