

## **Evaluation of stability in sweetpotato using different methods**

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### **ABSTRACT**

Eight sweetpotato lines along with a check local cultivar were grown for 3 years in eight environments across Orissa for tuber yield. Variance due to genotypes, environments, G x E (linear) compared was highly significant. Both linear and nonlinear components were significant. The three stability methods used, Eberhart and Russel (1966), Shukla (1972) and Francis and Kannenberg (1978), differed in identifying stable cultivars. Eberhart and Russels  $S^2_d$  and Shukla's  $S^2_p$  parameters were highly correlated ( $r_3 = 0.78^{**}$ ). In all the three parameters, line 90/606 was found stable but other lines differed. Of the methods use, Francis and Kannenberg technique was convenient in grouping the cultivars.

Keywords: coefficient of variation. G x E interaction. rank correlation. stability. sweetpotato.