

# ‘Use new techniques to enhance agri production’

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**Kochi:** Employing new breeding techniques like gene editing for improvement of yield, grains and nutritional quality should be the way forward for enhancing agricultural production in the country, stressed experts while speaking at the various sessions related to ‘Frontier science and emerging genetic technologies’ at the 16th National Agricultural Science Congress in Kochi on Wednesday.

## 16TH AGRI-SCIENCE CONGRESS

“Even though genomics-assisted products have been developed and released in various crops, the pace of adoption is slow due to limitations with respect to infrastructure, trained manpower, funding and logistics,” said Indian Institute of Rice Research director R M Sundaram, while delivering a presentation on reshaping the rice genome to meet emerging challenges.

“Despite the significant progress in total food grain production, particularly rice production in the recent years, stagnating productivity (at 2.8 tonnes/ha) is a major area of concern in rice. One of the principal reasons for low productivity of rice in the country is

that most of the rice growing area is under adverse ecologies such as hills, saline soils, rainfed areas, acid soils, etc. Therefore, genome engineering of rice needs to be focused,” he said.

He said the emerging challenges of climate change, changing pest and disease scenario, grain quality and nutrition enhancement, and development of fertilizer use efficient cultivars, etc., require a roadmap and strategies for exploitation of the enormous genomics information.

“We have not increased our investment in research in public institutions to further our genomic research. The controversy over failure of BT-cotton is a case of not making the correct narrative. “The production of BT-cotton is still high, though there has been a small dip in the rainfed areas. If we had promoted BT varieties instead of BT-hybrid, it would have been a different story,” said Tata Institute of Social Sciences social scientist R Ramakumar.

Speaking to TOI, Ramkumar said Kerala will have to address the issue of crop production. “The state will have to aggregate the production. This could be done through its cooperative network. It will have to develop the food processing sector,” he said.