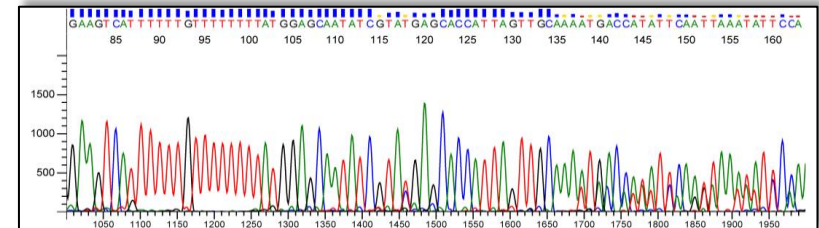
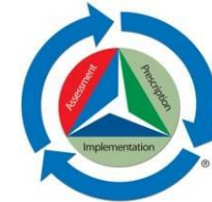


**Waterbody:** Lake Dell  
**County, State:** Polk, FL  
**Organization:** Applied Aquatic Management  
**Collected By:** Michael Perez  
**Collection Date(s):** 2/16/2023  
**Management Response of Interest:** Sonar\* (fluridone)  
  
**Laboratory Receipt Date:** 2/17/2023  
**# of sample locations received:** 2  
**# of sample locations analyzed:** 2  
**Quality Control Sample (LS3 Biotype):** 100%

## GenTEST\* Report

### Aquatic Plant Genetic Assessment



**GenTEST** is an advanced assessment technology that examines specific genetic sequences of aquatic plant DNA (deoxyribonucleic acids) to predict response to management with aquatic herbicides. DNA sequencing with GenTEST includes several methods and technologies used for determining the order of the nucleotide bases in key areas of an aquatic plant's genetic code that play an important role in specific responses to particular herbicide modes of action or general ability to survive management. By determining the genetic makeup of an aquatic plant or plant community, the appropriate herbicide modes of action and dosing scenarios or other management technique can be prescribed based on well-tested correlations between genetics and management response. GenTEST improves aquatic plant management practices by providing rapid and scientifically based assessments prior to management design implementation, commonly with a focus on treatment with specific aquatic herbicide modes of action.

**Results Summary:** GenTEST analysis was completed on 2 sample locations submitted. Plants from 1 of the 2 sites were determined to be the Less Susceptible Biotype 1.

## Sample Location Results

Site			
Identification	Genotype <sup>†</sup>	Biotype <sup>††</sup>	Sample ID
North Side	CGT	CS	CTM41687-1
South Side	AGT	LS1	CTM41688-1

## GenTEST<sup>\*</sup> Report

### Aquatic Plant Genetic Assessment

#### Fluridone Genotype and Herbicide Response Category

CGT CS = Classically Sensitive Biotype  
 AGT LS1 = Less Susceptible Biotype 1 (2.25 R/S)  
 TGT LS2 = Less Susceptible Biotype 2 (3.75 R/S)  
 CAT LS3 = Less Susceptible Biotype 3 (6.00 R/S)

#### **R/S = Resistance/Sensitivity Ratio<sup>\*</sup>**

For example: R/S Ratio of 2.00 means twice the herbicide dose is needed to achieve same results versus sensitive biotype.

<sup>†</sup> **Genotype**: the hereditary information, genetic make-up.

<sup>††</sup> **Biotype**: organisms with the same genetic make-up.

<sup>\*</sup> Michel, A., Arias, R.S., Scheffler, B.E., Duke, S.O., Netherland, M. and Dayan, F.E. 2004; Somatic mutation-mediated evolution of herbicide resistance in the nonindigenous invasive plant hydrilla (*Hydrilla verticillata*). Mol. Ecol. 13, 3229–3237

For questions regarding this report, please contact Wendi Nance, SePRO Aquatic Specialist at [wendin@sepro.com](mailto:wendin@sepro.com), 386-409-1175.