GENETIC EVALUATION OF POLYCROSS HYBRIDS OF SWEET POTATOES [Ipomoea batatas (L.) LAM.]

P.C. Chaurasia* and Jitendra Singh

Department of Horticulture Indira Gandhi Krishi Vishwavidyalaya, Raipur (C.G.) *Corresponding author Email: pcsagri@yahoo.co.in

ABSTRACT: Sweet potato is an important staple crop in case of trible place. Evaluation of poly cross hybrids of sweet potato to identify tuber bearing progenies was conducted at Department of Horticulture, Indira Gandhi Krishi Vishwavidyalaya, Raipur, farm between march and April 2009. Sweet potato seeds were obtained from a polycross nursery of nine sweet potato clones adopted to Raipur. Nine hundred and eight seeds were scarified and sown out of 689 germinated and established seedlings 77 mature plants (11%) were selected as having the potential to produce tuberous roots. These selected progenies were advanced into these first clonal generations for further yield evaluation. The highest yielding half sib progeny was obtained from a hybrid parent Indira Madhur. Heritability values for tuber yield, tuber number and vine weight were 0.80, 0.62 and 0.10, respectively. Parental clones IGSP-C-15, IGSP-C-16 and I-9 showed good general system in improving sweet potato in the low lands of Raipur farm.

Keywords: Polycross hybrids, sweet potato.

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