

ICAR-CPCRI launches 'Kalpa Composite Flour', a coconut milk residue based food ingredient

The flour has three variants; it is made by mixing coconut milk residue with fibre enriched cereal and millet flours

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'Kalpa Composite Flour', a coconut milk residue based food ingredient launched by ICAR-CPCRI. | Photo Credit: K. Shyama Prasad

The Central Plantation Crops Research Institute (CPCRI), Kasaragod, under the Indian Council of Agricultural Research (ICAR), has come out with a new food ingredient, Kalpa Composite Flour, by mixing coconut milk residue (CMR) with fibre enriched cereal and millet flours.

CMR is generated during the industrial processing of virgin coconut oil and other coconut milk-based products. It is a fibre-rich and polyphenol-dense byproduct and primary an underutilised co-product of coconut.

K. Balachandra Hebbar, Director, ICAR-CPCRI, told *The Hindu* that the product was released during the World Coconut Day celebrations at the institute on Wednesday. He said Kalpa Composite Flour has three variants — CMR mixed with wheat flour, CMR combined with rice powder and CMR mixed with ragi and wheat flour.

Hima John, scientist, Physiology, Biochemistry, Harvest and Post Harvest Technology Division at the institute and who is a member of the team which developed the ingredient, said that CMR-wheat flour variant can be used for making chapathi, parota and flat bread, while CMR-rice powder variant can be used for making puttu. Cookies and confectionery products can be prepared using CMR-ragi and wheat flour variant, she said.

"Kalpa Composite Flour has a shelf life of three months and it enhances antioxidant activity when compared to the traditional cereal and millet flours," she said.

"The products (variants) represent a circular economy approach to coconut processing by converting a nutrient-rich byproduct into convenient functional food ingredient," Ms. John said.

She said 10% to 25% CMR can be incorporated based on consumer preference and the stability of the product.

"This innovation exemplifies sustainable coconut processing, value addition and circular utilisation of coconut resources, turning a processing by-product into a valuable food ingredient," Mr. Hebbar said.

Other scientists in the development team included M.R. Manikantan, Shameena Begum P. P., S.V. Ramesh, Alka Gupta, Shilpa S. Selvan, Murali Gopal in addition to Mr. Hebbar.

Commercial launch

Abhijnana Food Products Pvt. Ltd., Puttur, Dakshina Kannada, has made millet and ragi cookies, under the Nitya brand name, by purchasing the Kalpa Composite Flour technology of ICAR-CPCRI.

Its Managing Director Radhakrishna Ittigundi told *The Hindu* that the two products will be commercially launched within a few days. "We did not use any preservatives, tasting powder, colour while making the cookies. They are made with natural ingredients with butter and jaggery," he said.