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RESEARCH ARTICLE

LEPTADENIA RETICULATA(RETZ.) WIGHT & ARN. (JIVANTI): A REVERED ETHNOMEDICINAL CLIMBER OF BANASKANTHA DISTRICT NORTH GUJARAT, INDIA

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Abstract

In various cultures and traditions of India, plants hold deep spiritual, medicinal, and ecological significance. Revered plants are an integral part of indigenous knowledge systems, symbolizing the profound connection between humans and nature. Leptadenia reticulata (Retz.) Wight & Arn., commonly known as Jivanti, is one such sacred plant valued for its multifaceted roles in traditional practices. This study aims to document the ethnobotanical knowledge associated with Jivanti in the Banaskantha district of Gujarat. Field observations and interactions with local communities were conducted to explore their use in traditional medicine, rituals, and cultural ceremonies. This document has importance not only as a medicinal resource but also as a cultural symbol preserved through generations. This research contributes to the conservation of indigenous knowledge and promotes awareness of the sustainable use of revered plant species in local traditions.

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Introduction:-

Some useful plants, which could often be preserved and worshiped without association with any deity (Gadgil and Vartak, 1976). Traditionally, and in some cases even today, member of the community take turns to protect the grove (Sudha et. al., 1998). Most biological studies on L. reticulata are restricted to crude extracts and many biologically active compounds are yet to be identified in order to base data. At present, L. reticulata is a threatened endangered plant because of overexploitation, unscientific harvesting and habitat loss.(Sudipta kumar Mohanty, 2017). In Indian subcontinent this family is represented by only one genus with two species viz. L. reticulata and L. pyrotechnica. This plant recognized for its medicinal, spiritual and ecological benefits which may contributes to its revered status.

Study Area:

The Banaskantha district takes its name from the River BANAS, which flows through it. The district is situated in the North eastern part of the state and lies between North Latitudes $23^0 33'$ &$24^0 25'$,east longitudes $71^0 07'$ & $73^0 02'$. It has an area of 10,303 sq.km and is bounded by the state of Rajasthan in north, Rann of Kutch in West by Sabarkantha, Mehsana and Patan districts in East, South and South West respectively. The region is having the minimum temperature as low as 5^0C -15^0C and maximum temperature as high as 42°C – 48°C. The average annual

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rain fall in the region ranges from 670mm or 26.4 inch . The soil of Banaskantha is Plain sandy except in hollows where it is clay and near the Rann where it is mixed with black earth. The Rocks are Metamorphic, gneiss and Mica- schist with upheaval and outbursts of red and grey graphite.

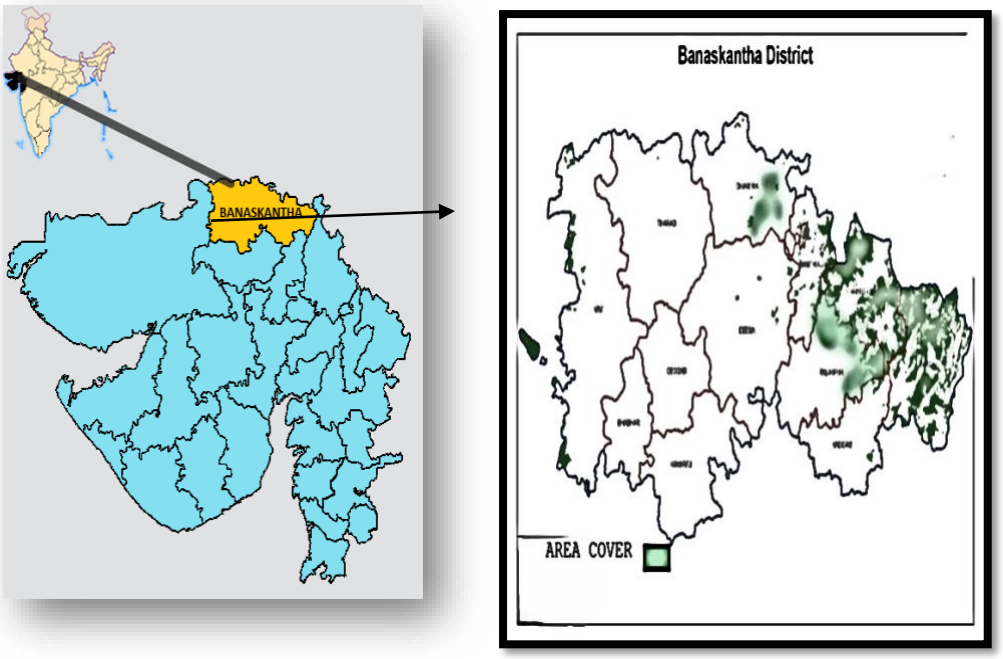

Figure 1:-

Material and Methods:-

Periodic field trips were organized in connection to different Places of Banaskantha district during the year 2023-2024. A complete information regarding the sacred plants species growing in the region were collected from the local people. The prerequisite for these studies in the pooling of the knowledge existing with ethnic groups regarding the plant/plant parts. Temple priests and local leaders are interviewed.

Results and Discussion:-

In Ayurveda. There are many remedies, medicine, yoga, experiments, among them Dodi is an important plant with high medicinal values. In Kaiyadeva nighantu : it is written in the dictionary – as Jivanti or Jivni(life- Giver), Phulya(Excellent), Bhadra(best), Yashaskari(giving success), Putrada(son-giving), Jivabhadra(the one who brings welfare to living beings), Devaprushtha(like the back of the gods).

Now a day, we are facing the major problems on the conservation of biodiversity, sacred groves play an important role in the conservation of biodiversity and soil conservation. The genus Leptadenia belongs to family Asclepiadaceae (Arc aakdo kul.).

L. reticulata is economically valued for their therapeutic properties. It is one of the most important medicinal herbs used in Ayurveda for promoting vitality and life.(Sudipta kumar mohanty,2017)

In northern Gujarat, near Balaram Ambaji Wildlife Sanctuary, this plant Jivanthi are recognized as the Revered plant of this region and many belief and mythes are related with herbs. Their wide ranging social and traditional therapeutic formulations, importance on the one hand and declining population on the other, necessitate that the species be included in restoration Programs.

L. reticulata is one of the most popular medicinal plants which characteristics and distributions are described in the main books of Charaka Samhita, Sushruta Samhita, Bhav Prakash Nighantu, Kaiyadeva Nighantu, Raj Nighantu, Dhanvantari nighantu, etc.

This species of creeper is jay-like and their stems are tied with twine. It grows as thick as the wrist. Bark of the lower part grayish white. The color of the branch is pale green. The leaves of the dodi are broad, heart shaped.(Figure 2). when the Pods are broken, a Yellow sticky liquid comes out. When it dries, it turns brown. And when it becomes sticky, it becomes rubbery. Its flowers are green with a slight yellowish tinge. Flowering occurs between July and October (Figure 3) and fruiting between September and December. When fruits ripens, it becomes hard and chewy. Its fruit is in the shape of a horn. The seeds are similar in appearance to Acacia and Chamar, and are covered with soft hairs like their seeds.

It is also effective in treating three doshas, especially, in relieving gas and bile. It is an anti- inflammatory and the leaves are crushed and applied to inflammation caused by bile. It is given for indigestion, diarrhea and constipation. It strengthens the heart, relieves leprosy. (blood heat)

Starting from the time of knowing about pregnancy and getting pregnant, if the mother continues to consume dodi until the child is breastfed, the child is born healthy at the full term, and does not face any nutritional problems after birth.

Generally, after pregnancy, due to not paying attention to the diet and lifestyle of the mother, air- pitta of the mother enters the uterus and the mouth opens prematurely and throws the fetus out of the uterus. If the fetus falls before the completion of four months of pregnancy, it is called miscarriage. If tuberculosis infection occurs in the uterus, there is problem in conceiving and maintaining a pregnancy. Dodi leaves and pods are used as a vegetables, boiled with milk and ghee, it removes fever, inflammation and induces pregnancy.

In case of blindness, many people have stopped the progression of blindness by eating ghee prepared from Dodi leaves and using it as a local paste.

In diarrhea, the powder of the root is taken with water.

Crushing dodi vines and giving them to the milking cows improves both the quantity and quality of milk. Forest dwellers traditionally use dodi flowers in headache and migraine, if they do not have them, they break a branch and sniff it.

At present, L.reticulata is a threatened endangered plant because of its overexploitation, unscientific harvesting and habitat loss. Overall , this review highlights the therapeutic potential of L.reticulata, considering the current market demand and promotes future research on its conservation and large scale cultivation by adopting proper agronomical practices.

FIGURE 2

FIGURE 3

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