What Katrina and Rita May Send You (other than \$3 gas)

by Dearl E. Sanders

The destruction that hurricanes Katrina and Rita brought to the Gulf Coast in 2005 has been well documented on national television and in the press. Following the devastation, help came from around the nation. Federal troops, utility crews, law enforcement, fire fighters, NGO's and FEMA contractors from around the country poured into the states of Louisiana and Mississippi and continue to do so. After the storms, millions of downed trees were salvaged by timber crews from throughout the nation, especially the west. One of my concerns and a concern to others is the fact that most of this help arrived by vehicle and will depart by vehicle, while passing through some of the south's most heavily infested areas of invasive plants. Due to a severe shortage of clean water in the aftermath of the hurricanes, vehicles were not washed off prior to their departure. Since they had been in and through heavily weed and seed infested areas, and since vehicles have so many areas for seeds and weed fragments to stick, this will likely speed up the unwanted movement of invasive plants to areas of the US where they currently do not occur. Usually invasive plants move in a fairly slow and predictable manner across the landscape. This unprecedented movement of vehicles into and out of infested areas may allow some of these plants to "jump" large areas to their new homes.

Most Likely to Move

Anyone in the world with a TV or newspaper is now familiar with the areas of New Orleans and the Mississippi coast. These areas, especially St. Bernard Parish, are heavily infested with cogongrass (*Imperata cylindrica*). Cogongrass has spread steadily from southern Alabama across the mid-south since the early 1930's. It is a perennial grass with rhizomes and is identified by its silvery plume-type seed head in early spring and an off center midrib. Wherever introduced, it has predominated most non-cultivated areas, including roadsides, pine plantations, pastures, etc. It is able to outcompete all of our southern forage and native grasses. It is nonpalatable to livestock and represents a major fire threat.

The area of south Mississippi near where Katrina came ashore is home to Tropical soda apple (*Solanum viarum*). This member of the nightshade family has spread from Florida into south Mississippi. It is a large thorny relative of horsenettle (*Solanum carolinense*), produces thick hedges, and is difficult to control.

Itchgrass (*Rottboellia cochinchinensis*) is a common roadside pest in southwest Louisiana where Rita flooded approximately 2,500 square miles. It is a prolific seed producing annual covered with fiberglass-like hairs. Nonpalatable to livestock, it readily colonizes both crop and non-crop areas. Seed is produced in jointed segments in an unusual spike type seed head. These jointed segments also float, which tends to increase its movement and attachment to vehicles in flooded situations.



Tropical soda apple, Solanum viarum.

Chinese tallow (*Sapium sebiferum*) is a rapid growing weedy tree with milky sap. It is well established in south Louisiana and coastal Texas. It has become the predominant woody species in large areas of southwest Louisiana. It is a prolific seed producer and is not controlled by mechanical means. Cutting produces numerous sprouts, with repeated cutting producing solid stands of the tree.

A number of invasive aquatic plants are found in both the Katrina and Rita impacted areas. Some, such as giant salvinia *(Salvinia molesta)*, are a national threat. Others, such as red rice *(Oryza sativa)*, represent a serious threat to rice producing areas in California. All of these invasive aquatic plants, with the exception of salvinia, produce seed. Washing contaminated vehicles near drains, ditches, or other areas with access to water will certainly increase the likelihood of these plants becoming established in new areas.

What to Do

Most states have a quarantine official in the respective state's department of agriculture, natural resources, environmental quality, etc. It is recommended that all equipment that was moved out of the impacted areas be cleaned as soon as possible. These staging areas, equipment yards, firehouses, etc. should be inspected regularly for the presence of any plant that looks unusual or out of place. If something is discovered, contact the state quarantine official or an appropriate weed scientist within the state for proper identification. If an invasive species is discovered, ask for a complete and immediate control and monitoring program. Recommendations for controlling these weeds are available from the Louisiana State University AgCenter (www.lsuagcenter.com) or Mississippi State University (www.msucares.com).

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