

The Hidden Wealth of Neglected and Underutilized Crops

Malaysia is known throughout the world as a country rich with an abundance of unique flora and fauna. It's also increasingly well-known for its signature culinary arts. But for the urban Malaysian population, the access to this cultural diversity has narrowed as a result of the easing of access to foods containing high amounts of energy, fats, and sugar. Much has been highlighted about the country's high obesity rates in regard to both children and adults, that it is becoming a public health challenge which is getting a lot more difficult to combat. Chronic diseases, like high blood pressure and diabetes, are alarmingly on the rise, and are becoming more prevalent throughout the population, draining a significant portion of the country's economy. There have been increasing calls to return to a more wholesome, nutritionally sound diet which would incorporate locally sourced vegetables and fruits.

Forgotten or neglected and underutilized crop species (NUCS) are species that have fallen under the radar of mainstream research and development, which typically focuses on just a few staple crops - rice, wheat, and maize. The lack of attention on NUCS means their potential value is often underestimated. This in turn leads to their marginalization, reduced use, and ultimate disappearance from the market and our tables. These wild edibles tend to possess a much lower calorie and glycaemic index compared to commercially cultivated vegetables, thereby offsetting the negative effects of both malnutrition and obesity. They are micronutrient rich and very adaptable to various climate conditions, and re-



REDISCOVERING HIDDEN TREASURES

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quire very little attention for them to thrive. The high fiber content and antioxidant activity found in these plants help consumers fulfil their satiety, thus reducing unnecessary eating and preventing blood sugar spikes, while also decreasing the risk of cardiovascular disease. Studies done on traditional Malaysian vegetables show that they have higher iron, vitamin D, and calcium content, and are in many ways superior to cultivated vegetables.

Rural populations of the world are the primary consumers and agents of preservation for NUCS. This can be observed in the Orang Asli, also known as the Aboriginal People, a term used to describe the indigenous people found in Malaysia, who to a certain degree still rely on jungle resources, such as mountain rice, maize, tubers, sweet potato, ferns, herbs, vegetables, and taro for their income and sustenance. These foods represent cultural pillars within distinct eco-cultural landscapes. They are central to livelihoods and age-old traditions that bring cultural groups together around food cultivation, production, and eating.

In spite of this re-emergent knowledge, not many are keen to jump on this bandwagon, and those with the means to do so would rather rely on pills and supplements to enhance their diet. The lingering lack of interest, and the uninformed, poor-man stigma associated with these crops have pushed the younger generation further away, and has caused many of these heritage foods to be slowly forgotten.

An immediate problem, however, is that many of these underutilized plant species are slowly becoming extinct due to massive deforestation that paves way for further development. With the effects of climate change becoming more ubiquitous in the

world, there is a timely obligation to find plants that are resilient and can withstand the harsh changes we face, and may even provide a role in further protecting the environment. The growing unease over the matter of food security in the world is the result of a maturing realization that the genetic base of most human caloric intake from plants is dangerously narrow. Despite being one of the twelve 'megadiverse' countries in the world and having 15,000 species of vegetable plants available, only 300 species that are indigenous to the country have been used as food throughout this regions history.

A concept known as soft survival is slowly starting to find appreciation, in which there is a recognition that indigenous people (the Orang Asli) are gatekeepers of the traditional knowledge which encompasses foraging, cooking, and how to live harmoniously with the environment in order to outlast the harsh conditions of an urbanized society. The diversity observed in wild edibles and food supplies embodies the base of heterogeneity that is needed to negate the deleterious effects brought about by commercial food, reducing hidden hunger issues and imparting nutrients, taste, and texture frequently absent from repetitive carb-rich diets typical of altered diets. Many universally beneficial opportunities exist for these plants to impart a nutrient rich diet to support holistic health among the urban populations, as well as to safeguard the loss of knowledge, and to ease the dietary transitions that many around the world may experience in the 21st century. Given the common threads linking food, health, and environmental wellbeing in traditional and urban societies, there is no better time than now to remember and restore indigenous plants. ■