

RSD Testing Helps Keep Sugarcane Healthy

Ratoon stunting disease (RSD) was the most important disease affecting sugarcane in Louisiana for many years. The pathogen that causes RSD occurs in water vessels of stalks and is spread mechanically during planting and harvest. The disease causes stunted growth but no diagnostic external symptom, so farmers would spread and increase RSD without realizing it. Over the last 35 years, a public and private sector partnership has provided healthy seedcane to the industry and reduced the incidence of RSD to a very low level. The healthy planting material is produced through a laboratory process known as tissue culture by two commercial seedcane companies then certified through the Sugarcane Seed Certification Program operated by the Louisiana Department of Agriculture and Forestry. The fact that RSD does not cause any reliable external symptoms means disease monitoring with a laboratory test is needed to insure that a healthy seedcane program is working effectively. RSD testing is available to farmers through the Sugarcane Disease Detection Lab (SDDL) operated by the LSU AgCenter with financial support provided by the American Sugar Cane League and the commercial seedcane companies.

Sampling and testing old stubble (ratoon) fields of cane intended for the mill is the best means of determining whether a healthy seedcane program is working as intended. Testing should be done in the late summer at the end of planting and the beginning of harvest. A test sample consists of 25-30 stalks collected across both ends of a field. A complete “joint” consisting of two nodes with a complete internode in between is collected from the base of each stalk. Samples from a field are then placed in a sealable plastic bag and delivered to the SDDL for testing. County Agents and sugarcane consultants can assist in the field selection and sampling process. The SDDL does not charge for RSD testing.

Most commercial sugarcane varieties will suffer yield loss if infected by RSD. Farmers can have their cane tested to make sure that the disease is not persisting on their farm and causing yield loss. More information about healthy seedcane programs and RSD testing is available at <https://www.lsu.edu/agriculture/plant/extension/sugarcane-lab.php> or can be obtained by contacting Dr. Jeff Hoy at jhoy@agcenter.lsu.edu.