

Sri Lankan Superfruit Drives Health And Economic Recovery

University of Jaffna



The University of Jaffna's technology transfer office partnered with Mullai Milk Processing Industry to add the bael yogurt drink to its portfolio of products.

After the end of a nearly three-decade civil war, the citizens of the Northern Province of Sri Lanka have been steadily rebuilding their local communities and economies. Specifically, they are working to improve the health of their citizens, while also helping the dairy industry return to pre-war levels of productivity.

To address the health and economic needs of the region, researchers at the University of Jaffna in Sri Lanka developed a yogurt drink flavored with bael fruit syrup that features the medicinal and therapeutic properties of bael fruit. The product was developed using natural bael fruit, while omitting artificial preservatives, colors and flavors.

Bael is a seasonal fruit found across South Asia. It has been recognized for its medical value for centuries by local populations, and recent studies have shown its nutritional benefits as a source of calcium, potassium, iron, and vitamins A, B, and C. When ripe, bael has astringent, laxative and restorative properties, among others. The fruit is also reported to contain phytochemicals associated with anti-cancer and anti-ulcer properties.

Food fortification, in which nutrients are added to readily available processed food products, is a strategy often used to address nutritional deficiencies across a population. Yogurt is a popular vehicle for food fortification—often with the addition of Vitamin D—because it does not require chewing, is generally tolerated by people who are sensitive to other sources of lactose and stays edible for longer than many other dairy products.

The yellow-green bael fruit is about the size of an orange but has a hard shell, gelatinous flesh and numerous hard seeds, which can make it difficult to eat out of hand; processing the fruit into juice, jam or syrup are popular ways of making the popular flavor and nutrients available to consumers. The bael tree is hardy, and can grow in almost any type of soil, but the fruit is harvested seasonally.

The university's tech transfer office, University Business Linkages Jaffna (UBL-Jaffna), worked with Mullai Milk Processing Industry (Mullia MPI), to add the new yogurt variety to its growing portfolio of products and made it available for licensing in 2022. The bael syrup yogurt was the first product to be licensed by UBL-Jaffna, and launching the product has started a new era of product-based research at the university.

Mullai MPI has provided job opportunities to rural, war-affected communities and war widows, improving their standard of living. Mullai MPI produces pasteurized milk, curd, yogurt, ghee and cottage cheese.

The bael syrup drinkable yogurt was officially launched for commercial sale in October 2022 at a celebration held at the University of Jaffna. The researchers and university personnel were joined by government officials, commercial representatives and other directors from industries in the province.

The drinkable yogurt is currently available in stores and supermarkets across Jaffna and is in high demand due to both the flavorful taste and the health benefits of the bael fruit.

The new yogurt variety was invented by S.Anand Kumarr, Susanthaa Piratheepan, S.Sivatharshan, and Sivajanani Thiruchchenthuran at the University of Jaffna Department of Animal Science.

This story was originally published in 2023.

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