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GENETIC IMPROVEMENTS IN MAIZE PRODUCTION

Dr Rampal Singh*

* Sanskriti University, Mathura, Uttar Pradesh, INDIA Email id: rampal.soa@sanskriti.edu.in

ABSTRACT

Maize is the third most significant crop of nation after rice and wheat and is grown round the year. Its grain is utilized as feed, food and industrial raw material. Enormous progress has been achieved over past six decades to increase yield potential via genetic improvement and relieve impacts owing to different biotic- and abiotic-stresses. This study provides an overview of methods pursued in genetic improvement of maize and evaluates their effect on productivity and output of the crop. Development of cultivars with tolerance to abiotic-stresses and resistance to diseases has been a key issue in maize development. Improved goods have been provided to farmers by both governmental and commercial sectors engaged in maize seed manufacturing and distribution. As a consequence, area under better cultivars has been growing steadily, and now about 65 percent of maize land is under improved cultivars (mainly hybrids) (mostly hybrids). Adoption of high-yielding cultivars, better production techniques and increasing demand of maize resulted in higher output and productivity. Future possibilities of maize production and development techniques in context of climate change and in ensuring nutritional security are also addressed in this study.

KEYWORDS: Crop, Germplasm, Genetic Improvement, Nutrition, Production.

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