International Journal of Agricultural
Science and Research (IJASR)
ISSN(P): 2250-0057; ISSN(E): 2321-0087
Vol. 6, Issue 2, Apr 2016, 229-234

TRANS STELLAR
•Journal Publications •Research Consultancy

STUDY OF BC_3F_2 POPULATION FOR SKEWNESS AND KURTOSIS IN MAIZE (*ZEA MAYS* L)

SRUTHY MENON V.[1], N. MANIVANNAN[2] & K. N. GANESAN[3]

[1]*Rubber Board Field Officer, Karnataka, India*

[2,3]*Centre for Plant Breeding and Genetics, Tamil Nadu Agricultural University, Coimbatore, India*

ABSTRACT

BC_3F_2 population of maize derived from cross between UMI 79 and UMI 936(w) and repeated backcrossing with UMI 79 was used in the study for skewness and kurtosis. Data on days to tasseling, days to silking, days to maturity, plant height, cob length, cob diameter, number of rows per cob, number of grains per row, cob weight, shelling %, hundred grain weight and grain yield per plant for BC_3F_2plants were recorded. Positively significant skewness was observed in BC_3F_2 progenies for days to maturity, cob diameter, cob weight, number of grains per row and grain yield per plant confirming complementary gene action for the traits. The gain is slower with mild selection but is faster with intensive selection. Positively significant kurtosis was observed for days to maturity and number of grains per row. The positive kurtosis indicates leptokurtic curve and the traits are controlled by few genes. Negative kurtosis was observed in 100 grain weight and grain yield per plant. This indicates platykurtic curve which means characters are controlled by many genes. If selection for these characters were made intensively, the gain will be faster.

KEYWORDS: Maize, Skewness, Kurtosis

Received: Mar 01, 2016; **Accepted:** Mar 14, 2016; **Published:** Mar 19, 2016; **Paper Id.:** IJASRAPR201632

Original Article