



ULAM

Regenerative Edible Flora from Southeast Asia

15 recipes from Malaysia, Cambodia and Vietnam

Edited by - Eric Olmedo

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Preface

Preface

*Distinguished Prof. Datuk Dr.
Shamsul Amri Baharuddin*

On the 24th of May, 2019, in Rome, Italy, took place an important event that remained quite unnoticed until this day: the meeting of the *Caritas Internationalis'* General Assembly. Caritas Internationalis is a confederation of Catholic relief, development and social service organisations, whose mission is to "serve the poor and promote charity and justice throughout the world". On that day in Rome, Caritas Internationalis welcomed a special guest: José Graziano da Silva, Director-General of the FAO (the Food and Agriculture Organisation of the United Nations). Under the roof of the Hotel Ergife, Mr da Silva uttered a simple but powerful statement: "Focusing only on producing more food is not enough, it is also crucial to produce food, that is healthy and nutritious in a way that preserves the environment." He also stressed that "Nourishing people must go hand in hand with nurturing the planet".

The FAO Director-general's statement echoes the general precepts of UNESCO's seventeen Sustainable Development Goals (SDG), and more specifically, goals No. 2 (zero hunger) and goal No. 3 (good health and well-being). It is in line with this vision that a UNESCO chair was established in October 2019 at the National University in Malaysia: its mission is to study "Social practices in Intercultural Communication and Social Cohesion". One of the main action research clusters of our chair bears a specific objective: diminishing marginalisation of ethnic minorities through short food supplies chains, which connects with another UNESCO SDG (SDG No. 10 "reduced inequalities"). It is with the FAO director-general's words in minds and these three SDGs in our visor that the Ulam School Project was born. "Ulam" is a Malay word that refers to local edible flora.

Our goal with the Ulam School Project is simple: help fighting the "hidden hunger" (enough calories but lack of nutrients) through promoting cross-border discovery of the botanical and culinary resources in our Malaysia, Vietnam and Cambodia through frontier fieldwork. The fieldwork conducted by our respective teams in those three countries taught us that the gatekeepers of Ulam are often indigenous communities, which are categorized as "ethnic minorities" by their respective governments.

Respect of indigenous plant food knowledge provided the foundation for the fifteen innovative food and recipes presented in this digital book: these recipes are contemporary

and attractive while still cognizant of history. It is a must-read and a “must-cook” piece of responsible culinary literature.

Last but not least, we would like to express our deepest gratitude to the Toyota Foundation, which sponsored the making of this unique cookbook.



Distinguished Prof. Datuk Dr. Shamsul Amri Baharuddin, FASc.
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Image source: gettyimage

Introduction

Introduction

by Eric Olmedo

Cuisines system associated with the Western part of the world often include dishes categorised as salads; ingredients such as raw greens, fruits, and cooked vegetables are tossed together, served as an appetizer, side dish or even as a main meal, occasionally garnished with animal-based proteins such as chicken, beef or fish.

Similarly, in Southeast Asia, cuisines are found to also have their own versions of salad. In Malaysia, ethnic Malays label these as *ulam*. According to Wan Hassan (Hassan, 2010), "*Ulam* is a Malay word for any vegetable that is eaten raw, blanched or lightly boiled, and eaten with rice". Ethnic Malays enjoyed (*ulam*) for generations; so did the Orang Asli (aborigines from Peninsular Malaysia) and the Peranakan communities (historically creolised communities that prospered in the straits settlements of Peninsular Malaysia before and during colonial era; similar social groups can be found throughout the Malay archipelago). The word *ulam* also exists in Hebrew ("אולם") referring to a "hall", an "auditorium", "vestibule" or a "porch", as in "Solomon's Portico" in the ancient Temple of Herod in Jerusalem. In Tagalog, the official language of the Philippines, *Ulam* relates to the main dish accompanying rice.

In this book, we understand the word *ulam* as a Malay idiom, referring to "salad greens" consisting of shoots, fruits, stems, flowers, roots and leaves of naturalized or native plants incorporated as part of an indigenous traditional diet.

In Southeast Asia, children, teenagers and young adults are seen to consume more of the imported varieties of vegetable such as broccoli, carrots and Western lettuces; partially popularised by the "superfoods trend" (Sygo, 2014). Much of the selections mentioned often comes with higher price tags due to factors like land area requirements, transportation, agri-chemicals and fertilizers. On the contrary, naturalized or native *ulam* greens often requires less care and space, blending into urban landscapes in the shape of trees and shrubs; even as potted plants around the house (Hassan, 2010).

Indigenous plant-based meals have provided for healthy dietary options for many indigenous communities in the past and present. These greens are sourced from local flora, and of course, termed differently across countries: 'chi' in Khmer, 'rau', in Vietnamese and 'ulam' in Malay; these generic words encompass all sorts of greens served raw or blanched, having been a staple component

of healthy nutrition in traditional diets of people across Southeast Asia's hinterland.

In order not to burden our readers' mind; and because our research institute is based in Malaysia, we decided to use the word '*Ulam*' transnationally across the three countries for the sake of this book.

Different countries, different issues

In **Malaysia**, rapid urbanisation (about 77% in 2019 – Source: World Bank) and industrialisation have progressively led to a disconnection between nature and culture. In peninsular Malaysia where about 5.64 million hectares are dedicated to palm oil plantations (source: FAO, 2019), remaining forest areas are contained as national parks or reservation lands with regulated access, contributing to museification of local biotope and further disconnection with edible wild plants for young urban generations. Some indigenous Orang Asli (aborigines) communities still live close to local flora, and practice hunting and gathering lifestyles, standing as guardians of forgotten botanical knowledge.

Vietnam has one of the highest population densities in the world, clustering its heaviest in the Mekong Delta region. While the national low urbanization rate (35.9% in 2019 – Source: World Bank) allows familiarization with farmed vegetables, central planning of agriculture policies and transition to more industrial and market-based economy increase the risk of alienating ethnic Kinh (Viet) people (85.7% of Vietnam population) with Rau (Vietnamese *Ulam*; Rau thorn referring more specifically to herbs), while

ethnic minorities such as Hmong and Jarai social groups still possess this knowledge.

For the indigenous communities such as the Hmong, Krung, and Jarai spread across the border in **Cambodia**, their knowledge of local flora is under threat due to declining interest among the younger generation and encroachment by agro-industries. The availability of Chi (Cambodian *Ulam*) for urban dwellers, meanwhile, is curtailed by the dependence on imported vegetables and fear of pesticide residue.

Ulam: the real superfood of Southeast Asia

The Asian Vegetable Research and Development Center (AVRDC) has been analysing nutritional constituents of vegetables from around the globe; only to find that "traditional plants" (native or naturalised plants that grow locally) possess much higher nutritional content such as vitamins A, C, E, folates, iron, calcium and antioxidant than imported ones (Yang and Keding, 2009). These findings further position the case that micronutrient-rich traditional plants should be brought back to present day diets to enhance the vitamins and minerals status among the population (Kahane et al, 2012).

Ulam 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 (Darkwa and Darkwa, 2013). The high fibre content found in these plants help consumers fulfil their satiety, thus reducing unnecessary eating and also prevents blood sugar spikes. The high antioxidant activity of these plants has also been interlinked with a decreased risk of

cardiovascular disease (Keatinge et al., 2010). Studies conducted on traditional Malaysian vegetables show that they have higher iron, Vitamin D and calcium content compared to cultivated vegetables. Here below are some potent examples of *Ulam* that can be found in Malaysia:

Gajus, (Cashew nuts' leaves) for the red and yellow varieties, shows very high antioxidant activities, potentially contributing to lower the risk of chronic diseases;

Kacang botol (winged beans), *beluntas*, *bebuas*, and yellow velvet leaf all demonstrate good antimicrobial activities. Winged beans display the highest free radical scavenging activity (meaning it may help fight chronic diseases like cancer); *Ulam Raja* is not the 'King' of edible plants for nothing: it bears anti-diabetic properties, reduces blood pressure, promotes bone formation, and displays anti-inflammatory and antimicrobial activities.

Western prescriptions of healthy meals have struggled to achieve a lasting health impact due to the dissimilarity with local palates and reliance on expensive international macro-vegetables (such as tomato, lettuce, and bell pepper). Southeast Asian foods that have long been optimized to balance nutrition and to use local ingredients can be easily crowded out by simple-and-quick Western salads and baked meals, which are often presented as the modern alternative to local cuisine.

The Ulam Cookbook Project

It would be of course unrealistic to expect a return to the old ways of balanced traditional foods. Instead, the 'Ulam Cookbook Project'

seeks to re-imagine traditional vegetables as ingredients for contemporary foods. The fifteen recipes presented in this book endeavoured revisiting *Ulam* to make it palatable for urban dwellers, while acknowledging traditions and preserving the micro-nutrients contained in this regenerative edible flora of Southeast Asia.

These recipes are twice original: first, the selected ulam as base-ingredients were identified and collected during the fieldworks conducted by our multidisciplinary teams comprising sociologists, anthropologists, ethnobotanists, educationists and chefs throughout various natural sites in Malaysia, Vietnam and Cambodia. Second, our Chefs designed recipes that stem from their own imagination, drawing from indigenous knowledge system, yet enriching their culinary creativity process with inputs from ethnobotany and nutrition.

Enjoy cooking these dishes and eating them: not only will you be taking good care of your own health, but you will help preserving the environment and pay tribute to the gatekeepers of *Ulam* who have much to teach us.

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Eric Olmedo is a sociologist by training. He is currently a Principal Research Fellow at the Institute of Ethnic Studies (KITA), *Universiti Kebangsaan Malaysia* (UKM) - the National University of Malaysia, where he leads the “Ethnicity and Food” Research Cluster.

He is listed as an expert in workforce development and capacity building for tourism and hospitality industry sectors by various international agencies; as such he has led fieldwork missions on behalf of the French Development Agency, the African Development Bank and the World Bank. These missions took him across Europe, South Africa as well as Central and Southeast Asia.

Eric Olmedo is also the founder of the Asia-Pacific Food Studies Network (APFSN). In 2018, The Toyota Foundation awarded him an action-research grant through competitive bidding. The grant relates to a transnational food education project encompassing Malaysia, Cambodia and Vietnam. Deemed as an expert in sustainable food systems, Eric Olmedo was invited to the UNESCO World Forum on “Culture and Food: Innovative Strategies for Sustainable Development” where he contributed to the UNESCO Parma Declaration dated 13 September 2019.



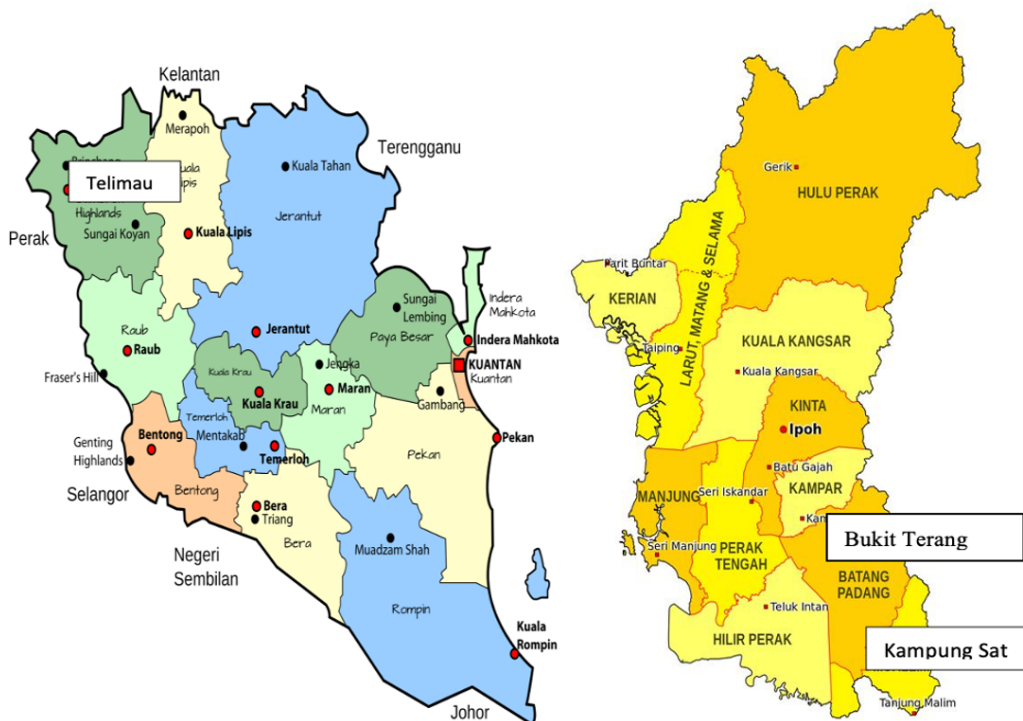
Image by: Susan Koo

Malaysia

Safeguarding Ulam in Malaysia: Gatekeepers, Curators, and Stewards of The Land

Rachel Thomas Tharmabalan went on a quest to locate lesser known ulam in Western Malaysia. She had made up her mind to work together with the “First People” of Malaysia, termed locally as *Orang Asli* (“original people”). Orang Asli were classified by British colonial census as aborigines (people who have inhabited the land from the earliest times). In the colonial census, Orang Asli had been divided into three main groups: The *Semang* (formerly called *Negritos*), the *Senoi* and the Proto-Malays. This broad classification remains in use today. Each of these main categories is divided into six sub-ethnic groups. Rachel chose to focus on the Semai social group, which is a sub-division of the Senoi people. The Semai live mostly in the states of Perak and Pahang, where Rachel did her fieldwork. She set her sight on three Semai settlements: Telimau in Pahang state, and Bukit Terang as well as Kampung Sat in Perak state. See map here below.

Figure 1. Visited Semai settlements in the Malay Peninsula



Telimau settlement is a relatively modern village due to agricultural development. Bukit Terang is considered as jungle fringe settlement but access remains relatively easy. The most remote of the three Semai settlements is without a doubt Kampung Sat, which is

located in the interior of the jungle. Rachel spent a considerable amount of time in these three locations, establishing trust and then learning about their way of life, cosmology and hunting-gathering techniques. She accompanied some of them for a few foraging trips into the jungle, and then discussed with the village headman, the traditional healer, and other knowledgeable members of the Semai community about oral tradition associated with the plants, like adequate culinary preparations and medicinal properties. Wild edible plants (ulam) were collected after these interviews sessions. Rachel made her selection according to the frequency of consumption, as well as the degree of importance particular ulam may play in the Semai's lives.



A Semai settlement at the fringe of the forest

Rachel likes to quote this story from the field as a typical narrative that led her to make choices when it comes to collect ulam. In one of the settlements, a Semai woman aged 35, shared the following story about her grandmother:

"When my grandmother was diagnosed with high blood pressure 15 years ago, the visiting Medical Doctor prescribed her medications to treat her ailment. She refused to ingest western medications and started consuming Meranti soup at least 4-5 times a week. In her next scheduled visit at the clinic, the Doctor was surprised at the readings obtained. It wasn't as high as before".

In this cookbook, the reader will be happy to find the exact recipe of the Meranti soup that contributed to heal this lady's grandmother. For that particular dish, Tan Kean Buan decided to leave the original recipe untouched, in order for the consumers to benefit from the medicinal properties shared with us by the Semai community, and for which we are forever grateful.



On a fishing trip



Preparing dinner

Two of the five recipes presented in the Malaysian chapter are authentic Semai recipes: the *Meranti soup* (*solanum nigrum*) and the *Pama* (*Gomphandra quadrifida*) - based recipe. *Pama* is consumed by pregnant women and frequently prepared for children. According to another member of the Semai community, whom has helped delivering countless of babies in the settlement, it helps boost up energy levels especially after a woman gives birth and also speeds up the recovery process. Apart from that, the leaves of *Gomphandra quadrifida* are useful in treating boils, abscesses and ulcers fast and effectively.

The other food recipe ("Turi leaves and & Sweet Potato Cooked in Coconut Milk") relates more to countryside Malay fare, but has been revisited for urban palates. Turi (*sesbania grandiflora*) is sometimes known as vegetable hummingbird or hummingbird tree in English. The plant has many medicinal uses: sprains, bruises, swellings, rheumatism, itching, diarrhea, colic, dysentery, diabetes, fever, sinus congestion, and malaria.

Chef Tan holding leaves of Tenggek Burung (*Melicope ptelefolia*) in his home garden in Subang Jaya, Malaysia. The plant is used as medicine to treat high blood pressure, reduces fatigue, improve blood circulation and relieve body stamina. Ethnic Malays consume it as Ulam.



The **beverage recipe** ("Iced Belimbing Bulu and Pegaga") is a total creation by Chef Tan, who believes that refreshing and healthy drinks should also taste good without any sugar or sweetener addition. For the record, his daughters love this drink!

The last recipe, "*Nasi Ulam*", is a traditional *Peranakan* culinary icon.

The term "Peranakan" is a Malay idiom signifying "Children of". The word refers to the descendants of interethnic marriages between local (Malay and others) wives and foreigners (traders), dating back in certain cases as far as the Melaka Sultanate period, at the beginning of the fifteenth century. The foreign traders could be either Chinese, Indian, or Arabic/Persian, or even European (whether the latter should be incorporated into the Peranakan category is a matter for debate). In reality, not all Peranakan are descendants of interethnic marriages, or else the identity of the one Malay ancestor has been lost in time. The outlook on Peranakan identity for most Peranakan-Chinese differs somehow, as they would rather interpret the term "Peranakan" as being "born overseas", in contrast with being born in mainland China.

Peranakan culture remains nonetheless a creolised culture in the sense that their ethnic Chinese traditions (mostly derived from the dialectal Hokkien social group, originating from Fujian province in Southern China) borrow from Malay cultural traits, rituals and language. Peranakan Chinese speak Baba Malay (a Malay patois), wear *sarong* and cook a sophisticated cuisine that used to reflect their wealthy Bourgeois status at the time of their glory, in the Straits Settlements of Malaya.

David Hock Jin Neo is a Peranakan-Chinese himself; his family originates from Melaka, in the South of the Malaysian Peninsula.

As both a scholar and amateur cook having Peranakan culinary heritage at heart, David prepared for us an iconic Baba-Nyonya (Peranakan-Chinese from the old Straits Settlements of Malaya, including Singapore) dish entitled "*Nasi Ulam*". Nasi means "cooked rice" in Malay; and Ulam: well... you already know.



Filming David making Nasi Ulam in a Peranakan-Chinese kitchen

As per many Peranakan dishes, making *Nasi Ulam* is time-consuming. Bear in mind that it used to be prepared by a whole crew of housewives and maids in the big mansions of the wealthy Peranakan merchants in days of old. Tacit culinary competition – or least comparisons – between *Baba-Nyonya* (the term *Baba* equates to man or father, while the word *nyonya*, refers to the lady of the house; the term *Nyonya* derives from the Portuguese *dona*) households were commonly taking place. One of the usual quality measurements metric would be the number of different ulam used to for the dish. The more the better, and higher the social status...

Nasi Ulam is not only a very comforting and healthy dish but it is also the creolised dish *par excellence*, mixing Chinese-style white rice cooked in Peranakan kitchenware, and tossed with seafood and raw ulam greens; in other words... the culture of mainland China connecting with the host society's nature goodness, tied together by the produce of the sea, as a metaphor of the merchants' life journey. A good dish to nurture your adventurer's soul.



*About
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Rachel Thomas Tharmabalan is a Lecturer in the School of Hospitality at Sunway University, Malaysia. She holds a master's degree in food technology from Universiti Sains Malaysia and is currently finalising her PhD. Her research interests revolve around nutrition and well-being, revitalization of traditional food and forgotten crops.



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Tan Kean Buan is a lecturer at INTI College, Subang Jaya, Malaysia. A Chef by training, he joined academia after many years of experience overseas. His interest is in creating awareness about the health risks of dining out and the benefits of enjoying home-cooked meals, prepared with local and natural ingredients.



David H.J. Neo
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David H.J. Neo lectures at the Faculty of Film, Theatre and Animation of Universiti Teknologi MARA, Puncak Perdana, Malaysia. He holds a PhD in Cinema Studies from La Trobe University, Melbourne. Since his return to Asia, he has focused his research on Peranakan cultures and cuisines of Southeast Asia, being a member of this community himself as well as an amateur cook.





Meranti in Anchovy & Turmeric Broth

Name of the core ingredient: **Meranti**

Botanical name: ***Solanum nodiflorum***

Other name in English: ***White Nightshade, Glossy Nightshade***

Widely grown in Malaysia, Singapore, Australia and New Zealand, this plant is constantly mixed up with another of its family, the *Solanum Americanum*. As with its Solanaceae family, most parts of the plant contain the toxins of glycoalkaloid solanine and related compounds. The unripe, green fruits are known to contain significantly higher quantities of solanine and hence are considered poisonous and should not be eaten. The ripe fruits however, have very much lower amounts of such compounds, thus are eaten by various ethnic groups of people where this plant is found.

Traditional Usage:

Locally known as sayur meranti, or sayur ranti, the tender shoots and leaves are cooked as a vegetable. Considered a forage food or village greens, it wilts very easily once picked, and easily turns mushy if kept too moist in an attempt to keep them from wilting. It is a popular local vegetable and the bitterness of the vegetable is highly sought after as it is said to contain medicinal values.

Health Benefits:

This plant is considered to be medicinal by many ethnic groups. It is widely used as a vermifuge (an agent that destroys or expels parasitic worms) and febrifuge (used to reduce fever) in Africa. The Chinese consider the plant as anti-inflammatory, heat dissipating, blood stasis dissipating and promoting subsidence of swelling.

Other uses include:

High blood pressure: Locals tend to use this plant as a traditional cure for high blood pressure, but some caution its use by people with hypertensive condition. This is because the plant contains various alkaloids that may affect the way the body naturally corrects blood pressure.

Appetite Stimulator: Those people wanting to gain weight or have lost the mood to eat, the fruits and leaves of this plant are cooked with coconut milk, and fermented fish (pekasam) to stimulate and encourage appetite.



- Category: Food
- Time Needed: 45 minutes

Instructions:

1. De-stem meranti leaves and wash to remove soil
2. Soak anchovies to rehydrate, drain excess water
3. Blend shallots, garlic, turmeric and anchovies to a smooth paste (or pound with mortar and pestle)
4. Heat about 2 tablespoons of cooking oil in a pan and saute the ground ingredients until fragrant
5. Add water to simmer for a few minutes
6. Add the meranti leaves, seasoning with salt. Stir to evenly cook the leaves. Serve hot with rice.

Ingredients:

- 200 grams** Meranti Leaves
- 100 grams** Water
- 4 grams** Salt
- 2 Tbls** Cooking oil

Pounded Ingredients

- 20 grams** Shallots
- 8 grams** Garlic
- 6 grams** Turmeric
- 15 grams** Dried Anchovies

Tips

- Anchovies may be substituted with dried shrimps, and prepared the same way.
- Amount of water may be lessened for a drier dish.



Turi leaves

Turi Leaves & Sweet Potato in Coconut Milk Broth

Name of the core ingredient: *Turi, Geti*

Botanical name: *Sesbania grandiflora*

Other name in English: *Vegetable Hummingbird*

The turi tree is a fast-growing slender tree, reaching a height of 5-10m. It has a life span of about 20 years. It has sparse branches, with long pinnate leaves, each holding about 35-60 leaflets. This tree is native to tropical Asia, but naturalised in the American tropics. It grows in the moist tropics with very short, dry seasons. It can be found mainly in India, Sri Lanka and parts of Australia where it is grown on a plantation scale for food, forage and green manure, while in Malaysia, it is grown in backyard gardens, particularly in Indian homes.

Traditional Usage:

It is indigenous from the South East Asia (Malaysia, Philippines, Brunei), to Northern Australia, and is also cultivated in many parts of India and Sri Lanka. It has many traditional uses, and many health benefits. Among them are to reduce heat loss (antipyretic), with uses as laxative, astringent, vomiting stimulant, and tonic. The leaves are utilitarian and are used to dilute blood clots, relieve pain, as a laxative and a diuretic.

Health Benefits:

Childbirth: Usually, the body temperature of the mother will rise after childbirth. Therefore, these leaves are used to bring the temperature down and cool down the body. About a large handful of leaves are cleaned thoroughly, and then mashed into a paste. The paste is then boiled with about 1/3 cup of water and a pinch of salt. Once cooled, the concoction is then strained and drunk.

Dysentery and bloody diarrhoea: The turi blossoms are used here to counter this illness. A handful of flowers are stripped to their inner red trunks. They are then boiled with 2 cups of water, to reduce until the water is left about a cup. Cool and strain. This potion is to be drink twice a day.

Vaginal discharge: Women suffering from this problem is encouraged to drink a concoction comprising of the turi leaves and turmeric, all milled till fine and then boiled.

Swollen finger: If the finger is swollen due to an injury, the turi leaves are used to calm the inflammation. A handful of leaves are washed, and then mashed smooth into a little paste, added with a bit of water. The paste is then dabbed onto the injured area, and then covered with a cloth. This will be done 3 times a day until the swelling is reduced. This can also be done with an injured fingernail, where the blood has clot on the nail bed, under the nail.

Headache, with running nose: As before, the turi leaves and flowers are used to alleviate this. A handful of the plant is washed clean and mashed into a fine paste. It is then boiled with ½ cup of water and a pinch of salt. The tea is then strained and drunk twice a day to help calm the headache and to stop the flu.

Sore Throat: A handful of the turi leaves are simmered in 3 cups of water. Once cooled, the tea is strained, and then used to gargle. This can be done four times a day to sooth the throat.



- Category: Food
- Time Needed: 45 minutes

Instructions:

1. Presoak the dried shrimp and anchovies to rehydrate
2. Drain excess water from shrimp and anchovies and blend or pound with the rest of the ground ingredients into a smooth paste
3. Blend the grated coconut and hot water and press through a sieve to extract the coconut milk
4. In a pot, simmer the milk, ground ingredients and crushed lemongrass
5. Add in the potatoes and cover with a lid, simmer gently stirring occasionally until potatoes are just cooked
6. Add the turi leaves and a little salt to taste
7. Stir to evenly cooked the leaves
8. Serve immediately while dish is still hot as accompaniment to white rice.

Tips

- Lightly smash the lemongrass to release oil for flavours and aroma.
- Potatoes are cut in chunks or wedges.

Ingredients:

Main Ingredients

200 grams	Turi Leaves
350 grams	Orange Sweet Potatoes
200 grams	Grated Coconut
300 grams	Hot Water
1 stalk	Lemon Grass
	Salt to taste

Ground Ingredients

50 grams	Shallots
15 grams	Garlic
25 grams	Fresh Turmeric
20 grams	Dried Prawns
40 grams	Dried Anchovies
40 grams	Fresh Red Chili



Image by: sambalhitampahang.com

Pokok Belimbing Buluh
"Cucumber tree"

Iced Belimbing Buluh & Pegaga

Name of the core ingredient: ***Belimbing buluh***

Botanical name: ***Averrhoa bilimbi***

Other name in English: ***Cucumber tree***

Native to Malaysia, the belimbing buluh has spread widely to the rest of Southeast Asia, India, Sri Lanka, Myanmar, Africa, Australia and South America. It prefers an evenly distributed rainfall for most of the year, with 2-3 months of dry season. It requires full sunshine, and growth is inhibited under shady conditions. The plant thrives on rich, moist, well-drained soil, and can also grow and fruit quite well on sandy soil enriched with organic matter.

Traditional Usage:

The fruit of this plant is eaten raw as ulam, usually dipped in appropriate sauces to lessen the acidic taste. It is also cooked in curries to lend a sour taste.

Heat Reduction: The fruit is also used to reduce fever and body temperature. Firstly, it is mixed with pepper and eaten to induce perspiration. Then, a paste of the pickled fruit is applied over the whole body to help regain normal strength after a long bout of prolonged fever.

Health Benefits:

This fruit is used traditionally to soften the facial skin and to get rid of acne. It produces vitamin C, that is also used as a medicine for canker sores and bleeding gums.

Other uses include:

Digestion Aid: The fruit is used to stimulate appetite, and the sour elements help aid digestion, as well as to help difficult bowel movements.

Skin clarifying Aid: The fruit helps to detoxify the skin, and acts as a naturally cleanser. It is also used to lessen the oil production in the skin, and to eliminate acne and pimples. The fruit may be eaten or used externally on the skin in the form of a poultice or mashed, and applied directly on the itch, swelling of mumps, rheumatism, and pimples.



- Category: Food
- Time Needed: 45 minutes

Method:

1. Wash both belimbing and pegaga
2. De-stem the pegaga leaves
3. Place all ingredients into an ice-blender and blend to a smooth texture
4. Served chilled, adjusting taste with more honey if necessary to offset sourness

Ingredients:

60 grams	<u>Pegaga Leaves</u>
330 grams	<u>Belimbing Buluh</u>
4 grams	<u>Salt</u>
30 grams	<u>Honey</u>
300 grams	<u>Ice Cubes</u>
300 grams	<u>Cold Water</u>

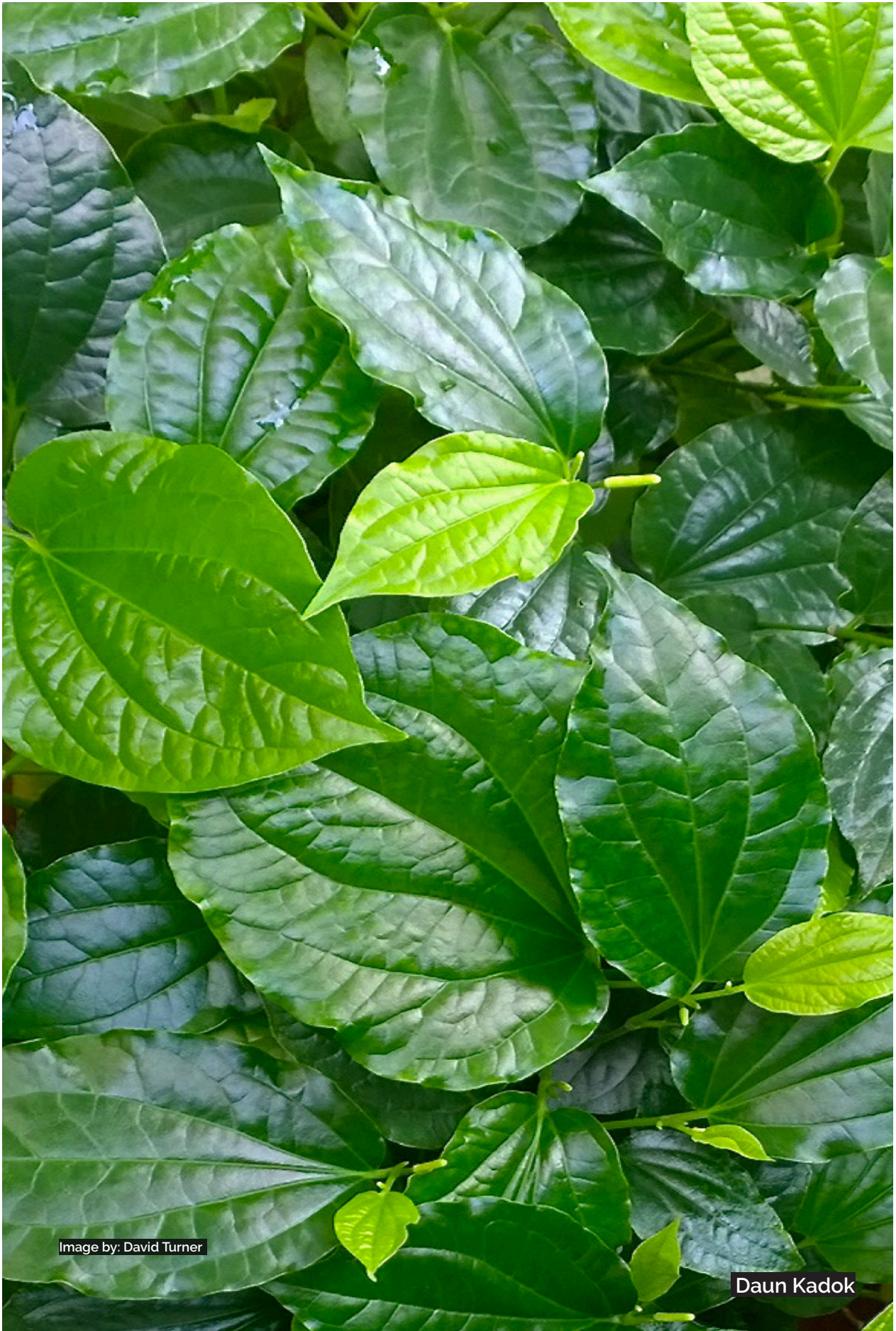


Image by: David Turner

Daun Kadok

Seafood Scented Pepper Leaf Broth

(an off-road inspiration from Nyonya Heritage's Perut Ikan)

Name of the core ingredient: **Kadok**

Botanical name: ***Piper sarmentosum***

Other name in English: **Wild Pepper Leaf**

Vietnamese name: **La Lot**

The kaduk plant is a ground creeper with long stems that root at the nodes. Its leaves are bright green, tender, and has longish heart shapes with 5-7 distinct veins. The flower is a short, erect, white spike with many tiny blooms. Fruits are berries that ripen deep purple. This plant can be found from the tropical areas of Southeast Asia, Northeast India and South China, and as far as the Andaman Islands. It grows very well without the sun, in the shade, and prefers a hot and humid climate all day and night long. It needs a moderate amount of water, as it is prone to root rot and yellowing leaves. However, if it does not have enough water, the leaves will look weak and droopy. It survives well in sandy and poor soils, with very infrequent fertilisation.

Traditional Usage:

The dried ripened flower is used as a spice. The leaves taste slightly bitter, and has a faint pepper smell. Sometimes, food is wrapped in the leaves and eaten, with leaf intact. It is widely used in traditional medicine as chemical analysis has shown that the leaves contain the antioxidant naringenin, while the fruit contains anti-tuberculosis and anti-plasmodial elements.

Health Benefits:

In Malaysian and Singaporean traditional medicine, the leaves are boiled in water and taken to relieve fever in malaria, and also to treat coughs, flu and rheumatism. The decoction is applied as a body rub for general weakness and pain in the bones. The leaves are pounded and used as a poultice for headache, and applied to the throat for coughs. The leaves may also used in embrocation for skin discolouration.

Other uses include:

Diuretic: The juice of the leaves are blended with sweetened milk, which helps to stimulate urination. It is also helpful in the maintenance of water levels in the body.

Colic: A quick cure for colic, the leaves are spread with castor oil, gently warmed and put on the stomach of the new-born child. This will quickly reduce the spasms and soothe away the pain from the agony of colic.

Lactation stimulation: Consumption of these leaves on its own after meal times at night is advised and encouraged for lactating moms as it helps to stimulate a heavier load of lactation.

Other oral treatments: For persistent coughs and asthma, the roots are mixed with betel nut and chewed, while the juice is swallowed. For toothaches, they are chewed with ginger, and can also keep bad breath at bay whilst fortifying the gums and avoiding tooth decay.



- Category: Food
- Time Needed: 45 minutes

Instructions:

1. Pre-soak dried chili (cut into pieces) to rehydrate. Pound with the rest of the ingredients
2. Place water and pounded ingredients into a soup pot, simmer until aromatic
3. Finely shred the daun kadok and kafir lime leaves
4. Cut brinjal, pineapple and long beans into 1 cm batons
5. Shell the body of the prawns, leaving the head and tail intact. Devein.
6. Add the brinjal, pineapple and long beans to the broth. Simmer until ingredients are tender
7. Add the finely shredded leaves and also the kesum leaves
8. Cook for about another 10 minutes to infuse flavors
9. Season the broth with fish sauce, adjust the seasoning if necessary.
10. Add in the coconut milk and prawns, cook for about 4 minutes or until prawns are just cooked
11. Serve hot, may be eaten as is or with rice or rice noodles

Ingredients:

Pounded Ingredients

35 grams	Shallots
20 grams	Red Chilli
15 grams	Lemongrass
35 grams	Bunga Kantan (torch ginger)
20 grams	Dried Chilli
12 grams	Shrimp Paste

Garnish

100 grams	Daun Kadok (Pepper Leaf)
2 grams	Kafir Lime Leaves
40 grams	Daun Kesum
4 grams	Dried Tamarind
200 grams	Brinjal
400 grams	Pineapple
250 grams	Fresh Coconut Milk
700 grams	Water
250 grams	Medium Prawn

Seasoning

70 grams	Fish sauce
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Tips

- More pineapples may be added for a sweeter taste.
- This dish taste better the next as it matures, and the flavours becomes more robust.



Peranakan Nasi Ulam (Herbed Rice)

Introduction

Nasi Ulam uses a variety of different herbs. My great grandaunt apparently picked and gathered as many as 16 different types of herbs to make her Nasi Ulam. I use only about 10 different types of herbs available in the market. I believe knowledge of many herbs have been lost with our rapid urbanisation and less frequently used ones have fallen into obscurity. The idea is to use as many herbs as possible and harness all the nutritional and medicinal values of the different herbs. They must be finely sliced and well mixed so that you are arrested with a myriad different flavours with each mouthful of Nasi Ulam you take.

Health Benefits:

The herbs are believed to expel wind and contain many medicinal benefits. It is also confinement food for women as the different herbs are believed to strengthen and cleanse the woman's body after childbirth.



- Category: Food
- Time Needed: 2 days

Instructions:

1. Dry-fry grated coconut, onion and chillies at very low heat till coconut is golden brown, to make the Serundeng Kelapa. This will take a few hours. Do it the day before and let it cool.
2. Bake fish with skin in the oven at 200 degrees, till it is cooked (approximately 20-30 mins). Turn the fish after 10 mins or so. There is no need to use any oil as the fish will produce its own oil. The skin of the fish will be hard and leathery, debone and flake fish meat.
3. Cook prawns, shell and chop.
4. Cook crab and extract meat.
5. Cook rice and let it cool for a few hours. When cooled, break up rice.
6. Slice all the herbs finely, except for long beans and cucumber.
7. Mix fish, prawns and crab into rice.
8. Mix finely sliced herbs into rice.
9. Mix Serundeng Kelapa into rice.
10. Garnish with Gerago and Bawang Goreng.
11. Pound all the Sambal Belachan ingredients together in a mortar and pestle.
12. Mix all the Sambal Chincalok ingredients together in a bowl.
13. Serve with condiments.

Ingredients:

- | | |
|------------------|--|
| 500 grams | Grated Coconut |
| 1 | Large Onion, sliced |
| 1 | Red Chilli, sliced |
| 1 | Green Chilli, sliced |
| 800 grams | Rice |
| 500 grams | Ikan Cencaru (Megalaspis Cordyla or Hardtail Scad) |
| 500 grams | Prawns |
| 500 grams | Crab Meat |
| 100 grams | Gerago or Dried Shrimps to garnish |
| 50 grams | Bawang Goreng or Fried Shallots to garnish |
| | Salt and Pepper to taste |

Herbs

- | | |
|-----------------|---|
| 2 stalks | Serai (<i>Cymbopogon</i> or <i>Lemon Grass</i>) |
| 1 stalk | Bunga Kantan (<i>Etilingera Elatior</i> or <i>Torch Ginger Flower</i>) |
| 3 | Daun Kunyit (<i>Zingiberaceae</i> or <i>Tumeric Leaves</i>) |
| 10 | Daun Kadok (<i>Piper Sarmentosum</i>) |
| 20 | Daun Limau Purut (<i>Citrus Hystrix</i> or <i>Kaffir Lime Leaves</i>) |
| 5 stalks | Daun Kesom (<i>Polygonum</i> or <i>Laksa Leaves</i>) |
| 5 stalks | Daun Pudina (<i>Mentha</i> or <i>Mint Leaves</i>) |
| 5 stalks | Daun Kemangi (<i>Ocimum Basilicum</i> or <i>Basil Leaves</i>) |
| 5 | Kacang (<i>Vigna Unguiculata Ssp. Sesquipedalis</i> or <i>Long Beans</i>) |
| 1 | Cucumber, remove core and dice |



Condiments:

Sambal Belachan (Chilli Paste)

100 grams	Red Chillies
40 grams	Belachan or Shrimp Paste, toasted
5	Daun Limau Purut (Citrus Hystrix or Kaffir Lime Leaves)
¾ teaspoon	Sugar
3 teaspoons	Lime Juice

Sambal Chincalok (Fermented Shrimps)

6 tblsp	Chincalok
4	Shallots, sliced
1	Red Chilli, sliced
1	Green Chilli, sliced
4 teaspoons	Lime Juice

Tips:

- The herbs need to be shredded hair-line thin, so that all the different herbs will get well mixed in and you can taste all the different flavours in each mouthful.
- The rice must be broken up when cooled so that each grain is separated and mixed well with all the other ingredients.
- I do not mix the cucumber into the rice but serve it in a separate bowl because cucumber tends to turn food rancid quickly.



Image by: Engin Akyurt

Cambodia

CAMBODIA

Nutritious ancient cuisine overshadowed by neighbouring gastronomic powerhouses

When **Hart Feuer** first travelled to Cambodia in 2004, he encountered the cuisine much like many visitors: by comparing it to Vietnamese and Thai food. Khmer cuisine, however, has come a long way in creating international awareness, and the common refrains from this first visit now sound more like impertinent stereotypes:

- ...it's like Thai food without all the chili
- ...they love watery soups as much as the Vietnamese
- ...they use coconut milk just like in Thai curries
- ...the fresh herbs served with many dishes remind me of eating Pho
- ...the foods are more pungent than I'm used to in Southeast Asian food

And finally, the most embarrassing of all (which has now long been cleared up):

- ...I feel like I've eaten something like this in a Thai restaurant in the U.S.

As a nation that started the last millennium ascendent as a mighty regional empire, but limped along for centuries as a vassal state, Cambodia simply wasn't in a position to engage in the aggressive gastro-diplomacy that put Thai cuisine on the map, or to leverage its post-revolution diaspora from the 1980s to overcome the predominance of Vietnamese cuisine in global refugee centers. Indeed, Cambodia has struggled more generally to overcome its moniker as the country of Pol Pot and the site of one of the 20th Century's most tragic auto-genocides. Getting its cuisine on the map has, for all these reasons, simply not been "on the plate" for Cambodian international relations. In the end, Cambodian culinary achievements have often been overshadowed, appropriated, or simply turned up-side down. One notorious example of the latter is that the Cambodians in Long Beach, California, the largest Khmer diaspora community in the world, are most well-known for... *their donut shops*. Outside of such diaspora communities, many Cambodian chefs have grudgingly chosen to operate nominally Thai or Vietnamese restaurants because Khmer cuisine would not serve as a reliable draw for customers. Many of you have, therefore, likely encountered Khmer food in such a restaurant without recognizing it or the ethnic background of the chef who prepared it. Furthermore, many Thai and Vietnamese dishes likely owe their provenance to the Khmer Empire, or at least the question of their provenance is up for more serious regional debate. The problem is that little concrete evidence about the ancient Khmer cuisine exists, with the exception of some imprecise depictions at archaeological sites in Cambodia (see Figure 1 depicting Amok curry) and the vague descriptions of Zhou Daguan, a Chinese diplomat who resided in Angkor in the late 1300s.



Figure 1. The making of Amok, steamed curry, circa. 1200-1300. Photograph by Mimi Palgen-Maissoneuve, 1918-1995. MimiJac Palgen Memorial Collection, Special Collections, Arizona State University Library.

But Cambodian cuisine is receiving renewed interest thanks to researchers and foodie detectives of neighboring countries. Since Cambodia became more accessible after the United Nations helped re-establish independence in 1991, chefs and botanists began to freely explore the deeper reaches of the country.

With Thailand and Vietnam gaining curiosity about the origins of many of their dishes, there have been more discoveries illuminating the Khmer heritage of mainland Southeast Asian food. A recent cookbook, "The Cuisine of Cambodia", written by Thai author Nusara Thaitawat, expresses the excitement at finding inspiration in familiarity. She writes, "I was struck

by how the ingredients were balanced to bring out the simple flavours and aromas in a way that was unknown to me. I was amazed that ingredients so familiar could at the same time be so exotic and a spell was cast" (page 13). Another reason that Cambodian cuisine is receiving increasing attention is due to the presence of wild plants and heirloom varieties in everyday cooking. Although Cambodia's Maoist agrarian revolution and resulting violence from 1970-1990 disrupted the development of high cuisine, the survivalist ethos of the era pushed Cambodians to re-integrate wild edible plants and alternative proteins into their diet and to consult more seriously the culinary wisdom of ethnic minority groups.



Figure 2. Map of Cambodia (Source: UN Cartographic Service)

Cambodian chef, Luu Meng, crowned Best Chef in Asia in 2014 and 2016, faced just this kind of background, growing up in a refugee camp in Thailand and scraping by with his family before taking on a career in hospitality. Like many observers, Meng is at pains to emphasize the diversity of ingredients, and simplicity of preparation which elevate the medicinal and nutritive aspects of Khmer food.

In recent non-fiction publications, like European and North American cookbooks and travel guides, Khmer cuisine is now commonly described as “fresh”, “healthy” and “nutritious”. This idealized characterization of the cuisine contradicts the developmental view of Cambodia pushed by nutrition scientists, that the diet is plagued by over-consumption of polished white rice, poor dietary diversity, and micro-nutrient deficiencies. These narratives can co-exist, as a high-potential cuisine can be diminished by limiting factors, such as poverty and weak domestic food chains. This book’s section on Cambodia looks for a middle-ground between these two realities, by seeking out the expertise of a modestly born chef, whose rural home was neither isolated nor metropolitan.

Chandavy Say, or Davy, a chef and food educator hails from a rural part of the province of Kampot, a region in Cambodia with access to both seafood and freshwater fish, and the produce of upland jungles and rice-paddy lowlands. It is also a region famous for its accommodation and adaptation to French colonialists, who used its seaport for trade and enjoyed its milder climate. In this cookbook, the readers will encounter recipes that are both locally enjoyed and internationally accessible, and which make good use of year-around wild flora as well as more seasonal wild plants. One of the most popular and simple way to enjoy vegetables in Cambodia is to pair them with the archetypical Khmer dipping sauce: tuk kreung (literally: mixed-ingredient sauce).



Figure 3. Edible flowers being sorted at Forest Restaurant in Cambodia in 2019.

A Kampot-inspired recipe and list of possible vegetables is prepared in this book, but adaptations with available ingredients can easily be made. The important thing is to look for the most fresh and hygienic wild plants to eat raw, and to lightly blanch fibrous or astringent plants. Another exciting and colorful way to diversify the texture and aesthetic appeal of food, while also supercharging the micro-nutrient content, is to seek out edible flowers. In Cambodia, as in many regions in Southeast Asia, there are numerous edible flowers which are under-utilized due to their fleeting blossoms or singular focus on the vegetal part of the plant. Some of the most beautiful and tasty are presented in this book in the form of salads, side-dishes, and soup ingredients. This includes sesbania flowers, water hyacinth flowers, red and yellow agati flowers, and cha houy flowers (see Figure 3). The beauty and healthiness imparted by these flowers makes one wonder why they were ever relegated to such a low status ingredient. We hope you will make more such discoveries inspired by your journey into Khmer cuisine in this cookbook.



Khmer edible flora

*About
The Authors*

Hart N Feuer
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Dr. Hart N Feuer is a junior associate professor at Kyoto University, where he teaches about food systems in Asia, heritage food, and ecological agriculture. His research focuses on preserving indigenous agriculture and cuisine through ecologically and culturally respectful modernization. He has been a researcher of Cambodia since 2004 and speaks fluent Khmer.



Sary Seng
Lecturer
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Dr. Sary Seng is a lecturer at the public university in Thbong Khmum province, Cambodia, and has served as a food and agricultural educator across Southeast Asia and abroad. He has worked for numerous organizations promoting ecological agriculture and heritage food preservation. His works aims to mainstream and teach young people to regain appreciation for diverse, traditional food systems.

Chandavy Say

Chef and educator, Cambodia

Chandavy Say is a chef and educator from the foodie-famous province of Kampot, Cambodia. She began her food career as an apprentice to her father, a village chef who catered for ceremonies and events. She now specializes in Khmer and Thai-Isaan heritage cuisine, serves as a show chef, and educates widely in Cambodia on childhood food literacy.



Sarann Pek

Chef and hospitality specialist, Cambodia

Sarann Pek is a chef and hospitality specialist, who has brought creative and socially-conscious cuisine to venues across Cambodia. Her background in culinary arts has helped her modernize Khmer cuisine while keeping it rooted in indigenous ingredients and dietary customs. She served as manager of the research restaurant Forest 'Prey Borisot', in Siem Reap, serving wild vegetable-focused Khmer cuisine.





Nom Banh Chok (*Khmer Noodles*) with Wild Forest Vegetables

Short Description

The Khmer Noodle has a folkloric history, in which it features in the story of a historic scholar named Thun Chey. Some versions of his story suggest that Thun Chey introduced noodle-making to China by selling Khmer Noodles. In contemporary Cambodia, Khmer Noodle is preferred for breakfast and snacks between lunch and dinners. Moreover, it is traditionally prepared and served during ceremonies, including funeral ceremony. It is also considered a social food because it is cooked while other family members gather vegetables or are otherwise engaged in processing the noodles. It is not considered a main dishes for Cambodia. The Khmer Noodle is primarily enjoyed during the rainy season when fish, vegetables, and wild plants are in abundance.

- Serves 5 people minimum



Instructions:

Boil the fish for 10 minutes then take it out, remove the skin and allow to cool before crumbling it into small pieces. Discard the water.

Pound the Kroeung in a mortar until it achieves a mostly smooth, pasty texture.

Boil the coconut milk for 5 minutes, add the prahok and stir until integrated.

Add to the coconut milk mixture the kroeung, palm sugar, fish sauce salt, peanuts, and cooked fish crumbles. Allow the sauce to boil until aromatic.

Taste the sauce and adapt the flavor with additional fish sauce and palm sugar to achieve preferred taste. Serve with finely sliced chilis if spiciness is desired.

Assembly

Carefully wash all vegetables and process into bite-size pieces suitable to be eaten by spoon and chopstick.

In a soup bowl, place a sampling of vegetables and a suitable portion of Khmer noodle. Ladle the sauce over the noodles until the liquid is visible above the vegetables.

Eat with a spoon and chopsticks. Optionally season with chili powder.

Ingredients:

1000g	Fresh Khmer Noodle
300g	Freshwater fish (e.g. catfish)
400g	Coconut Milk
100g	Prahok (fermented fish paste) - deboned
100g	Palm sugar paste
1 tsp	Salt
1 tbsp	Fish sauce

Kroeung (mixed spices and herbs) ~ 250g

100g	lemongrass, bulb and leaf
4 cloves	garlic
10g	fresh fingerroot
10g	fresh turmeric
5g	fresh galangal root
4 leaves	kaffir lime leaf
100g	roasted peanuts

Fresh vegetable medley, up to 2kg

- Banana blossoms (tray-yaung chek), sliced thinly
- Cucumber, julienned
- Saw-tooth coriander (ronha), chopped
- Thai basil (nung vong), chopped
- Mint (angkam), de-stemmed chopped
- Fishwort (chi poel Trey), chopped
- Asian coriander (chee pong tea kon), de-stemmed
- Water lily stems (prolut), chipped finely
- Water hyacinth flowers (pkha komplouk), de-stemmed
- Sesbania yellow flowers (pkha sngou), de-stemmed
- Bean sprouts (sundaik b'doh)
- Long bean (sundaik kua), chopped finely
- Mater celery (plouv kongkaip), whole
- River tamarind Leucaena (khtum tehs), cut

Wild vegetables

- Cardamom leaf (troit Kravanh), whole
- Mempat leaves (sluk longean), whole
- Mango-pine leaves – barringtonia acutangula (druoy veang), whole
- Cha Houy Flowers (pkha krochon andout), whole



Wild Flowers and Roast Beef Salad

Short Description

Wild flower and roast beef salad is a food that Cambodians would generally eat during dinner time because it is matched well with social drinking and shared small-dish eating habits. It can also be considered a main dish for lunch, in combination with rice, soup, and other savory foods.

- Serves 2 people

Instructions:

Grill the beef for about 10 minutes at high heat to create a charred exterior and medium-rare interior. Allow to cool fully before cutting into thin slices.

Infuse the fish sauce with chopped garlic and shallots

Thoroughly wash aromatic vegetables, cut in salad-size pieces, and toss together with the grilled beef.

Dress the salad with the infused sauce partially, sprinkle with crushed rice powder, and thoroughly toss the salad.

Ingredients:

300g Beef

Salad dressing

1 tbsp fish sauce

2 tbsp lime juice

2 cloves garlic

5 grams fresh galangal root (romdeng)

2 sml shallot

5 grams palm sugar paste

1-3 fresh chilis (de-seeded)

1 tsp Crushed rice powder

50g Long beans

200g Mix aromatic vegetables

- winged bean (proapiey), chopped into 2cm pieces
- mint (angkam), de-stemmed
- saw-tooth coriander (ronha), chopped
- Thai basil (nung vong), chopped
- mint (angkam), de-stemmed chopped
- fishwort (chi poel Trey), chopped
- water celery (plouv kongkaip), whole
- red agati flower (angkea dei), de-stemmed
- sesbania yellow flowers (pkha sngou), de-stemmed



Lime-Mint Honey Rib with Agati Flowers

Short Description

This dish is a derivative of a popular entrée for both lunch and dinner, but in contemporary Cambodia in small portions is also enjoyed as part of social drinking.

- Serves 2 people

Instructions:

Separate the rib into small pieces and marinate with the mixture.

Fry the garlic until aromatic, add ribs in hot oil until the ribs turn a deep red color

In the same pan, add a bit more oil and lightly sautee the agati flowers until deflated.

Assemble on the plate next to the sautéed agati flowers, and lime wedges. Add mint stems on top of the pork ribs.

Ingredients:

300g	Pork ribs
8-10 full flowers	Yellow agati flowers (angkea dei)
1 wedge	Lime
2 cloves	Garlic

Marinade

½ tsp	palm sugar
1 tsp	fish sauce
1 tsp	oyster sauce
½ tsp	crushed pepper
½ tsp	salt
300g	Vegetable oil
3 full stems	Mint



Tuk Kreung with Wild Forest Vegetables

Short Description

Tuk Kreung is very traditional dish, particularly eaten during the rainy season when a lot of vegetable and fish varieties are available in and around the rivers, rice fields and forest periphery. Eating tuk Kreung generally requires no implements such as spoon or fork. The vegetable medley can be adapted to any season or location and there is enormous diversity among the provinces in Cambodia.

- Serves 4 people

Instructions:

Boil the fish for 10-15 minutes and allow to cool slightly before deboning. Mashing the fish in a mortar until it becomes pasty.

Use 1.5 cups of the previous cooking water to boil the prahok for two minutes, stirring vigorously to combine the broth and prahok.

Separately mortar the kroeung ingredients (and except chili if desired) until a fine paste.

Combine kroeung, prahok broth, fish, and peanuts. Mix well.

Put dipping sauce into bowls and garnish with chopped saw-tooth coriander.

Ingredients:

300g Freshwater fish
100g Prahok (fermented fish paste), deboned

Kroeung (for mortaring)

3 cloves garlic
100g palm sugar
50g bird's eye chili (2-3 chilis)
2 tbsp lime juice
3 tbsp fish sauce
1 tsp salt

100g Peanuts, ground coarsely
20g Saw-tooth coriander (chi ronha), chopped finely

Vegetable Medley, carefully washed and processed as instructed below:

Common vegetables (raw)

- winged bean (propieay), 5cm pieces
- small round eggplant (trop sruoy), quartered
- pea eggplant (trop pout nyong), whole
- water hyacinth flowers (phka komplauk), de-stemmed
- water lily stems (prolut), 5cm pieces
- rice paddy herb (sa'om), whole
- baby corn (kon pout), whole
- young water mimosa (konchaet), whole
- cucumber (trasok), sliced



Assembly:

Carefully wash the vegetable medley and process into pieces that are suitable for dipping into a thick sauce. Leaves are usually left on the stem to allow for scooping up sauce. Flowers should be left whole.

Arrange the vegetable medley by category in a large serving bowl or tray.

Eat with hands and optionally scoop tuk kreung over vegetables.

Lightly blanched

- morning glory stems (drakuon), 5cm pieces
- okra, whole
- neem stems, whole

Seasonal wild vegetable (raw)

- keempat leaves (sluk longean), whole
- mango-pine leaves (druoy veang), whole
- red or yellow agati flowers, de-stemmed
- sesbania yellow flowers, de-stemmed



Flowers and Onion Pork

Short Description

This dish is meant to infuse the pork with the typical sweet, spicy, and umami flavors of the Khmer cuisine, while adding the sticky depth found in some Chinese and Vietnamese foods. The strong flavor is complemented by the onions steaming below while the palette is cleaned with the pumpkin flowers and fresh lime juice. This dish can be served as a main dish for lunch or dinner.

- Serves 2 people

Instructions:

Slice onion thinly and arrange on a serving plate.

Slice pork into small pieces and season with salt. Fry covered in oil in a small pan. Remove the pork pieces when lightly browned a crispy. Place directly on top of the prepared onion on the plate

In the same oil, add the combined sauce mixture except the oyster sauce. After the sauce begins to boil, add the oyster sauce and stir rapidly until thickened. Remove the sauce to a separate bowl.

In the same pan, lightly sauté the agati flowers until deflated. Remove and arrange around the onions and pork.

Drench the pork with the sauce and squeeze lime juice over the final arrangement.

Ingredients:

200g Pork
10 flowers Yellow agati flowers

Sauce

1 tsp palm sugar
1 tsp fish sauce
½ tsp salt
½ tsp crushed pepper
1 tsp oyster sauce

250g Onion
1 wedge Lime
100g Vegetable oil



Image by: Dung Le Tien

Vietnam

Vietnam: Foraging in The Mekong Delta Region: Rare Greens and Ethnic Minorities

Early 2019, Tang Thong Nhan and Eric Olmedo assembled a small group of people, including Théo, an exchange student from France, to locate rare fruits and lesser known plants in South Vietnam. Soon they were headed to the Mekong Delta region, and more precisely in Can Tho, as well as Binh Tuan province. Once they reached these two destinations, they made a point to meet with ethnic minorities groups in order to enquire about what they eat. Why ethnic minorities? For one simple reason: ethnic minorities tend to live in poorer conditions than the Kinh (Viet) majority of the population. Having less income, they need to make use of their environment to the fullest. They would often know about alternative foods that can be foraged in the wild, or in the countryside.



Looking for Gambogia trees

Once in Can Tho province, the Vietnamese-French expedition team went on a quest to find *Garcinia Cambogia* trees. Its fruit is quite famous for pharmaceutical industry, especially in the USA, as it displays slimming properties. Beside its weight loss benefits, the team was eager to see this cousin of the mangosteen, as the fruit bears erythropoietic (production of blood red cells) effects and treats gastrointestinal disorders. *Garcinia Cambogia* fruit is also known for improving glucose metabolism, which is essential for the functioning of our neurons.

Once in the village, Nhan, Eric, Théo and their crew were directed to the house of an ethnic-Khmer family. They were known for foraging into the forest. While treating them with white and oblong Chinese olives alongside a cup of tea, Mr Ly Ho explained to his French and Kinh visitors that it has become very troublesome to find a *Gambogia* fruit tree nowadays,

as farmers uprooted them to plants cash crops such as oranges or sugarcane. He offered some nice milk fruits (*Chrysophyllum cainito*, sometimes called star-apple) to soften his guests' disappointment; his son had been plugging them from a tree in the garden as they were speaking. The whole team was touched by his warm hospitality. Later in the forest, they eventually came across a small Gambogia fruit tree, which did not bear any fruits yet.



Milk apples



Chinese olives

The following day, the small group of explorers moved on to another village where they had the chance to meet a remarkable lady: Ms. Nguyen Thy Thu Ba. Ms. Nguyen is a secondary school teacher; she inherited land from her father, on which there is an orchard. On her free time, she works at the orchard, taking care of old and unique trees such as the one bearing Gandaria fruits (*boeua macrophylla*, or mango plum). She sells the gandaria plums at very low price to the community, so they don't have to buy more expensive fruits from the market. When times are hard, she even leaves the fruits outside her gate, for people to take. The most interesting part of the trees is however not its fruits but its leaves. If you infuse its leaves like you would do to make yourself a pot of tea, you shall get a hot beverage that yields anti-photoaging and moisturizing effects.



Under the Gandaria Plum tree



Ms. Nguyen Thy Thu Ba

Back in Can Tho, opportunity was given to meet a family belonging to the Hoa ethnic minority. Hoa people (Hua 華 in Mandarin language) are the descendants of the Han Chinese who have migrated to Vietnam. The latest national census of 2019 accounts for a bit less than 750,000 in Vietnam. The family we visited seemed to practice Confucianism, not without syncretism of Taoism and ancestors' worship. The head of the family explained that, when they were living in the countryside, they used to eat almost everything they could find in the forest around their village, as they were very poor. Nowadays their struggle is not over, but they feel a bit more comfortable. The host then advised to go and have a chat with an acquaintance of his: an ethnic Tay gentleman, who works in the dragon fruits' fields, adding that this particular family cultivates special eating habits that scholars like yourselves might find interesting.

Intrigued, the team was back on the road, this time heading for Binh Thuan province. The next informant was indeed an ethnic Tày. The Tày community account for a bit less than 2 million today and is considered the second largest community in Vietnam after the ethnic Kinh or Viet people. Their origins are still debated but they are usually considered as native to the land ; most of them are animistic and pray to a multitude of tutelary gods.

Their Tày host took them on a ride to the nearest dragon fruits fields where he showed the incredulous team how to plug the petals of from the white dragon fruit flower, taking care of leaving the core, so the plant may reproduce. He then explained that his family cooks these flowers, and sometimes flower buds, in three different fashions: simply boiled and dipped in soy sauce with chillies; as a regenerative soup, or a as vegetable in a hearty pork stew. He added with a smile that only he and his people eat the dragon fruit flowers; Vietnamese farmers usually throw them away.



Walking among the dragon fruits plants.

Looking at the vast amount of dragon fruits fields planted for the Chinese market, the team pondered at the zero waste opportunity to create a food supply chain leveraging on the

consumption of dragon fruits petals, which harbours health benefits such as wound healing properties. There is one obstacle though that stands in the way: pesticides. Dragon fruits are cultivated using intensive agriculture techniques. A locally engineered organic label would then make a lot of sense, out of public health interest, and having the potential to be more trusted than the imported American and European labels.

Vietnamese population does not have any issue with consuming vegetables, as it is culturally part of their diet. The last battle that remains is to make these greens chemical-free.



Dragon fruit flower

*About
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Le Quoc Hong Thi worked in several Vietnamese universities throughout his career. He developed a passion for spirits, liqueurs, mixology and alternative beverages.





Garcinia Cambogia Panna Cotta

- Name of the core ingredient: ***Garcinia Cambogia***
- Botanical name: ***Garcinia gummi-gutta***
- Other name in English: ***Malabar Tamarind, Wild Mangosteen***
- Name in Vietnamese: ***Trái Bứa, Mãng cụt rừng***

Garcinia Cambogia is a fruit native to southern India and Southeast Asia, also known as wild mangosteen, is a wood tree that lives extensively in some forests in Quang Ngai province. In addition, it also grows along with the forests of the western provinces of Vietnam. Garcinia Cambogia is medium-sized plants, the harvest time of Garcinia Cambogia falls from June to August of the lunar calendar every year. But because of having lower economics value than the purple mangosteen, farmers cut them down to make farmland for other plant varieties. It has a pleasant mild aroma, has many seeds, sour taste, green skin and yellow when ripe.

Traditional Usage:

Since ancient times, pomelos have been considered a valuable medicinal plant in the treatment of diseases: rashes, coughing up blood, allergies, peptic ulcer, duodenum, poor digestion. These effects were discovered when using Garcinia Cambogia bark, which was found to contain a lot of vitamin C.

Different from the sour taste of lemon or the bitterness of crocodile when adding to the pot of water to boil water spinach. The sour taste of bar is sweet, light and gentle. Garcinia Cambogia is usually picked when the fruit is ripe or nearly ripe, then separating the seeds to keep the shell, sliced skin and dried for storage to make medicine or used to cook sour soup, fish stock.

Health benefits:

Reduce Cholesterol: Garcinia Cambogia also has a very large component Hydroxycitric Acid. This is a substance that helps to reduce the conversion of sugars into fat, make fat tissue smaller and reduce the synthesis of bad cholesterol inside the body.

Weight loss: Research by scientists also shows that this ingredient in the fruit will reduce cravings, work very well in burning excess fat and help to lose weight effectively.

Increased energy: When you start losing weight, your body has a big change, and a lot of people feel tired and muscles are not toned after weight loss. However, Garcinia Cambogia extract can help you combat this problem, by promoting a large amount of energy to "beat" the exhausted moments during weight loss.



- Category: Food
- Time needed: 45 minutes

Instructions:

Soaking the gelatin sheet in ice water, take out and drain when using.

Combine the garcinia cambogia juice with sugar and water in a saucepan, cook over low heat until sugar melted, adds the gelatin sheet and stir continuously until melt. Pour the gelatin mixture into cups. Keep them cool in the fridge for 30 mins

Cook another batch of garcinia and sugar in another separate pan to make jelly cubes. After the sugar dissolves add Agar powder, stir until combined. Pour out a small tray and keep it cool in a fridge for 30 mins

When hardened, take the garcinia out of the tray and cut it into small cubes.

Pour whipping cream, milk and sugar in a saucepan and cook with low heat until sugar melts and reaches about 60-degree Celsius. Turn off the heat put the gelatin sheet and stir until melted.

Pour into the glass to create another layer (The glass was prepared Garcinia Cambogia jelly below).Keep in the cooler for another 30 minutes.

Decorate with a little bit of almond crumble, Garcinia Cambogia cubed, a blackberry, some cut wedge of strawberry and sugar art (optional).

Ingredients:

For Garcinia Cambogia Jelly:

300 ml Garcinia Cambogia juice
150 gr Sugar
2 pcs Gelatin sheet
50ml Water

For Garcinia Cambogia cubed:

200 gr Garnicia Cambogia
100 gr Sugar
4 gr Agar Agar

For cream layer:

200 ml Whipping cream
350 ml Non sugar milk
1 pc Vanilla pod
1 tsp Honey

For Almond crumble:

50 gr Unsalted butter
100 gr Sugar
100 gr Flour
100 gr Flaked almonds

For Plating:

Cream layer
 Garcinia Cambogia jelly layer
 Almond crumble
 Garcinia Cambogia cubed
 Strawberry
 Sugar art
 Black berry

Tips

- Soaking the gelatin sheet help jelly or glazing light and good texture.
- Don't cook cream overheat because it can cause cream is decomposed.
- Always combine taste between creamy and a little sour to help balance.



Dragon Fruit Flower Buds Soup

- Name of the core ingredient: **Dragon fruit flower bud**
- Botanical name: ***Hylocereus undatus***
- Other name in English: ***Pitaya, Dragon fruit, Strawberry Pear***
- Name in Vietnamese: ***Hoa Thanh Long***

Dragon fruit is a species of tree grown primarily for fruit and is also the name of several genera of cacti . Dragon fruit is a native plant in Mexico , Central America and South America . Currently, these species are also grown in countries in Southeast Asia such as Vietnam, Malaysia, Thailand, Philippines , Indonesia (especially in western Java Island); southern China, Taiwan and some other regions. Research and breeding by the Southern Fruit Institute has also been put into mass cultivation. Red or white flesh are widely grown and popularized in provinces such as Binh Thuan , Long An , Tien Giang,... Research and breeding by the Southern Fruit Institute has also been put into mass cultivation. Dragon fruit flower has a cool, sweet and light taste.

Traditional Usage:

According to Oriental medicine, when the dragon fruit blooms, it has a beautiful white color, has a tonic effect, eliminates cough, cures bronchitis, tuberculous lymphadenitis, and detoxifies alcohol. Very nutritious and valuable remedies.

Dragon fruit cereus flower is also considered as a clean vegetable, cooking soup with pork, seafood is both a dish and medicine in the house. Whether dragon fruit cooked with lean pork or fresh seafood are delicious, nutritious, cool and refreshing heat.

Health benefits:

Dragon fruit is a cooling fruit, laxative. Flowers are used to treating bronchitis, tuberculous lymphadenitis, tuberculosis, drunkenness.

The body used to treat fire burns, water burns, broken bones, parotid gland inflammation, boils (to cancer). Use a sufficient amount of body to remove shells and thorns, smash, apply water or apply residue.



- Category: Food
- Time needed: 90-180 minutes

Instructions:

Rinse shrimp shells and sauté until the shells are golden and crispy.

To create white stock. Rinse chicken and put in hot boiling water with salt (about 20g salt) for 10 minutes. Add in a slice of ginger, scallions and white wine. Then take out and wash the chicken bones.

Cut carrots and white turnips into chunks. Rinse and cut coriander roots.

Add water to the stock pot then add chicken bones, shrimp shells, ginger, carrots, white turnip, coriander roots and 5g of salt to the pot cook with simmer for 30-45 minutes (It can simmer for up to 3 hours if you have plenty of time).

Put the shrimp meat, tapioca starch, and spices into the blender finely ground, then mix with crab meat, chopped shallot, and chopped coriander stem.

Pump the stuffing in the middle of the dragon fruit flowers and then use a string to prevent the flowers from breaking when cooking.

Put the white stock, honey date, sweet and bitter kernel and dragon fruit flower stuffing seafood in the pot and with spices and for simmer about 30 minutes until the dragon fruit flower softens and tastes it again. Served the soup while it is hot.

Tips

- Use scallion and ginger and white wine when boiled chicken bone to decrease the poultry smell.
- Soak the dragon fruit flower in ice water to keep vitamin and green color of it. Soak the honey date and sweet bitter kernel before cook to help quick soften.
- Simmer when cook soup or stock follow Vietnam technique help clear stock or soup and get umami taste.
- Should put shrimp meat in the fridge before grinding helps a tough bit more. Should put shrimp meat in the fridge before grinding helps a tough bit more.

Ingredients:

For white stock:

- 300 gr** Shrimp shell
- 200 gr** Carrot
- 300 gr** White turnip
- 1500 gr** Chicken bone
- 100 gr** Coriander root
- 300 gr** Onion
- 40 gr** Salt
- 30 gr** Scallion
- 50 gr** Ginger
- 200 ml** White wine
- 3000ml** Water

For Dragon Fruit Flower Bubs Soup:

- 1000 gr** Dragon Fruit Flower Bub
- 100gr** Salt
- 100gr** Honey date
- 30 gr** Sweet and bitter kernels
- 10 gr** Rock sugar
- 20 gr** Chicken powder
- 2000 ml** Water

For stuffing:

- 200 gr** Crab meat (Chopped)
- 400 gr** Shrimp meat (Chopped)
- 20 gr** Chicken Powder
- 3 gr** Salt
- 5 gr** Sugar
- 3 gr** White ground pepper
- 15 gr** Shallot (Chopped)
- 15 gr** Coriander stem(Chopped)
- 20 gr** Tapioca starch

For Plating:

- Clear soup
- Dragon fruit flower bud
- Honey date and kernels
- Edible Flower



Ming Aralia leaves

Ming Aralia Fresh Spring Rolls

- Name of the core ingredient: *Polyscias fruticosa*
- Botanical name: *Polyscias fruticosa*
- Other name in English: *Ming Aralia, Panax Fruticosum, Panax Fruticosus*
- Name in Vietnamese: *Đinh lăng, Cây gi cá, Nam Dương sâm*

The Ming aralia is widely cultivated in several countries of Southeast Asia and the tropical islands of the Pacific region. It was originally located in Polynesia and thrives in environments of medium humidity, with temperatures varying from 16–29 °C (60– 85 °F).

Traditional Usage:

The Ming aralia grows everywhere in Vietnam, the people can plant into the flowerpot and use it as a bonsai, a medical plant. Because in daily life, leaves are used as raw vegetables or can be eaten in a fish salad.

According to traditional medicine, tree roots have a sweet, slightly bitter taste, coolness, have a vascular clear effect, nourish blood; clove leaves have a bitter taste, coolness has the effect of detoxifying food, fighting allergies, treating coughing up blood, dysentery. All cloves including roots, stems, and leaves can be used as medicines.

Health benefits:

Dr. Nguyen Thi Thu Huong and her colleagues at the Center for Ginseng and Medicinal Materials in Ho Chi Minh City also spent a lot of time and enthusiasm to study the effects of clove for 7 years (2000-2007). Dr. Huong's research has shown that clove has the same pharmacological effects as ginseng but is cheaper and easier to grow than ginseng. Specifically, according to the author's research, the tree has the effect of increasing physical strength, combating stress, stimulating brain activities, relieving anxiety, fatigue, antioxidant, protecting the liver, stimulating immunity.

Leaves can be crushed and placed on wounds to prevent swelling and inflammation. The roots can be boiled and drunk to stimulate urination, soothe nerves, relieve joint pain and inhale to stimulate sweating.

The tincture extract of the clove tree has anti-asthma, anti-histamine, and mast cell suppressant properties making it useful in treating asthma.

Dragging the trident helps significantly increase memory function as well as the survival time of old mice.



- Category: Food
- Time needed: 30 minutes

Instructions:

Washed and drained all vegetable

Cut the cucumber and carrots into thin pieces about 5cm long.

Cut lettuce and purple cabbage into chiffonade and keep in the tray

Just use mint leaves, coriander leaves, Polyscias Fruticosa leaf, Thai basil leaves.

Chopped red chili and garlic.

Boiled shrimp with a little salt, scallion, coriander root about 8-10 minutes. After the shrimp is cooked take out and soaked soaking in ice water then drained.

Peeled the shell, remove black string on the shrimp back and sliced in half.

Boil the rice noodles, then rinse with cold water to prevent cooking process go further

Soak rice paper wrapper wet and put vegetables in turns, which were prepared and put rice noodles in the center. Finally the sliced shrimp and roll it into a pretty, long fresh spring roll.

To make the peanut sauce: In a small bowl, whisk together the peanut butter, rice vinegar, hoisin sauce, sugar, sesame oil, chili and garlic. Add in 2 to 3 tablespoons water, as needed to create a super creamy but dip-able sauce.

Fresh Spring rolls served with peanut butter dipping sauce.

Tips

- Use scallion and root of coriander when boiled seafood to decrease the fishy smell.
- According to Pho Huu Duc (Chairman of the Eastern Medicine Association of Cau Giay District, Hanoi), the root of the clove contains lots of saponins, that can break the red blood cells. Therefore, use only when necessary and use the right dose, the right way. Do not use clove root with a high dose because it will cause drunkenness, feeling of tiredness, nausea, diarrhea.

Ingredients:

For fresh spring rolls:

- 10 pcs** Rice paper
- 200 gr** Lettuce
- 300 gr** Shrimp
- 150 gr** Cucumber
- 200 gr** Rice noodles
- 100 gr** Mint
- 100 gr** Coriander
- 30 gr** Scallions
- 100 gr** Thai Basil
- 200 gr** Carrot
- 200 gr** Purple Cabbage
- 200 gr** Polyscias Fruticosa leaf

For Peanut butter dipping sauce:

- 200 gr** Hoisin Sauce
- 100 gr** Peanut Butter
- 30 gr** Rice vinegar
- 30 gr** Sugar
- 20 gr** Soya Sauce
- 20 gr** Siracha Sauce
- 20 gr** Warm water
- 10 gr** Chili (Chopped)
- 10 gr** Garlic (Chopped)

For Plating:

- Fresh spring rolls
- Peanut butter dipping
- Edible flowers
- Chopped chilies



Image by: www.healthbenefitstimes.com/gandaria/

Plum Mango Leaf Lemongrass and Ginger Tea

Name of the core ingredient: ***Bouea macrophylla leaf***

Botanical name: ***Bouea macrophylla Griff***

Other name in English: ***Marian plum, Gandaria , Plum mango***

Name in Vietnamese: ***Lá Thanh Trà***

Bouea macrophylla (or *Bouea gandaria* Blume, *Bouea burmanica* Griff.), commonly known as marian plum, plum mango, gandaria, or maprang, is a tropical fruit that is widely grown throughout Southeast Asia, particularly in the countries of Thailand, the Philippines, Malaysia, and Indonesia. *B. macrophylla* (belongs to the same family as mango (Anacardiaceae), but its taste is notably different]. It is regarded as a fruit that can benefit health by providing a range of vitamins, minerals, and fibers, which may exert a wide range of pharmacological activities linked to their antioxidant, anticancer, antimicrobial, and anti-inflammatory properties

Traditional Usage:

Bouea macrophylla (belongs to the same family as mango (Anacardiaceae), but its taste is notably different]. It is regarded as a fruit that can benefit health by providing a range of vitamins, minerals, and fibers, which may exert a wide range of pharmacological activities linked to their antioxidant, anticancer, antimicrobial, and anti-inflammatory properties.

In Vietnam, various parts of *B. macrophylla* such as leaves, flowers, fruits, seeds are used as food and may be beneficial to health due to their phytochemical bioactive compounds. The antioxidant activity of ethanol extracts from the leaves of *B. macrophylla* has been reported and may help to prevent several diseases such as cancer and Alzheimer's disease.

Health benefits:

Anti-photoaging and moisturizing effect: *Bouea* leaves contain anti-aging properties that help us fight wrinkles and lose skin elasticity. In addition, the leaves also have the ability to help us moisturize, combat skin against diseases from UV rays.

Antioxidant: Help our body prevent heart disease, cancer and other diseases.



- Category: Beverage
- Time needed: 8 minutes

Instructions:

To make Bouea tea. Cook Bouea leaves in boiling water for 5 min, take out the leaves and strain to make the tea look clearer.

For sugar syrup. Boil 200gr sugar with 100gr water.

Combine all ingredient in a shaker. Shake well with ice for about 15 seconds.

Garnish with Cocoa nib and serve.

Ingredients:

- 90 ml** Bouea tea
- 90 ml** Sugar syrup
- 2 pcs** Sliced ginger
- 30 ml** Coconut nectar honey
- 20 gr** Cocoa nib
- 100 gr** Ice



Chinese White Olive Mocktail

Name of the core ingredient: **Chinese White Olive**

Botanical name: ***Canarium album (Lour) Raeusch***

Other name in English: **Chinese White Olive**

Name in Vietnamese: **Cà Na, Trám Trắng**

It is a plant species found in Southeast Asia. In Vietnam, "Chinese white olive" grows periodically in natural forests in the Northern provinces, from Quang Binh to the north; parts of southern China (Guangxi - Yunnan) and northern Laos.

Traditional Usage:

Chinese white olive trees can be used for various purposes. Roots, leaves collected all year round to make medicine. The fruit can also be used as medicine, when ripe, used to eat raw or processed into many dishes.

Health benefits:

Treat sore throat, tonsillitis, cough: sour, sweet, acrid and warmth have good effect on treating sore throat, tonsillitis, cough very well.

Treat enteritis, dysentery, diarrhea: juice of the fruit fillings stimulates salivary glands, helps the digestive system work well, and enhances the ability to absorb nutrients.

Cooling and refreshing effect: the olive has a sweet taste, provides minerals and vitamin C that are beneficial for cooling.



- Category: Beverage
- Time needed: 10 minutes

Instructions:

Boil Chinese white olive in salt water to remove bitterness. Remove seeds, add some water and blend to extract the juice.

For sugar syrup. Boil 200gr sugar with 100gr water.

Combine all ingredients. Stir well and top up with lemonade soda.

Serve on ice and garnish with boiled Chinese white olive.

Ingredients:

- 4 pcs** Chinese White Olive
- 30 ml** Sugar syrup
- 2 pcs** Slice Chili (Optional)
- 15 ml** Lemon juice
- 30 ml** Gomme Syrup
- 1 can** Lemonade Soda

Concluding Remarks

Consuming all the ulam-based recipes presented in this book goes beyond the mere tantalisation of our own palates. Buying and eating ulam is entering into a virtuous circle that preserves our future. Let us pause a moment and consider the bleak – yet plausible – scenario of a future without ulam, in the case of Malaysia for example.

In the year 2050, Malaysia has reached 40 million-population size, with an urbanisation rate touching 84% and a tertiary sector striving at 75% of the country's total domestic economy. Coastal areas have been damaged due to massive development; the green construction sector is still not much involved as the active construction sector's lobbying prevents any kind of actual enforcement of green measures.

Food uberization is now a social norm in Southeast Asian big cities: there are a few healthy options but these are reserved for the consumers who can afford it, widening the gap between low middle classes and the upper-middle classes.

With less and less arable land, Malaysia relies further on imported macro-vegetables, together with some attempts on hydroponic agriculture on urban rooftops.

Only the upper layers of the Malaysian society eat healthily, selection highly priced organic fair-trade labels, while the middle class has been shrinking, widening the social divide. Aborigines and creolized communities (Peranakan social groups) have been culturally assimilated, and their heritage almost forgotten, except for a shallow portion being commodified for tourism industry.

This future is however evitable. Let us now envisage a more positive scenario where awareness has been created and where the future looks brighter for mankind and for the planet.

With climate change becoming more ubiquitous and erratic in 2050, there was an obligation to find plants that are resilient and can withstand the harsh changes yet protect the environment (Padulosi et al., 2014). Ulam greens fit this role perfectly, being either native or naturalized plants, and having built their resilience in Malaysia for centuries at minima.

By 2050, syntropic agroforestry became a benchmark and has been replicated in other states, including in East Malaysia (Borneo island) where it bears a different name, linking it to local ethnic minorities' culture, as Aborigines dwell exclusively in Peninsular Malaysia. The Ulam economy set a trend, which in turn triggered the mushrooming of alternative

movements drawing on permaculture or on urban agriculture as far as the capital city is concerned; these alternative movements stem from a virtuous circle that was indeed set in motion by the Ulam movement.

Consequently, the place of the tertiary economy within the Growth Domestic Product regressed from 62% in 2020 to 58% due to the rise of micro-agriculture linked to the Ulam social economy system.

The percentage of forests estimated at 60.6% in 2020 has increased slightly reaching 62% due to reforestation. This reforestation was made possible by more responsible and sustainable practice of palm oil cultivation, thanks notably to international pressure.

The federal average ratio of arable land was 2.7%. By 2050, thanks to syntropic agro forestry, this percentage has doubled for our selected geographical area.

In 2019, Malaysians consumed about 3.5 billion worth of imported vegetables and fruits. The country was then self-sufficient at 89.9% (Source: Malaysian Department of Agriculture, 2020) and was importing specifically vegetables that cannot grow in Malaysia due to the nature of the soil and climate, i.e.: large onions, dry chilies and sawi (brown mustard).

With the Ulam movement advocating for locavorism, the imports gradually diminished, leading to a ratio of self-sufficiency of almost 95%.

In 2050, the adoption of Ulam lifestyle society by the majority leads to exponential growth of outdoor activities, thus contributing to solve the problem of Vitamin D deficit: one of these activities is eco-tourism in Orang Asli settlements, which are now prosperous.

As per Vietnam and Cambodia, the next challenge might be to produce pesticide-free local vegetables with sufficient nutrients, which probably means breaking free from the shadow cast by both American and European Union organic labels.

Buying ulam from a wet market from an organic farm may be viewed, or not, as an act of resistance against economic globalisation. More importantly, it makes us agents of change. Eating local ulam on a regular basis enables us to enter in a virtuous circle that yields systemic positive changes, for the planet, for the people who are the stewards of the land, and for our own health.

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The editor



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BLURB

What is Ulam?

And why an Ulam cookbook?

If you look for the word 'Ulam' in a Malay-English dictionary, you will probably stumble upon the following English equivalent: 'salad'. This is an oversimplification and a Western-centric translation.

Ulam is a Malay idiom that refers to the local edible flora of Malaysia, which is usually eaten raw, or slightly cooked and served with rice. Ulam, or ulam-ulaman in its plural form, include edible plants, herbs and other greens; some people also add into the Ulam basket selected fruits and nuts – it is a porous category.

Most importantly, Ulam is a sustainable and regenerative food. Its micro-nutrient levels are much higher than imported vegetables from intensive agriculture. As such, Ulam can help addressing the infamous hidden hunger (enough calories, but not enough nutrients).

The Food and Agriculture Organization of the United Nations (FAO) states that while hunger is circumscribed to specific areas, particularly in conflict zones and areas affected by climate change, obesity is everywhere.

FAO stresses that obesity is associated with many chronic diseases, such as diabetes, heart disease, hypertension and some forms of cancer and costs about \$2 trillion per year in direct healthcare and lost productivity. This is equivalent to the impact of smoking or the impact of armed conflicts.

Recent scientific surveys show that some specific ulam can also help diminishing sugar content in the blood, reducing high blood pressure and even fight certain types of cancer.

Eating Ulam is entering into a virtuous circle. When buying Ulam at the wet market, or at the supermarket, you contribute to the formation and maintenance of a short supply chain, which in turn reduces the country's carbon print, stimulates local economy and support indigenous communities that grow or forage Ulam. By eating it, you feel healthier and stronger.

This book displays fifteen Ulam-based recipes. These recipes originate from three different countries: Malaysia, Vietnam and Cambodia, where the many authors did their fieldwork to identify and collect plants with unique properties. Chefs then leveraged their skills and imagination to create healthy food or beverage recipes suitable for urban palates.

The Ulam Cookbook is a sub-component of a broader transnational Food Education Project entitled "The Ulam School", which is sponsored by the Toyota Foundation.

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