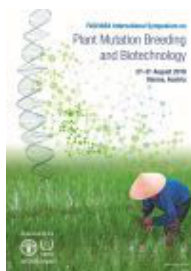


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MAIN RESULTS OF PLANT MUTATION INDUCTION FOR ABIOTIC STRESS IN CUBA

The effects of climate change have had an unfavourable impact on food production. Drought and high temperatures affect the production and supply of food to the population in Cuba. The development of new varieties tolerant to drought is an alternative that will be used to minimize the effects of climate change on food production and the induction of mutation has demonstrated its potential in this regard. Faced with this problem in the National Institute of Agricultural Sciences, an improvement program was developed that seeks to obtain new varieties of tomato, common bean and Hibiscus sabdariffa highly productive under conditions of drought and high temperature. Tomato seeds, common beans and Hibiscus sabdariffa were irradiated with different doses of ^{60}Co gamma rays. After four rounds of selection in the field, some genotypes with high yield potential under water supply and high temperature conditions were identified. The best genotypes were evaluated by farmers in different production areas. Three tomato mutants as well as three mutants of Hibiscus sabdariffa were released. Some advanced mutant lines of common bean tolerant to high temperature and drought were selected. Biochemistry and molecular evaluation of obtained mutants was performed.

Country or International Organization

Cuba

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