Technology	2. Large scale Screening for P Oxidative Stress Tolerance in sugarcane, <i>Erianthus sp</i> and <i>S. spontaneum</i>
Year	2024
Features	 Novel screening methodology for commercial hybrids of sugarcane and wild species germplasm was developed for oxidative stress tolerance. Oxidative stress treatment for the sugarcane is 500 ppm of 30 % hydrogen peroxide (H₂O₂) for 24 hrs For species, <i>S.spontaneum</i> and genera <i>Erianthus</i> sp., the oxidative stress treatment is for 48 hrs with >500 ppm H₂O₂ Traits for screening - Cell membrane injury (%), leaf temperature, SPAD value, chlorophyll fluorescence (Fm/Fv)
Use of the Technology	• New technology for screening wild species of <i>Saccharum</i> and the allied genera <i>Erianthus</i> for oxidative stress tolerance
Impact	• For the selection and breeding of climate resilient sugarcane varieties
Developers	R. Manimekalai, R. Gomathi and A. Selvi
	Screening for Oxidative Stress
	Image: Sugarcane, Erianthus sp. Image: Sugarcane, Erianthus sp.
	Germplasm of sugarcane and wild species
	Adaptive traits - Cell membrane injury (%), leaf temperature, SPAD value, chlorophyll fluorescence
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	Identification of Multiple stress tolerant clones in sugarcane germplasm