International Journal of Agricultural Sciences Volume 10 | Issue 2 | June, 2014 | 707-716 © e ISSN-0976-5670 | Visit us | www.researchjournal.co.in

RESEARCH PAPER

Correlation and regression analysis for rhizome yield and component characters in tikhur (*Curcuma angustifolia* Roxb.)

DEO SHANKAR*, S.S. RAO¹, R.S. NETAM, D.P. SINGH AND S.C. MUKHERJEE Shaheed Gundadhoor College of Agriculture and Research Station (I.G.K.V), Kumhrawand, Jagdalpur, BASTAR (C.G.) INDIA (Email : deo1975ram@gmail.com; metam@rediffmail.com, zare_igau@rediffmail.com)

Abstract : An investigation was conducted to analyze the correlation and regression in tikhur for rhizome yield and component characters. The experiment was conducted during *Kharif* seasons 2010-11 and 2011-12 at S.G. College of Agriculture and Research Station (IGKV), Jagdalpur, Bastar (C.G.). The experiment was laid out in Randomized Complete Block Design (RCBD) with 20 genotypes of tikhur with 3 replications. The genotypes were grown randomly in each replication in a total of 60 plots of $3.0 \text{ m} \times 2.4 \text{ m}$ each containing 60 plants per plot. Observations were recorded from ten randomly selected sample plants in each treatment and observed mean value used for statistical analysis. The results clearly indicated that the correlation co-efficients were influenced by environmental factors. However, some of the characters exhibited some extent of association and not much affected by environment. The improvement of total rhizome yield t/ha and weight of mother rhizome per plant can be possible by practicing individual selection for weight of primary finger rhizome per plant, number of primary finger rhizome per plant. Hence, these characters must be given importance for further improvement of their population.

Key Words : Tikhur, Correlation, Regression, Rhizome yield

View Point Article : Shankar, Deo, Rao, S.S., Netam, R.S., Singh, D.P. and Mukherjee, S.C. (2014). Correlation and regression analysis for rhizome yield and component characters in tikhur (*Curcuma angustifolia* Roxb.). *Internat. J. agric. Sci.*, **10** (2): 707-716.

Article History : Received : 06.12.2013; Revised : 25.04.2014; Accepted : 07.05.2014

* Author for correspondence ¹College of Agriculture and Regional Research Station (I.G.K.V.), Boirdadar, RAIGARH (C.G.) INDIA (Email : ssrao1959@yahoo.com)