

A Review on Stinging Nettle: Medicinal and Traditional Uses

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Abstract

In Nepal, stinging nettles, also known as “sisnu” or “bichu ghaas,” play a significant role in cultural and traditional traditions. For the inhabitants of Nepal, stinging nettles have cultural importance in addition to being useful as food and medicine. These stinging plants’ fragile leaves and shoots are used extensively in Nepalese culinary customs to enhance dishes like “sisnu ko saag.” Nettles’ high nutritional value, which is enhanced by their abundance of vitamins, minerals, and proteins, enriches the local diet, especially in rural locations where a variety of vegetables could be hard to come by. Stinging nettles have gained acceptance in conventional medical procedures in addition to their culinary usage. Nettle extracts and teas are frequently used in Nepali communities to treat conditions including joint pain, arthritis, and allergies because they think that nettles have diuretic, anti-inflammatory, and pain-relieving characteristics. In Nepali hair care practices, nettles are also used as a natural cure for preserving healthy hair and scalp. Culturally, the intake of stinging nettles is associated with rites and festivals like Dashain, where it has symbolic meaning. The fibers taken from nettle stalks are used to make traditional fabrics and apparel, conserving artisanal techniques from the past.

Keywords: Bichu ghaas, leaves, sisnu, therapeutic, *Urtica dioica*

INTRODUCTION

Urtica dioica, also referred to as stinging nettles, is a fascinating and distinctive collection of plants that has fascinated humankind for generations while also making them wary. These extraordinary plants are well known for having a special quality that causes a stinging sensation when their leaves and stems are touched due to the presence of histamines and formic acid in the trichomes.^[1] In temperate areas of the world, stinging nettles are perennial plants.^[2] Their clusters of tiny, greenish-white blooms and jagged, toothed leaves make them instantly identifiable. Due to their unusual defense mechanism, they are known as “stinging” nettles. Despite their potent stingers, stinging nettles have a long history of contact with people. Throughout history, they have served a variety of functions, including those related to food and medicine, textiles, and even as an inspiration for mythology and the arts. Nettle preparations have been used for their alleged medical characteristics, including pain relief and anti-inflammatory effects, while nettle leaves have been taken as a nutrient- and vitamin-rich food source. Stinging nettles also have an ecologically significant role by acting as hosts for a variety of butterfly species, including the stunningly beautiful and critically endangered monarch butterfly. Environmental

scientists and environmentalists value their presence as a valuable indicator of the health and fertility of the soil in a particular area.

When fully developed, stinging nettles are herbaceous perennials that normally grow to a height of 1–2 m (3–6.5 feet). They feature a single, erect stem with opposite lance-shaped, toothed, and stinging hair-covered leaves. The presence of small, hollow hairs on the leaves and stems of stinging nettles is their most recognizable characteristic [Figure 1]. A painful stinging sensation is produced when the hairs break and release these irritants when they come into touch with the skin. Clusters of tiny, greenish-white, or yellowish flowers are produced by stinging nettles. These flowers frequently lack beautiful petals and are unassuming. Normally, they flower in the late spring to early summer. Stinging nettle leaves can grow up to 10 cm (4”) long and have a deep green color. They have

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a serrated edge and are paired along the stem. The middle vein of the leaves is also noticeable. Because of their subterranean, fibrous root system, stinging nettles can grow in dense colonies in certain types of habitat. In a variety of environments, such as meadows, forests, riverbanks, and disturbed areas, they are frequently found in moist, nutrient-rich soils. They frequently flourish in locations with some shade.

The paper will focus on the medicinal and traditional importance, ecological importance, historical applications, and the different ways they interact with people and the environment.

Traditional medicine has traditionally utilized stinging nettles (*U. dioica*) for their conceivable therapeutic properties. Nettles are known to contain a variety of bioactive substances that may provide a number of health benefits, but scientific study on these compounds' potential medical applications is still in progress. The following are some putative medical advantages of stinging nettles:

Anti-inflammatory qualities

Compounds found in stinging nettles may have anti-inflammatory properties. They are, therefore, a well-liked option for treating the signs and symptoms of inflammatory diseases such as arthritis, gout, and joint pain. Some patients use topical nettle creams or supplements to lessen discomfort and inflammation.

Relief from allergies

Nettles are frequently used as a home treatment for allergies, especially hay fever. Some people get relief from allergy symptoms, including runny nose, itchy eyes, and sneezing, by drinking nettle tea or taking nettle supplements. The release of histamines, which cause allergy symptoms, is thought to be inhibited by nettles.

Impact on diuretics

Because nettles are diuretics, they can increase urine production. For those with specific medical disorders,



Figure 1: A plant of stinging nettle (sisnu) captured in the Baitadi district of Nepal

including edema (fluid retention) or high blood pressure, this impact might be advantageous. Nettles should only be used as a diuretic under a doctor's supervision, though.

Rich nutritional profile

Stinging nettles are loaded with vitamins, minerals, and antioxidants. These include Vitamins A, C, and K, calcium, iron, and magnesium. Various nettle products, such as nettle tea or roasted nettle leaves, can enhance your nutrition.^[3]

Health of the prostate

According to some research, stinging nettles may help relieve the signs and symptoms of benign prostatic hyperplasia, a noncancerous enlargement of the male prostate gland. Extracts from nettle roots are frequently used for this.

Skin health

Eczema, acne, and minor wounds have all been treated with nettles used topically. Nettles' anti-inflammatory and antibacterial characteristics may aid in calming skin irritations and accelerating recovery.

Pain relief

Nettles are occasionally used to treat muscle pains and menstrual cramps since they may have pain-relieving effects. Their anti-inflammatory and muscle-relaxing qualities are responsible for this impact.

Digestive health

Nettle tea is occasionally drunk to promote digestive health. Indigestion, bloating, and diarrhea may be improved by using it. In addition, nettles' high-fiber content can help with regular bowel motions.

Hair health

Nettle extracts are utilized in some hair care products because they may be good for the health of the hair and scalp. They might improve hair texture, encourage hair growth, and lessen dandruff.

Stinging nettles, also referred to as "sisnu" or "bichu ghaas" locally, have a long history of use in Nepal for a range of cultural, medical, and gastronomic uses. Here are some Nepalese customs for using stinging nettles:

Culinary use

Stinging nettles are frequently used in cooking as a wholesome green vegetable. The young leaves and sensitive shoots are picked, prepared, and used to a variety of conventional recipes. They are frequently included in stews, curries, and soups. The Nepalese delicacy "sisnu ko saag," or nettle curry, is well-liked there.^[4]

Cultural significance

Nettles have cultural significance in Nepal, and their gathering and eating are frequently connected to particular ceremonies and celebrations. For instance, eating a special meal that includes stinging nettles is common during the Hindu holiday of Dashain.

Fiber and textiles

Stinging nettles are harvested for their fibers in some rural Nepalese communities. Fibers from the plant's stalks are extracted and used to create fabrics and traditional apparel like "gunyu cholo" and "dhaka topi." Different researches have been conducted worldwide to examine the fibril use of nettles. Recent findings from Italy affirm *U. dioica*'s potential as a sustainable source of textile fabric.^[5]

Traditional healing methods

Local healers and shamans employ stinging nettles in a variety of traditional healing methods. They can be utilized in rituals and ceremonies to ward off bad spirits and repel negative energy because it is thought that they have cleaning and protective characteristics.

Livestock feed

Nettles are occasionally used as cattle feed, especially in regions where they are plentiful. They can serve as an animal food source for cattle and other animals.

CONCLUSION

Stinging nettles, sometimes referred to as "sisnu" or "bichu ghaas" in Nepal, are an amazing and diverse part of the nation's cultural and traditional legacy. These tough, venomous plants, which provide a variety of uses and advantages, have assimilated into Nepalese society. Stinging nettles are valuable sources of nutrition from a culinary standpoint, particularly in rural areas where they can be used to add vitamins, minerals, and proteins to people's meals. Foods like "sisnu ko saag" are an example of how nettles are used in traditional cuisine, demonstrating their adaptability and contribution to regional gastronomy. Stinging nettles have a place in traditional medicine that extends beyond the dinner table, providing treatments for ailments such as allergies, arthritis, and joint discomfort. Communities in Nepal value the diuretic, anti-inflammatory, and pain-relieving effects of nettles, and nettle preparations and teas are still used as herbal remedies.

Stinging nettles are used in Nepal's long-standing hair care customs as a natural tonic to support healthy hair and scalp, a practice that illustrates the delicate connection between nature and personal hygiene. These nettles carry symbolism and cultural value as they are woven into the tapestry of Nepalese celebrations and rituals. They provide a means of living as well since their fibers are used to make garments and other traditional textiles, preserving ancestors' skilled labor. Stinging nettles also have a symbolic meaning of protection from evil spiritual energies and purification in ancient healing rituals. Essentially, stinging nettles in Nepal are more than simply natural plants; they are a symbol of how nature and culture interact and support the health of the Nepalese people's body, mind, and spirit. Their continued use in traditional and medical procedures emphasizes how important they are to Nepal's rich and varied cultural tapestry.

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