

# TTE properties of natural huge rarity *Manilkara huxendra*(Roxb.) used by tribes of Jhabua district (M.P.) India: A review

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## Abstract

The family Sapotaceae is the major group Angiosperm Flowering plant. The Sapotaceae comprise a Family of about 70 genera and 800-1100 species of plant native to south Asia (China: Hainan and southern Guangxi provinces; the Indian Sub-continent: Bangladesh, India and Sri Lanka; Indo-China: Cambodia, Myanmar, Thailand and Vietnam. *Manilkara hexandra* (Roxb.) belongs to family Sapotaceae (milky juice and edible fleshy fruit )Native of Central India and Deccan Peninsula, cultivated throughout India also Widespread in Africa Madagascar Asia, Australia, Latin America. Therapeutic utilisation of *Manilkara hexandra* (Roxb.) a systematic examination of the shape, size, surface, texture, colour, taste and odour of the stem bark was carried out. The bark is greyish black and rough. The wood is very hard, heavy and very durable, dark purple. It is used for heavy. Structural work gate posts and big beams. The fruit is edible; the seed is used as cooking oil by the natives. The present study deal *Manilkara hexandra* (Roxb.)Plant is Traditional Therapeutic Ethno botanical Properties of Natural Rarity *Manilkara huxendra* (Roxb.) used by Tribes of Jhabua district (M.P.) India. The result suggests that the important part of used as potentially Human Mankind's.

**Key Word:** Guangxi provinces, Jhabua district, Therapeutic utilisation, livelihood, Ethno botanical Properties.

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## INTRODUCTION

The vegetation are Provided food, fibre, fodder, shelter, wood, energy and many others products of human being requirements. The botanical name of Khirni is *Manilkara hexandra* (Roxb.) and it belongs to the family sapotaceae or Mahua- family. Sapotaceae family is a diverse and ecologically important family of 800 species and 35 or 40 poorly defined genera (Takhtajan, 1997: Shultes and Raffouf, 1990). *Manilkara hexandra* (Roxb.) is a species in the tribe Sapotaceae family that is native to much of south Asia (China: Hainan and southern Guangxi

provinces; the Indian Sub continent: Bangladesh, India and Sri Lanka; Indo-China: Cambodia, Myanmar, Thailand and Vietnam<sup>1</sup>. It is a small to medium sized evergreen tree growing under semi-arid conditions, in gullied and ravenous lands. It is grown as an avenue tree and also cultivated in gardens for its very sweet edible fruits<sup>2-3</sup>. The Mayan Indians of Mexico and Central America traditionally have chewed the raw chicle latex. Furthermore, Aztec prostitutes loudly snapped their chewing gum to advertise their trade during the height of pre-Columbian Aztec civilization<sup>4</sup>. It is grown as an avenue tree and also cultivated in gardens for its very sweet edible fruits and the generic name *Manilkara*, is derived from mani-kara, a vernacular name for *M. kauki* in Malayalam<sup>5-7</sup>. *Manilkara hexandra* (Roxb.) is a slow-growing evergreen tree that grows in tropical and temperate forests. Hindi-Khirni, Ksheerini Kshiri, rayan, drier Marathi- karani, khirni, rajana, ranjana, rayan, rayani. Tamil-Kanupala Kaattuppala Ulakkai palai, Malayalam- pazhamunpaala Teluhu- ankalu palachettu, Pola, Kirini kannada – bakula Bengalikrikhiyur, Rainy Konkani- karni ranjana Gujarati- kshirini nimbabija

rajadana. It is also called “Palu” in Sinhalese or Palai and Rayan<sup>8</sup>. The external features of stem bark were observed using dissecting microscope<sup>9-11</sup>. The stem bark is grayish black and rough. The stem bark is astringent, febrifuge, sweet, tonic, and is used traditionally to treat a wide range of gastrointestinal symptoms<sup>12</sup>. The fruit is edible. Seeds are used in the treatment of ophthalmic, leprosy, delirium, ulcers, piles and opacity of cornea.<sup>13</sup> The stem, Helminthiasis flatulence, and stoma disorder<sup>14</sup>. The stem bark is also recommended for fever, jaundice, helminthiasis, flatulence, stomach disorder etc<sup>15</sup>. The seed were used for spermicidal by the aboriginals<sup>16</sup>. Starch is the major storage polysaccharide found in the fruits<sup>17-18</sup>.

**Study Area:** Jhabua is one of the Remote tribal rich district of Madhya Pradesh. It is situated in the extreme south- western part of the Madhya Pradesh state. It occupies the hilly tract along the western margins of Malwa plateau, and north of the Narmada River. The district extends between the parallels of latitude 21o30’ N and 25o10’ North, and meridians of longitude 73 o 20’ east and 75 o 10’ East. The total geographical area of the district is 3600 sq. km. It stands 45 st in size among all districts of the state. The shape of Jhabua district resembles a rough parallelogram with its length extending from south-west to north-east. The height of the district from sea level is 428 meters. The greatest length of the district is 152 km. and the greatest width 72 km. at the latitude of Jobat in south. It measures about 70 km. at the latitude Petlawad in north of the district. This district can be divided into three physiographic divisions - The Vindhyan Range in the south, Malwa Plateau in the east and north Indian. The upper valleys of the Mahi, the Anas and the Hatni. A number of the rail way stations in district

are Meghnagar, Bamnia, Thandla Rd, Panch Pipila, Anas, Bhairongarh, Raoti, Amargar which connects mainly of the towns and villages in the District. The whole district lies under the zone of northern tropical dry mixed deciduous forests. The major forest area is found in Jhabua, Ranapur, Thandla, Meghnagar, and Petlawad Tehsils. The main forest products are timbers, firewood’s, bamboos, grass, gum, resins, fruits, Roots and others products, Jhabua State was one of the Princely states of India during the period of the British Raj. It had its capital in Jhabua town. Most of the territory of the Princely state was inhabited by the Bhil people, who constituted a majority as the population. Umarket was a thikana or Vassal State of Jhabua<sup>19</sup>. After India's independence in 1947, its rulers acceded to India, and Jhabua became part of the newly created Madhya Bharat state, which in 1956 was merged into Madhya Pradesh [20]. According to the 2011 Census Jhabua district has a population of 102409<sup>121-22</sup>. These Tribal people are the ecosystem people who live in harmony with the nature and maintain a close link between man and environment<sup>23</sup>. They utilization various plant parts like root, bark, leaves; fruits etc<sup>24</sup>. Bhil has the highest population in Jhabua district followed by Dhar, Barwani and Khargone district. Madhya Pradesh holds 1st rank among all the States/Union Territories (UTs) in terms of special Tribal population and 12<sup>th</sup> rank in respect of the proportion of ST population to total population<sup>25</sup>. This ancestral knowledge about uses and preparations of these plants is transferred orally from one generation to another<sup>26</sup>. They provide a good source of Information Traditional Therapeutic Ethno botanical Properties of *Manilkara huxendra* (Roxb)<sup>27</sup>.

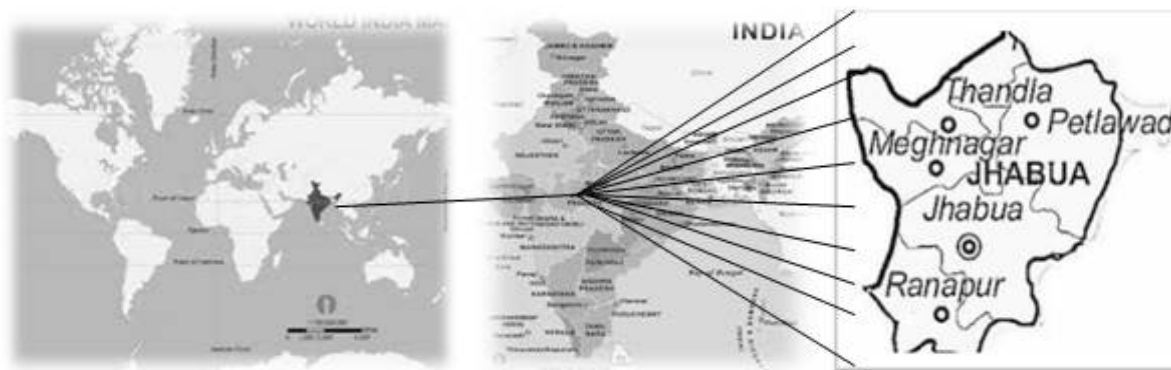


Figure 1: Location of Study Area

## MATERIEL AND METHODOLOGY

Many Field surveys were conducted during June 2015 - 2017 to Approach and uses of plants in disease, Ethno botanical information, utilization, methods of raw materials preparation, historical aspects of plant, seasonally variations in plant, plant parts and all other

information about selected plants to document through oral interviews and designed semi- structured questionnaire from local herbalists Badwa, Hakeems and the elderly people who were familiar with traditional uses of plants particularly for medicinal, veterinary, fruit, vegetable, fodder, Fuel and others, Literature work of

selected plants, historical records aspects, review of work already done on the object, tabulation work in Library of life science department and pharmaceuticals department of Pacific University. Field work Non-participant, direct Observation and participant observation of tribal area. Prepared Questions were asked and discussed about therapeutic use of Ethno botanical medicines. Plants were immediately collected and identified with the help of flora<sup>28-33</sup> and available literature herbarium was prepared following standard method<sup>34</sup>. Authenticity of plant use were cross checked and confirmed<sup>35, 36</sup>. All the collected plant specimens were deposited in the herbarium of department of Life Science Pacific Academy of higher education and research university Udaipur. All the Ethno botanical information during the survey Personal focused, mythological significance, religious and other uses were collected through Interviews from senior resourceful citizens, villagers, school teachers, group interviews, life history, open and closed questions, utilization of traditional knowledge of ancient races by interviews, opinion, and cross section collection of data, plants collection in study area, non-participant, participant observation questionnaire and interview of tribal plants and data and internet and electronic media device use. Therapeutic Traditional knowledge wisdom with modern knowledge with Therapeutic plants, Indigenous, Management system for Preservation, Synthetic drugs with potent therapeutic activity.

## RESULT AND DISCUSSION

According to the 2011 Census of India Bhil or Bheel is the most popular tribe with a total population of 46118058, constituting 37.7 % of the total ST population. These tribal's are mainly in habitat western parts of India i.e. in the states of Madhya Pradesh, Gujarat, Rajasthan and Maharashtra. In Madhya Pradesh these tribals are spread over in four districts, viz. Jhabua, Dhar, Kargone and Ratlam. Bhilala, Bhil, Pataya extravagance varies ailments with plant based remedies on the foundation of their rich information about the plant species found in forest. Basically this community is forest dweller and well acquainted with medical properties of plants of their surroundings. Major part of the district is covered by dense forest area in which various tribes, like Bheel, Bhilala and Pataya are in Majority. Out of these tribes Bheel and Bhilala stand high in strength scattered in most of the villages of the district. Bheel are the one of the oldest tribal community not only of India but of the world. Among Tribal villages more common trees are *Borassus flabellifer* (Linn.), *Mimusops hexandra* (Roxb.), *Syzygium cumini* (Linn.), *Ficus bengalensis* (Linn.), *Cassia tora*, (Linn.), *Khair Acacia catech* Khajur (phonex *silvestris*), *Khejra (prospis spicigera)*, *Mahua*

(*Bassia catifolia*), *Pipal (Ficus religiosa)*, *Haldu (Adina cordifolia)*, *Anwala (cassia quiculata)*, *Thor Euphorbia neffifolia*, *Cassia tora*<sup>37</sup>. The plants which are commonly used by the tribal people of Jhabua Community for preparation of Medicines Frequently grow.

## CONCLUSION

This Study deal determination use this plant and this Traditional, Oldest, ancestral acquaintance, innate knowledge, Aboriginal knowledge, Traditional, Ancestral, invaluable knowledge, about uses and preparations of this plant. This study is a little Effort of documentation of the Traditional Therapeutic Ethno botanical plant *Manilkara hexandra* (Roxb.) Used by Autochthon of Jhabua district as a Natural Rarity.

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