An Unwanted Fort Morgan Resident

Beach Vitex (*Vitex rotundifolia)*

How did it get here?

Beach vitex is a new invasive species to the Alabama Gulf Coast. It is a deciduous woody vine native to Korea and other western Pacific countries. This plant was introduced to the Southeastern United States in the mid-1980's as an ornamental and also for beach stabilization. Here along Alabama Gulf Coast, some local nurseries sold beach vitex after the hurricane seasons of 2004 and 2005 to promote beach stabilization. It has been found in isolated pockets of Perdido Key, Orange Beach, Gulf Shores, and Fort Morgan. However, beach vitex does not provide beach stabilization.

Beach Stabilization

Beach vitex has very large vines and roots that are incapable of holding sand in storm events. It lacks the fibrous root system that native plants such as sea oats, beach panic grass, and other native dune plants possess holding sand and build dunes. Beach vitex produces a tight canopy, which shaded out the other native plants. It will look like a thick covering of plants but, when a tropical storm or severe storm hits the coast, beach vitex vines and roots cannot stop coastal erosion and loss of the beach as native plants fibrous root systems.

Sea Turtle Impacts

North, South Carolina and Virginia have been battling beach vitex for years. The thick, above ground vegetation of beach vitex has been found to deter nesting adults and trap sea turtle hatchlings. Nesting females like to nest in open areas. The thick above ground foliage of beach vitex deters nesting adult females. Additionally, newly emerged sea turtles become trapped in the think above ground vegetation, exhausting themselves and perishing before they can reach the ocean.

Identification

Beach vitex leaves are oval shaped with a tip, opposite and semi-waxy about 1 -2 inches long. The stems are woody, and the underside of the leaves is a lighter green. Flowers are purple in the summer (about 1 inch) and in small clusters at the ends of branches. Fruits are ¼ inch in diameter and purplish-black when ripe. Beach vitex can grow at a rate of 10 feet or more per year, and can produce vine runners up to 60 feet long. It can produce 10,000 to 20,000 seeds per square meter and the seeds can remain viable up to 4 years. These seeds can be easily spread by animals, wind, or water.

As mentioned earlier, the eastern coast of the United States has been battling beach vitex since the mid-1990's. This website, The Beach Vitex Task Force (http://www.northinlet.sc.edu/beachvitex/about.html) is run by a group of concerned citizens which has has the very good pictures of this invasive menace. Another informative website is run by the Clemson University Extension Service: (http://www.clemson.edu/extension/hgic/pests/weeds/hgic2315.html).

Reporting locations of beach vitex

There is a new smart phone application that citizens can use to report invasive plant species locations. The smart phone application is called SEEDN (Southeast Early Detection Network). It allows citizens to use their smartphone to identify and report invasive species in the Southeastern United States. The application has pictures and descriptions of invasive species to aid identification. It also has a function where citizens can photograph and submit the photographs for identification. The reports are uploaded to a database map and e-mailed directly to local and state verifiers for review. The application was developed by the University of Georgia and is a free download for Apple or Android smartphones.

Treatment and Eradication

Luckily beach vitex has been found only is isolated areas of Alabama's Gulf Coast. It can be easily treated and eradicated. The citizen-run Beach Vitex Task Force group has developed very good treatment methods as listed below:

BEACH VITEX ERADICATION

Scratch and Dab Method

Herbicide

Glyphosate available at home and garden stores can be used to kill Beach Vitex. For example: Round-Up Super Concentrate Weed and Grass Killer, 50.2% Glyphosate, isopropylamine salt; $23 / quart or HDX Weed & Grass Killer Concentrate, 41% Glyphosate isopropylamine salt;

$17 / quart.

*The pre-mixed solutions in “Pump–N-Go” and “Ready-to-use” bottles **are not** concentrated enough to kill Beach Vitex using the method described below. Those mixes are general developed for spraying herbicides on the leaves.

*It is important to follow all of the instructions on the label and be sure to wear personal protective equipment (long pants, long sleeves, gloves and safety glasses) when applying herbicides.

If you have it available, it is helpful to add a very small amount of Tracker Dye (blue coloring) to the herbicide solution and agitate well. The dye isn’t necessary, but it is useful as an indicator so you know where you’ve applied the chemical and where you haven’t.

Unused herbicide can be stored for several months in a cool, dark place. Make sure the container is labeled as to the ingredients and concentration. Be sure to stir or agitate it well before using it in the future.

Application

Starting at the edge of a colony of beach vitex, find a stem running along the surface of the ground and scratch the bark with a garden hoe, machete or other tool, for a length of 4 to 12 inches. The scratch should be gentle being careful to only scar the bark down to the green vascular tissue. Don’t scratch all the way into the white part in the center of the stem. Using a sponge paintbrush attached by duct tape to a 2-3 ft long stick (Lowes has a long paint stirrer for 5 gallon buckets of paint that works really well for this), dab or brush the herbicide solution onto the wounded stem. Repeat by scratching and dabbing herbicide every six to eight feet of horizontal stem, especially in the vicinity of where stems are rooted into the ground. In addition, try to apply additional herbicide around the base of the plant being careful not to girdle the trunk of the plant (don’t scratch the bark all the way around the trunk or stems).

You may also use the hands-on method. Put on a latex glove and then place a cotton glove over the latex glove. Dip your hand in the herbicide solution. After cutting into the stem of the plant, gently rub the cut portion of the plant with the herbicide soaked glove.

Do not apply this herbicide if rain is predicted within one hour.

Watch treated plants for signs of die back. If, after 6 to 8 weeks, plants are continuing to thrive, you may want to make another application of the herbicide. Treat plants only during the growing season (April through mid-November). There is no need to apply this herbicide when the plants are not actively growing.

Spray (Foliar) Application Method

Spraying beach vitex with herbicides is generally less effective than the scrape and dab method described above. However, if you have a very dense stand of beach vitex, that does not contain any sea oats or other beneficial native dune grasses; you can treat these sites with Glyphosate using a spray or foliar application method. Follow the mixing instructions on the product. Be sure to use a clean container. Since the water in some beach towns contains various metals, distilled water is best. Unused herbicide can be stored for several months in a cool, dark place. Make sure the container is labeled as to the ingredients and concentration. Be sure to stir or agitate it well before using it in the future.

Since coastal areas where beach vitex grows are often windy, be sure to spray plants when there is no wind. Early mornings are usually the only time the winds are light enough to spray. If you do spray during windy conditions, you risk damaging other nearby desirable plants with herbicide that blows onto their leaves.

Do not apply this herbicide if rain is predicted within one hour.

Watch treated plants for signs of die back. If, after 6 to 8 weeks, plants are continuing to thrive, you may want to make another application of the herbicide. Treat plants only during the growing season (April through mid-November). There is no need to apply this herbicide after the leaves have dropped for the winter or when the plants are not actively growing.

*It is important to follow all of the instructions on the label and be sure to wear personal protective equipment (long pants, long sleeves, gloves and safety glasses) when applying herbicides.

If you have questions about Round Up products, call 1-800-246-7219.