



Adhatoda vasica- A traditional use cum health benefit

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ABSTRACT

Branker (*Adhatoda vasica*) is important shrub in Kandi areas of Jammu region. It is used for two purposes first is used for medicine and second is used for traditional purpose. Branker plants are used to cure different diseases such as asthma, skin disease, chronic, bronchitis, cough, cold and tuberculosis. Branker leaves, bark, the root bark, the fruit and flowers are useful in the removal of intestinal parasites. In the traditional purposes are used as traditional wisdom, food, mulching, cleaning teeth, fruit ripening, roofing of kaccha houses, cattle sheds, fuels and control soil erosion.

Adhatoda vasica Nees (Acanthaceae) locally known as branker and commonly known as Vasaka is distributed throughout India upto an altitude of 1300 m and mainly found in sub-Himalayan region. It prefers loamy soils with good drainage and high organic content. It can be grown well both in hilly and plain lands. This plant grows on wasteland and sometimes it is cultivated also. Branker is seen almost in all types of climate.

Jammu and Kashmir is the northern most state of the country divided into three regions Jammu, Kashmir and Ladakh. Jammu region comprises of subtropical, intermediate and temperate areas. Maximum of area under subtropical belt is rainfed locally known as kandi belt. Most of the terrain of Kandi belt are undulated topography and affected by vagaries of unpredictable weather further motivated to prolonged dry spell.

In such conditions, something which provides sustainability is the use of traditional knowledge-wisdom developed by the people over many generations for proper utilization of available natural resources. Rural people make traditional uses of natural growing vegetation in rainfed areas which provides sustainability to their farming system and also improve soil quality. *Adhatoda vasica* is a wild grown shrub is traditionally used in mulching, fruit ripening and for medicinal purposes. Practice is more effective as the *Adhatoda vasica* leaves increase the soil fertility, insecticide and make the uprooting of seedling

easier. Their stems are used for cleaning of teeth and strengthening the gums. Keeping in view of the above facts the present investigation was to evaluate the traditional agriculture practices to improve the soil fertility, home uses, medicine and human health presented in this communication.

Brief description :

Origin : *Adhatoda vasica* Nees is a small evergreen, sub-herbaceous bush which grows commonly in open plains, especially in the lower Himalayas (up to 1300 meters above sea level), India, Sri Lanka, Burma and Malaysia. *Vasica* Nees is a dense perennial shrub. Leaves are of dark green colour above and pale yellow below. Flowers are typical, white arranged in pendunculated spike.

Climate : The climate of this area have predominantly sub-tropical. The annual rainfall of nearly 1100 mm, its skewed distribution leads to moisture stress condition during the major part of the year. The rains are especially erratic in time and space. Most of the rainstorms received in summer season are of short duration and high intensity whereas those received in winter season are of low intensity and inconsistent.

Soil : Soil of the area is generally coarse in texture, low in organic matter, poor in nutrients, highly erodible and wastelands. The soil surface is infested with stones and water retention capacity is extremely poor. Generally most of the soils orders Entisols and Inceptisols with ochric surface and cambic subsurface diagnostic horizons.



Branker (*Adhatoda vasica*) is used for traditional practices :

Mulching :

Spreading of *Adhatoda vasica* Nees leaves, twigs and stems material are used for the purposes of mulching. Mulching help in the reduction water loss to evaporation and becomes conserve in soil moisture. *Adhatoda vasica* leaves is also practiced to prevent seedbeds from getting exposed to the sun and rain and to protect seedlings from hailstones. Rainfall or irrigation water passed through mulching materials which might be due to addition of organic matter and soil nutrients after decomposition of mulches (Kumar, 2014).

Ripening of fruits : Farmers are used of *Adhatoda vasica* nees leaves in ripening of mango, papaya and date fruits. The fruit is wrapped in leaves of various fruits. The leaves give to heat to the fruit and ripening of fruit is within 3 to 7 days. This facility provides to the fruit ripening.

Kaccha house : The farmers/poor men are used for spreading of leaves for preparing the of roofing Kaccha houses. The cattle sheds is made with the help of shrub, locally known as Laadi. Goat's eats leaves have foods.

Soil erosion : The terrain of kandi belt people is used for *Adhatoda vasica* Nees plantation as check of soil erosion. The terrain of Kandi is almost undulated resulting in enormous soil erosion. The farmers plant *Adhatoda vasica* Nees across the slope which protects the soil from erosion.

Bee keepers : Bee keepers shift their apiaries to Kandi areas from onset of winter. *Adhatoda vasica* Nees bears flowering from the month of February. Flowers are being a rich source of nectar facilities bee keeping.

Teeth cleaning : The local people are used for stem in cleaning of teeth in these areas. The farmers are early in the morning for go and away for field work they can use of stem. The stem of branker is easily and locally available in these areas.

Branker (*Adhatoda vasica*) is used for medicine practices :

– *Adhatoda Vasica* is used in the traditional of Indian medicine for thousands of years to treat respiratory disorders.

– It is useful in treating bronchitis, tuberculosis and other lung and bronchiole disorders.

– A decoction of the leaves can be used as an herbal treatment for cough and other symptoms of colds. The soothing action helps irritation in the throat and the expectorant will help loosen phlegm deposits in the airway which makes *adhatoda* a good remedy for sore throat.

– *Adhatoda Vasica* is used for control both internal

and external bleeding such as peptic ulcers, piles and bleeding gums.

– A poultice of the leaves may be applied to wounds for their antibacterial and anti-inflammatory properties. The poultice is also helpful in relieving rheumatic symptoms when applied to joints.

– This herb exhibits antispasmodic, expectorant and blood purifying qualities.

– *Adhatoda Vasica* is also used for speed delivery during childbirth.

– The juice obtained from the leaves can be used to treat bloody stool and mucus in stool

– The leaves, roots and the flowers are extensively used in indigenous medicine as a remedy for cold, cough, bronchitis and asthma.

– The juice from its leaves should be given in doses of 2 to 4 grams in treating diarrhoea and dysentery.

– It is used of its leaves can be applied with beneficial results over fresh wounds, rheumatic joints and inflammatory swellings. A warm decoction of its leaves is useful in treating scabies and other skin diseases.

– Relief in pyorrhoea and for bleeding gums by locally application.

– Relieves or eases muscular spasms, cramps or convulsions.

– Stimulates contraction of the uterine muscle, facilitating or speeding up childbirth.

– Lowers blood pressure.

– *Adhatoda* is said to be non-poisonous to mammals, but to kill fish, insects and lower organisms (Vickers and Zollman, 1995).

– It was used by traditional midwives at the time of delivery.

– It is used for antidiabetic drugs control of diabetes. Diabetes is a global problem and every year a considerable amount of foreign exchange is involved in import of antidiabetic drugs. The utilization of indigenous drug resources with the collaboration of local industry will be minimizing the expenditure incurred on the purchase of foreign drugs.

– *Adhatoda vasica* Nees extract obtained from the fresh leaves of plant mixed with water. About 10 ml of extract is used thrice a day to treat sugar.

Conclusion : *Adhatoda vasica* is the increasing the soil fertility with the help of mulching. The *Adhatoda vasica* is also used of ripening of fruits, bee keeping roofing of kaccha house. Indigenous technological knowledge is...

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