

## **Evaluation of Sugarcane (*Saccharum officinarum* L.) Genotypes, in modern method of Agriculture, using correlation and path coefficient Analyses**

**Authors :** T. S. Bubuche, L. Abubakar, N.D. Ibrahim, A. A. Aliero, H. M. Sama, B. S. Haliru

**Abstract :** A two-year study was conducted at the Fadama farm of Usmanu Danfodiyo University Sokoto, Nigeria. Correlations and path coefficients analysis were used to determine the interrelationship and importance of various characters as components of yield in sugarcane during 20011-012 and 2012-013 growing seasons. Fourteen sugarcane hybrids and a local check were evaluated. The experiment was laid out in a randomized complete block design (RCBD) and replicated three times. Significant and positive correlation were recorded between total cane weight/ha and single stalk weight, between single stalk weight and final brix and between stalk girth and stalk length while final brix and number of milliable cane/ha recorded no significant correlation. Traits that had high direct contribution to the final yield were number of stalk/stool, number of milliable cane/ha, single stalk weight and brix content while high indirect positive contributions were observed in growth habit, number of internode per stalk and stalk length..

**Keywords :** correlation, path analysis, sugarcane, yield components

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020