

Sweet sorghum yields per harvests in Tennessee summer and fall of 2022.

Four tall growing with high sugar content sweet sorghum cultivars, i.e, Achi Turi, Dale, Dasht Local and Topper. 76-6 along with research sorghum variety RTx 430, were maintained at Tennessee State University main campus farm from summer to early fall of 2022. Final harvest was conducted when it was getting cold on the farm in early fall and the sorghum plants were senescing drastically. Some stalks of sorghum plants were harvested from the field during peak growing season in late summer. It was sought if late season harvest at plant senescence would be intriguing for analyzing comparative yields. Growth data from all five sorghum cultivars was obtained as well as the amount of juice produced along with their sugar contents in °Brix values were also recorded. Two sorghum cultivars, i.e, RTx 430 and Dale stood out as producing the most juice with higher °Brix values for sugars when harvested in fall. This research generated a comparison of mid-growing season yields with that of sorghum production levels at plant senescence harvests. Such comparative data for each sorghum cultivars if analyzed with relevant parameters towards biofuel production, can benefit society and environment.