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CSIR labs to come up with new rice variety, anti-malaria drug

NBRI CIMAP CDRI

Lucknow: The CSIR-run laboratories will come up with some key consumer products over the next two years. These would include arsenic-free rice and anti-malarial drug.

The Council of Scientific and Industrial Research instruction (CSIR) has directed institutes coming under it to speed up research and introduce products and technologies that will benefit the people. CSIR's 'Fast track translation project' aims to provide immediate benefit to the society by delivering products in short period by 'completing the last mile from lab to market'.

Three CSIR-run institutes in Lucknow -- National Botanical Research Institute (NBRI), Central Institute of Medicinal and Aromatic Plants (CIMAP) and Central Drug Research Institute (CDRI) -- are working on such products and technologies.



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NBRI is working on arsenic-free rice variety, 'Muktashree', in collaboration with Rice Research Station, Chinsurah, West Bengal. This rice would be safe for human consumption even if grown in regions with poisonous elements in groundwater and soil. In addition, NBRI is also working on anacardic acid, a potential molecule that will increase cotton fibre yield and in turn, raise farmers' income. NBRI is also working on an opium poppy plant variety which will aid in manufacturing of life-saving drugs.

CIMAP will make its early mint technology available to farmers. It will aid in increasing productivity of menthol mint by about 30% along with cutting down production cost by 30%. The facility of Technology Business Incubation Centre (TBIC) for manufacturing of herbal products.

Meanwhile, CDRI is working on three different drugs that will provide treatment for osteoporosis, malaria blood clotting. All the three drugs are in final phase of completion.

http://timesofindia.indiatimes.com/city/lucknow/CSIR-labs-to-come-up-with-new-rice-variety-anti-malaria-drug/articleshow/52787614.cms

Info on changes to DNA to help design foods that fight diabetes, cancer

CSIR-CFTRI

CSIR-CFTRI (Council of Scientific & Industrial Research-Central Food Technological Research Institute) is now using the science of human epigenetics, which indicates chemical changes to the DNA, to design foods that would reduce ailments such as diabetes and cancer.

In this regard, the institute recently organised a day-long seminar under the aegis of department of biotechnology, New Delhi, where scientists deliberated on the role of diet in defining human epigenetics.

The key objective was to drive the development of designer foods that were created to suit specific individuals. It would enable prevent lifestyle disorders that are widely prevalent in the country today. Currently the Mysuru-based food institute major is getting the much needed knowhow from other research institutes in the country for this new initiative.

At the workshop, Prof. Ram Rajasekharan, director, CSIR-CFTRI, said that the key objective of the research and congregation of food scientists was to collate the knowledge available and establish linkages between diet and epigenomic changes.



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The main task is to develop foods to cater to specific disease conditions, and help people get personalised and healthy nutrition.

The scientists felt dietary factors may be among the many causes responsible for epigenomic changes. However, in India this area of research is still in early stages. The scientists also discussed issues related to identification of epigenomic modifications in various lifestyle diseases.

The scientists are now looking to comprehend the epigenome, which is a multitude of chemical compounds that can tell the genome what to do.

According to research reports, scientists continue to investigate the connection between the genome and the chemical compounds that modify it. Specifically, they are studying the effects of modifications on gene function, protein production, and human health.

There is an understanding that epigenetic changes could be attributed to some people afflicted by lifestyle disorders like diabetes and cancer.

http://www.fnbnews.com/Top-News/info-on-changes-to-dna-to-help-design-foods-that-fight-diabetes-cancer-39097

NIO scientist selected as ambassador of Germany based institute

CSIR-NIO

PANAJI: Dr Lata Gawade of the biological oceanography division, at the Goa-based national institute of oceanography (NIO) has been selected as ambassador for India, at the Leibniz -Zentrum for Marine Tropencology (ZMT), Germany.

ZMT is a centre for tropical marine ecology which supports capacity building within this field of research. This centre and ISATEC-Bremen Germany recently formed an alumni with the previous recipients of the ZMT fellowship. This fellowship was initiated in 2008.

Representing India, Dr Gawade is among the many other recipients of this fellowship from around the world who will be participating in the ambassador's meeting to be held in October at Bremen-Germany.

http://times of india. indiatimes. com/city/goa/NIO-scientist-selected-as-ambass ador-of-Germany-based-institute/articleshow/52780470.cms