

# Babchi Seed Oil Health and Beauty Benefits

## QUICK FACTS

Botanical Name	<i>Psoralea Corylifolia</i>
Color	Pale yellow to red brown
Odor	Strong nutty scent
Blends well with	Ylang yang, Orange, Sandalwood, Birch
Origin	Small plant grows in warm climates like Sri Lanka, India and China.
Extraction Method	Steam distillation
Source	Seed

Babchi (*bawchi*, *bakuchoi*, *bakuchi*, *bemchi*, *bavanchi*) seed oil comes from the *Psoralea corylifolia* plant. It's a small herb that belongs to the *Fabaceae* family, often found in the warmer countries of India, Pakistan, China and South Africa. The plants grow to about 1 m tall and bear perennial and pungent, bitter tasting fruits that cannot survive in freezing winters, along with beautiful yellow and blue–purple tinted flowers that bloom in the rain.

The seeds are usually dark brown, with a characteristic kidney shape, bitter taste and an oily exoskeleton, which is pressed to obtain babchi seed oil. Babchi seed oil's fatty acid profile can be broken down into 30% *oleic acid*, 20% *arachidic acid*, *alpha linoleic acid*, *behenic acid*, 5% *stearic acid* and 2% *bakuchiol*.

The main chemical components of babchi seed oil are *psoralen*, *bakuchiol*, *limonene*, *linalool*, *angelicin*, *α–elemene*, *isopsoralen*, *bavachalcone*, *bavachin*, *6–prenylnaringenin*, *corylifol*, *isobavachalcone*, *corylin*, *psoralidin*, *corylifolin*, *methyl 4–hydroxybenzoate*, *bavachromanol* and *neobavaisoflavone*. The leaves contain *raffinose*, *psoralen*, and *isopsoralen*. The most active ingredient in babchi seed oil is *bakuchiol*. However *psoralen*, *isopsoralen* (coumarins) *flavonoids*, and *meroterpenes* are the other therapeutically effective ingredients present in the seeds and fruits of the plant.

These ingredient are responsible for the management of various skin ailments and other diseases. *Psoralen* is used in anti–cancer treatments. When combined with ultraviolet light (PUVA therapy), they treat skin conditions such as vitiligo, eczema, psoriasis and skin problems related to certain lymphomas.

## THE HISTORY OF BABCHI SEED OIL

Babchi seed oil has had many traditional uses in Ayurveda for its various healing properties. It is actually one for the most celebrated and cherished essential oils in all of Indian history. There have been hundreds of uses recorded both in modern medicine and in the Ayurveda. Babchi seed oil was also thought to be an aphrodisiac. All parts of the plant are used—leaves, fruits and seeds. Every part of the babchi plant has its own unique medicinal use. The bitter fruits are known to prevent nausea and vomiting.

But perhaps the most famous use of all, which earned it the title “*kustanashini*” in Ayurveda, is treating leprosy. *Kustanashini* literally translates to “the destroyer of leprosy”. It's all thanks to babchi seed oil's strong antimicrobial activity which eliminates the organism that causes leprosy. Ayurveda is an ancient Indian system of medicine that dates back to over 3,000 years ago. People believed that the Ayurveda had been given to sages by the gods, and then passed down to human physicians, who now use it as a

form of alternative (or complementary) medicine. Hundreds of uses for babchi seed oil have been documented in the Ayurveda and are still being implemented today.

India wasn't the only nation that knew about the medicinal properties of this herb. In China, there are documented mentions of *Bu Gu Zhi* (their name for babchi). *Bu Gu Zhi* loosely translates to "tonic bone resin", because it was believed that babchi seed oil could strengthen and revitalize one's bones, and even heal fractures and bone injuries.

In the past, people actually took the plant, soaked it in water overnight and drank the water when they woke up, but this approach was problematic for many reasons. The most obvious reason is the bitter taste. But in addition, you'd need a very large amount of babchi to gain any medicinal benefits, and that much of the plant could trigger an allergic reaction. Which is why a different, and better, approach is extracting the essential oil by steam distillation from the seeds of *Psoralea corylifolia*.

Modern science hasn't been able to explain how the efficacy of babchi seed oil was understood so long ago. However, they have been able to explain *how* babchi seed oil works.

## THE DIFFERENCE BETWEEN BABCHI & BAKUCHIOL

Babchi seed oil has been described as having retinol-like properties, without the typical side effects of redness and flaking. People with sensitive skin have a special interest in plant-based extracts that reduce fine lines and wrinkles. More recently a "newer" form of babchi seed oil, *bakuchiol*, has been made available. Both come from the same plant. Bakuchiol though, is more natural and safe skin care ingredient alternative to retinol.

Babchi seed oil is a multi-dimensional extract. Bakuchiol is extracted from the original babchi seeds through a complicated industrial process that makes it **unsuitable** to use in ECOCERT-style formulations. Meaning, if you want a natural and organic product, it won't contain the processed synthetic chemical bakuchiol. Bakuchiol is termed 4-(3,7-DIMETHYL-3-VINYLOCTA-1,6-DIENYL)-PHENOL, whereas babchi seed oil is simply called oil of *Psoralea Corylifolia*.

With bakuchiol extract, the recommended dose is between 0.5%–1%. However, if you're using babchi seed oil, then you can use a significantly higher dose than 0.5%–1% in your formulation, without experiencing negative side effects like redness or blistering.

## BAKUCHIOL VS RETINOL

Retinol stimulates cellular activity and collagen production. Retinol strengthens the skin's protective barrier to avoid loss of moisture. Now, bakuchiol and retinol are similar in that they are both excellent in anti-aging skincare. Both retinol and bakuchiol show effects on photo-ageing in clinical tests when used in a 0.5% dilution. A [2018 study](#) published in the [British Journal of Dermatology](#) compared bakuchiol (used twice daily) with retinol (used nightly) in 50 women with photo-ageing in their late 40s.

Both retinol and bakuchiol stimulated key retinoid-binding genes and collagen production improved wrinkles and hyperpigmentation to a similar degree. However, retinol users experienced more stinging and scaling than those who used bakuchiol. Another key difference is that bakuchiol is *photostable*, while conventional retinol is not, which means retinol can only be used at night.

## THE HEALTH BENEFITS OF BABCHI SEED OIL

Babchi seed oil is known to support skin health and treating skin conditions like vitiligo and psoriasis, and reproductive and genital health and treating impotence. It has been used to treat bone disorders, lumbago (lower back pain) and even intestinal worms. It is used as a vasodilator and cardiac tonic.

Babchi seed oil can be used to treat upper respiratory conditions, to make skin and hair care products, house cleaning products and in aromatherapy. It can also be added to skin care products as it promotes healthy skin and natural skin color. Its sweet aroma is known to reduce stress and fatigue, and lifts mood. It has antibacterial properties, which promote healthy hair and scalp, and can be used to treat dandruff and hair loss. Its antibacterial properties make it a favorite in making hand wash and soaps. Its anti-fungal properties are useful in the making of a variety of skin and nail ointments.

Babchi seed oil is highly concentrated and should only be used externally. This oil is used both topically and in aromatherapy. Although 100% natural, essential oils should always be diluted in carrier oils prior to using in topical applications.

### BLOOD PURIFIER

Babchi seed oil is a powerful blood purifier. It promotes circulation of blood and helps your body get rid of harmful waste materials and enhances your detoxification process. Thereby aiding your liver, which is the main organ responsible for the body's detox. Babchi seed oil is also known as an *immunostimulant*, which is like steroids for your immune system. This oil can help keep your first line of defense against cold and flu as strong as ever.

### WOUND CARE

Babchi seed oil has antibacterial and anti-microbial properties that help treating infections. It also helps in treating inflammation and reducing allergies. Babchi seed oil has also been used for wound care, for instance after burns or scalds.

### CONTAINS ANTIOXIDANTS

Babchi seed oil contains antioxidants. Antioxidants fight harmful "free radicals" that are naturally produced in your body. These free radicals are byproducts of reactions that occur in your skin, hair, kidneys, liver, heart and almost every organ in your body. Free radicals attack your cells and tissues causing various diseases and even accelerate ageing.

The antioxidants in babchi seed oil are especially useful when it comes to your skin. They improve the appearance of age marks, wrinkles, dark spots and uneven skin tone. Applying babchi seed oil to your skin may make your skin look years younger.

### BONE HEALTH

Babchi seed oil has been proven to strengthen bones by promoting calcification and increase bone density, which helps prevent osteoporosis and fractures. It has high concentration of calcium so it helps to assist recovery from bone dislocation. Scientists have even experimented on several rat models where certain compounds in babchi called *isoflavones* increased the replication of bone cells and bone mass.

### RESPIRATORY HEALTH

When infused and inhaled, babchi seed oil can help soothe many respiratory tract problems and disorders such as dyspnea, asthma, bronchitis, nasal congestion, whooping cough, cold, sinusitis and headaches. You can massage back, throat and chest to help improve respiratory system and breathing. Babchi seed oil helps to lower a chronic fever known as *Jwarahara*.

### GASTROINTESTINAL

Babchi seed oil can help with indigestion and dyspepsia. It's also a strong *anthelmintic* which means it can be used to treat intestinal worms.

## FIGHTS CANCER

Numerous research studies support the effectiveness of babchi seed oil in treating various types of cancers. The presence of chemical compounds like *corylfolinin*, *psoralen* and *bavachinin* can arrest or slow down the growth of lung cancer cells, certain lymphomas and osteosarcoma.

A [2013 study published in the Journal of Pharmacy and Pharmacology](#) stated that certain compounds extracted from babchi seed oil exhibited a high potential to treat oxidative stress, cell deaths and other cellular damage in cancer patients with its immune stimulant and *chemoprotective* effects.

## MANAGE MENOPAUSE

Menopause can be a rollercoaster. Symptoms from hot flashes to night sweats to mood swings can happen any time, even during sleep. Babchi seed oil can help in different ways to ameliorate these symptoms.

## IMPROVE MOOD

Babchi seed oil contains chemical compounds that boost your body's three *catecholamines*: dopamine, noradrenaline and adrenaline. Dopamine sends your brain a feeling of "happiness", which can help improve your mood and overcome depression. As for adrenaline...don't go skydiving, go for babchi seed oil! It's safer.

## MANAGE DIABETES

It has anti-hyperglycemic properties which are helpful for diabetics in lowering their blood sugar levels. It should not be used alone, but with the proper medical supervision and medication, babchi seed oil can help you better manage your diabetes.

## BOOST APPETITE

Babchi seed oil is also a *stomachic*, which means appetite stimulant. It's one of the reasons babchi seed oil is often used in anorexia and other eating disorders. It can also be used in cancer patients undergoing chemotherapy to boost their appetite.

## TREAT REPRODUCTIVE PROBLEMS

Babchi seed oil is thought to be an aphrodisiac. It has been known to increase fertility in males and has been used to treat impotence, incontinence and premature ejaculation. When diffused and inhaled, it is relaxing and uplifts mood. For females, it can be massaged topically to the lower abdomen to increase production of reproductive hormones.

## SKIN HEALTH

Babchi seed oil has been known to treat skin conditions like dermatitis, eczema, boils, scabies, skin eruptions, leukoderma, ringworm, edematous skin conditions, inflamed skin nodules, red papules, discolored dermatosis and vitiligo. Babchi seed oil contains psoralen that stimulates melanin pigments of skin structure and promotes melanin production which improves pigmentation and the natural color of skin, hair and nails. In Ayurveda, it is referred to as *Shitraghni* as it impacts the pigmentation and discoloration of skin.

## VITILIGO

The majority use for babchi seed oil today is in the treatment of vitiligo. Vitiligo is a skin condition where white patches occur when skin loses its natural pigmentation. Each of us has a skin tone because our skin has cells called *melanocytes* that contain *melanin* which is responsible for skin pigmentation. Your

skin takes on a certain complexion depending on the type and amount of melanin you have, which is determined by your genetics.

Melanin pigments are lost when *melanocytes* cells die. In vitiligo, a large amount of your melanocytes get destroyed in certain areas of your skin, leaving behind white patches. These patches might be focused in one area or all over your body. Scientists don't know the exact cause of vitiligo, but they've discovered that it has a genetic component and it's also more likely to appear in people with thyroid dysfunction.

The problem with vitiligo is that it's difficult to cure. Some patients don't respond to treatment and those who do often experience toxic effects from the synthetic drugs. That's why there has been renewed interest in the use of babchi seed oil in the treatment of skin pigment disorders. Studies have shown that the oil is effective in cases of vitiligo, leukoderma and skin hypopigmentation (reduced pigmentation).

Babchi seed oil contains the compound *psoralen*, which has *immunomodulatory* properties, that acts on *melanoblastic* and *Rouget's* cells, stimulating pigment production. Treatment for these skin conditions usually involves tiny amounts of babchi seed oil diluted into a mild carrier oil, and then rubbed gently into the skin on the affected areas. Babchi seed oil slowly reduces the size of the white patches, from the outer edges towards the center as pigment production is restarted. The new pigment then diffuses into the paler skin surface, restoring normal color.

## PSORIASIS

In 1933 the world was introduced to *psoralen*. Psoralen is a chemical substance (C<sub>11</sub>H<sub>6</sub>O<sub>3</sub>) found in some plants that photosensitizes mammalian skin and is used in conjunction with ultraviolet light to treat psoriasis in a treatment called *phototherapy*.

There are several different types of phototherapy—including narrowband UVB, broadband UVB, targeted UVB [excimer laser or light], and UVA with psoralens (topical, oral, or bath)—and all of them involve exposing the skin to light.

Recently, babchi seed oil has been used to reduce skin inflammation and flaking seen in psoriasis. The active *coumarins* present in the oil inhibit the synthesis of new DNA in skin cells, which reduces the rate of cell proliferation, (production of new skin cells). These help to promote skin healing in chronic conditions like psoriasis. In a [2012 study](#) *ethanolic* extracts obtained from *Psoralea corylifolia* seeds showed almost 76% antipsoriatic activity, when compared to the control group by using mouse tail model.

## ACNE

Babchi seed oil has antibacterial and anti-fungal properties. Babchi seed oil can protect the skin against bacterial and fungal infections. It is particularly effective against organisms that are commonly found on the dermis (outer layer) of the skin, like *Staphylococcus aureus* (Staph), *Pseudomonas aeruginosa* and *Escherichia coli* (E. coli).

This oil is useful in products formulated for acne prone skin as it prevents the process of lipid peroxidation in the skin's sebum by keeping the acid mantle active. This reduces the overproduction of bacteria on the skin's surface and reduces the keratinization of cells. Babchi seed oil and its active ingredient bakuchiol, used in conjunction with salicylic acid may reduce the symptoms of acne.

## SKIN CARE

Babchi seed oil provides nourishment and adds a protective layer to skin. It also improves blood circulation and makes skin look younger, healthier, more plump and glowing. It is also favored in skincare products and cosmetics.

## ANTI-AGING

Like retinol, babchi seed oil and bakuchiol promote the production of collagen, “plumping” your skin and reducing the look of lines and wrinkles. Unlike retinol, babchi seed oil has a hydrating effect on the skin. Retinol causes dry patches and sensitivity. Babchi seed oil is gentler, its anti-inflammatory and antibacterial properties calm and soothe, which makes it suitable for all skin types.

## SUNSCREEN

Babchi seed oil is also widely used in sunscreens and tanning products.

## ORAL HEALTH

Babchi seed oil may also be used for a variety of dental problems. It also possess astringent, antibacterial, antimicrobial properties that helps to treat plaque, bad breath (halitosis) and bleeding gums.

## HAIR HEALTH

Babchi seed oil is also widely used in hair and scalp products, particularly those that promote regrowth of hair lost due to alopecia. This oil stimulates hair growth as well as removing dandruff. You can even restore your hair’s natural color and luster with a babchi seed oil.

Babchi seed oil helps in making hair stronger from the roots and increasing the growth of hair follicles. It helps in treating itchy and dry scalp and increasing blood flow to the scalp, which helps with hair growth and reduces hair loss.

## NAIL HEALTH

Babchi seed oil has strong antifungal properties which come in handy when fighting nail infections.

## BETTER FOR VEGANS

Retinol is often produced from animal sources—liver, fish and egg yolks, while plant-based babchi is totally vegan.

## THERAPEUTIC USES OF BABCHI SEED OIL

1. **Skin Care:** It can be used to make skin care products. It will deeply moisturize the skin and increase blood circulation. It stimulates melanin production. Babchi seed oil also helps in treating skin infections. Apply a mixture of 1 drop each of lavender, orange and frankincense essential oils, and 2 drops of babchi seed oil diluted into 2.5 ml of jojoba oil to the affected areas.
2. **Hair Care:** It can be added to hair masks and shampoo to increase their benefits and make them more effective. Its nourishing qualities can also be used in making conditioners and other hair care products to make hair stronger, prevent greys and hair loss due to alopecia areata. Dilute some babchi seed oil into a carrier oil like coconut, jojoba or sesame oil. Begin with 1% initially and work up to 5% and massage well into the scalp and roots.
3. **For a Skin Burn:** *First note that for a burn you should put the affected area under cold running water for a **minimum** of 2 minutes. Two minutes sounds like a short time but when you are under the tap, make sure you stay the full **120 seconds**.* After that, apply lavender essential oil

diluted into aloe vera gel. Or, just plain aloe vera gel. And then apply the aloe vera every hour or so for the next day. And a few days later you can apply babchi seed oil diluted into a simple carrier oil such as coconut, sunflower, sesame or almond with a few drops of omega-rich rosehip, tamanu, marula, cacacy, avocado, or argan oil.

4. **Bone Sprain or Dislocation:** Massage with a mixture of 2 drops of black cumin and 2 drops birch essential oils, and 5 drops of babchi seed oil diluted into 10 ml of sesame oil.
5. **Massage Oil:** Adding this to massage oil can relieve joint and knee pain. The antispasmodic components act as a natural aid for cramps and muscle spasms.
6. **Oral Health:** It helps treat plaque, bleeding gums and bad breath (halitosis), and maintain oral health. Gargle by mixing 1 drop of clove and 1 drop of babchi seed essential oils in a cup of warm water twice a day, morning and night.
7. **Upper Respiratory Conditions:** It can be added to steams and inhaled for better respiratory health. Inhale a mixture of 1 drop of peppermint essential oil and 2 drops of babchi seed oil in a steam inhalation.
8. **Prevent Respiratory Infections:** To a warm bath, add 2 drops of babchi seed oil.
9. **Lower a Fever:** Massage the soles of the feet with a mixture of 1 drop of cajeput essential oil and 2 drops of babchi seed oil diluted into 2 ml of coconut oil.
10. **Improve Respiratory System Health:** Massage back, throat and chest with 1 drop of babchi seed oil diluted in a vaporizing ointment.
11. **Aromatherapy:** It is also useful for treating urinary tract infections, diabetes, cardiac health, kidney health, constipation, worm infestation, bleeding disorders, inflammation and anemia. Babchi seed oil has a relaxing effect and can be used in aroma diffusers. It can also be used to increase male libido.
12. **To Stimulate Reproductive Organs:** It can help treat premature ejaculation. Massage lower back, genital organs and lower abdomen with a mixture of 2 drops of cassia, ylang ylang and babchi seed essential oils diluted in 3 ml of jojoba oil.
13. **To Improve Mood:** Add 1 drop each of rose and sandalwood essential oils, and 2 drops of babchi seed oil to a hot bath.
14. **Scented Candles & Soap Making:** Babchi seed oil has a sweet, balsamic smell which lends candles a unique warm aroma. Its pleasant scent and antibacterial properties makes it a good ingredient to add in soaps and hand washes.

**Note: If you'd like to add essential oils, a good rule of thumb is: to every 30ml of carrier oils you can add a total of 6–10 drops of essential oil.**

## PRECAUTIONS WHEN USING BABCHI SEED OIL

Generally, babchi is safe for all skin types, although if you are pregnant or lactating, you may wish to avoid it. It's a natural plant-based alternative to retinol. Should be used at night, to err on the side of caution. Avoid during pregnancy and with sensitive skin. Consult a doctor to treat any medical condition. It should not be used internally. Avoid sun exposure after using babchi seed oil. People with sore throat, dry mouth, constipation, urinary tract infection and hematuria (blood in urine) should avoid it.

It can cause possible sensitization in some individuals, so use in very low concentration only. It is important to note that all essential oils are extremely concentrated and if to be applied anywhere topically, should always be diluted up to a maximum dosage of 4% in a suitable carrier oil. Babchi seed oil can irritate the skin and can cause burns and blisters. It **must** be diluted to 1–5% of a formula in order for it to be safe. The warnings advise using it as low as 0.5%. Babchi seed oil can cause [Hepatitis](#), hyperacidity and gastritis in **high doses and/or prolonged usage**. Avoid products like curd, pickles, fish etc. when using babchi seed oil.

It is important to apply babchi seed oil with caution. Studies have found it to be *phototoxic* due to its levels of *furocoumarins*. One [study](#) found it caused *phytophotodermatitis* following application of a product containing an unknown amount of babchi seed oil combined with sun exposure. Another precaution when using babchi seed oil is that too much of it can cause skin discoloration. Just 3–4 drops diluted in a carrier oil while avoiding sun exposure are enough.

### 3 MYTHS ABOUT BABCHI SEED OIL

Myth 1—it is a true “essential” oil. No, babchi seed oil is extracted by cold pressing it directly from the seed which preserves its nutrients and antioxidants. True essential oils are produced by steam distillation or CO<sub>2</sub> extraction. Babchi seeds are cold pressed—the same extraction method used to extract sunflower, coconut, argan, etc. These oils are not volatile. A true “essential” oil evaporates when a drop is placed on a tissue. Babchi seed oil leaves a greasy brown stain.

Myth 2—It is safe only at 0.5%. Depending on the formulation, whole babchi seed oil may be safely used up to 5%–10% without any irritation. But **not** the extract of bakuchiol, which is only advisable to use between 0.5% and 1%. Exceptions are for those who are pregnant or lactating and should opt for alternatives like rosehip and cacay, which can be used at 100%. Babchi seed oil stimulates collagen production and improves skin defenses against free radicals. It is safe as a retinol alternative for sensitive skin in diluted amounts. Start at 1% and work up to 5%.

Myth 3—it is a “new” discovery. No, it has been used for thousands of years in Ayurvedic and traditional Chinese medicine for the treatment of ailments like bone disorders, leprosy, impotence, intestinal worms, lower back aches, and various skin conditions such as psoriasis, eczema, dermatitis, skin eruptions, scabies, vitiligo and ringworm.