



THOMAS ZACHARIAS

EXECUTIVE CHEF AND PARTNER, THE BOMBAY CANTEEN, MUMBAI

INGREDIENT: *Moras bhaji*, *Suaeda spp.*

WHY USE: We celebrate regional Indian cuisines and showcase indigenous, local, and seasonal produce. We have added *moras bhaji*, a halophyte that grows in salty lands or brackish waters to our portfolio of Indian vegetables. It is succulent with a juicy crunch and almost *chaat masala*-like salty-sour flavor

WHERE TO BUY: Collected from the Mangroves in Vasai, Mumbai

WHAT TO PAY: Around ₹200 per kg to the collector

Courtesy Thomas Zacharias

CHANNA DAL AND MORAS VADA

INGREDIENTS

Channa dal (soaked overnight): 2 cup
Cleaned moras leaves: 100 g
Onions (chopped): ½ cup
Green chillies (chopped): 2 tbsp
Ginger (chopped): 1 tbsp
Curry leaves (chopped): 4 tbsp
Hing: a pinch
Turmeric powder: ⅛ tsp
Cumin seeds (toasted): 3 tsp
Besan: 1 ½ tbsp
Salt to taste
Sugar to taste

METHOD

Coarsely grind the soaked channa dal. Mix the remaining ingredients together. Season. Form flat patties using 25 g of batter per vada and deep fry.

CHARRED CORN AND MORAS SALAD

INGREDIENTS

Roasted corn kernels: 1 cup
Moras bhaji (plucked): 1 ½ cups
Hing (asafoetida): ½- 1 tsp

METHOD

Toss salad with hing and a squeeze of lime. We top our Indore-inspired bhutte ka khees with this hing dusted salad and serve with a chilli coconut chutney.

When the sky turns cloudy in March, Resham Begum prays that she would hear thunder claps at night, and that the lightning would shine through the window of her mud house in Nagsari forest of Lolab area in Jammu and Kashmir's Kupwara district. "Lightening makes the *kangech* sprout from the earth," she quips.

Kangech is the local name for the rare Himalayan mushrooms, the *gucchii* morels, also referred to as *Morchella esculenta*.

Begum starts early with her three children, aged between eight and 12, and climbs the denser area of the forest, each with a scarf-sized cloth for carrying back the little treasures and a few thick breads to sustain them while on the hunt. "On some days, we collect so many *kangech* that we find it difficult to carry back," Begum says. Morel collection is the main occupation of the family for most days in March and April. Begum sun-dries the morels on her rooftop, spread evenly on a straw mat.

GUCCHII STORY OF THE MOREL

ZEHRU NISSA

By the time a *gashnaghar* (local middleman) arrives in the village, Begum's family has managed to collect a stock of *kangech* that sells for ₹5,000 to ₹7,000. The price is not based on weight or number of morels. "He just offers a price to the stock we have collected, usually four of these baskets," Begum says, showing a large cane basket which could hold about 20 litres.

However, not every day brings a jackpot for morel hunters. "It is like a gamble. One might find two morels, or one might find a sack-full of them," Abdul Salam, a morel hunter from Yousmarg, says. "One has got to be lucky to find *kangech*. There is no sure way of knowing where it can be spotted," he adds. Salam treads on foot, often with a fellow villager, to the farthest of areas of Pir Panjal range—Dragdolan, Bargrah, Bajpathri, Tchoorkhal and Behrandabb—to find "the darkest and the biggest of morels". At lower altitudes, the morels sport a lighter color, and do not fetch a very good price in the market. "Last year, I sold the dark morels at ₹9,000 a kilogram, while morels from lower areas fetched only ₹7,000," he says.

However, going higher is not as easy as it sounds. The fear of bear and leopard attacks and the chance of wandering into an unwelcome territory always looms large. Mohammad Iqbal is a resident of Kalaroos, Kupwara and buys morels from the hunters of the villages of Lolab, Machil and other higher reaches in Kupwara. Iqbal is a licensed contractor for dealing in non-timber forest products;



Zehru Nissa

the contract is issued by the state's department of forests. Every year, the department auctions rights to extract *gucchi* from various forest areas.

After a successful bid, contractors or middlemen like Iqbal go from village to village to source morels collected by hunters. "We pay them the best price and they can sell only to us," Iqbal says. However, he rues that some hunters approach the stockists directly to get a better deal.

In 2018, Iqbal bought 200 kg of morels, the price mainly determined by the color and size. Contractors like Iqbal usually sell the small sizes and the lighter colored morels at ₹9,000 per kg and the bigger and darker ones at ₹12,000 per kg. Selling to stockists in Srinagar and other cities, in the last spring in 2018, Iqbal made a profit ₹2,000 per kg on small morels and ₹3,000 per kg on the bigger ones.

Stockists supply the *gucchiis* to markets in Kashmir, Mumbai, Punjab and many other cities, with a few thousand rupees added to the cost as their profits. The *gucchiis* reach the plates of connoisseurs from these shops and sellers at ₹17,000 to ₹27,000 a kilo.

"We clean the *gucchiis*, grade them, clip them and vacuum pack them into packages as per client requirements," Noor-ul-Amin, one of the oldest and most popular dealers of *gucchiis* and saffron in Kashmir says. Located in the posh Polo View market in Srinagar, his shop Amin-bin-Khaliq (ABK) supplies the product to restaurants and sellers across

India. Displaying a wide range of morels, Amin picks up a piece the length of his palm. “This is the best kind of morel you will find anywhere in the world—even better than European and other varieties,” he says. The cost—₹25,000 to ₹30,000 a kg, depending on the season. The other varieties, smaller ones, and with the tails intact, sell for less: ₹15,000 to ₹20,000 a kg.

Branded as “Proudly a product of Kashmir”, morels sold by ABK is a booming business and has a wide customer base, but Amin feels not enough is being

During March and April, families go deep in the forests to collect morels. These fetch the families between ₹5,000 to ₹7,000

done by the government and other stakeholders to promote “Brand Kashmir” of morels, which he claims are the “most exotic and organic mushrooms” anyone can have.

According to official data, in 2018-19, auctions in all the areas of Kashmir division fetched the forest department a meager ₹10.5 lakh. Conservator of forests-Kashmir division, Irfan Ahmed Shah, says the department is planning to build better intelligence on how much morel grows, in which areas of Kashmir, etc. This, he feels, could help the

department earn better revenues, reduce smuggling of the product, and help morel hunters earn a better livelihood.

The department, Shah says, also plans to collect data and develop links with populations living in or near forests, who are involved in morel hunting. “The prices that contractors pay to morel hunters are often exploitative,” he says. However, he adds, the situation in Kashmir has stalled progress on these lines. “Let us be honest, most of these plans have not moved beyond files. The situation is often not very conducive for our officials to tread deep into forests,” Shah admits.

In recent years, the dip in tourism has hit the demand for morels. In Kokar Bazar, a low-end market of Srinagar, Ghulam Ahmed Beigh, owner of Badam Shop that sells morels, nuts and other forest products from Kashmir, has felt the slack. “We used to get a lot of tourists in this market who would shop for saffron and morels,” he says. But now, his entire morel business has shrunk to supplying only to traders outside the state.

However, many businesses in Kashmir have found an antidote to the low tourist inflow as well. Organic Kashmir, an e-commerce portal for native specialties from the state, claims it sources morels “from the grassroots”. “Ours is a collaborative business, where the morel hunter is at the center,” Omais Qadri, the founder of Organic Kashmir, says. Qadri’s company also ensures that the mushrooms are of the “perfect size and color”.



Getty images

KASHMIRI STYLE MOREL CURRY

INGREDIENTS

Dried morels: 1 medium size bowl
(about 30 g)
Onion (finely diced): 1 medium-sized
Mustard oil: 1 tbsp
Turmeric powder: ½ tsp
Kashmiri chilli flakes: ½ tsp
Milk: ½ cup
Salt to taste

METHOD

Soak morels in a pan of water at room temperature overnight. Slice the mushrooms vertically into two halves. Rub the inside hollows and ridges with thumb gently to remove any debris. Drain and keep aside. Heat oil in a pan and add finely chopped onions. When the onions turn translucent, add morels and stir fry for five minutes on medium heat. Add salt, turmeric and Kashmiri chilli flakes and stir gently to cover all morels. Cover the pan for five minutes. Add milk and bring to boil. The traditional Kashmiri guchhii curry is ready. Enjoy with rice or roti.

Note: No aromatic spices are added to guchhii to retain their exquisite and delightful aroma.

RECIPE BY: ZEHRU NISSA

A DELICIOUS AFFAIR

CHANDRA PRAKASH KALA

After four-and-a-half hours of arduous trekking on the hill slopes from Srinagar town in early May of 2011, I reached the temperate forest of Khirsu, an eye-catching yet lesser known hill station in Uttarakhand's Pauri Garhwal district. From here, I saw a number of villages scattered across the downhill slopes in the pine and oak forests. Trekking further, I encountered a variety of colourful pheasants, including *khaleej* and *koklass*. But a more rewarding discovery was to happen the next day.

“Walking in the temperate forests of not only Uttarakhand but the entire north-west Himalayas, especially during April and May, offers some unique and remarkable returns,” I was once told by I D Bhatt, a scientist at G B Pant Institute of Himalayan Environment and Development in Almora. Besides being ecologically important, the oak-pine-dominated forests provide some peculiar provisioning services, which include some delicious fruits. The Himalayas are known to harbour over 650 species of wild fruits, but people in Uttarakhand mostly eat *heesar*, *kingod*, *karonda*, *bedu*, *melu*, *timla* and *kafal*.

The next morning, I set off to explore the oak and rhododendron forests of Khirsu. To my delight I saw some *kafal* trees laden with berries. They are delicious, as the name itself reflects—ka + fal, meaning “what a fruit”. Also called box berry (*Myrica esculenta*), it is an evergreen, dioecious tree (male and female of the species are different). People prefer the female tree because it bears fruits that fetch a handsome price even in villages.

Kafal tree is medium-sized and generally grows in the temperate forests of pine, oak and rhododendron between 1,000 metres and 2,200 m above the sea level under canopy trees. It grows across the Himalayan region, from Khasi, Jaintia, Naga and Lushi hills in north-eastern India to the Malaya, Singapore, China and Japan farther east. In north-eastern India, *kafal* is called *soh-phi*.

Walking in the forest, I cast my eyes around for *kafal* trees that had branches



low enough to pluck fruits. Failing to find one, I picked up my pair of binoculars to soak in the beauty of the hills. I saw a girl swiftly climbing a tree to pluck *kafals*. Three women standing beneath were gathering fruits in baskets made of bamboo. I learnt from them that the fruit is part of folklore. One such story is about a woman who plucked a basketful of *kafal* fruits from the nearby forest and brought them home. The scorching summer heat had parched her throat. She asked her beautiful daughter for water. But there was no water at home. So the woman went to the spring nearby to quench her thirst and asked her daughter to watch over the basket, giving strict instructions not to eat the fruits.

When she returned, the fruits looked fewer. Not realising that the fruits had shrunk because of loss of water, the woman slapped her daughter hard. The girl died on the spot and turned into a cuckoo. Ever since, every year in May and early June, the cuckoo sings, “*kafal pako min nee chakho* (*kafal* has ripened, but I have not tasted it yet)”.

The popularity of the wild fruit is also reflected in a song famous in Uttarakhand: “*Bedu pako baarah maasa, narayni kafal pako chait* (*bedu* ripens every month, but *kafal* only in April-May)”. This is also a representative song of the Garhwal Rifles and the Kumaon Regiment.

SMALL FRUIT, BIG BENEFITS

Savitri Devi, one of the three women gathering the fruits, told me that people collect *kafal* both for their own consumption and for sale. The fruits are gathered mostly by the women in villages. Looking at the tree and its high fruit-bearing branches, I noticed that collection is not an easy task. People often slash down its branches, spread them on the ground and collect the fruits. The fruit’s maturity is confirmed when its colour changes from green to dark or blackish red.

Since *kafal* grows in a specific altitudinal range, people living beyond it eagerly wait for *kafal* sellers. Earlier, people would exchange two bowls of pulses like *gahath*, *masoor* and *urad* for a bowlful of *kafal*. On returning to Srinagar, I arrived in Balodi, a village that had almost no *kafal* tree. But I did see a woman selling the fruit. She had walked down from a village close to Khirsu. She told me that one full glass of *kafal*, which may be around 250 g, costs about ₹15 in rural areas. Vendors sell *kafal* in local markets where the cost fluctuates, depending upon the availability of the fruit. In tourist places like Srinagar, Nainital, Pauri, Uttarkashi, Tehri, Almora, Karnprayag and Devprayag the cost of *kafal* is higher. It could be between ₹60 and ₹100 per kg. To get an idea of how much is a kg of *kafal* keep in mind that about 200 mature fruits weigh 100 g.

Delicious as it is, the tree is disappearing from the region for a number of rea-

sons. *Kafal* is known to have a symbiotic relationship with nitrogen-fixing soil microorganisms. Nitrogen is used by plants associated with the tree. Disturbances caused by people around the tree affect the associated species and tree saplings, reducing their chances of regeneration. People cut down male *kafal* trees for fuelwood because they do not bear fruits. This severely affects pollination and regeneration of the species. “*Kafal* grows in relatively open canopy forests. It, therefore, prefers chir pine forests,” points out Bhatt. Chir pine forests are prone to frequent fires during summers. This is a big reason for the declining population of *kafal* trees in the area.

In the recent years, some parts of Uttarakhand have reported early fruiting of *kafal*. This has been attributed to climate change. The changing socio-economic and environmental pressures on temperate forests have led to a sharp decline in the availability of *kafal* trees. Apart from anthropogenic disturbances, there are natural reasons for the reduced number of *kafal* trees. The tree is generally propagated by seeds but since the seed coat is impermeable, the physical dormancy remains, resulting in irregular and erratic germination pattern. This ultimately affects the species’ regeneration potential, and the new *kafal* trees have high heterogeneity in terms of male or female trees. This is not bad news for only the admirers of the tasty fruit. For a couple of years I had surveyed the *vaidyas* of Uttarakhand to document their knowledge on use of herbal medicines. During one such visit, I was informed that almost all parts of the *kafal* tree are used in one way or the other. The bark is used to cure a number of diseases, including mental illnesses. It is known to have anti-allergic property. The fruit itself is said to possess anti-asthmatic property. The fruit and bark together are used for making red and yellow dye. The oil extracted from *kafal* flowers and seeds is used as a tonic. Its leaves are a good fodder for cattle and its branches are used as fuelwood. The fruit is also used for making squash, syrup and jam. Despite its multiple uses and great potential as a fruit crop, the forest department does not select the species for its afforestation and reforestation programmes. That is why people have not yet started cultivating *kafal* as a crop.

Economical, ecological and social importance of *kafal* does warrant a concerted effort to conserve the species. Village-level enterprises on *kafal* can boost rural economy. Processing the fruit for squash, syrup and jam can improve people’s financial condition.

ACHYRANTHES ASPERA/ NAIRUSEDI KEERAI

15-DAY DELIGHT

B SALOME YESUDAS

Spinach and fenugreek all bunched up in neat bundles in urban markets: that's the image one has when thinking of leafy vegetables. But the greens are not just that. They are intrinsic to tribal and rural diets as well. In the densely forested districts of Jawadhu hills in Tamil Nadu, tribal people have something to pluck all through the year from their fields, farms and forests. Men, women and even children can differentiate between the edible and inedible plants. They know the

plants that can be consumed when crops fail.

One such leafy vegetable, *Achyranthes aspera*, grows in abundance in the millet farms of the area during the rainy season between June and September. While weeding the farms, women of Vedaranyam taluka in the state's Nagappattinam district collect its tender leaves and stems in July itself. This is because they become hard once they start flowering. Locally called *nairusedi keerai*, *naagar*, *uthlandiga sepu* and



Poriyal



Achyranthes is popular among the health conscious as it helps in weight loss. However, it can be harmful if over-consumed

nayuruvi, it belongs to the Amaranthaceae family. *Chaulai ka saag*, a popular leafy vegetable, also belongs to this group. *Achyranthes* leaves may be small in stature, but they are packed with nutrition, are delicious and most importantly, have many medicinal properties, says Vasantha of Thommaretti village located in the Jawadhu hills. “Not just leaves, its stem, root and even the seed can be consumed as both food and medicine,” she says. Studies prove her claim.

HEALTH SUPPLEMENT

In Vedaranyam, traditional practitioners use the plant to treat women with reproductive problems, shows a study published in the *Journal of Traditional and Complementary Medicine* in July 2017. Researchers in Pakistan have found that the plant can be used as a nutritive supplement. Their study, published in the *Pakistan Journal of Pharmaceutical Sciences* in September 2014, states that *Achyranthes* leaves can improve general health parameters such as body weight, haemoglobin and platelet counts. 100 g of *Achyranthes* leaves provide 3.3 g of protein, 417 mg of calcium, 68 mg of phosphorous, 12.5 mg of iron, 5,311 µg of beta carotene and 94.56 mg of vitamin C. It is said that the plant’s root can

be used as a toothbrush to kill oral germs. The root’s powder, when mixed with pepper and honey, can cure cough.

The paste of *Achyranthes* leaves can treat the poisonous bite of an insect, a wasp or a bee. When mixed with onion, the paste can be used to cure skin diseases. It can also treat diarrhoea if consumed along with buttermilk. These days, *Achyranthes* is becoming popular among the health conscious as it helps in weight loss. However, it can be harmful if over-consumed. But this is unlikely as the plant’s tender leaves and stems are available only for about 15 days in a year.

During *Sunjam panduga*, a festival celebrated when the crops are in full bloom, farmers collect fresh beans and greens from their fields and cook them all together in a dish called *bajji kura*. *Achyranthes* leaf finds its place in the auspicious recipe. *Samarangana-Sutradhara*, an encyclopaedia on classical Indian architecture, tells us that its juice can be used as a powerful ingredient for the mixture of wall plaster.

Despite the nutritive value, tribal people refrain from collecting the plant now as the farms are heavily sprayed with chemical-based pesticides. Small wonder, this storehouse of nutrition has disappeared from our food baskets.

PORIYAL

INGREDIENTS

Achyranthes leaves: 250 g
Red gram (masoor) dal: 100 g
Oil: 1 tbsp
Chilli powder to taste
Salt to taste

METHOD

Boil *dal* in just enough water till it is half cooked. Add salt and *Achyranthes* leaves, and boil again. Drain out extra water, if any. Heat oil in a pan, add *dal*, put chilli powder and fry for some time. Serve hot with *roti* made of *jowar*, *bajra* or *ragi*.

KOOTTU

INGREDIENTS

Achyranthes leaves: 250 g
Green gram (moong) dal: 100 g
Tomatoes: 2
Garlic (crushed): 4 pods
Onion (small): 1
Chilli powder to taste
Salt to taste

METHOD

Boil green gram dal till it is tender. Add chopped *Achyranthes* leaves, tomatoes, onions and garlic. Cook for a few minutes. Add salt and chilli powder, and cook some more. Serve hot with rice.

MIXED GREENS TADKA

INGREDIENTS

Achyranthes leaves: 50 g
Amaranthus leaves: 50 g
Red gram (masoor) dal: 100 g
Garlic: a few pods
Whole red chilli: 4
Oil: 1 tbsp
Mustard seeds: 1 tsp
Salt to taste

METHOD

Boil masoor dal and drain out extra water. Warm oil in a vessel, add mustard, garlic, dry chilli. When they turn brown, add washed and chopped leaves, dal and salt. Close the lid and let it simmer for 8 to 10 minutes. Relish with hot rice.