

Betel Leaf Essential Oil Health and Beauty Benefits

The betel (*Piper betle*) is a vine (crawler) of the family Piperaceae (also known as the pepper family, are a large family of flowering plants), which includes pepper (or peppercorn) and kava (or kava kava, meaning “bitter”).

The betel plant is native to Southeast Asia. It is an evergreen, dioecious (either female or male) perennial (lives more than two years), with white catkins (a slim flower cluster without petals) and waxy green, glossy heart-shaped leaves which, when crushed, have a peppery fragrance.

Etymology of Betel

The term “betel” was derived from the Malayalam word *vettila* (വെറ്റില), via Portuguese.

Distribution of Betel

Piper betle is originally native to Southeast Asia, from Island Southeast Asia (Philippines, Timor–Leste and the Lesser Sunda Islands, and Peninsular Malaysia) to Indochina (Vietnam, Cambodia, Laos, Thailand, and Myanmar).

Its cultivation has spread along with the Austronesian migrations and trade to other parts of Island Southeast Asia, Papua New Guinea and Melanesia, Micronesia, South Asia, the Maldives, Mauritius, Réunion Island, and Madagascar. It has also been introduced during the Colonial Era to the Caribbean.

Cultivation of Betel

The betel leaf is cultivated mostly in South and Southeast Asia, from Pakistan to Papua New Guinea. It needs a compatible tree or a long pole for support. Betel requires well-drained fertile soil.

Waterlogged, saline (high salt content) and alkali soils (clay soils with high pH) are unsuitable for its cultivation.

In Bangladesh, farmers called *barui* prepare a garden called a *barouj* in which to grow betel.

The *barouj* is fenced with bamboo sticks and coconut leaves. The soil is plowed into furrows of 10 to 15 m length, 75 cm in width and 75 cm depth.

Oil cakes (or press cakes, are the solids remaining after pressing something to extract the liquids, their most common use is in animal feed), manure, and leaves are thoroughly incorporated with the topsoil of the furrows and wood ash. The cuttings are planted at the beginning of the monsoon season.

Proper shade and irrigation are essential for the successful cultivation of this crop. Betel needs constantly moist soil, but there should not be excessive moisture. Irrigation is frequent and light, and standing water should not remain for more than half an hour.

Dried leaves and wood ash are applied to the furrows at fortnightly intervals and cow dung slurry is sprinkled. Application of different kinds of leaves at monthly intervals is believed advantageous for the growth of the betel. In three to six months, the vines reach 150–180 cm (60–70 in) in height, and they will branch.

Harvest begins with the farmer plucking the leaf and its petiole (the stalk that attaches the leaf blade to the stem, capable of twisting the leaf to face the sun) with his right thumb. The harvest lasts 15 days to one month. The betel plant has made its way to research labs of many Bangladesh chemical and food nutrition companies.

The harvested leaves are consumed locally and exported to other parts of Asia, the Middle East, Europe, and the Americas. Betel is grown and cultivated as an important crop in rural Bangladesh.

CULTURAL SIGNIFICANCE OF BETEL

CHEW

Betel plants are cultivated for their leaves which is most commonly used as flavoring in chewing areca nut (or in modern times, tobacco), called “paan”. Betel nut chewing, also called betel quid chewing or areca nut chewing, is a practice in which areca nuts (the seed of the areca palm) are chewed together with slaked lime and betel leaves for their stimulant and narcotic effects.

The practice originated in the Philippines around 5000 years ago. Where the oldest remains of areca nuts and lime (a calcium-containing inorganic mineral composed primarily of oxides, and hydroxide) from crushed sea shells have been found in the Duyong Cave archaeological site.

It was spread along with the Austronesian migrations to the rest of Southeast Asia, Taiwan, South China, and South Asia. However, it is unknown when betel leaves were first combined with areca nuts, since areca nuts can be chewed alone.

While the practice of chewing betel leaf (betel quid) existed even before the common era (CE and BCE), with attested references from at least the 3rd century CE, the ingredient mix (*paan*) it was chewed with changed over time. Areca nut, mineral slaked lime and catechu (extract of acacia trees used variously as a food additive, astringent, tannin, and dye) were the historic ingredients, as referenced in texts from 9th century CE, and tobacco started to feature in the 20th century.

The practice of chewing betel leaf is on the decline, and now the betel quid (gutka, ghutka or guṭkha) consisting of tobacco, areca nut, catechu, paraffin wax, slaked lime and sweet or savory flavorings is more popular. Betel leaves are also a popular flavor in hookahs.

BREATH FRESHENER

Betel leaves are commonly used as a breath freshener in India. They are used as a base to wrap up the various components of “paan”, including tobacco, areca nut and sugar syrup, among others. Modern variations of this street favorite include chocolate syrup poured in the center of the leaf with the addition of the other traditional components. The leaf is rolled and wrapped up to create a conical shape and is always ingested in one bite.

It takes a long time to chew the entire betel leaf but the flavors and textures of this breath freshener are long-lasting and make it an interesting experience.

MEDICINAL VALUE

Epidemiological studies demonstrate a close association between the incidence of cancer in India and the chewing of betel quid containing tobacco, areca nut, slaked lime and betel leaf. Chewing *paan* (betel quid) is strongly associated with a higher risk of developing head and neck cancer, as well as oropharyngeal squamous cell carcinoma (OPSCC), a form of cancer that affects the mouth, tonsils, and throat.

Attempts have been made to confirm the carcinogenic and mutagenic (mutates DNA) of betel quid or its ingredients. Betel leaf extract alone has not been shown to cause adverse effects. Smokeless tobacco products have been shown to exhibit mutagenic and carcinogenic behavior. A scientific study from Japan found that lab rats that ate a mixture of betel leaf and areca nuts had severe thickening of the upper digestive tract, whereas after a diet of betel leaves alone, only one laboratory rat developed a forestomach papilloma.

Multiple studies demonstrate that betel quid without added tobacco also causes esophageal cancer, and in some instances, liver cancer. In a cancer diagnosis patterns study with patients that chewed betel

quid with different ingredient combinations, the risk was found to be the highest for those using any form of tobacco.

[International Agency for Research on Cancer](#) (IARC) and the [World Health Organization](#) (WHO) accept the scientific evidence that chewing tobacco and areca nut is carcinogenic to humans. As with chewing tobacco, chewing betel quid with tobacco and areca nut is discouraged by preventive healthcare efforts. Reports suggest that betel leaf by itself has beneficial effects, in part because of its anti-mutagenic effects against mutagens (tobacco and areca nut) in betel quid.

While earlier studies hypothesized a potential mutagenic role for betel leaf in causing oral cancers, subsequent studies invalidated it by isolating compounds (*eugenol* and *hydroxychavicol*) in betel leaf that have anti-mutagenic roles. These compounds were also found to reduce the carcinogenic burden imposed by tobacco and areca nut. Hydroxychavicol is found to demonstrate anti-prostate cancer efficacy in an in vitro (human prostate cancer cells) and in vivo (BALB/c nude mice) study.

RELIGIOUS

The betel leaf features prominently among the cultural heritage of India, Nepal and other South East Asian countries. It is most widely used in India for special occasions where it is known as “the golden green”. In Hindi, betel leaf is known as “paan ka patta” in Telugu it is called “tamalapaku”, in Tamil it is known as “vethalapaaku”, in Malayalam it is “vattla”. Betel leaf-flavored condoms are a common fixture in drug stores in India.

In India and Sri Lanka, a sheaf of betel leaves is traditionally offered as a mark of respect and auspicious beginnings in traditional Indian culture. Occasions include greeting elders at wedding ceremonies, celebrating the New Year, and offering payment to physicians and astrologers (to whom money and/or areca nut, placed on top of the sheaf of leaves, are offered in thanks for blessings).

CULINARY

Betel leaves are also used in cooking, usually raw, for their peppery flavor. They are also used as a flavoring agent in various candies, culinary dishes and drinks. Paan masala, a powdered spice mixture of betel leaf flavor and tobacco, is also pretty common in India. Use of *binglang*, or betel, has over a 300-year history in areas of China, where it was once promoted for medicinal use.

PHYTOCHEMISTRY OF BETEL

Chemistry of betel leaf varies geographically and is mostly *chavibetol* (a phenylpropanoid) dominant. *Safrole* is a major component of Sri Lankan piper betle. *eugenol*, *isoeugenol*, and *germacene D* are other dominant compounds in other chemotypes.

The leaves also contain *eugenol*, *chavicol* (p-allylphenol), *hydroxychavicol* and *caryophyllene* (β -caryophyllene, BCP).

The stems contain phytosterols which are phytosteroids, similar to cholesterol (β -sitosterol, β -daucosterol and *stigmasterol*), alkaloids (*piperine*, *pellitorine*, *piperdardine*, *guineensine*), *lignan* (pinoresinol) and other bioactive components. Some of them are *oleanolic acid*, *dehydropiperonaline*, *piperolein-B*, *bornyl cis-4-hydroxycinnamate* and *bornyl p-Coumarate*.

The roots contain *aristolactam A-II*, a new phenylpropene, *4-allyl resorcinol* and a *diketosteroid stigmast-4-en-3,6-dione*.

The essential oil consists of 50 different compounds, of which major components are the monoterpenes *eugenol*, *caryophyllene*, *terpinolene*, *terpinene*, *cadinene* and *3-carene*.

THE ECONOMICS OF BETEL

Betel vines are cultivated throughout Southeast Asia in plots whose area is typically 20–2000 square meters (0.005–0.5 acre). Malaysian farmers cultivate four types of betel plants: “sirih India”, “sirih Melayu”, “sirih Cina” and “sirih Udang”. The harvest is then sold in bundles of leaves, each bundle costing in 2011 between MYR 0.30–0.50 (\$0.07–\$0.12).

In Sri Lanka, betel is grown all over the country, but the commercial production of betel, with bigger leaves with dark green color combined with thickness, known as “kalu bulath”, is confined to a few districts, such as Kurunagala, Gampaha, Kegalle, Kalutara and Colombo. These are sold at a wholesaler in lots of 1000 leaves. According to a report published by the [United Nations \(UN\) Food and Agriculture Organization \(FAO\)](#), a successful betel farm in Sri Lanka can provide a supplemental income to a farmer by providing six days of work every six months and net income when the leaf prices are attractive.

The FAO study found the successful farm's yield to be 18,000 leaves per 150 square feet (14 m²). The additional salary and income to the Sri Lankan betel grower, assuming he or she provides all needed labor and keeps all net profit, is Rs 1635 per 150 square feet (14 m²) of betel farm every 6 months (\$90 per decimal per year, or \$9000 per acre per year).

if the farmer hires outside labor to tend the betel vines and harvest the crop, the FAO found the net income to the betel farm owner to be Rs 735 per 150 square feet (14 m²) of betel farm every six months (\$40 per decimal per year, or \$4000 per acre per year).

According to FAO, the market prices for betel leaves vary with wet and dry season in Sri Lanka, and in 2010 averaged Rs 200–400 per 1000 leaves (\$1.82–\$3.64 per 1000 leaves). The FAO study assumes no losses from erratic weather and no losses during storage and transportation of perishable betel leaves. These losses are usually between 35%–70%.

In Bangladesh, betel leaf farming yields vary by region and vine variety. In one region where betel leaf cultivation is the main source of income for farmers, a total of 2,825 hectares of land is dedicated to betel vine farming. The average production costs for these betel farms in Bangladesh are about ₳ 300,000 per hectare (\$4000 per hectare, \$16 per decimal), and the farm owners can earn a profit of over ₳ 100,000 per hectare (\$1334 per hectare, \$5.34 per decimal).

In India, a 2006 research reported betel vines being cultivated on about 55000 hectares of farmland, with an annual production worth of about IN ₹ 9000 million (\$200 million total, averaging \$1455 per acre). The betel farming industry, the report claims, supports about 400,000–500,000 agricultural families.

A March 2011 report claims that betel farming is on a decline in India. While in ideal conditions some farms may gross annual incomes after expenses of over IN ₹ 26,000 per 10 decimal farm (\$5,780 per acre), a betel farm's income is highly erratic from year to year, due to varying rainfall patterns, temperature, and spoilage rates of 35%–70% during transport over poor infrastructure.

Simultaneously, the demand for betel leaves has been dropping in India due to acceptance of “gutkha” (chewing tobacco) by consumers over betel leaf-based “paan” preparation; the report cites betel leaf trading has dropped by 65% from 2000 to 2010 and created an oversupply. As a result, the report claims Indian farmers do not find betel farming to be viable anymore.

THE HEALTH BENEFITS OF BETEL LEAF

It is believed that betel leaves can detoxify the blood and provide antioxidant nutrients. These leaves are used to promote cardiovascular function, having anti-inflammatory properties. The therapeutic benefits of the betel leaf can be found in the oil as well.

Betel leaf essential oil has become popular in the past few years. Steam distillation is the most commonplace way of extracting the oil. The leaves yield the most oil when young. The color of the extracted oil can vary from yellow to brown. The aroma and flavor of the oil are quite sharp and bitter.

1. SOURCE OF ANTIOXIDANTS

Chewing betel leaves helps to promote the production of ascorbic acid in the saliva. Ascorbic acid is known to contain antioxidants. Antioxidants help protect the body from viruses and bacteria. Betel leaves are a good source of antioxidants. These antioxidants help prevent damage from toxins and free radicals from environmental exposure.

2. REDUCES INFLAMMATION

Betel leaves are a good source of antioxidants that can act as anti-inflammatory agents. Consuming betel leaves regularly can prevent certain inflammatory diseases like arthritis and asthma. Ground betel leaves mixed with a carrier oil applied topically can relieve pain associated with inflammations.

Betel leaf essential oil is abundant in vitamin C and has analgesic qualities than can ease pain and inflammation associated with rheumatic conditions like arthritis. The numbing quality of this essential oil can help ease other pains like back and joint pain, and headaches. For arthritis, muscle spasms, soreness or swelling, a betel leaf essential oil massage can be effective. Massaging the lower back with betel leaf essential oil diluted with a carrier oil can help ease the pain.

3. AIDS DIGESTION

Betel leaf juice is good for a healthy digestive system. Chewing betel leaves after a meal can also aid digestion. Betel leaves have an alkaline quality that effectively neutralizes pH imbalances in the stomach and intestines. Drinking the water from boiled betel leaves is a natural remedy for indigestion. This natural remedy is effective at improving the symptoms of Gastroesophageal Reflux Disease (GERD). It is important to remember to maintain a gap of at least 30 minutes between ingesting the betel leaves and your meal.

The phytochemicals present in betel leaves have antioxidant properties. Stomach ulcers can lead to the damaging of the stomach lining, decreased production of gastric mucus and oxidative stress. The antioxidants in betel leaves can help heal and prevent future stomach ulcers.

Betel leaf essential oil has digestive and carminative qualities to aid intestinal and digestive functions. Massaging the abdomen with a mixture of betel leaf and other essential oils can provide the stomach relief from acidity, heartburn, constipation and other digestive problems. Intestinal worms like hookworms and tapeworms may also be effectively treated by using betel leaf essential oil.

4. PREVENTS CONSTIPATION

Constipation is a digestive system malfunction that manifests as hard stools or having problems passing stools, or infrequent bowel movements. The causes of this condition can vary from physical inactivity to certain medications.

To prevent constipation, it is best to include high fiber foods in your diet. For instance, all types of fruits, vegetables, leafy greens and whole grains. Betel leaves contain antioxidants and are high in fiber, they are beneficial for preventing constipation. Just chewing betel leaves regularly can help maintain a healthy digestive system.

5. INCREASES HUNGER

Betel leaves help balance pH in the stomach and are therefore beneficial for promoting appetite. A balanced pH triggers the proper signals to the brain to release hunger hormones. Betel leaves also help

reduce acidity in the stomach. They keep the duodenum free from toxins and free radicals. Optimal pH balance in the stomach can prevent bloating.

6. ANALGESIC

Betel leaves and essential oil have analgesic properties. They can offer pain relief from bruises, cuts, rashes, headaches and other forms of inflammation. You can use betel leaves to ease pain by applying a paste made from ground betel leaves or a few drops of betel leaf essential oil to the affected area. Alternatively, drinking the water from boiled betel leaves is also another way to obtain pain relief.

Betel leaves and essential oil can be used as a natural remedy for a headache. Applying betel leaves or essential oil on the forehead can help relieve a headache.

7. TREATS NEUROLOGICAL PAIN

Nerve pain can indicate the symptoms of certain conditions and diseases involving the central and peripheral nervous systems including diabetes, fibromyalgia and cancer. Betel leaves and essential oil have been known to be beneficial as a natural treatment for neurological pain. Drinking 1 teaspoon of betel leaf juice twice a day can help manage neurological pain.

8. EASES UPPER RESPIRATORY PROBLEMS

Drinking the residual water from boiled betel leaves regularly helps treat upper respiratory problems including cough, cold and asthma. Another benefit of betel leaves and essential oil is as natural remedies for bronchitis. Some of the phytochemical compounds found in betel leaves and essential oil can help ease the inflammation of the bronchioles and lungs.

Betel leaf essential oil has expectorant qualities that can loosen phlegm and open up the airways. Another benefit of betel leaves and essential oil is that they help ease a constant cough. This benefit stems from their antibacterial and antiviral qualities, which reduce inflammation in the throat.

Asthma is usually triggered by a histamine reaction in the upper respiratory system. Histamine creates bronchoconstriction, causing difficulty in breathing. Betel leaves and essential oil have anti-histamine properties that help prevent and control asthma.

9. MANAGES DIABETES

There are plenty of effective anti-diabetic medications available on the market, but they often have side effects on the liver and kidneys. Betel leaves contain nutrients such as riboflavin and vitamin C that can regulate glucose levels. Several studies have revealed that betel leaf powder has the potential to lower blood sugar spikes in newly diagnosed Type II diabetic patients.

Betel leaves contain antioxidants that help in combatting oxidative stress and reduce inflammation caused by uncontrolled blood glucose. Consuming betel leaves can help manage diabetes mellitus and keep the immune system optimal. Betel leaf essential oil also has antidiabetic properties.

10. LOWERS CHOLESTEROL

Having high cholesterol can increase the risk of a stroke. Betel leaves contain eugenol which can aid in lowering high levels of cholesterol, triglycerides, low-density lipoprotein (LDL) cholesterol, and very low-density lipoprotein (VLDL) cholesterol. Moreover, eugenol inhibits the amount of cholesterol that passes through the liver, which can help reduce the amount of lipids absorbed by the intestines.

11. SUPPORTS LIVER FUNCTION

Tannins are beneficial antioxidant compounds found in tea, cocoa and red wine. The presence of tannins in betel leaves supports optimal liver function. Tannins also help prevent cellular damage from free

radicals which may lead to cancer. You can consume betel leaves together with berries to fulfill your antioxidant nutritional requirement.

12. ANTIFUNGAL, ANTISEPTIC AND ANTI-PARASITIC PROPERTIES

The polyphenols contained in betel leaves have a natural antiseptic quality. They provide dual protection by killing germs and treating inflammation such as arthritis.

Terpenes and flavonoids, compounds present in betel leaves, have strong anti-parasitic properties that help combat parasite related strains of malaria. The practice of using betel leaves for their anti-parasitic properties to treat malaria began centuries ago in Malaysia.

Chewing betel leaves is a natural remedy for preventing fungal infections. Betel leaf essential oil also has antibacterial, antifungal and antiseptic properties that fight infections like athlete's foot and ringworm.

13. SOOTHES EARACHES

Earaches result from infections and inflammation of the external, middle or inner ear. The causes may stem from sunburn, dermatitis or trauma. Swelling around the outer ear, fever, itch, vertigo and tinnitus (ringing in the ears) can also cause an earache. If you suffer from earaches, then betel leaf juice or essential oil are a great natural organic treatment.

14. SOOTHES VOCAL CHORDS

Singers frequently gargle using a mixture of warm water and betel leaf essential oil to soothe their throat and reduce inflammation of the larynx (laryngitis) before and after a performance.

15. REMEDY FOR NOSEBLEEDS

Frequent nosebleeds may be a sign of a more serious health condition. The causes of nosebleeds can vary from allergic reactions, high blood pressure or even a symptom of leukemia. In case of a nosebleed, add a couple of drops of betel leaf essential oil to a cotton ball and carefully insert part of it in the nose. This should stop the blood flow.

16. MAINTAINS ORAL HEALTH

Betel leaves have antibacterial and antiseptic qualities. Betel leaves can prevent dental caries by reducing the amount of acid produced by bacteria in the saliva. Tooth decay, swollen and bleeding gums can also be treated using betel leaf essential oil. Betel leaf essential oil also has powerful antibacterial and antiseptic qualities that prevent the development of bacteria. Gargling with the residual water of boiled betel leaves or a mixture of warm water and betel leaf essential oil might help strengthen gums, and prevent plaque buildup and tooth decay.

In India it is common practice to chew betel leaves after a heavy meal, eating garlic or food items with a strong aroma. The essential oil of betel leaves has a similar quality and may help freshen breath after heavy meals. The antibacterial properties of betel leaf essential oil can eliminate bacteria and restore fresh breath.

17. MENTAL HEALTH

There are plenty of effective antidepressant drugs available on the market, however, it is proven that some herbal remedies can also have a positive impact in treating and managing depression and anxiety. One popular remedy is to chew betel leaves. This is because they stimulate activity in the central nervous system, uplifting mood and producing feelings of well-being.

Betel leaves also contain aromatic phenolic compounds that stimulate a number of catecholamines in your system, which are linked to stabilizing mood. Betel leaves can be a good herbal remedy alternative

to prescription medication. Ingesting 1 teaspoon of betel leaf juice regularly can help you manage depression and anxiety.

18. MAINTAINS PROPER METABOLISM

This is one of the best home remedies to help you lose weight effectively. Betel leaves combined with black pepper is a potent and natural weight loss remedy. The two speed up your body's metabolism and also help eliminate harmful toxins. Betel leaves can easily be incorporated into the diet or ingested as pastes, powders, juices, to enhance metabolism.

Pepper and betel leaves break down stubborn fat, balance pH helping the intestines absorb important nutrients, and remove waste and toxins, improving the performance of the body's metabolic system. The stimulant property of betel leaves make it a good diuretic. It can help release water retention and treat certain urinary problems.

19. MAINTAINS VAGINAL HYGIENE

Women can make a natural organic douche remedy at home by boiling betel leaves and using the cooled residual water it as a vaginal wash.

20. REPRODUCTIVE HEALTH

Betel leaf and its essential oil are stimulants, which is why the leaves have traditionally been chewed. This stimulant property has given the plant, its leaves and essential oil the reputation as "aphrodisiacs". In Asian countries betel leaves and essential oil are used to treat sexual maladies in both men and women.

Chewing betel leaves can trigger the production of sex hormones. In addition, you can combine betel leaves with other aphrodisiac foods such as chili, chocolate, banana, and watermelon to lift the mood and produce feelings of pleasure.

THE BEAUTY BENEFITS OF BETEL LEAF

1. PREVENTS BODY ODOR

Bathing in a mixture of betel leaf juice and bath water can help you remain fresh all day. Betel leaf can prevent the unpleasant odor of perspiration from the apocrine glands.

2. PROMOTES HEALTHY SKIN

Due its antiseptic and antifungal properties, betel leaves prevent acne, they help treat skin ulceration, infection, pruritus (itch) and allergies. Washing your face with betel leaves can keep skin beautiful and clear. Making a betel leaf juice and olive oil or rosewater facial cleanser is a natural way to keep acne and dark spots at bay.

3. TREATS SKIN CONDITIONS

Applying betel leaf juice topically to the skin can help treat skin conditions like psoriasis and eczema due to its antiseptic and antifungal properties.

4. HEALS WOUNDS

Betel leaves can help heal wounds, especially burns. The vitamin C content in betel leaves will help speed up the healing process. Betel leaves contain phenolic and phytochemicals that can be very effecting against gram positive and gram-negative bacteria that cause infection.

5. REMOVES WARTS

This natural remedy has been known to work effectively at removing warts without leaving scars.

6. HAIR HEALTH

Betel leaves help treat dandruff, reduce hair loss and strengthen your hair follicles. A hair mask made from betel leaves and sesame oil is a go-to remedy to for healthy hair.

THERAPEUTIC USES OF BETEL LEAF

You can consume betel leaves whole or you may be able to find it in juice form, otherwise, the essential oil is readily available. Betel leaves provide unexpected health benefits. Consider consuming betel leaves in your meals. For instance, you can add betel leaves to garlic rice, or simply add them to roasted or grilled chicken and beef for flavor. Adding betel leaves to your food can give you double the benefits.

The advantages of betel leaves and essential oil are utilized for medicinal purposes in the Ayurveda. The essential oil of betel leaf features stimulant, carminative, antifungal, antibacterial and digestive qualities.

1. **For Pain Relief:** Massage the affected area with 2 drops betel leaf essential oil diluted in 1.5 ml of coconut oil. Alternatively, add 4–5 drops of betel leaf essential oil to a cold or hot compress for instant relief.
2. **For Pain Relief:** Grind betel leaves and blend them into a carrier oil such as coconut or olive and apply the mixture directly to the skin.
3. **For Indigestion:** Boil 1–2 betel leaves in 1 cup water, strain the leaves and drink.
4. **For Better Digestion:** Massage the abdomen using a combination of 2 drops each betel leaf and [peppermint](#) essential oils diluted in 2 ml sesame oil. Alternatively, inhale to encourage the juices for digestion.
5. **Ease Bowel Movements:** Crush 1–2 betel leaves and put them in 1 cup water overnight. Drink the water in the morning on an empty stomach.
6. **For Steam Inhalation:** Add 2 drops of betel leaf essential oil to a sink full of hot steaming water, cover your head with a towel and inhale the vapors. Alternatively, massage the chest with a mix of mustard seed oil and betel leaf essential oil to relieve congestion.
7. **To Manage Chronic Pain:** Drink 1 teaspoon of betel leaf juice twice a day.
8. **For Upper Respiratory Problems:** Drink the residual water from 1–2 betel leaves boiled in 1 cup water regularly.
9. **Relief from Congestion:** Apply mustard seed oil to a betel leaf, warm it and place it on the chest to relieve congestion. Alternatively, boil 2–3 betel leaves with cardamom, cloves and cinnamon in 2 cups water. Reduce liquid to 1 cup and drink this mixture two to three times a day.
10. **To Ease a Cough:** Boil 1–2 betel leaves in 1 cup water, strain the leaves and drink regularly. To add flavor to the residual boiled water, sprinkle some cinnamon for a delicious hot or cold “tea”.
11. **For Skin Conditions:** Apply betel leaf juice topically to the skin.
12. **For Wounds or Infections:** Combine 2 drops each betel leaf and peppermint essential oils, 1 drop turmeric essential oil and 2 ml coconut oil, and apply this mixture to the affected area. Alternatively, ground betel leaves can be applied topically to the wound area.
13. **For An Earache:** Mix betel leaf essential oil and coconut oil, using an eyedropper put two drops in the affected ear.
14. **For a Nosebleed:** Add 2 drops of betel leaf essential oil to a cotton ball and carefully insert part of it in the nose.
15. **For Focus and Concentration:** Ingest 1 teaspoon of betel leaf juice regularly.
16. **As a Diuretic:** Drink the residual boiled water of 1–2 betel leaves in 1 cup water daily.
17. **Prevent Body Odor:** Add betel leaf juice to your bath water.
18. **Prevent Acne:** Mix betel leaf juice with olive oil or rosewater to make a natural facial cleanser.

19. **As Mouthwash:** Gargle using the residual water of 1–2 boiled betel leaves in 1 cup water. Alternatively, gargle using 1 cup of warm water in which 2 drops of betel leaf essential oil have been diluted (*optional: add the essential oils of peppermint, fennel, cardamom, cinnamon, nutmeg and cloves*). Gargle daily in the morning and at night for best results.
20. **Hair Mask:** Make a mask from ground betel leaves mixed with sesame oil, apply it to the scalp and roots. Let it sit for an hour, then wash with a mild shampoo.
21. **Relaxing Bath:** Add a few drops of betel leaf essential oil to a hot bath can help calm tense and tired muscles.

HOW TO MAKE A BETEL LEAF HERBAL REMEDY

Usually, this betel leaf herbal remedy is mixed into cooked rice when it is served.

INGREDIENTS

- Turmeric (fresh or powder)
- Brown sugar
- Sugar
- Tamarind
- Salt
- Betel leaves
- Water

INSTRUCTIONS

1. Crush the turmeric first, if fresh.
2. Mix the first 5 ingredients in a bowl.
3. Boil the betel leaves in the water separately and then strain and reserve the water.
4. After mixing the first 5 ingredients, add them to the reserved betel leaf water.
5. Heat until boiling then strain the solids and reserve the remaining water as your herbal remedy.

NUTRITIONAL VALUE OF BETEL

This aromatic creeper is loaded with vitamins and nutrients such as vitamin C, thiamine, calcium, and carotene.

Principle	Value	% of RDA
Energy	44 Kcal	15.5%
Protein	3.5g	3–3.5%
Total Fat	1g	0.4–1%
Vitamins		
Nicotinic Acid	0.63–0.89mcg	
Niacin	13mcg	
Riboflavin	1.9–30mcg	
Vitamin A	1.9–2.9mcg	
Electrolytes		
Potassium	1.1–4.6mcg	

Minerals		
Iodine	1.3mcg	

Value per 100g.

PRECAUTIONS

As is the case with any tobacco–related product, there is a risk of developing leukoplakia (oral cancer) if consuming “paan” often. Consuming the betel leaf on its own, however, is not harmful. Furthermore, as is the case with any tobacco–related product, chewing “paan” can be slightly addictive, but the addiction is to the tobacco and not the leaf itself. Always perform a 24–hour patch test prior to use to check for any potential allergic reaction. Always consult with your physician first before adding anything new to your diet or lifestyle.