

COORDINATED LED TECHNOLOGY DEVELOPMENT FOR TROPICAL FRUIT CROPS IN INDIA

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ABSTRACT

The All India Coordinated Research Project on Fruits (AICRPF) of the Indian Council of Agricultural Research (ICAR) under the National Agricultural Research System (NARS) is a unique mechanism for testing and recommending location and need-based technologies depending on the agro-climatic conditions. This project provides a platform and opportunities to the scientists for exchanging ideas and materials for working on similar problems in different agro-ecological regions for collectively developing solutions. Currently, of the 50 centres in total, 43 centres (12 on Citrus, 13 on banana, 9 on papaya, 5 on jackfruit, and 4 on sapota) are working on tropical fruits.

Through this vast network, a total of 2102 germplasm accessions have been collected. More than 58 technologies encompassing improved varieties/hybrids, production technologies viz., efficient input use technologies, region specific nutrient and irrigation water requirement for different varieties, integration of organic and inorganic source of nutrients, use of biofertilizers, crop regulation, rejuvenation of old and senile orchards, and protection technologies have been recommended. Most of these are included in the Package of Practices of the respective State Agricultural Universities. Among the technologies, approximately 5–10% of varieties/hybrids and 25–30% of agro-techniques are being adopted by farmers in the respective states of India.

With these accomplishments, the project is planning to continue to conserve the germplasm of tropical fruit crops as a safety duplicate site for National Active Germplasm Sites (NAGS) coupled with augmentation of germplasm collection. It shall continuously support the notification of varieties/hybrids through multi-location trials (MLT), standardizing the suitable agro-techniques for improving the productivity of the tropical crops. Concisely, the paper covers the extent of progress made in increasing the national productivity of tropical fruits and the future plan to further strengthen the linkage between the inventor and extension wing of the NARS for the benefit of the farmers.

Keywords: tropical fruits, agro-techniques, banana, citrus, papaya, sapota, jackfruit